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COMPARATIVE TAKIC GRAMMAR

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**SURVEY OF CALIFORNIA AND OTHER INDIAN LANGUAGES
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PREFACE

We undertook the present study because of the confluence of a number of factors. Many years ago, we had worked directly with speakers of three of the Takic languages, Cupeño (Jane Hill), Serrano (Kenneth Hill), and Mountain Cahuilla (both of us in a field methods class at UCLA). Upon the death of our teacher and mentor William Bright in 2006, we came into possession of a number of Takic references which are now rare and virtually unobtainable. More recently, the Smithsonian Institution has made the field notes of John Peabody Harrington available to be viewed online, allowing the inclusion of original material on Acjachemem, Kitanemuk, and Tongva.

For years I had felt reluctant to finalize a grammar of Serrano, on which I wrote my dissertation in 1967. There were too many important details that remained not understood, particularly in subordination structures. Only within the comparative framework worked out by Jane did those details take on meaning. She had a marvelous ability to reach meaningful conclusions from what often appeared to me to be inadequate evidence. This comparative approach has also been very fruitful in dealing with the extremely limited evidence on grammatical patterns found in the Harrington materials. Sadly, Jane Hill died November 2, 2018, soon after we had completed the first draft of this study.

We prepared the study in Microsoft Word, which turned out to provide major challenges for work on a large manuscript. I must thank Norma Maynard for her help on complicated matters of formatting and for the moral support she provided. I also thank Andrew Garrett for including this study among the Survey Reports, and Zachary O'Hagan for his work in readying the manuscript for publication.

Kenneth C. Hill
Tucson, Arizona
September 2019

ABBREVIATIONS

>	goes to – Also, in expressions like 2SG > 1SG, 2SG is agent, 1SG is patient.
<	comes from
< >	as written
*	reconstructed (preceding); unattested (following)
=	clitic boundary (enclitic)
=	proclitic boundary
1	first person
2	second person
3	third person
AB	absolute case
ABL	ablative
ABLAUT	ablaut vowel
ABS	absolutive suffix
ABST	absentative
AC	Acjachemem
ACC	accusative case
ADJZ	adjectivalizer
ADV	adverbial
ADVZ	adverbializer
AGTV	agentive
ANIM	animate
APPL	applicative
AUG	augment
AUGM	augmentative
AUX	auxiliary
BEN	benefactive
C	consonant
CA	Cahuilla
CAUS	causative

CF	contrastive focus
CFAC	counterfactual
CHAR	characterizing
CMP	completive
COL	collective
COM	comitative
COMING	concurrent motion hither
COMEPR	prior motion hither
COMING	come doing
COMP	complementizer
COND	conditional
CONT	continuative
CU	Cupeño
CUST	customary
DAT	dative
DCA	Desert Cahuilla
DEC	decendent
DEF	definite
DEM	demonstrative
DES	desiderative
DET	determiner
DIM	diminutive
DIST	distal
DISTR	distributive
DPST	distant past
DR	Dorothy Ramón (Serrano Speaker)
DS	different subject subordinator
DSPRS	describing present
DSPST	describing past
DTR	ditransitive
DUB	dubitative
DUR	durative

EMPH	emphatic
ERG	ergative case
ethn	ethnonym
EXC	exclusive
FCT	factive
FOC	focus
FREQ	frequentative
FUT	future
GEN	genitive
GENT	gentilic
GO&	prior or concurrent motion away ‘go and do’
GOING	concurrent motion away
GOPR	purposive motion suffix
H&E	Hyde and Elliott 1994
H&N	Hill and Nolasquez 1973 [2005]
HAB	habitual
HES	hesitation form
HORT	hortative
IFUT	immediate future
IMP	imperative
IMPRS	impersonal
INAN	inanimate
INC	inclusive
INCH	inchoative
IND	indicative
INDF	indefinite
INFR	inferential
INSTR	instrument
IPFV	imperfective
IPST	immediate past
INS	instrumental
INTR	intransitive

INTERJ	interjection
IRR	irrealis
K	k-class thematic suffix
K&G	Kroeber and Grace 1960
KI	Kitanemuk
LIG	ligature
lit.	literally
LOC	locative
LU	Luiseño
MCA	Mountain Cahuilla
MOT	motion suffix
MOTPR	prior motion (usually purposive)
NEG	negative
NFUT	nonfuture
NMLZ	nominalizer
NOM	nominative
NP	noun phrase
NSG	non-singular
OBJ	object
OBL	oblique case
ONOM	onomastic suffix
PASS	passive
PFV	perfective
PL	plural
plcn	place name
PNUA	Proto Northern Uto-Aztecan
POL	polite
POT	potential
PRO	independent pronoun
PROG	progressive
PROH	prohibitive
PROX	proximal demonstrative (within purview of first person)

PROX2	second person proximal demonstrative (within purview of second person; or closer than “distal” but farther away than “proximate”)
PRS	present
prsn	personal name (including lineage names, names of supernaturals, creatures)
PRT	particle of uncertain function/meaning
PSD	possessed
PST	past
PTak	Proto-Takic
PTCP	participle
PUA	Proto-Uto-Aztecan
Q	question (interrogative)
QUOT	quotative
R&E	Ramón and Elliott 2000
REAL	realis
REFL	reflexive
REP	repetitive
RES	resultative
RN	Roscinda Nolasquez (Cupeño speaker)
RPST	recent past
S&E	Sauvel and Elliott 2004
S&H	Seiler and Hioki 1979
S&M	Sauvel and Munro 1981
sbdy	somebody
SBJ	subject
SE	Serrano
SEQ	sequential
SG	singular
SIMUL	simultaneous
SM	Sarah Martin (Serrano speaker)
sp.	species
SS	same subject
ST	stative

SUB	subordinator
TR	transitive
TV	Tongva
TVF	Fernandeño dialect of TV
TVG	Gabrielino dialect of TV
UF	underlying form
UNCERT	uncertain, suffix indicating uncertainty
USIT	usitative
V	verb (or vowel)
VBLZ	verbalizer
VOC	vocable
x	incorrect form

CHAPTER 1

THE TAKIC LANGUAGES

1.1. TAKIC WITHIN UTO-AZTECAN. Takic is a subgroup within Northern Uto-Aztecan¹ with all member languages located in southern California. The term comes from the Uto-Aztecan root **taaka* ‘person’, the source of the word for ‘person’ (also ‘indigenous person’) in all of the languages of the group.

The position of Takic within the Uto-Aztecan family is shown in (1).

(1) Northern Uto-Aztecan

Numic (Great Basin, Colorado Plateau, Californian deserts, Great Plains)

Hopi (Colorado Plateau in Arizona)

Tübatulabal (southern Sierra Nevada)

Takic (southern California)

Southern Uto-Aztecan

Tepiman (southern Arizona and northwest Mexico)

Tarahitan (northwest Mexico)

Tubar (northwest Mexico)

Corachol (western Mexico)

Nahua (Aztecan) (central and southern Mexico and Central America)

Northern and Southern Uto-Aztecan are probably both single clades, although this point requires further investigation. The major evidence for the genetic unity of Northern Uto-Aztecan was reviewed by Manaster-Ramer (1992b). Merrill (2013) has presented new evidence for the genetic unity of Southern Uto-Aztecan. For languages included in the various Southern groups, see Stubbs (2011:7).

Our more detailed (though quite tentative) understanding of the structure of Northern Uto-Aztecan is given in (2), arranged so as to mimic the north-south, west-east geographical distribution of the languages, but with the virtually unknown Tataviam and

¹ The term *Uto-Aztecan* [ˈjuːtəʊ æzˈtɛkən] is based on *Ute* [juːt], a language of the northernmost group, and *Aztec*. The Aztecs spoke *Nahuatl* [ˈnawatl], also known as *mexicano*, a language of the southernmost group.

Nicoleño at the end. Some details of the hierarchical structure of (2) are somewhat impressionistic. They are motivated by the fact that the postulated groupings often appear in generalizations made about phonology and grammar in this study. Further investigation is needed to see whether these are indeed clades. Nodes that lack labels are indicated by the symbol ▶.

(2) Northern Uto-Aztecan

Numic

Western Numic: Mono (Owens Valley Paiute), Northern Paiute

Central Numic: Timpisha Shoshone (Panamint), Western Shoshone, Gosiute, Shoshone, Comanche

Southern Numic: Kawaiisu, Colorado River Numic (Chemehuevi, Southern Paiute, Ute, and others in a dialect chain)

▶ (Northern Uto-Aztecan other than Numic)

Hopi

Californian

Tübatulabal

Takic

Serran

Kitanemuk (KI)

Vanyume (likely a variety of Serrano though maybe of Kitanemuk)

Serrano (SE)

▶ (Tongva and Cupan, i.e., Takic other than Serran)

Tongva (TV)

Fernandeño (TVF)

Gabrielino (TVG)

Cupan

Coastal

Acjachemem (Juaneño) (AC)

Luißeño (Reyeño) (LU)

Inland

Cahuilla (CA)

Desert Cahuilla (DCA)

Pass Cahuilla (Whitewater or Wanikik Cahuilla)

Mountain Cahuilla (MCA)

Cupeño (CU)

Tataviam (of uncertain affiliation, perhaps within Takic)

Nicoleño (of uncertain affiliation, probably within Takic)

We find it useful to regard Hopi and Tübatulabal as “near Takic” within Northern Uto-Aztecan. Numic seems farther removed. Manaster Ramer (1992a) has suggested that Tübatulabal and Takic could be combined as “Californian” ; we use his label and recommend further work on this idea. Perhaps Tataviam (see chapter 2) belongs under “Californian” rather than Takic. Under Cupan, “Coastal” and “Inland” indicate recognized groupings that have heretofore not had any special label. The abbreviations in (2) are used throughout for the Takic languages of the present study.

Detailed discussion of the geographical locations of the Takic groups appears in Kroeber (1907b, 1925). We provide here brief summaries only.

Tongva² was spoken in the Los Angeles Basin and on Santa Catalina Island among the Channel Islands. We have come to believe that Tongva is more closely related to Cupan than it is to Serran, i.e., the Serran languages seem to be rather different from the rest of Takic. This understanding was reached rather late in our study and is at variance with our normal order of citation and of treatment of the languages, which is TV, SE, KI, LU, AJ, CU, CA (and DCA, MCA within CA).

As for the Serran languages, Serrano was spoken in the transverse San Gabriel and San Bernardino ranges and in the desert interior as far east as Barstow. Kitanemuk was spoken in the Antelope Valley and in the western Mojave Desert, overlapping with Serrano territory. No data are available on Vanyume, perhaps a third Serran variety, spoken north of Serrano and east of Kitanemuk, “the Serrano of Mojave River” (Kroeber 1925:614).

² Tongva is the name preferred by the heritage community for the language previously referred to as “Gabrielino” and we use it in this study, with the abbreviation TV. Occasionally we note differences between the Gabrielino (TVG) and Fernandeno (TVF) dialects.

The Cupan³ languages were spoken south and east of the other Takic languages. They can be divided into “Coastal” Luiseño and Acjachemem⁴ and “Inland” Cupeño and Cahuilla. The Coastal languages were spoken in present-day Orange and San Diego Counties and on San Clemente Island. Luiseño (J. P. Harrington’s “Reyeño”) is so called for its association with the Mission San Luis Rey de Francia. Acjachemem (Juaneño) was spoken farther north and west along the coast in the vicinity of the Mission San Juan Capistrano. Contrary to our earlier impressions, we have found that the two Coastal languages are sufficiently different from each other, especially phonologically, that we believe they should not be regarded as simply two dialects of the same language. Much of our treatment of Acjachemem is done in conjunction with Luiseño because we introduced the Acjachemem data rather late in the drafting of this study when we believed that the two languages were more similar to each other than they turn out to be. Even so, the similarities and differences pattern well enough that it is often useful to treat them together in the same section.

The Inland languages, Cupeño and Cahuilla, are closely related to each other. Cupeño speakers lived in two villages in the northeastern corner of San Diego County, and Cahuilla communities were located in the San Jacinto range south of the San Gorgonio Pass and in the Coachella Valley. There were apparently also Cahuilla communities in the San Bernardino Valley, along with Serrano groups (Kroeber 1907). Cahuilla had three major varieties: Pass Cahuilla (for which little data is available) of the area of Banning and Whitewater, Desert Cahuilla of the Coachella Valley, and Mountain Cahuilla, spoken in the southern San Jacinto range adjacent to the Cupeño lands.

Limited data on Tataviam, spoken to the northwest in the Santa Clarita Basin in Ventura and Los Angeles counties, led Munro (2001) to suggest that it belongs within Takic. Only four words are documented for Nicoleño of San Nicolas Island; these hint at a link to Tongva. Materials on Tataviam and Nicoleño are reviewed in chapter 2.

The Takic languages are of interest for several reasons. The first involves the questions they pose for the dynamics of hunter-gatherer societies. Most scholars, from Kroeber (1923-1925) through Bright and Bright (1969) and Miller (1984), have assumed that the

³ The term *Cupan* was coined by William Bright (Bright & Hill 1967:358).

⁴ The ‘cj’ is pronounced [x], like *j* in Spanish; thus *Acjachemem* is pronounced [aˈxatʃəməm].

Takic groups represent an expansion from the east, one that must have replaced or incorporated communities earlier established in territories where Takic communities are found in historic times. In contrast, M. Nichols (1981) and Shaul (2014) have suggested that the Takic groups may be ancient in their region, and that the Proto-Uto-Aztecan homeland itself may have been in California. J. Hill (2014, 2015) critiques this work, arguing that the traditional view of the Takic groups as expanding into southern California from some location outside the region is probably correct. Since the Takic groups – with the possible exception of some Cahuilla bands who may have planted some crops prior to contact with the Spanish (Bean & Lawton 1976) – are all hunter-gatherers, this represents an unusual case (Bellwood 2013) of the replacement of one group of hunter-gatherers by another, in a region that must have had a substantial population prior to the arrival of Takic peoples. However, the history of “accretion” (J. Nichols 1997) in indigenous California suggests that such events were not necessarily unusual there (Golla 2011); the Takic spread is only one such example among several in California prehistory. Others include the expansion of Miwok-speaking peoples from a probable homeland in the Sacramento Delta west to the coast and east into large parts of the interior as far east as the Sierra Nevada and the spread of Costanoans south, replacing the Esselen (Callaghan 2014); the expansions of Wintun groups into the Sacramento Valley from the north (Whistler 1977); and the spread of Yokuts-speaking groups in the San Joaquin Valley (Golla 2011). An important anthropological question, which requires the integration of data from linguistics, biological anthropology, and archaeology, is to understand the dynamics of such replacements and the conditions under which they can take place.

In order to achieve such an integration, it is important to establish, at least in general terms, the date of the Takic spread into southern California. The perspective from linguistics is unclear. Miller (1984) argued, based on a lexicostatistical analysis, that Takic diversification began about 3500 years ago. This argument is consistent with claims by some archaeologists (e.g. Sutton 2010) that some Takic communities, especially Tongva in the Los Angeles Basin, date to that period in their present locations. A possible indicator of the earliest Takic presence on the coast may be the pottery noted by Drover (1975, 1979) at Newport Beach and on Santa Catalina Island, dating to between 3800 and 3500 years ago, slightly later than similar ceramics identified in the

Tucson Basin and dated to 4100 B.P. J. Hill (2012a) has suggested that a small suite of vocabulary for pottery can be reconstructed to Proto-Uto-Aztecan.

Bright and Bright (1969) pointed out that a lexicostatistical analysis of Takic might be chronologically misleading, since some of the lexical diversity in the group was due to the presence of a substantial Takic substratum vocabulary, especially notable in Tongva, that could not be linked to any of the non-Uto-Aztecan language groups present in the region in the period after European contact. These latter include the Chumash languages to the west, the Yokuts languages to the north, and the Yuman languages to the east and south, including the Colorado River Yuman languages Mojave and Quechan, the Kumeyaay languages of Delta-California Yuman, and especially Northern Diegueño, 'Iipay Aa. There is evidence of limited horizontal transmission between these languages and Takic (Hill 2017) and none of the Tongva substratum vocabulary can be traced to any of them.

J. Hill (2012a) confirmed and updated the Bright and Bright results, and observed that the Takic languages exhibit substantially more apparently non-Uto-Aztecan vocabulary than their sister Numic languages in a standard sample of basic vocabulary, flora-fauna vocabulary, and cultural vocabulary compiled for the project “Dynamics of Hunter-Gatherer Languages.”⁵ The Numic languages expanded into their present range during a relatively recent period, probably within the last 2000 years (Garfinkel 2007) and perhaps within the last millennium (Bettinger & Baumhoff 1982), but may have encountered relatively few established groups in the Great Basin. Substratum items present in basic vocabulary at an unusual level can bias towards antiquity the lexicostatistical dating methods that are available to linguists.

J. Hill (2015), based on a study of plant names, suggested that the Takic intrusion probably did not take place prior to about 2,800 years ago. A key piece of evidence is that Takic languages share a lexical item, proto-Takic **maaxwa-La*⁶ ‘*Washingtonia filifera*, California fan palm’.⁷ This plant does not appear in the California deserts until about 800 BCE (Koehler & Anderson 1995). Another datum is provided by a Proto-Northern Uto-

⁵ Funded by the National Science Foundation (NSF HSD 902114).

⁶ The reconstruction **L* represents “lenited **r*” (see chapter 3).

⁷ Cf. SE *mamahu-t\$* ~ *mamahw-t\$*, LU *maaxwa-l*, CU *maawa-l*, CA *mawul* ~ *maul*.

Aztecan word for the western honey mesquite (*Prosopis juliflora*), *oo.⁸ Mesquite appears along the course of the Mojave River between 1490 and 670 BCE. By 200 CE it had retreated to its present northern limits, along the lower Virgin River near Mesquite, Nevada. These dates are consistent with findings by Ahlstrom and Roberts (2008) of communities with intermittent maize cultivation from 350 BCE in Clark County, Nevada, and by Sutton (1988) of probable Takic groups in the Antelope Valley in California by 500 BCE.

In summary, a fairly wide range of dates, from about 3800 to 2800 years ago, have been suggested for the earliest Takic presence in southern California. Proposed dates that are much earlier than these can probably be rejected on linguistic grounds, and no scholar has suggested a date later than J. Hill's proposal of 2800 years ago, i.e., about 800 BCE, based on the paleobotanical data on the distribution of fan palms.

1.2. GOALS OF THE COMPARATIVE GRAMMAR. While K. Hill has worked for many years on Serrano, and J. Hill has similarly focused on Cupeño, in preparing the comparative grammar we have been repeatedly struck by how much we have learned about these two languages in the light of careful attention to the other languages of the Takic group. Limitations on the available corpora have been a barrier to analysis on many points, but it turns out that the comparative exercise can to some degree compensate for this problem. We believe that the work illustrates the utility of a comparative-grammar approach, and we hope that the new understandings that we have gained will be useful to others who are interested in further linguistic study, or in work toward language revitalization in the Takic-heritage communities.

While most work on Takic has attended only to lexical diversity, Takic is an interesting case of typological diversity in a small group of closely-related languages. We hope to clarify this typological diversity among the languages through attention to their morphology and syntax. While in some respects the languages are all very similar (for instance, in most dimensions of noun inflection), they also exhibit some striking differences. Deserving special attention is the varying distribution of clause components across two sets of morphological structures: the verb construction itself, and an auxiliary

⁸ Cf. SE oo^R-t\$, KI oo-t\$, LU ee-la, CA i-ly.

construction. At one extreme we find Serrano and Tongva, where inflection in the main-clause verb construction itself is minimal, including only future tense and special forms for the imperative, with all arguments of the verb, tense, and modal and evidential distinctions being encoded in the auxiliary complex. At the opposite extreme is Cahuilla, where the auxiliary complex has been almost entirely lost, and all verbal arguments and tense distinctions appear in the verb construction itself. The other languages fall at various intermediate points along this continuum, with Cupeño developing a curious solution where non-past clauses have a more elaborate auxiliary construction, while past-tense clauses have a more elaborate verb construction.

Another goal of the present work is to provide, as a component of the comparative work, a solid treatment of Serrano, expanding and extending K. Hill's dissertation of 1967. This language turns out to be very important to an understanding of the evolution of the structure of the Takic group. Perhaps most important is the relatively robust realization of Whorf's "k-class" of verbs, which has permitted us to identify its traces in the other languages. Since Tongva represents a third branch of Takic, our comparative goals required us to incorporate materials from this language as well, adding to work by Munro to provide a basic descriptive framework on which more detailed analyses can build.

Finally, we aim to make available as much data as possible on the languages, especially since many of the published materials are long out of print. For this reason we provide copious exemplification. This makes the work quite long, but we hope that the apparatus of examples will be useful to scholars, although it cannot substitute for renewed study of the original sources.

1.3. LANGUAGES AND SOURCES. The aim of the present work is to contribute a foundation of description and analysis of the major dimensions of Takic phonology, morphology, and syntax. In order to accomplish this, we consolidate and refine materials available from previously published sources, and we also contribute new data, with special emphasis on Serrano. In some cases, such as in inflection in noun phrases where the languages are relatively similar, it has been most convenient to organize the discussion according to individual structural components, such as possessed vs. non-possessed nouns, or case. In other areas, such as morphophonology, the auxiliary complex and the

verb constructions, we have developed parallel treatments organized by language, with cross-references as appropriate. Addressing our goal of providing a full range of basic descriptive materials proved to be an enormous job, and we have not been able to undertake a detailed treatment of Takic morphosyntax in historical-linguistic perspective. We have, however, remarked occasionally on possible historical linguistic comparisons and reconstructions. A detailed attention to topics in historical syntax in the Cupan languages, with comparative sketches of their verb phrases, is found in Jacobs (1975), but we believe the present study to be the first to incorporate data from Tongva and the Serran languages.

A better understanding of Tongva is important, especially since it is probably best understood as a distinct branch of Takic. Tongva shares some features with the Serran languages and some with Cupan. Tongva (but not its dialect *Fernandeño*) shares a distinctive vowel shift with *Luisseño*: the realization of Proto-Takic **i* as *o*, and of Proto-Takic **o* as *e*. Further, Tongva and *Luisseño* share a pattern of unstressed vowel reduction, with the five-vowel system of stressed position being reduced to a three-vowel system in unstressed position. However, in many other respects Tongva is very unlike *Luisseño*, and the apparent shared innovations are probably due to language contact that took place well after the breakup of Proto-Takic, perhaps even in the last two centuries.

Loan vocabulary from Tongva appears in other Takic languages, and Tongva itself exhibits the most dramatic evidence for substratum vocabulary of any of the Takic languages. Its geographical location on the southern Channel Islands and in the Los Angeles Basin suggests that it is descended from communities who were at the leading edge of the Takic spread. This group has been suggested as a center of diffusion of important cult activity that extended as far north as the Central Valley (Hudson & Blackburn 1978).

No published grammar or dictionary of Tongva is available, although a dictionary is in preparation (Pamela Munro, personal communication). The major source for the language is five microfilm reels of field notes collected by J. P. Harrington early in the 20th Century. These form the basis for nearly all of the discussion in the present work. Tongva materials are cited by volume, reel, and frame in the on-line archive entitled

“The Papers of John Peabody Harrington in the Smithsonian Institution, 1907-1957.”⁹ Because Harrington checked and rechecked his elicitations again and again, seeking the phonetic accuracy that he referred to as “clearly heard forever” (often “chf” noted on a file slip), these materials are often highly repetitive, so unless we are discussing variation, we cite only one frame for our examples. Readers should be alert to the fact that there is considerable variation in the notes, but a thorough study of this is beyond the scope of the present work. Harrington also conducted fieldwork on the variety of Tongva spoken in the San Fernando Valley, called *Fernandeño*, and we have cited those materials once or twice. McCawley (1996), a valuable treatment of Tongva history and ethnography, includes as appendices vocabularies of the language collected in the 19th century and the early 20th century (though not the Harrington materials). The reel and frame numbers given with the Tongva examples are from an index of the Harrington materials compiled by J. Hill. In spot-checking the references we have found a few errors, and there may be more. When a search in the on-line archive does not yield the example we have cited, we have been able to find it by imagining possible typographical errors, e.g. 104 instead of 105 for the reel, or, for a frame, 0167 instead of 0176, etc. We apologize for such errors.

Translations of Harrington examples are given as they appear in the field notes, with Spanish orthography, but not usage, normalized from the vernacular Spanish of his consultants, accompanied by our own more literal glosses and any necessary addenda.

Pamela Munro, in collaboration with heritage community members, has worked on the Harrington notes on Tongva for a number of years, and has provided analyses of key grammatical systems including the second-position clitics (Munro 2000) and verb classes (Munro 2012). We thank Professor Munro for sharing with us unpublished work.

For the Serran languages, Anderton (1988) compiled a grammatical description and dictionary of Kitanemuk based on the field notes, again, of J. P. Harrington. The Anderton materials form the basis of the discussion in the present work. While Anderton’s work with the Harrington materials, undertaken before they were photographed and catalogued at the Smithsonian Institution, was careful and scrupulous to the highest

⁹ The numbering of the frames in the on-line version of the Harrington archive is different from that in the microfilm version. The reason is that in the on-line archive the front matter for each reel is included in the numbering. Frame numbers can usually be found for the microfilm by subtracting 10 or 12 from the on-line frame number given here.

degree, we have returned to the original field notes in the Harrington papers in the Smithsonian Institution in order to find additional examples and to pose questions which were not part of Anderton's project. As with Tongva, we cite Kitanemuk materials by volume, reel, and frame of the on-line version of the Harrington field notes in the Smithsonian Institution. The same caveats that we noted above for citation of the Harrington Tongva materials apply.

There is relatively little published linguistic material on Serrano, and one of the major goals of the present work is to contribute as much data and analysis on that important language as possible. Unfortunately Harrington's fieldwork specifically on that language was almost entirely devoted to place names and mapping, all recorded on a single reel of microfilm (3.101 in the on-line archive). However, several of Harrington's Tongva consultants knew some Serrano, so a good deal of Serrano vocabulary appears scattered through the five reels of microfilm devoted to that language in the Smithsonian on-line archive, and we have occasionally cited forms from those materials. Ramón and Elliott (2000), the result of several years of collaboration between linguist Eric Elliott and Serrano elder Dorothy Ramón, is a large collection of texts that provides a rich source for both vocabulary and grammatical examples. The transcription of Serrano in Ramón and Elliott (2000) does not record all phonemic distinctions found by other scholars, including Harrington and K. Hill and the transcription is in many places simply incorrect. It is not clear whether the missing distinctions simply did not appear in Mrs. Ramón's speech, whether they are neutralized for the purposes of a practical orthography, or whether they simply were not heard (Serrano phonetics is exotic and difficult). Furthermore, the translations in that source are quite free. When we cite Ramón and Elliott (2000), we have adjusted the transcription according to our phonological understanding and also the translations where useful. To aid the reader who may be interested in the Ramón texts, we include the original spellings as well as the original translations where ours differ from theirs.

The understanding of Serrano proposed here, while it draws on the above sources, is to a greater degree based on the work of K. Hill, who conducted fieldwork on the language in the early 1960s. K. Hill's materials in raw form are archived (and soon to be available on line) at the Survey of California and Other Indian Languages, University of California at Berkeley. K. Hill's texts are all from a single consultant, the late Mrs. Sarah

Morongo Martin of Morongo. Mrs. Martin is mentioned in Dorothy Ramón's memoirs in Ramón and Elliott (2000) as an exemplary conservative speaker of the language, so we are fortunate to have her contributions to this work. K. Hill also was able to work briefly with Mr. Louie Marcus, also of Morongo.

The archives of Harrington's field notes include extensive materials on all the Cupan languages, especially for Luiseño, Acjachemem, and Mountain Cahuilla. Since ample material on Luiseño and Cahuilla is available in more recent linguistic publications, we have usually used this work instead of Harrington's notes, consulting the latter only occasionally to clarify difficult points. A general source on Cupan is a review of Cupan syntactic history by Roderick Jacobs (1975). This work includes materials from all the Cupan languages, including Cupeño from the village of Wilákalpa, not documented elsewhere.

Luiseño is documented in a large dictionary by Elliott (1999), who included his own materials from work with Villiana Calac Hyde, a resident of the Rincon community. Elliott also included an exhaustive compilation of data from Harrington and other early workers on the language including Philip Sparkman, who collected Luiseño data when he lived at Rincon at the end of the 19th century. A. L. Kroeber worked, also at Rincon, early in the 20th century. George Grace collaborated with Kroeber in the 1950s with new text collection and a redaction of the Sparkman materials published as Kroeber and Grace (1960) (K&G). A pedagogical grammar by Villiana Hyde (1971) in collaboration with linguists at the University of California, San Diego, provides additional materials. A large text collection compiled by Hyde and Elliott (1994) (H&E) is a rich source of grammatical material; lexicon from that work is incorporated in Elliott (1999). Of special interest for Luiseño are materials compiled by Pablo Tac, a young Luiseño speaker who was a seminarian in Rome in the 1830s. Kroeber and Grace (1960) and Chung (1974) present these materials in part. The Tac texts and dictionary have recently been compiled and published in full by Haas (2011), which is our primary source for citations of Tac's work. These are especially useful because Tac was from *Qech*, San Luis Rey, on the Pacific coast, while nearly all other materials are from Rincon, an interior variety. However, there is little difference between the Tac materials and those collected decades later at Rincon; only minor variation can be identified. Luiseño materials from speakers at Soboba appear in the Harrington field notes on Tongva, and invite dialectological work based on a

comparison of Soboba, Rincon, the Tac materials from *Qech* (San Luis Rey), and other locations that may appear in the Harrington materials. A preliminary assessment suggests that the main differences among the varieties are lexical.

Acjachemem is quite similar to Luiseño in many grammatical and lexical respects, but the two languages have some serious phonological differences. Our data come almost entirely from the Harrington field notes in the Smithsonian archive and are cited using the same format as for Tongva, above. Material from the language appears as well in Harrington's (1978 [1933]) redaction of the work of Fray Gerónimo Boscana, a priest at the San Juan Capistrano mission from 1812 to 1826. An invaluable list of vocabulary from sources other than Harrington's notes (and with some data from those as well) has been published in a 2007 dissertation by Woodward. The group's name is spelled in the literature in a number of different ways; we use "Acjachemem" since Woodward (2007) states that this is the preferred usage of the heritage community.

Sources for Cupeño include Hill and Nolasquez, eds. (1973), a collection of texts and a capsule dictionary; this was republished in 2005 with altered page numbering. Hill and Nolasquez citations are of the form H&N 11[22] 33, where "11" is the page number in the 1973 original, "[22]" is the page number in the 2005 reprint, and "33" is the sentence number. A new transcription of the texts (as yet unpublished) was prepared at the Research Centre for Linguistic Typology at La Trobe University in 2000. Citations from the new transcriptions are of the form text title plus sentence number. Hill (2005) is a reference grammar of the language. We have also used J. Hill's original field notes. We have also drawn on materials compiled by Jacobs (1975), and a single reel of Harrington's notes on this language in the Smithsonian archive. In addition, we draw on field notes and texts collected by Paul-Louis Faye in 1919, 1920, and 1921, which are archived in the Bancroft Library. These were also the basis for analyses in Hill (2005). Some of the analyses in the present work, which take advantage of new perspectives made available by our comparative exercise, are revisions of those in Hill (2005). Where we use these new analyses we have included more detail; otherwise the Cupeño data are sketched in more briefly than for the other languages, with readers advised to consult Hill (2005). One problem with the Cupeño data is that by the time we began composing the present manuscript, J. Hill had deposited her file slip boxes, the only key to her field notes, along with the original notebooks, in the archive of the Survey of California and

Other Indian Languages at Berkeley, and had retained only unsearchable pdf copies, of poor quality, of the field notes. Furthermore, her Shoebox¹⁰ files were no longer readable due to changes in the Windows operating system. Unsourced examples on Cupeño are from J. Hill's field notes.

Materials on Cahuilla include data from Desert Cahuilla (DCA) and Mountain Cahuilla (MCA). Where an example is labeled simply "CA" it involves a point on which the two varieties do not differ, and the citation is usually from DCA data. Hansjakob Seiler and his students have contributed a number of sources on Desert Cahuilla, including a study of the verb (Fuchs 1970), an edition of texts (Seiler 1970), a grammar (Seiler 1977), and a dictionary (Seiler & Hioki 1979) (S&H). We have not seen Hioki's study of particles (1972). A difficulty with using the extensive materials in Seiler (1970, 1977) and S&H has been that the transcriptions tend to favor a rather free broad phonetic rendition of speaker performance rather than a consistent phonemic representation of allomorphs. The data on variability obviously is of value in its own right, but the resulting inconsistencies in transcription sometimes make the materials hard to interpret in morphological and syntactic perspective. While both of the present authors worked briefly on Cahuilla with Mrs. Catherine Siva Sauvel when we were enrolled in a field methods class taught by William Bright at UCLA in 1962, neither of us feel competent to seriously revise the Seiler transcriptions. So we mostly have left them intact, with occasional remarks that we hope will clarify inconsistencies. We have occasionally revised Seiler's free English translations to more closely reflect the Cahuilla structure.

For Mountain Cahuilla we reserve discussion mainly to points at which it differs from the Desert dialect. We have consulted Harrington's collection of materials from Mountain Cahuilla speaker Adán Castillo. A pedagogical grammar by Sauvel and Munro (1981) (S&M) provides extensive documentation. A long text edited from the Harrington materials by Mamet (2008) is also a useful source on Mountain Cahuilla. Finally, Eric Elliott and Mrs. Sauvel edited two volumes of texts recorded from Mrs. Sauvel herself. We have consulted only the second volume (Sauvel & Elliott 2004) (S&E) since we have been unable to obtain a copy of the first.

¹⁰ Shoebox is a discontinued language text software produced by the Summer Institute of Linguistics.

* <i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>
* <i>ng</i>	<i>ng</i>	<i>ng</i>	<i>ng</i>	<i>ng</i>	<i>ng</i>	<i>ng</i>
* <i>l/r</i>	<i>-r- (?)</i> ¹	<i>-r-</i>	<i>-r-</i>	<i>-l-</i> ²	<i>-l-, -lj-</i>	<i>-l-, -lj-</i>
* <i>c</i>	<i>tʂ, -j-</i>	<i>ch, -j-, -h-</i>	<i>ts, -j-, -h-</i>	<i>ch, -j-</i>	<i>ch, -j-</i>	<i>ch, -j-</i>
* <i>s</i>	<i>ʂ</i>	<i>h, ʂ, -r, -∅-</i>	<i>h, ʂ, -r</i>	<i>s, ʂ</i>	<i>s, ʂ</i>	<i>s</i>
* <i>w</i>	<i>w, -∅-</i>	<i>w, -∅-</i>	<i>w, -∅-</i>	<i>w</i>	<i>w</i>	<i>w</i>
* <i>j</i>	<i>j</i>	<i>j</i>	<i>j</i>	<i>j</i>	<i>j</i>	<i>j</i>
* <i>ʐ</i>	<i>ʐ</i>	<i>ʐ</i>	<i>ʐ</i>	<i>ʐ</i>	<i>ʐ</i>	<i>ʐ</i>
* <i>h</i>	<i>h</i>	<i>h</i>	<i>h</i>	<i>h</i>	<i>h</i>	<i>h</i>

¹ The evidence for **r* in TV is quite tentative. It is based on the pair TV *xoruurenok* ‘make noise, of water’ and LU *xiilax* ‘rush, of water’. Unfortunately, even if this pair is of common origin, the vowel correspondences are not regular and the initial *x* is unexpected.

² Luiseño also has *-r-* as a result of sound symbolism (chapter 14).

Table 2. Vowels

PUA	Tongva	Serrano	Kitanemuk	Luiseño	Acjachemem	Cupeño	Cahuilla
* <i>i</i>	<i>i (e)</i> ¹	<i>i</i>	<i>i</i>	<i>i</i>	<i>i (a)</i>	<i>i</i>	<i>i</i>
* <i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>
* <i>u</i>	<i>u (o)</i>	<i>u</i>	<i>u</i>	<i>u</i>	<i>u</i>	<i>u</i>	<i>u</i>
* <i>o</i>	<i>e</i> ²	<i>o^R</i>	<i>o</i>	<i>e (i)</i>	<i>e</i>	<i>i</i>	<i>i</i>
* <i>y</i> ³	<i>o</i>	<i>y</i>	<i>y</i>	<i>o (u)</i>	<i>o</i>	<i>y</i>	<i>e</i>

¹ Parentheses indicate unstressed variants. Unstressed mid and high vowels neutralize in TV and LU. Unstressed *i* reduces to a centralized *a* in AC. The other vowels can reduce to *a* as well but do so variably.

² The vowel **o* remains unchanged in TV after **k*: PTak **ko* > TV *xo*.

³ We use *y* for the unrounded central vowel (Harrington’s <ə>), which is higher in Serran than in Cupeño.



Map of the Tactic Languages

Nicoleño, not indicated on the map,¹¹ is from San Nicolas Island, on the lower left. “Luisseño-Juaneño” corresponds to our Coastal Cupan and “Juaneño” is our Acjachemem.

1.6. CONCLUSIONS AND CAUTIONS. Throughout the present work we have tried to point out our own uncertainties and confusions, and we are sure that those who use the work will find many new problems and contradictions that we have overlooked, along with matters about which we were flat-out wrong. But we hope to have provided a foundation of preliminary description and analysis, especially of Tactic morphology, that will make future work on this fascinating group of languages easier, and permit Tactic materials to play a larger role in comparative Uto-Aztecan studies than has hitherto been possible²

¹¹ From Golla (2011:178), cartography by Jackie Honig Bjorkman, courtesy of the University of California Press.

CHAPTER 2

NOTES ON TATAVIAM AND NICOLEÑO

2.0. INTRODUCTION. In chapter 1, we list two languages that seem to belong to Takic but are otherwise barely known. Tataviam, spoken north of Tongva, and Nicoleño, of San Nicolas Island in the Channel Islands, are very poorly documented. For Nicoleño we have only four words, in an entirely amateur transcription, and short song texts that are difficult to interpret because “song language” is somewhat different from everyday language throughout Takic. However, the data are sufficient to establish that they are most likely members of the Takic group or closely related to Takic. The evidence for this determination is presented in this section. The data are so scanty that they contribute little to our understanding of Takic linguistics, except the obvious evidence of variation beyond that attested in the better-documented languages. However, they do attest to the geographical extent of the group.

2.1. TATAVIAM. The “core territory” (Johnson & Earle 1990:191) of the Tataviam was the Santa Clarita Basin in the northwest corner of Los Angeles County and adjacent Ventura County. The group was bordered on the west by interior Chumash, and on the north by Kitanemuk. They may have also bordered with Serrano to the east.

The people were sometimes referred to as “Alliklik,” a Chumash label meaning “grunters, stammerers” (Johnson & Earle 1990:202), which was also applied to interior Chumash communities. Harrington’s consultants for Kitanemuk referred to them in Californio Spanish as *pujadores*, of the same meaning (e.g. 3.98.0017). Kroeber (1915) proposed that the language was Uto-Aztecan, not Chumashan. Bright (1975) reviews the linguistic data and suggests that *Alliklik* be reserved for interior Chumash. Hudson (1982) returns to the problem and finds at least part of the basis for confusion. He concludes that Kroeber’s *Alliklik* refers to a Uto-Aztecan group, probably Tataviam but possibly Kitanemuk, associated with the place name *Castaic*, while the Merriam *Alliklik* vocabulary is probably from the Chumash of *Castac* Lake, probably an interior settlement of Ventureño Chumash.

Munro (2001) provides the most detailed discussion of the Tataviam linguistic materials. Munro assembled data from Bright (1975), from field notes compiled by A. L. Kroeber and J. P. Harrington, and from the records of the San Fernando Mission. She also considered evidence from Tübatulabal (Northern Uto-Aztecan) and Kawaiisu (Southern Numic). We thank Munro for sharing with us a copy of the handout from a 2001 conference presentation, which has not been published. Her conclusion is that the language is Takic, probably most closely related to Tongva. The crucial data establishing Uto-Aztecan (and, more narrowly, Takic) affiliation, appears below.

(1) Tataviam affixes

- a. *mehire' pāt-a* 'tome agua (drink water)' (-a 'accusative' < contraction of PNUA *-a-yī)
- b. *hijutsapā-ma* '¿Ónde vienes? (Where do you come from?)' (-ma '2SG?' < PUA *m...)
- c. *íra'ę ka'm-əŋ* 'tengo mucho miedo (I am very afraid)' (-əŋ 1'SG?' < PUA *n...)
- d. *kákäva a-pāk ātj* 'tulareños, su cabeza de rata (Yokuts Indians, rat-heads)' (a- '3SG possessive prefix'; note TV, SE, KI a- '3SG')
- e. *nitiruku* 'vieja' (old woman), *píkwālarūku* 'muchachito (baby)', *tətanarūku* 'young antelope' (-ruku 'diminutive'; no UA cognates identified)
- f. *pidúk'ų-ŋ* 'Piru', *tas'weju-ŋ* 'Rancho San Francisco', *pi'i-ŋ* 'tular?', *kwitsa'o-ŋ* 'Sierra de la Liebre', *tríkatsi-ŋ* '?', *kwaru-ŋ* 'Lago Elizabeta', *akude'e-ŋ* 'Newhall', *əta-ŋ* 'Cañón de Domínguez' (-ŋ 'placename suffix'; cf. TV and Cupan suffix *-ŋa for locatives and place names)

Munro's morphological segmentation for the accusative of 'water' appears in (1a). Tongva and Acjachemem are the only Takic languages that show accusative morphology in -a and they seem to share it with Tataviam. Note though that the Tataviam word does not show the expected Takic lenition of absolutive *t in 'water'; cf. the lenition *t > r seen in Tongva *paa-r*, nor *t > l seen in Acjachemem *paa-l* and Inland Cupan *pa-l*, nor *t > *t\$ seen in Serran *paa-t\$*, all meaning 'water'. This may be evidence that Tataviam was "near Takic," like Tübatulabal and Hopi, rather than a language within Takic. Alternatively, Tataviam -ta may be the accusative marker itself, as is found in the Southern Uto-Aztecan languages Yaqui and Mayo.

In (2), Munro relates attested Tataviam vocabulary to Uto-Aztecan.

(2) Tataviam lexical items

- a. *ha-ikwə* ‘¿Qué hay?, amigo.’ (What’s happening, friend?) (TV *haa* ‘¿Qué tal? [How are you?]’, SE, KI *haminat* ‘How are you?’; TV *eehwa* ‘friend’)
- b. *hālākā* ‘¡Siéntate! (Sit down!)’ (TV *xaa*, *xaroo* ‘estar (be)’, Tübatulabal *hal* ‘sit’ < PUA **katy* ‘be located, dwell, live, sit’)
- c. *mehire*’ *pāta* ‘tome agua (drink water)’ (PUA **hi...*- ‘drink’)
- d. *ḱákāva apāk ātj* ‘tulareños, su cabeza de rata (Yokuts, rat-heads)’ (GA *xaar* ‘woodrat’, PNUA **kawa*; TV *pwa-* ‘head’; probably < PUA **paN* ‘above, on top of’, cf. Numic ‘head, pot’, as in Shoshone *pampi* ‘head; hair’ [Miller 1972:127])
- e. *nitiruku* ‘vieja (old woman)’ (KI *nohtat* ‘vieja’, SE *nihtavy*^{rt}\$ ‘old woman’; Proto-Takic **nos-ta* ‘old woman’)
- f. *tātānarūku* ‘young antelope’ (TV *tonaa-r* ‘pronghorn’; PNUA **tymyna* ‘pronghorn’)
- g. *piḱúk’u-ŋ* ‘Piru’ (KI *pivuh* ‘tule’) ¹²

King and Blackburn (1978:535) also assume that Tataviam was a Takic language and state that “Archeological data suggest that the Tataviam began to differentiate from other southern California Takic speakers around 1000 B.C.”

2.2. NICOLEÑO. Nicoleño is known from only four words and two short songs, collected from Juana María (the baptismal name given her just before her death), a woman who survived alone for many years on San Nicolas, one of the Channel Islands. The rest of the population had been removed by 1836. She was convinced to leave the island in 1853 and was brought to Santa Barbara, where she died after only a few weeks.

2.2.1. THE FOUR NICOLEÑO WORDS. Heizer and Elsasser (1961) give two sources for four words collected from Juana María during her brief survival in Santa Barbara. The first selection is from “Eighteen Years Alone: A Tale of the Pacific,” by Emma Hardacre in *Scribner’s Monthly* in 1880. The second, with a slightly different transcription, is from Thompson and West’s *History of Santa Barbara County* (1883).

¹² *Piivut* ‘three-sided tule’ was also volunteered as a TV word by Francisco Librado, Harrington’s consultant for several varieties of Chumash (3.102.0439).

Beyond a few words, nothing was ever known of her tongue. A hide she called *to-co* (to-kay´); a man, *nache* (nah´-chey); the sky, *te-gua* (taý-gwah); the body, *pínche* (pin-oo-chey). (Heizer & Elsasser 1961:35 [1966:159])

It was but a short time before her death that they succeeded in making her understand that they desired to have some words of her own language. The following are about all that was learned of it: A hide she called “tocah;” man, “nache;” the sky, “toygwah;” the body, “puoo-chay.” (Heizer & Elsasser 1961:44 [1966:170])

Munro (2002) has provided a detailed treatment of the Nicoleño data, arguing that the second set of transcriptions, from Thompson and West (1883), is probably more accurate (although still very far from what a linguist would have recorded and quite possibly at least second-hand rather than directly from the speaker herself). Nicoleño may have been a Takic language, but its affiliation within Takic is unclear. Munro concludes that the most likely candidate is Cupan. Nicoleño was definitely not the same as the Tongva spoken on Santa Catalina Island, which probably shared the distinctive form *woroojt* ‘man’ and lacked the root with *na-* seen in Nicoleño <nah´-chey> and in Inland Cupan, i.e., in Cupeño and Cahuilla.¹³ We give the four Nicoleño words in (1) and then review Munro’s (2002:666) suggestions regarding to the probable forms of the words.

(1)		Hardacre	Thompson and West	Munro
a.	hide	<i>to-co</i> (to-kay´)	<i>tocah</i>	<i>toká</i>
b.	man	<i>nache</i> (nah´-chey)	<i>nache</i>	<i>naxe</i> or <i>naxi</i>
c.	sky	<i>te-gua</i> (taý-gwah)	<i>toygwah</i>	<i>tóykwa</i> or <i>twíkwa</i>
d.	body	<i>pínche</i> (pin-oo-chey)	<i>puoo-chay</i>	<i>púwke</i> or <i>púwki</i> or maybe <i>pyúwke</i> or <i>pyúwki</i>

¹³ TV *woroojt* and the Cupan words in *naxa-* come from two different PNUA words for ‘grow up’: **wylV* (Stubbs 2011, #1100) and **naka* (Stubbs 2011, #1198) respectively. (Note that for the unrounded central vowel, we substitute our *y* for Stubbs’s *i*.)

Munro suggests that word (1a) ‘hide’ is related to forms such as LU *-tuká* ‘muscle’, CU *-tuk7a* ‘skin’. Since ‘hide’ can also be understood as ‘skin’, this identification seems quite plausible.

In word (1b) ‘man’, she interprets the <ch> as representing a velar fricative, as in German. Her suggested readings, *naxe* or *naxi*, seem to relate to the Inland Cupan words for ‘man’, cf. CU *naxánish*.

Word (1c) ‘sky’ is almost certainly a Takic form, cf. TV *tokuupar*, KI *tukuhpat\$*, CU *tukuchi-*, all meaning ‘sky’.

Word (1d) ‘body’ is more problematic. Munro also suggests that the gloss is erroneous. She finds the most likely analysis to be *pu-* from **py-* ‘3SG possessor’, found in Luiseño and Cupeño, and <...oo-ch...> representing *ux* or *uk*, with <ch> in this example maybe being used for [k], as in Italian. The closest resemblant Munro finds is LU *powki* ‘its wing’. She notes also SE *pyy^Rn* and KI *pyyna* ‘naked’, taking into account the <pin-> of the Hardacre transcription. Alternatively, again considering the Hardacre transcription, we believe another possibility is some word from PNUA **pun-* ‘stomach, belly, waist’. However, Munro suggests that if the Hardacre transcription is a copyist’s error for ?<piuuche>, the readings may be *pjúwke* or *pjúwki* (Munro’s <pyúwke, pyúwki>). These readings would correspond to no known Takic form. Our conclusion is that for now, the identity of word (1d) remains uncertain.

2.2.2. THE NICOLEÑO SONG TEXTS. The song texts are given by Munro (2002) from Hudson (1978, 1981). The first song has actual words, that are said to mean, “I leave contented, because I see the day that I want to get out of this island” (Munro, citing Hudson 1981:190-91). There are two transcriptions of the song, given in (1).

(1) The first Nicoleño song text

Version A	Version B
tokitoki	tikitiki
yamymina	yahamimina tikitiki (repeated three times) ¹⁴

¹⁴ It is unclear whether “repeated three times” means that the line occurs three times or four times. If the line is “repeated once,” it is unambiguously understood to occur twice, but English usage is fuzzy regarding larger numbers of “repetitions.”

tokitoki	
weleleshkima	tikitiki weleleshkima
yaamymina	nishuyahamimina
weleleshkima	weleleshkima
yaamymina	nishuyahamimina
tokitoki	tikitiki

It seems likely that the element < nishu- > in the fourth line of the right-hand version is a version of *ny-\$uun ‘my heart’, used in expressions of feeling in all the Takic languages. Munro suggests a possible relationship between < weleleshkima > and a Mojave vocable, *pelelelele*, used by women to cheer people on as they danced.

However, another possibility must be noted. A Cupeño song (2a) recalled by Roscinda Nolasquez (Hill & Nolasquez 1973) has a single line, sung five times. This same song appears as a lullaby in the “Badger Children” story, told in Serrano by Sarah Martin at Morongo in 1963. Mrs. Martin’s version of the song (2b) again has a single line and is sung five times. The tune pattern in the Serrano song is A / A / B / A / A, the third occurrence of the line having a slightly different tune from the others. Mrs. Martin knew the song was in some other language but did not know what language it was.

- (2) a. *Hajka wele wele momaa* (Miss Nolasquez’s version)
 b. *Hajka wele wele mooma*. (Mrs. Martin’s version)

Miss Nolasquez suggested that the song referred to the motion of the waves on the shore (*haj-ka* ‘at the end’) of the sea (*momaa*, reflecting a Tongva or Luiseño word for ‘ocean’, which is *moomat* in both these languages. Since Juana María’s song is said to have an “island” reference, this may give us another hint as to the meaning of < welele- > in *weleleshkima*; it may refer to the motion of the waves as the singer journeys, a journey being implied by < -kima >, which corresponds to Tongva *kimaa* ‘come’: *welelesh kima* ‘the waves come (?)’ (cf. also Serran *kim* ‘come’; but not Cupan ‘come’ which is unrelated).

A second Nicoleño song is interpreted by Munro (2002) as perhaps entirely in vocables. Again, it has been documented in two versions. Munro reports that Harrington

consulted with an “Indian” who said that the song meant “I continue moving, swaying of the dance, I continue.”

(3) The second Nicoleño song text

Version A

hi(i)hihiyo’oo (repeated two times)

kachnaulanalna’al (with reported swinging in
the dance as the dance was done)

hi(i)hihiyo’oo

Version B

ihu’ihiyuhu (repeated two times)

hachunuwa la nal na’al

ihu’ihiyuhu

Munro observes that there seem to be no Takic words in this song that correspond to the meaning suggested by Harrington’s consultant. We disagree; there are two possible realizations. If we divide *kach=na...* in the second line, the *=na* might be a first person singular clitic like the Cupeño ergative pronominal *=ny*. There are two other syllables *na-* in the line, either of which might be part of a pronoun. The Cupeño first-person singular independent pronoun is *nyʔy*. In addition, the Cupeño verb *wal-(j)ax* means ‘be shuffling the feet’ (cf. transitive *wal-in*, which means ‘dig at something with the feet, the way an animal digs a burrow’; the *j* of the intransitive suffix *-jax* deletes following *l*). A possible transcription in Cupeño, assuming the same reading of <ch> as [x], as suggested in the interpretation of the vocabulary, is as in (4). The parenthetic *l*’s are in the song transcription but would not be present in the presumed Cupeño sentence as spoken.

- (4) CU *Hax=ny wal-a-na(l) nyʔy(l)*.
 who=I shuffling-INTR-CUSTOMARY 1SG.PRO
 ‘Who am I dancing with shuffling feet?’

The *l* elements of course are a problem. It is possible that they are a part of “song language” but this is merely speculative. The other line is pretty clearly a vocable, but the *hi* syllable could have a sense of spiritual “breath” or “wind” (e.g. CU *hi-qsa* ‘rest, catch breath’ from *hi-* ‘breath’, *qusáʔ* ‘breathe’; cf. TV *-hüken* ‘wind’).

The second line of the song in (2) is “repeated three times” (= a total of three times?) and the first line of the song in (4) is “repeated two times” (perhaps for a total of three

times). The number pattern of Cupan ceremonialism is three/five. Thus if the Nicoleño songs indeed show this pattern of repetition, this may be further evidence in support of Takic language affiliation.

CHAPTER 3

SOUND SYSTEMS

3.0. INTRODUCTION. Here we review the phonological inventories for the Takic languages and their historical development.

Phonological inventories for the Takic languages, with a single series of plain stop consonants, are less complex than those of most of their non-Uto-Aztecan neighbors. The Chumash languages have plain, aspirated, and ejective stops and spirants, as well as glottalized spirants, semivowels, and nasals (Klar 1977). Yokuts languages also have plain, aspirated, and ejective stops, as well as glottalized continuants (Whistler & Golla 1986). Going slightly farther afield, however, north of Tübatulabal, one finds a sound system in Sierra Miwok (Freeland 1951:1), which is remarkably similar to that of Takic, having only a single series of plain stops and affricates, without ejectivity or aspiration.

Among the immediately neighboring non-Uto-Aztecan languages in southern California, the Yuman languages are most similar to Takic in their phonological inventories and, uniquely among the non-Uto-Aztecan neighbors, have labialized velar consonants as phonological units. While only one such consonant, **kw*, is posited for Proto-Uto-Aztecan, Proto-Yuman is reconstructed as having both **kw* and **xw* (Langdon 1970:542). In fact the Proto-Yuman consonant system posited by Langdon contains **kj*, **k*, **kw*, **q*, a set of contrasts found in Uto-Aztecan only in Hopi and Serrano, both of which have Yuman languages as neighbors.

Yuman influence also may be the source of consonants like *qw*, *xw*, *lj*, and *ñ* that appear in Cupan inventories (Hinton 1991). The development of multiple sibilants, blade-alveolar *s* [s], apico-alveolar *š* [ʃ], and blade-postalveolar *sh* [ʃ], in the Takic languages may also be due to contact with non-related languages of California where such systems are common (Bright 1978a, Hinton 1991).

Vowel systems in most Northern Uto-Aztecan languages are notable for the presence of the non-low non-front (central or back) unrounded vowel *y*, which is also found in Tepiman, the northernmost group within Southern Uto-Aztecan. This vowel corresponds

to *e* in the other Southern groups. Most scholars reconstruct PUA **y*¹⁵ for this correspondence, regarding the contemporary vowel *y* as representing a retention of something very much like whatever the original vowel quality was.

Among the Takic languages, the vowel *y* is found in the northernmost pair, Kitanemuk (KI) and Serrano (SE), and in Cupeño. The other Takic languages have other reflexes of **y*; this will be discussed in some detail below. The vowel *y* is largely absent from the non-Uto-Aztecan languages of California though it is found in several groups that have Uto-Aztecan languages as immediate neighbors: Chumash (Klar 1977), Yokuts (Whistler & Golla 1986), Sierra Miwok (Freeland 1951:1), Maidu (Shipley 1964), and Washo (Golla 2011:208). The Yuman languages also have *y*, though that vowel does not reconstruct for Proto-Yuman (Langdon 1976). It seems possible that the presence of the vowel *y* in at least some of these neighboring Californian groups may have come about from the influence of Uto-Aztecan.

3.1. TAKIC VOWELS. The vowel system for Proto-Takic is unchanged from that reconstructed for Proto-Uto-Aztecan as a whole.

(1) **a*, **i*, **o*, **u*, **y*

3.1.1. VOWEL LENGTH. All of the Takic languages have contrastive vowel length. For Kitanemuk (KI), Anderton (1988:39) chose not to mark vowel length in her orthography for KI, believing that it was impossible to definitively determine vowel length on any individual item since the Harrington field notes for the language do not record length consistently. Our view is that while Harrington's recordings are indeed inconsistent, with vowel length undermarked, where he writes long vowels more than once in recording a word it is likely that the word indeed has a long vowel. This conclusion is supported by the fact that for 192 stems for which Harrington frequently writes long vowels, in 178 cases vowel length is confirmed in at least one of the sister Takic languages that maintain etymological vowel length, Tongva (TV), Serrano (SE), Luiseño (LU), or Acjachemem (AC). In addition, where Harrington writes more than one stress on a word (usually on the first and second syllables), the non-initial stress is usually confirmed as long in Takic

¹⁵ We substitute our *y* for the *i* or *ĩ* of other scholars throughout, except in direct quotations.

cognates (in 22 of 24 such cases). KI stress is discussed further in 3.4. Our analysis of KI vowel length has identified a number of minimal and near-minimal pairs, seen in (1). Some of these were identified by Harrington in his field notes, although sometimes, as in the case of ‘horn’ and ‘crow’ in (5a), he got the contrast backward (3.99.0324).¹⁶

(1)	KI	long vowel	short vowel
	a.	<i>a-7aa7</i> ‘its horn’ (3.98.0616)	<i>a7a7</i> ‘crow’ (3.98.0350)
	b.	<i>a-muuk</i> ‘he is sick’ (3.98.0234)	<i>amuk</i> ‘over there’ (3.98.0131)
	c.	<i>a-oova</i> ‘he is strong’ (3.98.0257)	<i>a-uva</i> ‘her eye’ (3.98.0216)
	d.	<i>tsaanga-t\$</i> ‘lizard sp.’ (3.98.0117)	<i>hanga-t\$</i> ‘yellowjacket’ (3.98.0134)
	e.	<i>a-huu7=mat</i> ‘he will fart’ (3.98.0463) ¹⁷	<i>a-hu7=mat</i> ‘it will burn’ (3.98.0063)
	f.	<i>kaaka-t\$</i> ‘sagebrush’ (3.99.0218)	<i>kaka-t\$</i> ‘valley quail’ (3.99.0337)
	g.	<i>tamaa-ts</i> ‘tooth’ (3.99.0240)	<i>tamo-ts</i> ‘knee’ (3.98.0361)
	h.	<i>waatsi-t\$</i> ‘a plant’ (3.99.0166)	<i>watsi-t\$</i> ‘hoof, claw, nail’ (3.98.0362)
	i.	<i>ni-jaa7</i> ‘I took’ (3.98.0212)	<i>ni-ja7</i> ‘I flew’ (3.98.0107)
	j.	<i>a-pii</i> ‘he threw a stone at him’ (3.98.0362)	<i>a-pi</i> ‘her breast milk’ (3.98.0362)

In most of the pairs we have found for KI, the length feature is on the first syllable of the stem. However, length can fall anywhere in the word, and Harrington sometimes recorded more than one long vowel in a word, as in the examples in (2).

(2)	KI	a.	<i>a-paamuuk</i> ‘he drowned’ (3.98.0463)
		b.	<i>rioo7in-i7aa-t\$</i> ‘clippers’ (3.98.0283)
		c.	<i>ni-kuuman-ihuun</i> ‘I am sleepy’ (3.100.0393)
		d.	<i>ni-paawii-tsu7</i> ‘I splice rope’ (3.98.0470)

While the examples in (2) appear with long vowels in the Harrington notes, going forward in this work, we also write KI vowels as long where our analysis suggests they were present, even if for a specific item cited, Harrington may not have written it with a non-word-initial stress or a long vowel.

¹⁶ This is not surprising and corresponds to our own experience. Sometimes one can collect a pair of words and notice that there is a vowel length difference and then misidentify which word has which length.

¹⁷ = marks an enclitic boundary; it marks the clitic status of the following element.

KI seems to have at least one long-vowel prefix, *pyy-* ‘3PL’. Harrington explicitly marks this prefix as long only once, commenting of the example *pyy-kat\$* ‘they are’ (3.98.0282) that the prefix is “here long as usual in such position.” The corresponding prefix is SE *pyy-*, also with a long vowel. It seems reasonable to assume that the other plural prefixes are also long, just as in SE: KI *tsyy-* ‘1PL’ (SE *chyy-*) and KI *yy-* ‘2PL’ (SE *yy-*).

A second issue with Harrington’s transcriptions appears in the AC notes, where Harrington transcribed three vowel lengths. His transcription for a stressed short vowel included the vowel followed by a double consonant, e.g. <’attʃal > ‘horse’ (3.123.0382). For long vowels, he wrote a double vowel, e.g. <’atáaxam > ‘people’ (3.121.9783). However, he also sometimes wrote a stressed vowel followed by a superscript vowel, e.g. <’avá^axt > ‘cottonwood’ (3.123.0385). Here he noted that the vowel in the stressed syllable was “not short, half-long.” Bright (1978b) transcribed examples of both the first and last type with a stressed short vowel, and we follow his practice here.

Vowel length has a high functional load in all the languages except Inland Cupan. The long vowels that are distinctive in CU and CA are secondary developments, original vowel length contrasts having been lost. Many of the long vowels of present-day CU and CA derive from **VhV* sequences. All the languages show long vowels in loan words, especially in loans from Spanish.

The practical orthographies that appear in most published work for TV, LU, CU, and CA use double vowels to represent long vowels.¹⁸ We follow this practice also for SE, KI, and AC. For SE, we write the rhotic feature (see below) after the second of a double vowel, *aa^R*, *yy^R*, *oo^R*.

3.1.2. SERRAN VOWELS. The Serran languages maintain the original Tactic vowel system with no serious restructuring. The most remarkable development is that of the rhotic vowel *o^R* from **o* in SE. This has been accompanied by the development of two other SE rhotic vowels, *a^R* < **a* and *y^R* < **y*, either in syllables neighboring original **o* or under conditions yet to be understood. Both Serran languages have added the vowel *e*, found in loan words and also as a combinatory modification of **a* in SE and of **i* in KI. Similarly SE has added *o* in loan words and as a combinatory variant of both **a* and **y*. The fact that KI sometimes substitutes unrounded *y* for Spanish *o* – cf. KI *rihyr* < Spanish *frijol*

¹⁸ For LU, Kroeber and Grace (1960) and Bright (1968) indicate vowel length by a raised dot.

'bean' – suggests that *y* may be phonetically somewhat lower in KI than it is in SE, perhaps as low as the mid central *y* of CU.

(1)	PTak	* <i>a</i>	* <i>i</i>	* <i>o</i>	* <i>u</i>	* <i>y</i>	
	SE	<i>a, a^R</i>	<i>i</i>	<i>o^R</i>	<i>u</i>	<i>y, y^R</i>	<i>e o</i>
	KI	<i>a</i>	<i>i</i>	<i>o</i>	<i>u</i>	<i>y</i>	<i>e</i>

The Serran vowel *e* is found in loan vocabulary, as exemplified in (2).

- (2)
- SE *peeris* 'pear' < Sp. *peras* 'pears'
 - SE *alveerchu7* 'apricot' < Sp. *albérechigo* 'a variety of peach'
 - SE *yskwela7* 'school' < Sp. *escuela* 'school'
 - KI *peesow7* 'peso [the Mexican unit of money]' (3.99.0491) < Sp. *peso*
 - KI *elejewu* 'dancer at paying ceremony' < Chumash *7eleje7wun* 'swordfish; undersea supernatural beings' (3.98.0029)

SE *e* is also found as an assimilation of *a* or *y* to a following palatal sound, as in (3). This assimilation has not been found in KI.

- (3)
- SE *jeii7v* 'will carry' < *jaa7a* 'carry' + *-iv* 'future'
 - SE *kwei7v* 'will eat it' < *kwa7a* 'eat (tr)' + *-iv* 'future'
 - SE *chei7t* 'bushes' < *cha7a* 'be dense, crowded' + derivational suffix *-i* + absolutive suffix *-ta*; cf. adj. *cha7-i7* 'crowded'
 - SE *chawe-j* 'she is picking it' < *chawyy* 'pick' + *-j* 'indicative'; cf. *chawyy-t\$u7* 'she went to harvest' (with *-t\$u7a* 'purposive motion')
 - SE *tyyjpia-jka7* 'to the land of the dead' < *tyyjpia* + *-jka7* 'dative'; cf. *tyyjpia-t* 'the land of the dead'

In some instances, it cannot be determined which vowel underlies SE *ei/ej*, whether *a + i/j* or *y + i/j*, such as in the examples in (4).

- (4)
- SE *weilj-t* 'dish', *weilja-m* 'dishes'
 - SE *hunej7* 'some more, more so'
 - SE *pyvejpa7* 'if'

- d. *\$iikwe-j=ny7* ‘I gutted it’ (with indicative *-j*). There is no available evidence to establish whether the root is underlyingly *\$iikwa* or *\$iikwy*.

In KI **i* often lowers to *e* before *a*, as in (5).

- (5) KI *uvea* ‘before, already’ (3.98.0092); cf. SE *uvia* ‘already’

The Harrington notes show both *i* and *e* written for this sound; Anderton (1988) normalized it to *e*. On the other hand, the appearance of *e* in loan words such as in (2e) clearly shows KI *e* as an autonomous vowel.

KI maintains the inherited vowel **o* unchanged, as *o*, while SE has changed it to a strongly rhotic vowel *o^R* (3.1.2) and has added a new non-rhotic *o* in loan words (as in *ooro7 ~ ooru7* ‘gold’ < Sp. *oro*, *hoosporo7 ~ hoospuru7* ‘match’ < Sp. *fósforo*) and in the combination *ou/ow*, where the *o* derives from *y* and sometimes from *a*.

- (6) SE *o* in *ou*, *ow* or in reduplication of *ou*, *ow*
- hoowkp* ‘one’ (< Serran **hyy* < PUA **syNV* ‘one’ + metathesized **-kup* ‘numeral stem formative’); reduplicated *ho~hoowkp* ‘only one’
 - nouuva7* ‘my eye’ (< *ny-* ‘my’ + *-uuva7* ‘eye’)
 - ouuva7* ‘his/her/its eye’ (< *a-* ‘third person singular possessor’ + *-uuva7* ‘eye’)
 - chi7 ñipko-w* ‘if you beat me’ (*-w* ‘subordinator’, *chi7* ‘2SG > 1SG’ [i.e. ‘you (subject), me (object)’]; cf. *ñipky-j=ny7* ‘I beat him’)
 - hounganich* ‘poor one’; reduplicated *ho~houngan* ‘be poor’

SE has also added the rhotic vowels *a^R* and *y^R*, which are of unclear origin. At least some examples have arisen from **a* and **y* under vowel harmonic influence of a neighboring *o^R*, which is often no longer present in the resulting form. Minimal and near-minimal pairs of non-rhotic and rhotic vowels are seen in (7).

- | | | | |
|-----|----|---|---|
| (7) | SE | non-rhotic | rhotic |
| | a. | <i>paan</i> ‘with (using) water’ | <i>a-paa^Rn</i> ‘its egg’ |
| | b. | <i>paa-v</i> ‘in the water’ | <i>paa^R-v</i> ‘in a wet place’ |
| | c. | <i>acham</i> ‘we’ | <i>a^Rt\$y-m</i> ‘head lice’ |
| | d. | <i>hyngykt\$</i> ‘a great many, hundreds’ | <i>hyy^Rng-t</i> ‘rattlesnake’ |

- e. *myny-7* ‘3PL > 1SG-PST’ *my^Rny^R7-k-in* ‘swallow it’
 f. *ychy* ‘cold’ *y^{Rt}\$y^R* ‘hot’

3.1.3. NON-SERRAN VOWELS. Takic languages other than SE and KI exhibit the vowel inventories in (1).

- (1) TV, LU, AC *a, e, i, o, u*
 CU *a, i, u, y* (plus *e* and *o* in loan words)
 CA *a, e, i, u* (plus *o* in Spanish loan words)

3.1.3.1. A SERIES OF VOWEL SHIFTS. TV and the Cupan languages exhibit a series of vowel shifts from the Proto-Takic (and Proto-Uto-Aztecan) system, shown in (1).

- (1) a. **y* > *o* in TV, LU, AC
 b. **y* > *e* in CA
 c. **o* > *e* in TV,¹ LU, AC
 d. **o* > *i* in Inland Cupan (merging with *i* from PUA **i*)

¹ Sometimes **o* remains unchanged in TV, especially next to velar **k*, **ng*. See 3.1.2.2 below.

An alternative display of the changes and correspondences is provided in (2). Note that **a*, **i*, **u* remain unchanged.

- | | | | | | | |
|-----|--------|-----------|-----------|-----------|-------------|-----------|
| (2) | PTak | <i>*a</i> | <i>*i</i> | <i>*y</i> | <i>*o</i> | <i>*u</i> |
| | TV | <i>a</i> | <i>i</i> | <i>o</i> | <i>e, o</i> | <i>u</i> |
| | LU, AC | <i>a</i> | <i>i</i> | <i>o</i> | <i>e</i> | <i>u</i> |
| | CU | <i>a</i> | <i>i</i> | <i>y</i> | <i>i</i> | <i>u</i> |
| | CA | <i>a</i> | <i>i</i> | <i>e</i> | <i>i</i> | <i>u</i> |

These developments are maintained in stressed position; see below regarding losses of contrast among unstressed vowels.

In TV, Takic **y* has become *o*, as in LU. However in TV, unlike in LU, *o* appears to be phonetically variable with respect to rounding. In his earlier, more impressionistic notes, Harrington commonly recorded <ə> for vowels that he later on wrote as *o*. This is to say, the TV vowel sometimes was heard with a more CU-like quality and sometimes with

a more LU-like one. On the other hand, the San Fernando or Fernandeno variety (TVF), as opposed to the San Gabriel or Gabrielino variety (TVG), regularly retains unrounded *y*. For example, compare TVG *totaa* ‘stone’ (3.102.0409) and TVF *tytaa* ‘stone’ (3.106.0026). See 3.2.2.2 below for more detail.

Though **y* appears as a high vowel in some contexts in CU, it is most commonly pronounced as the mid central vowel [ə], and in unstressed position it pretty much merges with reflexes of **a*. CU *y* is written as <e> in the practical orthography for the language (cf. Hill 2005).

3.1.3.2. VOWEL SHIFTS AND NEUTRALIZATIONS. Several patterns of change in the vowels in the Takic languages cross the boundaries of the Serran, TV, and Cupan sub-branches, and suggest areal inter-influences.

The clearest pattern that crosses sub-branch lines is the vowel shifts in TV and LU, yielding in both languages *o* from **y* and *e* from **o*. This pair of shifts looks like a push chain, with the lowering of **y* to [ə] and then rounding to *o*, displacing original **o*, yielding, not a merger, but a secondary shift of **o* to *e*. The shared vowel shift in TV and LU suggests that the two languages may have participated in a single sociolinguistic community at the time that the shifts occurred. The formation of that community may have been quite recent since, as mentioned above, the TV data show variability between innovative rounded *o*, as in LU, and conservative unrounded *y*. Harrington may have been a witness to sound change in progress.

In Harrington’s notes on the Fernandeno dialect of TV, the vowel **y* remains unrounded, e.g. TVF *ytsy7* ‘cold’ (3.100.0378) vs. TVG *ot\$oo7* (3.103.0546), TVF *kykyyk* ‘bite’ (3.106.0039) vs. TVG *kokook* (3.105.0146). Some examples with **y* are variably rounded among Harrington’s TVG speakers, e.g. *woroojt* (3.104.0059) ~ *wyoojt* (3.104.0038) ~ *wryyyjt* (3.104.0031) ‘man’ (cf. SE *wyt\$y^R\$t\$* ‘man’, pl. *wyt\$y^Rham*).

While the shift of **o* to *e* in LU has largely gone to completion, in TV many examples of lexical items with etymological **o* show variation between *o* and *y*. Some of Harrington’s examples of *y* from **o* are rhotacized, much as in SE.

Harrington represented the reflex of **y* in TV in several ways. These include an upper-case letter *E*, which he used in the earlier phases of his fieldwork, and schwa, ə, which he used in later phases (and then *o* still later). He used the schwa symbol consistently for the mid vowel [ə] in his field notes on CU but he also used it for the higher vowel [i] or

[ɯ] in his SE and KI notes. Considering its variation with *o*, his schwa for TV and TVF probably represents the mid vowel. As mentioned above, in the TV notes both *E* and *ə* are sometimes followed by superscript *r*, presumably representing rhotacization (as in SE). In Harrington’s chart of TV phonemes (3.105.0725), he includes only schwa for this vowel.

Examples of lexical items with etymological **o* that have not become *e*, but which remain as *o* or exhibit variation between rounded *o* and an unrounded, non-front vowel, appear in (1). These include examples where etymological **o* is next to certain consonants, including **ng* (1a,b,e), **k* (1c-f), **h* (1g,h), **m* (1i). An exceptional example, *keengxal* ‘beads, necklace’ (3.102.0175) (compare SE *qoo^Rnqat*), which also lacks the expected lenition of **k*, is probably simply a version of the LU word *qenxat*.

Harrington represented length with a macron over the vowel (mainly in his earlier notes) or a double vowel or a vowel followed by a raised dot (in his later notes), and he also indicated stress with an acute accent. Sometimes he didn’t bother to mark length when he wrote the stress mark, and in later work often didn’t bother to mark stress on vowels marked as long. In the examples we write all long vowels as double and omit the diacritic for stress.¹⁹ In (1) we write his “*E*” where that appears, and “*ə*” where he uses that symbol, and we write his lower-case superscript *r*. For (1e), see also 3.5.1 (21).

(1)	TV	a.	salt	<i>ongoor</i> (3.104.0327), <i>Engoor</i> (3.102.0596), <i>EngEEr</i> (3.102.0673), <i>ongəər</i> (3.104.0327)	LU <i>engla</i> , acc <i>eengil</i>
		b.	throat, neck	<i>-ngoong</i> (3.101.0526)	SR <i>-ngo^Rho^R</i>
		c.	land, earth	<i>ooxor</i> (3.103.0725), <i>oo^rxor</i> (3.102.0500), <i>əə^rxor</i> (3.102.0500), <i>əə^rhər</i> (3.104.0014)	SE <i>oo^Rqt\$</i> ‘sand’ LU <i>exla</i>
		d.	bark	<i>-xooxot\$</i> (3.102.0630)	SE <i>a-qo^Rch</i> ‘its bark’

¹⁹ The stress mark would usually be redundant in that long vowels are almost always stressed and stressed vowels are almost always long. This is partly because underlyingly short vowels that are stressed get lengthened. Harrington variably wrote length or stress or both. Untangling which vowels are underlyingly long and which are only secondarily long is a challenge.

			LU <i>qeshla</i> ‘shell’
e.	squirrel	<i>xongiit</i> (3.105.0314), <i>hə'ngiit</i> (3.104.0068)	SE <i>qoo^Rngt</i> LU <i>qeenglish</i>
f.	older sister	<i>-ooxo7~yooxo7</i> (3.102.0635)	SR <i>-qoo^Rr</i> LU <i>-qee7is</i>
g.	cough	<i>xoxaatok</i> (3.105.0153)	SR <i>q^Ri7muk</i> CU <i>axi7a</i>
g.	only, just	<i>amooheriy</i> (3.105.0161), <i>aməʔheriy</i> (3.104.0066)	SE <i>moo^Rmo^Rho^R7</i> ‘anyway, for no reason, for nothing’ KI <i>mohmoho7k</i> ‘only, just, rude, butting in’ (3.98.0375)
h.	cave, burrow, hole	<i>a-hoorin</i> ‘its hole’ (3.105.0156), <i>a-hEE'pi7i</i> ‘cave’ (3.102.0584)	SE <i>ho^Rro^Rro^R7n</i> ‘be deep’ KI <i>horoxk</i> ‘drill a hole’ (3.99.0450) LU <i>heejax</i> ‘be dug out’
i.	my snot	<i>ne-moota</i> (3.104.0559), <i>ni-məʔta</i> (3.105.0091)	SE <i>ny-moo^Rr</i>

These variants also show up in the word for ‘nose’, seen in (2). Here TV has *o* etc. where *u* is expected. Possibly the vowel of this TV word has been affected by that of the somewhat similar word for ‘snot’, (1i) above.

(2)	TV	nose	<i>a-moopen</i> ‘his nose’ (3.103.0611) ~ <i>a-mEEpin</i> (3.102.0454), <i>ni-məʔpin</i> ‘my nose’ (3.104.0117)	SE <i>ny-mukpi7</i> ‘my nose’ LU <i>muuvi-l</i> ‘nose’
-----	----	------	---	---

TV and LU also share a neutralization of the high-non-high contrasts *i* vs. *e*, and *u* vs. *o* in unstressed syllables in most circumstances. However, at least as we normalize them, the neutralization proceeds in opposite directions, lowering the high vowels of TV, but raising the mid vowels of LU. In stressed position, LU *e* and *o* are low-mid [ɛ] and [ɔ].

In TV the vowels *i* and *u* become *e* and *o* respectively in unstressed syllables, resulting in a loss of contrast between mid and high vowels in that position. While Harrington’s notes vary in representing *i* ~ *e*, *u* ~ *o*, Munro in her publications on TV (e.g. 2000) always writes *e* and *o* in unstressed syllables. We follow Munro’s practice.

In LU, unstressed *o* (< **y*) appears as *u* [ʊ] and unstressed *e* (< **o*) appears as *i* [ɪ]. Bright (1968:2) observes, “In unstressed syllables, there is only a three-way vowel contrast, with nondistinctive variation of /*i* ~ *e*/ and /*u* ~ *o*/. The notation used here arbitrarily writes /*i*/ and /*u*/.”²⁰

While the contexts that trigger or block these neutralizations are not absolutely predicted by the unstressed-syllable condition (and they deserve further research), our normalized transcription of LU follows Bright’s example for LU, and Munro’s for TV. Thus, with certain exceptions discussed briefly as they appear, we write *a*, *i*, *u* for the unstressed vowels of LU and *a*, *e*, *o* for the unstressed vowels of TV. This means that our LU representations differ somewhat from those used by Elliott (1999), who writes all five vowels in unstressed position. Readers who wish to compare our forms with those in his dictionary can easily make the adjustment, that his unstressed *o* and *e* are our *u* and *i*. Elliott tends to write the vowel of a given morpheme consistently but we have not been able to identify the basis for his choice of *i* or *e* or of *u* or *o* among the unstressed vowels. It is definitely not etymologically motivated (see more below) and it seems unrelated to phonetics.

In phonetic terms, both TV and LU probably have/had a vowel system pretty much like the display in (3). We include in the display the guess that the low vowel of the unstressed system was also somewhat centralized. This surmise is based on our own phonetic impressions of the pronunciation of *a* in the related languages SE, CU, and CA. Unstressed *a* is not a clear, open vowel such as the *a* of Spanish. In fact, even stressed short *a* is usually heard as not as open as Spanish *a*.

²⁰ It may be useful to remember that within the structuralist phonemics of the 1960s, a system consisting of a lower vowel and two less low vowels, one of which is fronter and/or less rounded than the other, was to be regarded as a manifestation of the phonemic system /*a i u*/ regardless of the “phonetic details.” The unstressed vowel system LU, in Bright’s view, was an example of this kind of system.

(3) Phonetic Display of the LU and TV Vowel Systems

	stressed			unstressed		
	front	central	back	front	central	back
high	i		u			
semi-high/high mid				i ~ e		u ~ o
low mid	ɛ		ɔ			
centralized low					ə	
low		a				

It may be of some interest to review how various writers have handled the vowel system sketched in (3). All have encountered a constant tension between the desire to keep each morpheme spelled in the same way in its various contexts and the phonetic fact of unstressed vowel reduction. We restrict our attention to the *o* ~ *u* variants, since many of the morphemes that are usually unstressed have *o* from **y*.

We have already noted Harrington's practice in his TVG field notes, especially in the early ones, which was to record the phonetic facts as carefully as possible.

His field notes on LU are much more extensive, and we have examined them only spottily. He usually writes unstressed *u* as <u>, as in <jixélvul> (*jixévlul*) 'wise' (3.116.0046), <hiyémalom> (*hingémalum*) 'little boys' (3.116.0016). However, there are also transcriptions with unstressed <o>, especially following a syllable with stressed *o*, e.g. <nó·notom> (*noonutum*) 'chiefs' (3.116.0044); <nó·nutum> is also given on the same page, collected at a different time from a different speaker.

Impressionistic transcriptions of LU speakers from three different generations, reported in Kroeber and Grace (1960), show that often *o* was heard rather than *u* in unstressed position for what we can identify as etymological *o*. This appears in unstressed syllables in verb roots, as in *tovjúng-* 'ask' (cf. Hopi *tyyvingta* 'ask', Southern Paiute *tyvingujyaangani* [*<tiv^wi'-ŋu-yi-a(·)ŋa-ni>* Sapir 1931:679] 'he asks me') instead of *tuvyúng-* as recorded by more recent observers. A high frequency of *o* in unstressed position appears in the quotative clitic, always unstressed, for which we reconstruct **kwono* (cf. the SE quotative *kwyn(y)*). In the Kroeber and Grace materials we find <-kon-> (p. 183) and <-kun-> (p. 207), with similar frequencies in the 1909 and 1951 data. The 1838 materials from Pablo Tac published in Kroeber and Grace (1960) and in Haas (2011) always show =*kona*. However, as seen especially in Haas (2011), Tac's

practice was to write < o > for all instances of the unstressed rounded vowel, with < u > being reserved for the representation of /w/ (and the stressed vowel /u/).

Examples of *o* are seen in the Kroeber and Grace (1960) transcriptions of the LU verb suffixes *-qush*, *-uk*, *-lut*, and *-nuk*. The last suffix, a well-attested same-subject subordinator, is etymologically probably PTak **-nikwi*. It appears in the form *-nuk* in SE, CU, and CA. In SE it also appears as *-nkw*. It appears variably as *-nuk* or *-nik* in materials from Willy Calac collected by George Grace in 1951 (Kroeber and Grace 1960:182-193). Elliott's consultant Villiana Hyde had only the variant *-nik*. Kroeber's 1909 materials from Felix Calac have both < -nuk > (p. 27) and < -nok > (p. 30) as well as *-nik* (p. 191). The materials reproduced from the writings of Pablo Tac, dated to about 1838, show that Tac consistently used *-noq*, with *o*, as expected (see above). Data for both **=kwon* and **-nuk* suggest a possible shift away from a more TV-like pattern.

The dubitative/interrogative clitic is represented in Elliott (1999) as *=\$u*, based on the speech of Villiana Hyde from the 1960s through the 1980s. This reflects etymological **=\$y* with **y > o > u* in unstressed position. Kroeber and Grace (p. 61) list the interrogative as < šu-, su- (šo-, so-) >, so it is clear they take no stand on what the “correct” representation might be.²¹ Pablo Tac, of course, uses only an *o* form, < -so > (Haas 2011:129).

The second and third person subject clitic, etymologically **=yp* (following consonants) > **=op* > *=up*, is represented in Elliott (1999) as < -up >. In data from Felix Calac from 1909, Kroeber and Grace (1960) write < -up > (p. 62) and also < -op > (p. 66). Pablo Tac writes < -op >.

A similar example is the augmentative suffix, represented in Elliott (1999) as < -wu-t >, from Tactic **-wy-t* (*-t* is the absolutive suffix, marking non-possessed nouns). Felix Calac in 1909 had only eight examples of < -wo-t >, versus 20 of < -wu-t >. Again, Pablo Tac in 1838 always writes it with < o >.

Though CA does not have a systematic pattern of unstressed vowel reduction, there are some vowel quality consequences in CA of the absence of stress. Harrington's notes on CA from Adán Castillo, a Mountain Cahuilla (MCA) speaker, show occasional lowering of unstressed *u*, e.g. < 'ámmol > ‘agave’, where he notes specifically “not *u*”

²¹ Kroeber and Grace's hyphen following the clitic represents the clitic's initial position within the possible string of clitics. They have no special clitic marker corresponding to our =.

(3.107.0164). Seiler and Hioki (1979:16) (S&H) record Desert Cahuilla (DCA) <ʔámul>. Transcriptions in Seiler's (1970) texts do not show examples of this type and one would not expect Seiler to note them since CA has no autonomous *o* phoneme. However, *i* and *e* contrast in CA and etymological *i* appears frequently as *e* in the Seiler transcriptions as well as in the Harrington field notes. Harrington was clearly aware of the phenomenon and often has notes on examples of *e* as “not *i*”, and of *i* as “not *e*”, e.g. <'estú"etcem> (*estú7ichem* in S&H) ‘watermelons’ where the note on the second *e* is “not *i*”, and the singular form *estú7ish* is represented as <'estú"ic> (3.107.0165).²² Seiler (1977:141, 148) observes that *i* in verbal suffixes may be lowered to *e* following the nonfuture suffixes *-qal* and *-wen*, hence *-qa7le* or *-qal-7e* from *-qal-7i*, *-wen-epa7* from *-wen-ipa7*. The ablaut vowel²³ in sequences like *-i-ka7*, *-i-ve* is less variable, usually preserving *i*. Seiler's transcriptions also show rare lowering of *-7i* ‘factive’ and *-ipa7* ‘different subject’ following verb stems as well as after non-future suffixes. Etymological *i* is also occasionally lowered in unstressed syllables in verb stems. The common verb *hichi-* ‘go’ often appears as *hiche-*; in a sample from Seiler's texts, *hiche-* appears 12 times, compared to *hichi-* appearing 24 times.

There is no *i*-lowering in unstressed syllables in CU, although short stressed *i* is usually [ɪ], e.g. [pɪt] ‘road’, [nɪʃλəvəl] (*nishljyvyl*) ‘old woman’. In both CU and CA, in spite of the merger of PUA **o* and **i*, which yields a four-vowel system without *o*, the vowel *u* from PUA **u* remains phonetically quite high, and frequently induces harmonic assimilation to *u* in neighboring vowels. The important feature among CU vowels is the fact that *a* usually seems to merge with *y* in unstressed position. It is unclear whether this is truly a merger or if it is a consequence of our own limitations in hearing the rather blurry unstressed vowels. Our practice is to differentiate between the vowels *a* and *y* according to our etymological understanding, both synchronic and diachronic, as if we could hear the contrast. There must remain many mistakes.

AC has largely neutralized the unstressed vowels, which appear in the Harrington notes as <a>, and also with several symbols for centralized vowels including *ë*, *α*, *ø*, *ə*. Some examples of the neutralization appear in (4). The post-consonantal allomorph of

²² *Estú7ish*, pl. *estú7ichem* has exceptional stress but is of unidentified origin. One is reminded of Spanish *estuche* ‘case’, but any connection between *estuche* and ‘watermelon’ is unknown.

²³ For ablaut vowels, see 4.5.3.

the accusative case suffix that appears in LU as *-i* is always *-a* or an unrounded central or back vowel that Harrington writes <ë>. Pullum and Ladusaw (1986:42) suggest <ë> is equivalent to IPA [ɤ] (the unrounded back vowel at the height of [o]) or to a central vowel between [e] and [ɤ]. This corresponds fairly well to our [ə]. (Harrington's <ə> usually represents a higher vowel, [i]) The symbol <ë> appears in example (4f). However, there appears to be no phonological distinction between this sound and *a* (as in the same, accusative suffix in (4g)), and we write *a* for Harrington's <ë> going forward, in the understanding that this represents a centralized vowel higher than the *a* of stressed position. This follows the orthographic convention introduced by Bright (1994), cited by Woodward (2007).

(4) AC unstressed vowel neutralization

AC	LU
a. <i>-kajta7</i> (3.122.0155) 'sayo (opponent in the peon game)'	<i>-kajtu</i> 'enemy, opponent'
b. <i>kajuumawach</i> 'full of fish' (3.123.0300) ¹	<i>kojuumawish</i> 'full of fish'
c. <i>noo = na = pa</i> [1SG.PRO = 1SG = IRR] (3.123.0286)	<i>noo = nu = pu</i> < <i>noo = no = po</i> [1SG.PRO = 1SG = IRR]
d. <i>chaluupaq</i> 'enter' (3.123.0464)	<i>chulúpax</i> 'enter'
e. <i>hadhaheedhq</i> 'be wide open' (3.123.0513)	<i>hèdhahédhaq</i> 'be continually open'
f. <i>je7iichë</i> 'man (acc)' (3.123.0622)	<i>ja7aachi</i> 'man (acc.)'
g. <i>\$u\$ngalma</i> 'women (acc)' (3.123.0622)	<i>\$u\$ngalmi</i> 'women (acc.)'

¹ While this form illustrates the neutralization of unstressed *i* to *a*, it is unusual in that the suffix sequence that appears in LU as *-mawi-sh* 'full of' usually appears in AC as *-ma7-ch* rather than *-mawa-ch*, e.g. *engma7ch* 'having salt' (3.123.0496), *axi7ma7ch* 'having bad cold symptoms' (3.123.0434).

Kroeber (1909:247) noted a tendency for the vowel of the possessive prefix, which is underlyingly *o* in LU, to harmonize with stressed *a* of the possessed noun in AC. In the Harrington data, as well as in the materials compiled by Woodward (2007), this is sporadic at best. Kroeber observed that noun stems with other vowels had either *e* or *o* in the prefix. However, *a* also appears in prefixes with these stems in the AC corpus, and it seems likely that this is another example of the tendency for unstressed vowels to all appear as *a* or as a central vowel of some kind. The examples in (5) show that even when

we restrict the sample to Harrington's careful transcriptions, that there is considerable variation. Note that for Cupan, the 1SG prefix is historically **ny-*, which yields LU *no-*, even though elsewhere in Northern Uto-Aztecan the prototype appears to be **(n)i-* (cf. SE *ni-* ~ *ny-*, Hopi *i-*, Northern Paiute–Bannock *i-* [Liljeblad et al. 2012:759]).

(5) AC prefix harmony?

stems with *u*

- a. *na-7uuxa* 1SG-cough (3.123.0484)
- b. *na-huu7* 1SG-arrow (3.123.0589)
- c. *na-\$uun* 1SG-heart (3.123.0273)
- d. *ne-\$uun* 1SG-heart (Kroeber 1909:250)
- e. *po-\$un-nga* inside it [3SG-heart;middle-LOC] (3.122.0055)
- no-jul7kala* 1SG-pants (3.123.0555)

stems with *o*

- f. *na-jo* 1SG-mother (3.123.0395)
- g. *no-toow* 1SG-spirit (3.122.0154)
- h. *no-woowala* 1SG-voice.that.echoes (3.122.0155)

stems with *a*

- i. *na-7aach* 1SG-horse;owned.animal (3.123.0509)
- j. *no-kajta7* 1SG-opponent (3.122.0155)
- k. *na-maa-nga* 1SG-hand-LOC (3.123.0615)
- l. *na-wakch* 1SG-shoe (3.123.0314)

stems with *e*

- m. *ne-7e7* 1SG-foot (3.123.0501)
- n. *na-7e7* 1SG-foot (3.122.0220)
- o. *ne-7eev* 1SG-awl (3.123.0410)
- p. *na-7ev-nga* 1SG-awl-LOC (3.123.0410)
- q. *na-7em7la* 1SG-petticoat (3.123.0556)
- r. *na-7etchav* 1SG-left.hand (3.123.0480)

stems with *i*

- s. *no-7iik* 1SG-carrying.net (3.121.0759)
- t. *no-kii-nga* 1SG-house-LOC (3.123.0370)
- u. *na-kii-j* 1SG-house-ACC (3.123.0397)
- v. *ne-ki* 1SG-house (Kroeber 1909:250)
- w. *o-ki* 2SG-house (Kroeber 1909:250)

x. *na-wiw* 1sg-acorn.mush (3.123.0264)

3.2. TAKIC CONSONANTS. The consonant systems of the Takic languages appear in the following tables. The symbols of all the language spellings have been adjusted to accord with our unified transcriptional system. Symbols in parentheses represent sounds that appear only in loan words, usually Spanish, and the bracketed sounds in CU are regarded as of only allophonic status. The TV *s* seems not to be in contrast with *\$*; a given item will have *\$* or *s* depending on the speaker. For typographical simplicity, the glottal stop is represented by the figure 7 (as in the usage of Mayanists, cf. Pullum & Ladusaw 1986: 183).²⁴ In our practical orthography we do not write word-initial glottal stop, which has no phonemic status in TV and SE and is also of uncertain status in that position in KI and maybe even in Cupan. Our transcription is defective in that it does not mark the difference between unitary labialized consonants such as *kw*, *hw* and the sequences *k + w*, *h + w*, which are found across morpheme boundaries. However, there is no known contrast of affricate vs. the corresponding sequence of *t* followed by sibilant.

(1)	TV	<i>p</i>	<i>t</i>	<i>t\$</i>	<i>k</i>	<i>kw</i>	<i>ʔ</i>			
			(<i>s</i>)	<i>\$</i>	<i>x</i>		<i>h</i>			
		<i>m</i>	<i>n</i>		<i>ng</i>	<i>w</i>				
				<i>r</i>						
		<i>v</i>	(<i>dh</i>)		<i>j</i>					

s and *\$* seem to be functionally the same, varying between speakers. We usually normalize these as *\$*.

(2)	SE	<i>p</i>	<i>t</i>	<i>t\$</i>	<i>ch</i>	<i>kj</i>	<i>k^R</i>	<i>k</i>	<i>kw</i>	<i>q</i>	<i>q^R</i>	<i>ʔ</i>		
		(<i>f</i>)	<i>s</i>	<i>\$</i>	<i>sh</i>	<i>x</i>				<i>x^R</i>	<i>h</i>	<i>hw</i>		
		<i>m</i>	<i>n</i>		<i>ñ</i>	<i>ng</i>								
			<i>l</i>	<i>r</i>	<i>lj</i>									
		<i>v</i>	<i>dh</i>		<i>j</i>	(<i>gh</i>)		<i>w</i>						

Elliott (in Ramón & Elliott 2000) writes SE <qw>, but only before *a*. He usually writes <kwa> for our *kw*.

²⁴ Typographical simplicity also motivates the choice of *ch*, *sh*, *\$*, *t\$*, *ng*, *lj*, *dh*, *gh*, *y* over less accessible but unitary symbols like *č*, *š*, *ś/s*, *ć/č*, *ŋ*, *ʎ*, *ð*, *y*, *i/ə*. However, we continue to use the easily accessed symbol *ñ* and accented vowels like *á*, *é*, etc.; these are also necessary for the Spanish glosses from the Harrington notes. Also note that for clarity we use the digraph *ts* instead of unitary *c*.

(3)	KI	<i>p</i>	<i>t</i>	<i>ts</i>	<i>tʂ</i>	<i>k</i>	<i>kw</i>	<i>ʔ</i>		
				<i>s</i>	<i>ʂ</i>			<i>h</i>	<i>hw</i>	
		<i>m</i>	<i>n</i>			<i>ŋ</i>				
			<i>l</i>		<i>r</i>					
		<i>v</i>	<i>dh</i>		<i>j</i>		<i>w</i>			
(4)	LU	<i>p</i>	<i>t</i>		<i>ch</i>	<i>k</i>	<i>kw</i>	<i>q</i>	<i>qw</i>	<i>ʔ</i>
			<i>s</i>	<i>ʂ</i>	<i>sh</i>		<i>xw</i>	<i>x</i>		<i>h</i>
		<i>m</i>	<i>n</i>			<i>ŋ</i>				
			<i>l</i>		<i>r</i>					
		<i>v</i>	<i>dh</i>		<i>j</i>		<i>w</i>			
(5)	AC	<i>p</i>	<i>t</i>		<i>ch</i>	<i>k</i>	<i>kw</i>	<i>q</i>	<i>qw</i>	<i>ʔ</i>
			<i>s</i>	<i>ʂ</i>			<i>xw</i>	<i>x</i>		<i>h</i>
		<i>m</i>	<i>n</i>			<i>ŋ</i>				
			<i>l</i>		<i>r</i>					
		<i>v</i>	<i>dh</i>		<i>j</i>		<i>w</i>			
(6)	CU	<i>p</i>	<i>t</i>		<i>ch</i>	<i>k</i>	<i>kw</i>	<i>q</i>	<i>[qw]</i>	<i>ʔ</i>
		<i>(f)</i>	<i>s</i>	<i>ʂ</i>	<i>[sh]</i>		<i>xw</i>	<i>x</i>		<i>h</i>
		<i>m</i>	<i>n</i>		<i>ñ</i>	<i>ŋ</i>				
			<i>l</i>		<i>r</i>	<i>lj</i>				
		<i>v</i>	<i>(dh)</i>		<i>j</i>	<i>(gh)</i>	<i>w</i>			
(7)	CA	<i>p</i>	<i>t</i>		<i>ch</i>	<i>k</i>	<i>kw</i>	<i>q</i>	<i>qw</i> ¹	<i>ʔ</i>
			<i>(d)</i>			<i>(g)</i>				
		<i>(f)</i>	<i>s</i>		<i>sh</i>		<i>xw</i>	<i>x</i>		<i>h</i>
		<i>m</i>	<i>n</i>		<i>ñ</i>	<i>ŋ</i>				
			<i>l</i>		<i>(r)</i>	<i>lj</i>				
		<i>v</i>			<i>j</i>		<i>w</i>			

¹ The status of a *kw* : *qw* contrast in CA is unclear. Seiler (1977) writes only *kw* for Desert CA and includes only that representation in his chart of the phonemes (p. 24); for Mountain CA, Sauvel and Munro (1981) write *qw* for the unit phoneme and *kw* for *k* followed by *w*; and, again for Mountain CA, Sauvel and Elliott (2004) write both *kw* and *qw* as though they are contrastive units. Harrington writes both *qw* and *kw* in his Mountain Cahuilla notes, with no apparent attention to the question of contrast.

3.2.1. VELAR OBSTRUENTS IN SERRAN. SE has three velar obstruents, *kj*, *k*, and *q*, which are in partial complementary distribution. Conditions for the appearance of each of these velars is discussed in 4.2.4. Non-stem-initial *q* is often pronounced as an affricate [qχ] or even a fricative [χ]. SE *kj* is transcribed the same as *k* except in positions of a possible contrast with *k*.²⁵ *Kj* is written only before the vowel *a* or in a syllable coda when not preceded by a palatal sound, cf. the spellings for three forms of the dative suffix: *-jykja7*, *-jka7*, *-ika7*.

KI, uniquely among the Takic languages, seems not to have had a *k/q* contrast. Harrington's transcriptions include plain <k> and also *k* with subdot <ḱ> and Greek <κ>, perhaps representing [q] (in the KI notes, Harrington used the symbol <q> for phonetic [x]).²⁶ It seems clear that KI had the fronter and backer phonetic range of the velar obstruents like that found in the other Takic languages, but the evidence for establishing a phonological contrast is missing. Unlike our findings for vowel length, comparisons with SE have not been helpful in determining consistent differences among the velars in KI. For instance, for the very frequent KI verb *kat\$* 'be, be located, dwell' (SE *qat\$*), Harrington often (but not in the majority of cases) wrote <κ> (e.g. 3.98.0282). For *kaat\$* 'woodrat' (SE *qaa^Rt\$*), Harrington wrote both <k> (e.g. 3.98.0105) and <ḱ> (3.99.0355). For *-kaaha* 'apron' (SE *-kaah*) he wrote <k> (3.98.0259) or <κ> (3.99.0436). He even wrote <κ> before *y*, as in *kyy7* 'bite' in a typed dictionary slip (3.100.0065); cf. SE *kyy^R7* 'bite', which most clearly does not have [q]. It may be possible that a more sophisticated analysis of Harrington's practice might find evidence for a *k/q* contrast that has eluded us, but we agree with Anderton's (1988) choice to write the single symbol *k*. There is also no evidence for a contrastive *ky* consonant as in SE.

In SE, the only velar obstruent found before *o^R* is *q* (*k*, *kw*, and *ky* are excluded from that environment). For KI *ko*, cognate with SE *qo^R*, Harrington sometimes wrote <kwo>, though for only two lexical items (1a,b). (1c) is included as an example of a lexical item for which the spelling <kwo> is not attested.

²⁵ This is paralleled in Hopi, where *kj* occurs only before *a* and *e*.

²⁶ Elsewhere and later in his work, in AC for example, Harrington used <q> for our *q*.

(1)		SE <i>qo^R</i>	KI <i>ko</i>	KI <i>kwo</i>	
	a.	be full (from eating or of moon)	<i>qo^Rnakwaʔ</i>	<i>-konakwaʔ</i> (3.98.0381)	<i>-kwonakwaʔ</i> (3.99.0047)
	b.	foam (verb)	<i>qo^Rha^Rʔ</i>	<i>-koha[ʔ]</i> (3.98.0081)	<i>-kwohaʔ</i> (3.98.0231)
	c.	kill (pl.)	<i>qoo^Rn</i>	<i>-koon</i> (3.100.0615)	–

3.2.2. THE GLOTTAL STOP. In Uto-Aztecan studies, word-initial glottal stops have been traditionally reconstructed for otherwise vowel-initial forms. This has made for a more unified way of stating various processes, such as that a reduplicative pattern consists of a CV- copy of the following material rather than a double statement involving CV- and also V- copying. However, it seems clear that word-initial glottal stop is rather different from the glottal stop found in other positions. In at least two of the Takic languages, TV and SE (and probably KI as well), the glottal stop seems to figure in the phonology strictly in the syllable coda, with the glottal stop that is sometimes heard before an otherwise word-initial vowel being epiphenomenal, an abrupt onset of the voicing of the vowel. Since there is no contrast between the presence and absence of word-initial glottal stop,²⁷ there can be no confusion if we treat all the languages, at least orthographically, as having no initial glottal stop. Examples like CU *hishmíʔi* ~ *ishmíʔi* ‘something’ seem more straightforwardly accounted for by the loss of *h-* than by having the initial *h* replaced by a glottal stop.

3.2.2.1. NO WORD-INITIAL GLOTTAL STOP IN TONGVA. In TV, vowel-initial syllables reduplicate differently from consonant-initial syllables. Vowel initial words reduplicate as VC- while consonant-initial words reduplicate as CV-, as exemplified in (1).

(1)	TV	unreduplicated	reduplicated
	a.	<i>epuujo-k</i> ‘be ashamed’ (3.104.0208)	<i>ep~iipja-r</i> ‘one who is ashamed’ (3.103.0684)
	b.	<i>iita-r</i> ‘coyote’ (3.105.0381)	<i>eʔ~iita-ro-m</i> ‘coyotes’ (3.105.0381)

²⁷ Languages with a contrast between the presence and absence of word-initial glottal stops are unusual but there are some. K. Hill had the experience of working with Ngadha [ŋaʔɖa], a language of the island of Flores in Indonesia. Native vocabulary can be vowel initial but loan words which count as vowel-initial in Bahasa Indonesia show initial glottal stops.

- c. *novoo-r* ‘basket tray’ (3.103.0116) *no~noovo-r* ‘basket trays’ (3.104.0101)
 d. *toom\$a-r* ‘oak sp.’ (3.104.0143) *to~toom\$a-r* ‘oaks’ (3.104.0143)

With an initial long vowel, as in (1b), the reduplicative syllable ends in a glottal stop rather than in a copy of the consonant that begins the second syllable, as in (1a). Examples (1c,d) show that consonant-initial words reduplicate with CV- no matter whether the underlying root begins with a short-vowel syllable (1c) or with a long-vowel syllable (1d). The strange looking stem changes seen in (1), are quite regular and are studied in some detail in chapter 4.

3.2.2.2. THE GLOTTAL STOP IN SERRAN. In SE, the glottal stop has been restructured to be a feature of the syllable coda. The glottal stop heard sporadically in initial position is regarded as a phonetic onset feature of the vowel, not the glottal stop phoneme. Reduplication is revealing in this matter. As in many other Uto-Aztecan languages, SE has reduplications in CV-, CVh-, and CVV-. Vowel-initial stems reduplicate with V7-, Vh- and VV7-. Examples of Vh- reduplication are *o^Rh~o^Rngaj7-m*, the plural of *oo^Rngaj7-t* ‘lazy one’, and *yh~yj* (< *yh~yjy*) the repetitive/progressive of *yjy-j* ‘steal’. Sometimes the *h* of the reduplication gives the auditory impression of beginning the next syllable: *o^R.ho^R.ngai7m*, *y.hyj*. An example of a vowel-initial stem showing V7- reduplication is *o^R7~o^R\$an*, the completive of *oo^R\$ana7* ‘write’. It is presumed that the syllable division is *o^R7.o^R.\$an*. VV7 reduplication is seen in *uu7~u7* ‘get or take repeatedly, one at a time’, the repetitive of *uu7* ‘take’.

Another example concerns suffixation wherein an underlying glottal stop is lost in syllable-initial position. With the vowel-initial resultative suffix *-y7*: If a stem ends with a glottal stop, the glottal stop deletes before this suffix; cf. SE *aa^Rn-y^R7-k* ‘be open’, the resultative of *aa^Rn7-k* ‘open’.

The glottal stop in KI may behave much the same way as in SE but information is limited and very little is known about this feature of KI.

3.2.2.3. THE GLOTTAL STOP IN CUPAN. In Cupan (LU, AC, CU, CA), the glottal stop is secure in its occurrence as a syllable onset. Where there are problems with the glottal stop in Cupan, they are in postvocalic position, where it tends to be lost after unstressed vowels,

though not in AC. Our analyses for Cupan posit both underlying and inserted glottal stops in post-vocalic position. This is explored in detail in chapter 4.

3.2.3. CORONAL AFFRICATES. From our understanding of the Harrington notes, the affricate of TV (Harrington's <tʃr> or <tʃ>) should be identified as our *tʃ* rather than *ch* (Harrington's <tʃ> or <tc>, which he used for LU and AC, as in Harrington (1978 [1933])). Throughout, we write *tʃ* for the apico-alveolar affricate [tʃ] and *ʃ* for the corresponding sibilant [ʃ]; and *ch* for the blade-alveolar affricate [tʃ] and *sh* for the corresponding sibilant [ʃ].

KI is shown in a transcription adapted from that of Anderton (1980), also based on Harrington's field notes. Harrington's original transcriptions are given in Anderton's dictionary (1988:256-654) and we have also been able to use the Harrington field notes, which are now available on line. An important modification of Anderton's spelling is our use of *ts* for her <c> (Harrington's <ts>) and *tʃ* for her <č> (Harrington's <tʃ>, <tʃr>). Using Anderton's <č> would be particularly misleading because it is all too easily misunderstood as the equivalent of our *ch*, not of our *tʃ*.

Though the KI contrast between *ts* and *tʃ* is certain, there is variation in Harrington's transcriptions for apicoalveolar *tʃ* such that he occasionally writes not <tʃr>, his usual practice, but simply <tʃ>. Since there is no reason to expect a contrast of apico-postalveolar [tʃ] vs. apico-alveolar [tʃ], we take this inconsistency in writing the affricate as having no phonological significance. We should note that <tʃ> is also found in the Harrington notes elsewhere (for languages other than KI and TV) for the blade-alveopalatal (central laminal) affricate which we transcribe as *ch*. Harrington's alternative ways of writing *ch* include <tc> and <tš> as well as <tʃ>.

3.2.4. THE CH AND SH ALTERNATION IN CUPAN. In the Cupan languages (except for AC), with rare exception, [ʃ] (orthographic *sh*) functions as a postvocalic allophone of [tʃ] (orthographic *ch*), i.e., *ch* [tʃ] appears as a syllable onset and *sh* [ʃ] appears as a syllable coda. The sibilant *sh* [ʃ] is distinct from the apicoalveolar sibilant *ʃ* [ʃ], whose occurrence as either onset or coda is unrestricted.

Some exceptions to the complementary distribution of *sh* and *ch* have been found.

- (1) LU *ch* in the coda in lexical formations such as reduplication, place names
- chachnish* ‘some kind of tool’
 - Changichngish* ‘a divinity’
 - Qech* ~ *Qee7ish* ‘San Luis Rey’ (< *qeechi-l*, acc of *qesh-la* ‘shellfish sp.’)
 - qechngawish* ‘person from *Qee7ish*, Luiseño person’
- (2) CA rare *sh* as onset
- qashilj* ‘locoweed’
 - inishilj* ~ *iñishilj* ‘small one’, cf. *inis* ‘a little’ (sound symbolism: palatalization = diminutive)
- (3) DCA coda *ch* in *luch-*, a lexical exception; < Spanish *luchar* ‘struggle, battle, fight’
- luchlúchaw* ‘be rough’ (S&H 97)
 - Hepush luchwet*. ‘His face is rough.’ (S&H 97)
- (4) MCA coda *ch* before 7
- tach7a* ‘its bark, shell’; cf. *tacha-l* ‘bark of tree’
 - hich7a* ‘what?’ (S&M 294)
 - hich7ami*, *hich7amivi* ‘something’, pl. *hich7amivim* (S&M 294)

AC does not have the *ch/sh* alternation or allophony, but instead lacks the fricative *sh* has the affricate *ch* in all environments, as in (5).

- (5) AC
- cha7kwot* ‘sifting basket’ (3.123.0412)
 - maachat* ‘back’ (3.124.0356)
 - a\$lach* ‘bañadero (bathing place)’ (3.123.0363)
 - qeengch* ‘ground squirrel’ (3.112.0466)
 - chachpanq* ‘be mending it’ (3.123.0426)
 - wa7chma* ‘cattle (acc)’ (3.123.0398)

3.2.5. SIBILANT CONTRASTS. A problem for KI is the possibility of a contrast of \$ [ʃ] and *sh* [ʃ]. Most commonly, Harrington transcribed <ʃr>. However, he sometimes wrote simply <ʃ>. Anderton wrote <š> for both. Examples where Harrington’s transcriptions for individual items are relatively consistent appear in (1). These show the possibility of a contrast. However, the SE correspondences, also included in (1) where identified, all

of which show *ʃ* and not *sh*, strongly hint that a contrast is unlikely. Some of the confusion arises from the fact that the International Phonetic Association provides no unitary symbol for the non-retroflexed apico-alveolar sibilant; it must be represented with the awkward composition [ʃ]. (Whether this possibility was known to Harrington or was even available as an IPA practice at the time he worked cannot be determined.) This makes it likely that this sound would sometimes be transcribed with the symbol for the alveopalatal central laminal sibilant [ʃ] and sometimes with that for the retroflex sibilant [ʃ̣]. In (1) and (2), the consonants in question are given with the Harrington symbols; the remainder of the word is written with our normalized spelling.

- | | | | |
|-----|----|--|--|
| (1) | KI | transcribed with <ʃ> | transcribed with <ʃr> |
| | a. | <i>ʃay</i> ‘raw’ (3.98.0457)
(SE <i>ʃayt</i> ‘s.th. raw’) | <i>ʃraaʃits</i> ‘feces’ (3.99.0256)
(SE <i>ʃeiiʃch</i>) |
| | b. | <i>nifeahk</i> ‘I spread it out/paw it over (as salt, dirt)’ (3.98.0213) | <i>nifreahk</i> ‘I part my hair’ (3.98.0355) |
| | c. | <i>aʃy</i> ‘its flower’ (3.98.0085)
(SE <i>aʃy</i>) | <i>ʃryyts</i> ‘acorn woodpecker’ (3.98.0114) |
| | d. | <i>nif̣i</i> ‘my guts’ (3.98.0350)
(SE <i>nyʃi</i>) | <i>nifritʃa</i> ‘my mouth’ (3.98.0238)
(SE <i>niʃytʃ</i>) |
| | e. | <i>ʃomoʃj</i> ‘plant sp. (cocklebur?)’ (3.99.0231) | <i>ʃroongaatʃ</i> ‘lungs’ (3.98.0349) |
| | f. | <i>aʃuun</i> ‘pith’ (3.98.0206)
(SE <i>aʃuun</i> ‘its middle’) | <i>nifruuhi</i> ‘my pubic hair’ (3.99.0257)
(SE <i>niʃuur</i> ‘my umbilicus’) |

While SE has both *ʃ* [ʃ] and *sh* [ʃ̣], SE *sh* is quite rare and does not occur in words related to KI vocabulary with the sibilant in question.²⁸

As with the velar consonants, some lexical items (including some of those above) are transcribed with both symbols at different times. Examples are given in (2). Example (2b) shows variation in writing the two instances of *ʃ* inside a single word; in our normalized spelling (2b) would be *ʃaaʃ*.

²⁸ SE *sh* occurs only before *t* (*cht* > *sht*) or *ch* (*ihch* > *ishch*), root-finally in *luumish* ‘lame’, *piipish* ‘near’, and *-qaiish* ‘opponent’, and in the CA loan word *paʃi-sh* (pl. *-m*) ‘mouse’.

(2)	KI	transcribed with <i>f</i>	transcribed with <i>fr</i>
	a.	<i>afarafara</i> ‘it is all cracked’ (3.98.0481) (SE <i>a\$ararki7</i> ‘cracked’)	<i>nifrara</i> ‘I cracked it’ (3.100.0614) (SE <i>\$ararkina-j=ny7</i> ‘I cracked it’)
	b.	<i>faaf</i> ‘oak sp.’ (3.98.0413) <i>fraaf</i> (3.98.0037)	<i>fraaf</i> (3.100.0658) <i>fraaf</i> (3.98.0037)
	c.	<i>fjymatsi7</i> ‘scratch me’ (3.98.0379)	<i>fryymihwa7t</i> ‘abalone rim scratcher’ (3.98.0485)
	d.	<i>fii7ts</i> ‘urine’ (3.98.0349) (SE <i>\$ii7ch</i> ‘urine’)	<i>afriivana7</i> ‘urinal’ (3.98.0271)
	e.	<i>afut\$u</i> ‘its butt end’ (3.99.0396)	<i>afrut\$u</i> (3.100.0484)

With sibilants especially, it is important to remember that Harrington’s consultants were elderly people who almost certainly suffered from dental problems typical of their age and social condition at that time. That is another factor that makes us suspect that there was no contrast with these sibilants.

Much the same situation obtains for TV, which seems to have only one sibilant phoneme. Both *s* <*s*> and *\$* <*ʃr*> ~ <*ʃ*> are recorded. However, the difference between *s* and *\$* in TV is not by lexical item but by speaker. Since several of Harrington’s most important consultants – one of whom was 98, having been born in 1820 – used *\$*, most of the TV examples we cite show that sibilant.

CU <*ʃh*>, as in Hill and Nolasquez (1973) and Hill (2005), is our *\$*.

AC has both blade-alveolar *s* and apico-alveolar *\$*. Harrington consistently wrote the latter sound as <*c*> (in his earlier transcriptions) and <*ʃ*> (later), rather than with notations like <*ʃr*> which often he used for TV. However, he also wrote LU *\$* – which definitely contrasts with LU *sh* – with <*ʃ*> as well.²⁹ In later work, Bright (1978a) confirms the presence of a “retracted” sibilant.

²⁹ Kroeber (1909:248) observes that this sound in AC, which he writes <*c*>, has a “palatal” quality, “similar to the palatal sounds of Yokuts, Salinan, and other languages in Central California.” Kroeber’s use of “palatal” here is odd. Just in case there is any doubt that Kroeber’s term “palatal” really means “retroflexed,” he goes on to say, “The Dravidian sounds of the *t*’ series are probably similar.” Interestingly, we find that Daniel Jones (1962:214), writing of retroflex consonants, says they are “made by directing the tip of the tongue against the hard palate.” We wonder if work by some phonetician like Jones may have influenced Kroeber’s usage, in which he refers to the target of the articulation, not the active articulator or the articulatory gesture.

3.2.6. APPROXIMANTS AND RHOTICS. Diverse spellings for the voiced approximants [ð] and [ɣ] are normalized as *dh* and *gh*. The labial approximant is represented as *v* and the palatal and labialized velar approximants are *y*, *w*. Note that consonantal *r* in all the languages is a tap (as in Spanish)³⁰ and in TV, probably a trill in word-final position, where Harrington often recorded it as <rr>.

The rhotic feature of SE vowels, indicated by a postvocalic raised capital *R* (*a^R*, *y^R*, *o^R*), is remarkably similar to the rhotic sound of American English in words like *bird*. Note that SE *a^R* is monophthongal, not a sequence of *a* followed by retroflexion like *ar* in rhotic varieties of English. The rhotic-colored back stops are represented similarly, as *k^R*, *q^R*, in an attempt to make it clear that they have nothing to do with the SE *r* consonant phoneme.

3.2.7. INTRUSIVE B AND D IN TONGVA. In TV before *r*, a nasal consonant has a transitional denasalized release. Thus a sequence *mr* or *nr* acquires an intrusive homorganic voiced stop: *mr* > *mbr*, *nr* > *ndr*.³¹ These intrusive stops are clearly not TV phonemes, but we find this phenomenon interesting enough that we retain the *b* and *d* in our spellings, as in the examples in (1). This phenomenon is mainly found with the clause-level clitics (1a) though it also occurs word-internally. Example (1b), with *woondro*, the future of *woo* ~ *woono* ‘be’, is the only attested word-internal example of *nd* among the verbs; verb-internal *mb* can be seen below in (3a). Word-internally, the phonetic problem of the transition between *n* and *r* is resolved more commonly by the loss of *n* before *r*, as in *mokaa-ro*, the future of the verb *mokaana-x* ‘kill’: **mokaana-ro* > **mokaan-ro* > *mokaa-ro*.

- (1) TV a. *Ejoomo-mb = re = 7av = e* *mokaa-ro*.
 1PL.PRO-AUG = 1PL = 2PL = IND kill-FUT
 ‘You pl. are going to kill us.’ (3.104.0098)
- b. *Ajoo7en* *mamaaha-r* *woond-ro* *menee7* *tameev-nga*
 much;many grass.plant-ABS be.there(pl.)-FUT this year-LOC
 heaa ekwaa *Sovoovo-nga*.

³⁰ Never a retroflexed fricative like the *r* of Hopi.

³¹ TV *mb*, *nd* are “postoralized *m*, *n*” in the terminology of Wetzels & Nevins 2018.

now here Soboba-LOC

‘Este año habrá mucho zacate aquí en Soboba. (This year there will be a lot of hay here in Soboba.)’ (3.104.0447)

In (2), the *n* and *r* are brought together by syncope, the rhythmic loss of a non-final vowel. In (2), the root-final vowel *a* of *huunar* is lost in the plural.

- (2) TV *huuna-r*, pl. *huund-ra-m*
 bear-ABS bear-ABS-PL
 ‘bear, pl. bears’ (3.104.0058)

Alternative plurals of ‘bear’ are reduplicated *ho~huuna-r* (3.104.0350), with no plural suffix, and reduplicated and suffixed *ho~huund-ra-m* (3.104.0538).

The examples in (3) show that the insertion of transitional *b* is variable, or at least that Harrington’s transcription of it was variable.

- (3) TV a. *Heaa=no=j toomb-ro.*
 now = 1SG = IND throw-FUT
 ‘Yo lo voy a tirar, I am g[oing] to throw it away.’ (3.103.0565)
- b. *Noo=n=7e toom-ro voolaa ne-neev-tar.*
 1SG.PRO = 1SG = IND throw-FUT ball.ACC 1SG-foot-INS
 ‘I am going to throw the ball with my pie (foot).’ (3.103.0190)

3.3. TAKIC SYLLABLE STRUCTURE. In Takic, as in most languages, syllables of the shapes CV and CVC are common. The V here can be short or long. We represent long vowels with double vowel letters. While this is a convenient orthographical choice, it must be noted that long vowels in most of Takic – and in Uto-Aztecan more generally – are not phonologically sequences of doubled short vowels.

There are some exceptions in Cupan. LU has long vowels in stressed position, but the double vowels found in unstressed position represent sequences of short vowels (4.4.7). The Inland Cupan languages, CA and CU, have lost Uto-Aztecan historic vowel length and the double vowel spellings in those languages are probably best understood as phonologically representing just that, double vowels. Some double vowels in CA result

from loss of intervocalic *h* or *ng* under reduplication (4.6.10). CA also has double-vowel sequences – as well as other vowel sequences – that result from the loss of intervocalic *h* before an unstressed vowel, as in (1).

- (1) CA a. *muu-t* (< *muhu-t*) ‘owl’ (cf. *muh-ta-m* ‘owls’)
 b. *sia-t* (< *siha-t*) ‘cradle’ (cf. *sih-nga* ‘in the cradle’)

Further, again in CA, vowel sequences arise from the loss of a posttonic glide when it is homorganic with one of the neighboring vowels, as in (2).³²

- (2) CA a. *mau-l* ~ *mawu-l* ‘palm tree’
 b. *pau-l* ~ *pawu-l* ‘pestle’
 c. *hua-t* ~ *huwa-t* ‘iodine bush’
 d. *kui-lj* ~ *kuji-lj* ‘funeral’
 e. *kiu-lj* ~ *kiju-lj* ‘fish’
 f. *sui-ly* ~ *suji-lj* ‘scorpion’
 g. *wia-l* ~ *wija-l* ‘pencil cactus’

Otherwise, sequences of vowels do not occur in the Cupan languages, whether within the syllable or in a sequence of syllables. In TV and the Serran languages vowel sequences are found in roots within the syllable. In SE, two examples have been found of vowel sequences in succeeding syllables resulting from a diachronic loss of intervocalic **w*, *hi.kaa.yt* ‘squirrel sp.’ and *ipaa.at\$* ‘valley oak’.

Syllable-initial consonant clusters are vanishingly rare. In most of the languages, the only attested syllable-initial consonant clusters are in Spanish loan vocabulary, such as SE *triiwa7*, CU *triiwa* ‘wheat’, from Spanish *trigo*. The only indigenous initial consonant cluster presently known is SE *tq* [tχ], found uniquely in the inferential modal *tq(a-)* and its derivatives such as *tqamin* ‘strangely’ (< *tqa-* + *hamin* ‘how, somehow’), *tqit* ‘something strange, something unknown’ (< *tqa-* + *hiit* ‘what, something, anything’). The diachronic source for SE *tq* is unclear; it may represent the reduction of an element **taqa*, which appears in Hopi as the particle *taq*, a clause introducer that contrasts the previous statement with its logical consequence. Similarly, the common CA discourse

³² No clear CA example of *uwu* > *uu* or of *iji* > *ii* has come to our attention.

marker *taka* may be related to these forms. An alternative possibility might be a combination of the irrealis modal *t(a)* with the negative *qa*; inferential *tq(a)* never cooccurs with irrealis *t(a)*.

3.3.1. TONGVA SYLLABLES. TV syllables may contain more than one vowel, with a short front *e/i* or rounded *o* as first vowel, as in (1).

- (1) TV
- | | | |
|----|-----------|---|
| a. | <i>ea</i> | <i>meaaro</i> ‘will go’ (3.103.0132) |
| b. | <i>ie</i> | <i>\$iee7enar</i> ‘healer’ (3.103.0472) |
| c. | <i>eo</i> | <i>\$eoot</i> ‘star’ (3.102.0588) |
| d. | <i>eu</i> | <i>keuur</i> ‘fish’ (3.103.0032) |
| e. | <i>oa</i> | <i>poaana</i> ‘yesterday’ (3.104.0116) |
| f. | <i>oe</i> | <i>oee</i> ‘all’ (3.103.0363) |

Many such examples represent the diachronic loss of an intervocalic glide. The occurrence of these vowel sequences seems to be restricted to stressed position. Since stressed syllables are lengthened, all the examples of vowel sequences within the syllable have a short first component and a long second component. In chapter 4, on morphophonemics, we will show that two-vowel syllables reduce to single-vowel syllables in unstressed position. The stressed two-vowel syllables are of the pattern $V_1V_2V_2$ and in the Harrington notes, V_1 is written variously as a glide, a short vowel, or a short vowel followed by a homorganic glide. We normalize these in favor of the short vowel spelling.

Consonant clusters within the TV syllable coda are restricted to glide + obstruent, as in (2).

- | | | |
|--------|---|----------------------|
| (2) TV | | syllable division |
| a. | <i>aawk</i> ‘his mother’ (3.104.0136) | – |
| b. | <i>woroojt</i> ‘man’ (3.103.0166) | <i>wo.roojt</i> |
| c. | <i>akaawkt\$am</i> ‘crows’ (3.103.0208) | <i>a.kaawk.t\$am</i> |
| d. | <i>paajtco7ar</i> ‘bow’ (3.103.0734) | <i>paajt.xo.7ar</i> |

The examples in (2) also illustrate the fact that long vowels in TV can occur in closed syllables. Treating the postvocalic glides phonemically as vowels, i.e., *aaok*, *worooet*,

akaaokt\$am, *paaetxo7ar*, may be a bad idea. It would provide conflicts with the vowel clusters mentioned above with respect to stress placement and lengthening (chapter 4).

3.3.2. SERRAN SYLLABLES.

3.3.2.1. VOWEL CLUSTERS. Serran, like TV, allows sequences of vowels within a syllable, as seen in (1). The possibilities of vowel combination are much more varied than those of TV, above. In SE, the length feature usually falls on the second member of a vowel cluster (within the syllable), but not always. Nothing can be determined about KI vowel length in VV combinations because Harrington only rarely indicated KI vowel length. With respect to (1a), it is unclear if there is a contrast $V_i : V_j$ in most environments in SE and KI; KI examples are treated as having V_j . (1d) provides a rare example of a clear long–short sequence within the syllable where the second vowel cannot be construed as a glide. SE *ia* sometimes corresponds to KI *ia* (1e) and sometimes to *ea* (1f).

(1)	SE	KI
<i>ai</i>	a. <i>tyy7aint</i> ‘poison’	<i>tyy7ajn</i> ‘give an omen’ (3.98.0388)
<i>ai(i)</i>	b. <i>qaiich</i> ‘mountain’	<i>kajts</i> ‘mountain’ (3.98.0351)
<i>ay</i>	c. <i>\$ayt</i> ‘raw’	<i>\$ay</i> ‘raw’ (3.98.0457)
<i>aay</i>	d. <i>jaay7</i> ‘catch it!’, imperative of <i>je-j</i> ‘catch, seize, take’	
<i>ia</i>	e. <i>kwia\$y7k</i> ‘lie scattered about’	<i>kwiatin</i> ‘drag’ (3.98.0446)
<i>ia(a)</i>	f. <i>miaat\$u7</i> ‘go along’	<i>mea</i> ‘go!’ (3.98.0378)
<i>io^(R)</i>	g. <i>nichio^Rpt</i> ‘my small round basket’	<i>kwiot\$sk</i> ‘bend’ (3.98.0216)
<i>ioo^(R)</i>	h. <i>hioo^Rchk</i> ‘go up’	<i>rioo7in</i> ‘shear’ (3.98.0283)
<i>ya(a)</i>	i. <i>myaat\$</i> ‘moon’	<i>myat\$</i> ‘moon’ (3.98.0033)
<i>y(y)i</i>	j. <i>tyyjt</i> ‘devil, spirit’	<i>tyyjt</i> ‘diablo (devil) or spirit’ (3.98.0030)
<i>yi(i)</i>	k. <i>yyit\$sk</i> ‘look back’	<i>hyik(7)ymanis</i> ‘rabbit dance’ (3.100.0293)
<i>o^(R)aa</i>	l. <i>mo^Raa7t</i> ‘smoke’	<i>moaa7t</i> ‘smoke’ (3.100.0423)
<i>o^(R)i(i)</i>	m. <i>cho^Riichk</i> ‘shrivel’	<i>voi\$sk</i> ‘in position of stinkbug, head down, tail up’ (3.98.0282)

Vowel sequences between syllables are also found in SE, often between vowels of the same quality and mainly across morpheme boundaries as in *mi.ia7t\$* ‘one that goes’ (< *miaa* ‘go’ + agentive *-i7a* + absolutive *-t\$a*). SE *ipaa.at\$* ‘valley oak, *Quercus lobata*’ (< **ipaawa-t\$a*) seems to have three syllables.

3.3.2.2. CONSONANT CLUSTERS. Syllable-final consonant clusters are common in the Serran languages. There seems to be no constraint on the class of consonants that may begin a cluster. Subsequent consonants must be non-resonants (except for in combination with a glottal stop, see below). Some representative SE examples are given in (1).

- (1) SE
- a. *wipt* ‘fat’
 - b. *wirukt* ‘vulture’
 - c. *po^Rqt* ‘road’
 - d. *qaikwt* ‘rope’
 - e. *naasht* ‘girl’
 - f. *hukaht* ‘deer’
 - g. *hwii7t* ‘jackrabbit’
 - h. *haamt* ‘grass’
 - i. *chichint* ‘boy’
 - j. *woo^Rngt* ‘rain, rain cloud’
 - k. *weiljt* ‘dish’
 - l. *a^Rt\$a^wt* ‘crow’
 - m. *maa^jk* ‘come around, as around a bend’
 - n. *cheeq^Rt\$a* ‘twin’
 - o. *wyt\$y^R\$t\$a* ‘man’
 - p. *chaa^Rngt\$a* ‘zebra-tailed lizard’
 - q. *kwijjt\$a* ‘black oak, its acorns’
 - r. *huu7t\$a* ‘star’
 - s. *po^Rqp* ‘on the road’
 - t. *churupk* ‘enter’
 - u. *pitk* ‘fill’
 - v. *jarukk* ‘get clean’
 - w. *hajaqk* ‘get knocked down’
 - x. *mii\$k* ‘get wet’
 - y. *cho^Rnu7k* ‘stand up’

z. *amaj7* ‘new’

Two *k*'s in a row word finally, such as in *jarukk* (1v), are separately articulated.

Resonants, but not glides, can occur as finally in SE after a glottal stop, as in (2).

- (2) SE a. *hwii7m* ‘jackrabbits’
 b. *\$yriiri7n* ‘be red’
 c. *ta = n jui7v* ‘I’ll cry’

Glides can follow the glottal stop in KI, see (7) below.

Three-consonant clusters, as in (3), are considerably less common.

- (3) SE a. *majht\$* ‘child’
 b. *iikhwp* ‘half’
 c. *nyyhtk* ‘under me’
 d. *paa^Rchqt* ‘rifle’
 e. *paa^Rchqp* ‘on the rifle’
 f. *cho^Rn7cho^Rn7k* ‘stand around, stand up repeatedly’
 g. *ky^Rvy^R7nk* ‘become full of holes, pockmarked’
 h. *kwei7v = t* ‘3SG will eat it’
 i. *haiipa7n = t* ‘when?’

Many of the SE consonant clusters are occasioned by syncope, i.e., the deletion of a non-final short vowel, as in the examples in (4). A vowel can undergo syncope only before an obstruent. In the inflection of many nouns, the singular form ends in an obstruent suffix, whether *-t*, *-t\$*, or *-ch*, and in the plural this suffix is replaced by the non-obstruent *-m* and in certain locatives by the non-obstruent *-v*. Again, repeated consonants in final position, like those in (4j,k), are separately articulated.

- | | | | |
|-----|----|--|--|
| (4) | SE | syncope | no syncope |
| | a. | <i>hyy^Rng-t</i> ‘rattlesnake’ | <i>hyy^Rnga-m</i> ‘rattlesnakes’ |
| | b. | <i>muum-t</i> ‘great horned owl’ | <i>muumu-m</i> ‘great horned owls’ |
| | c. | <i>naav-t</i> ‘prickly pear’ | <i>naavy-m</i> ‘prickly pears’ |
| | d. | <i>haam-t</i> ‘grass’ | <i>haama-nu7</i> ‘from the grass’ |

e.	<i>miaach-t\$</i> ‘stingy person’	<i>mi~miaacha-m</i> ‘stingy people’
f.	<i>majh-t\$</i> ‘child’	<i>majha-m</i> ‘children’
g.	<i>oo^Rq-t\$</i> ‘sand’	<i>oo^Rqa-v</i> ‘on the sand’
h.	<i>chichin-t</i> ‘boy’	<i>chichina-m</i> ‘boys’
i.	<i>mahaq-t</i> ‘crane’	<i>mahaqa-m</i> ‘cranes’
h.	<i>huunav-t</i> ‘badger’	<i>huunavi-m</i> ‘badgers’
i.	<i>naaw-t</i> ‘dress’	<i>ni-naawa-7</i> ‘my dress’
j.	<i>\$yvat-\$-t\$</i> ‘body louse’	<i>\$yvat\$y-m</i> ‘body lice’
k.	<i>qo^Rpo^Rt-t</i> ‘turtle, tortoise’	<i>qo^Rpo^Rta-m</i> ‘turtles, tortoises’

Syncope seems to be optional in (4k). Upon offering the form *qo^Rpo^Rtt*,³³ the speaker giggled, apparently in recognition of how peculiar it sounded to an English speaker, and thereafter would offer only *qo^Rpo^Rtat*. Thirty years later, it was recorded as *qo^Rpo^Rt* <qerpert> (Ramón & Elliott 2000:614), with a single word-final *t*. Much earlier, Harrington had recorded it as <qopətat> (e.g. 3.101.0043). The word seems to have progressively reduced over the generations.

Qo^Rpo^Rt-t ‘turtle, tortoise’ is exceptional. Other examples for which final double *-tt* would be expected in fact show only single *-t*. Some of these are shown in (5), along with their KI cognates where available. The KI examples do not show the reduction.

(5)	SE sg	SE pl	KI sg	KI pl
a. sack	<i>tangat</i>	<i>tangata-m</i>	<i>tangata-t</i> (3.98.0020)	<i>tah-tangata-t</i> (3.98.0380)
b. small basket	<i>chipo^Rt</i>	<i>chipo^Rta-m</i>	<i>tsopota-t</i> (3.98.0020)	–
c. gum plant	<i>ky7at</i>	<i>ky7ata-m</i>	–	–
d. small bird	<i>wichit</i>	<i>wichita-m</i>	<i>witsita-t</i> (3.99.0322)	<i>witsita-m</i> (3.99.0322)

The pattern of syncope in KI is somewhat different from that of SE and the KI forms of (5) may represent the forms as they existed in an older form of SE before the application

³³ Perhaps a loan from a Yuman language, cf. Mojave *kapet* ‘turtle, tortoise’ (Munro et al. 1992:115), unless, of course, the Mojave word is instead a Takic loan.

of the more comprehensive version of syncope of present-day SE. In SE the suffix *-t* has completely disappeared (coalesced with the stem consonant) in the nouns given in (5).

That the final *-t* of SE *tangat* (5a) and *chipo^{Rt}* (5b) is not the absolutive suffix is further demonstrated by the possessed forms *ni-tangt* ‘my sack’, *ni-chio^{Rpt}* ‘my basket’, both of which show the retention of the *t* and metathesis (and the regular collapse of **-ta.angt* to *-tangt*, where “a.a” represents a theoretical sequence of two short a’s).

The existence of the near-homophone SE *qo^Rpo^R-t*, pl. *qo^Rpo^R-m* ‘a round kind of basket’ (perhaps a turtle-like basket) may also contribute to the preservation of the separable suffix *-t* in *qo^Rpo^{Rt}-t*, pl. *qo^Rpo^Rta-m* ‘turtle’.

The pattern of inflection found in (5) may have been extended in SE to other nouns with a different original structure, as seen in (6). The KI forms in (6) show the final *-t* as an inflectional suffix. In the corresponding forms in SE it seems to have become fused with the stem, at least to the extent that it is not replaced in the plural by *-m*.

(6)		SE sg	SE pl	KI sg	KI pl/adverbial
a.	cottonwood	<i>wama-t</i>	<i>wama-ta-m</i>	<i>wama-t</i> (3.99.0130)	<i>wama-m</i> (pl.) (3.99.0130)
b.	willow	<i>haqa-t</i>	<i>haqa-ta-m</i>	<i>haka-t</i> (3.98.0171)	<i>haka-jyk</i> (loc.) (3.98.0147)

The SE word *taaqt* ‘human being’, pl. *taaqt-a-m*, seems to have joined this group. Though diachronically the final *-t* of *taaqt* is an absolutive suffix, there is no synchronic internal SE evidence to support that analysis. The SE word for ‘self’, *-taq(a-)*, comes from the same etymon, PUA **taaka*, but it bears no synchronic derivational connection with *taaqt*. The KI correspondence of *taaqt* is unsyncoated *taakat* (3.98.0288), pl. *taaka-ta-m* (3.98.0311).

Like SE, KI permits quite complex consonant clusters, as shown in (7). Unlike SE, KI allows glides to appear in clusters following the glottal stop, as in (7a-c).

- (7) KI
- a. *hypy7jt* ‘very small beads’ (3.98.0022)
 - b. *\$ikwa7jts* ‘wild oats’ (3.99.0165)
 - c. *ra7wk* ‘sit’ (3.100.0066)
 - d. *hypyk* ‘rub buckskin’ (3.100.0351)
 - e. *kwitkwitk* ‘multicolored’ (3.100.0842)
 - f. *kwiotk* ‘it is bent’ (3.98.0216)

- g. *vaat\$ʔk* ‘it is circular’ (3.98.0287)
- f. *piakk* ‘take out’ (3.98.0202) ¹
- g. *\$akwk* ‘hoarse, nasal’ (3.98.0278)
- h. *muyr\$ʔk* ‘sad’ (3.98.0320)
- i. *vo7rk* ‘boil (tr)’ (3.98.0231)
- j. *y7vk* ‘raise something up out of reach’ (3.100.0545; Anderton 1988:336)
- k. *-no7mk* ‘buy’ (3.100.0348; Anderton 1988:432)
- l. *wipt* ‘fat’ (3.98.0020)
- m. *pokt* ‘trail, road’ (3.98.0391)

¹ Harrington transcribed *piakk* as <piak’k>, with the marker <’> indicating that the first *k* of the *kk* cluster is separately released, as in SE.

3.3.2.3. SYLLABLE-INITIAL CONSONANT CLUSTERS. The SE inferential modal/evidential *tq(a)* (1) and its derivatives, as in (2), provide the only examples of word-initial consonant clusters in native Serran vocabulary. The derivatives are from indefinites and have the sense of ‘X-or-other, a strange sort of X’.

- (1) SE a. *Tqa = vy-7 hiintu7.*
 INFR = 3SG-PST marry;take.a.wife
 ‘I guess he married her / He must have married her.’

- (2) SE a. *tqami7* ‘someone-or-other’ *hami7* ‘someone, who’
 b. *tqiit* ‘something-or-other, something strange’ *hiit* ‘something, what’
 c. *tqaiipiu7* ‘from somewhere-or-other, from some strange place’ *haiipiu7* ‘from somewhere, from where’

In loan vocabulary from Spanish a few initial consonant clusters are attested in SE (3), but none are reported for KI, cf. (3d) where SE has initial *tr* as in the Spanish original while KI has an inserted vowel which breaks up the consonant cluster: *tariiwu7*.

- (3) SE a. *franseesjam* ‘French’ *francés*
 b. *skweela7 ~ yskwela7* ‘school’ *escuela*
 c. *traapu7* ‘cloth, rag’ *trapo*
 d. *triiwa7* ‘wheat’ *trigo* cf. KI *tariiwu7* (3.98.0239)

A final source of initial consonant clusters in SE is in the remarkable occurrence of the irrealis modal *t* in sentence-initial position. This is rare; all three attested examples are given in (4).

- (4) SE a. *T* *niat\$kin-iv.* / *Niat\$kin-iv=t.*
 IRR.3SG > 3SG lock-FUT lock-FUT = IRR.3SG > 3SG
 ‘He’ll lock it.’
- b. *T* *ny-huun* *umi7k-iv.* / *Ny-huun = t* *umu7k-iv.*
 IRR.3SG 1SG-heart forget-FUT 1SG-heart = IRR.3SG forget-FUT
 ‘I’ll forget (“My heart will forget”).’
- c. *T* *hamin* *pa-t* *ñiha-j,* *vy-chi7* *chysh-chyva7.*
 IRR.3SG how PROX2-ABS do-IND 3SG-1PL.OBJ IPFV-follow
 ‘What’s the matter with him that he’s following us around?’

3.3.2.4. DISTINGUISHING BETWEEN *I* AND *J*. A confounding problem has been how to treat SE vowel + [i] within the syllable. There is often no phonetic basis for distinguishing between vowel + *i* and vowel + *j*. K. Hill over the years preferred to write vowel + *i* for all examples in which postvocalic *j* does not devoice, as it does after *i* before obstruents, as in *kii-jka7* ‘to the house’. The spellings in Ramón and Elliott (2000) have postvocalic *j* (their <y>) in most of the examples where K. Hill was writing *i*. We have decided in this study to write *j* or *i* according to our understanding of comparative Takic and of the dynamics of the derivational rules, e.g. *ama-j* ‘that (acc)’ (not <ama-i>) because the accusative suffix *-j* is from underlying *-jy*, but *kwe-i7v* ‘will eat it’ (not <kwey7v>), a metathesis involving the vowel-initial future suffix *-iv*. This approach seems to solve certain perceptual conundrums. For example the indicative form of the verb ‘go’ has been variously recorded as <mi>, <mih>, and <mii>. A representation *mij* is consistent both with the morphology (*mi-j* [go-IND]) and with the confusing range of phonetic perceptions. However, the reader should be aware that spellings with postvocalic short *i* and *j* represent pretty much the same thing. The same is true of much less common postvocalic *u* and *w*.

3.3.3. CUPAN SYLLABLES. Cupan syllable types are tightly constrained. The maximum onset is a single consonant, with exceptions arising in initial position in Spanish or English loan vocabulary. Every non-initial syllable must begin with a consonant – with certain systematic exceptions mentioned above at 3.1 (1, 2). Unlike TV and the Serran languages, the Cupan languages do not allow a syllable to contain more than one vowel – though the double (long) vowels of Inland Cupan (see 3.1.1) may technically be exceptions, depending on whether a sequence containing such a vowel combination is to be considered as one syllable or two.³⁴

The maximum syllable coda in non-final position is a single consonant, such that a sequence of consonants (-CC-) is to be found only between syllables (with the striking exception of AC). For Inland Cupan, final syllable codas are limited to a single consonant. In LU final syllables have looser constraints than non-final syllables. Long vowels that shorten in closed syllables non-finally are permitted in final syllables, as in (1a), and some syllable-final resonant-plus-obstruent combinations are allowed, as in (1b).

- (1) LU a. *no7eeng* ‘my salt’; cf. *engla* ‘salt’, *eengil* (acc)
 b. *jumájk* ‘long ago, formerly’

AC syllable codas are very different, with sequences of up to three consonants in syllable-coda position. Their complexity matches and perhaps surpasses that of SE (cf. 3.3.2.2). The complex sequences of consonants of AC are found in both medial and final position, as seen in (2).

- (2) AC a. *cha7kwt* ‘ciernador (sifting basket)’ (3.123.0432)
 b. *chaluj7ch* ‘la castilla (the Spanish language)’ (3.123.0439)
 c. *maqa7xktam* ‘be going to go to bed (pl.)’ (3.123.0578)
 d. *patkwej7x* ‘su enfermedad (3SG’s illness)’ (3.123.0275)
 e. *pej7wechp* ‘lo mismo (the same)’ (3.123.0305)
 f. *qenxch* ‘collarbone’ (3.123.0401)
 g. *sokojhl*, pl. *sokojhlam* ‘ortiga grande (large nettle)’ (3.122.0047)
 h. *soskmal* ‘ortigueta chiquita (small nettle)’ (3.122.0047)
 i. *takav\$t*, pl. *takav\$tam* ‘chichiquelite (black nightshade)’ (3.123.0475)

³⁴ Inland Cupan stress patterns are of no help in resolving this matter.

- j. *toomaw7ch* ‘ciego (blind)’ (3.116.0236)
- k. *tooj7kaw7t* ‘risueño (smiling, pleasant)’ (3.123.0561)
- l. *wakpch* ‘escoba (broom)’ (3.116.0173)
- m. *waqchl* ‘meloncilla, a kind of ash-colored plant’ (3.121.0489)
- n. *wimxan7t* ‘pesado (heavy)’ (3.123.0527)
- o. *xiim7q* ‘he is smiling’ (3.123.0560)

3.4. TAKIC ACCENTUAL SYSTEMS. Takic accentual systems are diverse. Little is known about secondary stress, so we describe only primary stress. A major distinction among the groups is that in TV and the Serran languages, the domain for stress is the word. In contrast, in the Cupan languages, prefixes are nearly always extrametrical (with exceptions to be noted for stressless roots), and the domain of stress is the root or stem. A short vowel counts as one mora and long vowel as two moras for the placement of stress. In Takic, syllable-final consonants also figure in the mora count, unlike the situation reported for Southern Paiute where the gemination or prenasalization of a consonant has no effect on stress placement (Sapir 1949:50-51).

TV and SE share a system of stress on the syllable containing the second mora of the word, including any prefixes. SE and KI also, unlike TV, have stress on the first syllable of the word even if it is short, at least in citation forms. This means for SE, and probably as well for KI, that both a short first syllable and the second syllable are in strong position, with subsequent syllables being pronounced in a much more reduced fashion, often losing a short vowel entirely when followed by an obstruent consonant. Syllables in non-initial position, either closed or containing a long vowel or when following a syllable in weak position (there is a kind of alternating stress here), also count as strong with respect to any following syllable. In context, initial short syllables tend not to be stressed and they may weaken; an extreme case has been noted with *chichint* ‘boy’, which in fast speech has been heard as *chchint* or even as just *chint*.

In the Cupan languages, the stress-bearing unit is the root or base, with prefixes unstressed. Within the root or base, AC shows the same second-mora stress pattern as that found in TV and Serran; the prefixes show evidence of secondary stress. LU stress is similar though with many complications, especially ones having to do with secondary vowel lengthening and shortening. The LU prefixes also show indications of having secondary stress. CU simply has lexical stress on roots, probably the result of a loss of

vowel-length contrast from an earlier second-mora stress system, but with the added complication of a set of stressless roots that displace stress to the prefix or suffix, depending on the construction (cf. Hill & Hill 1968). CA has root-initial stress almost exclusively. Rare exceptions are marked.

3.4.1. TONGVA STRESS. In TV, the stress is almost always on the syllable containing the second mora of the word (including prefixes), as seen in (1).

- (1) TV a. *huunar* ‘bear’, *hohuunar* ‘bears’ (3.105.0390), *paahonar* ‘great bear’ (3.105.0473)
 b. *honaar* ‘badger’ (3.105.0398)
 c. *huur* ‘arrow’, *ne-huu* ‘my arrow’ (3.105.0291)
 d. *aawverot* ‘type of bead’ (3.103.0536)
 e. *a\$aawt* ‘eagle’ (3.103.0709)
 f. *m-ook* ‘your (sg.) mother’ (*mo-* + *-ook*)

The examples in (2) show that stress may fall on disyllabic prefixes. Examples (2a,b) show stress falling only on the prefix. A stem with a long vowel may retain its stress even with a stressed prefix (2c,d). Also, a disyllabic prefix may occur with no stress (2e).

- (2) TV a. *ejoo-ken* ‘our houses’ (3.102.0888)
 b. *omoo-jok* ‘your (pl.) mother’ (3.104.0090)
 c. *kotaa ejoo-hiin* ‘our wood’ (3.103.0342)
 d. *ejoo-eehja7* ‘our compañero (friend)’ (3.103.0638)
 e. *pomo-eehja7* ‘their compañero’ (3.103.0638)

With a short root, the stress may even fall on what we analyze as a clitic (chapter 8), as in (3).

- (3) TV *Me = n = a = j* *huute-ro* *paa-ra.*
 go = 1 = 3SG.OBJ = IND see-FUT water-ABS.ACC
 ‘Voy a ver el agua. (I’m going to see the water.)’ (3.104.0097)

While “short” form of the TV verb ‘go’ normally appears as *mii* (the “long” form being *meaa*), apparently the stress skipped it in the sentence cited in (3), but interestingly,

Harrington indicated no lengthening of the vowel *a*; at least in this respect it behaved somewhat like a clitic should.

In (4) stress falls on the second root syllable in the absolutive form and the first root syllable in the prefixed form. In both examples the stressed syllable contains the second mora. The consequent vowel changes are reviewed in 4.1.1.

(4) TV *eviīt* ‘awl’ (3.102.0741), *ne7-īive7* ‘my awl’ (3.104.0092)

A short vowel before another vowel does not count as a mora (and is often written as glide in the source materials), yielding forms like those in (5).

(5) TV a. *t\$ot\$oiim* ‘lazy ones’ (3.104.0459)
 b. *nahoaa7a* ‘pay it!’ (3.104.0408)
 c. *omo-eehja* ‘your (pl.) friend’ (3.103.0638)

Munro, as mentioned above and whose practice we follow, consistently writes only *o* and *e* in unstressed syllables. Harrington’s transcriptions suggest that this vowel may be perceived variably and/or may have been variable across different speakers. He often wrote the etymological vowel in reduplications, as for instance in <huhúunar> (3.105.0390) for *hohuunar* ‘bears’; and for *paahonar* ‘great bear’, he wrote <páahunarr> (3.105.0473). But he wrote both <hunárr> (3.105.0398) and <honáarr> (3.104.0456) for the related word *honaar* ‘badger’. The ‘badger’ examples also attest to Harrington’s earlier <hunárr> and later <honáarr> transcriptional modes.

While the examples above suggest a strong relationship between stress and vowel length, the relationship is not entirely regular. The most common pattern appears to be that stressed vowels will be long, and unstressed vowels will be short. However, a few words with long vowels not marked for stress appear in Harrington’s notes, as in (6) below. Example (6c), a form with only one attestation, is doubly exceptional. The first syllable, which Harrington transcribed as long, is apparently unstressed and the stress is marked on the syllable containing the *third* mora. The word was collected as a somewhat forced projection of what the TV word might be by a comparison with words in other languages with long *kii-*. Perhaps this special attention to the unstressed first syllable

affected the pronunciation.³⁵ Short stressed vowels in open syllables, if (6d) is correct, are quite rare. The construction in (6d) appears only once in the Harrington materials and *toruuko7am** or *toruuxo7am** may also have been possible.

- (6) TV a. *omoo-kii-n* ‘your (pl.) houses’ (3.102.0017)
 b. *ijoo-\$uun* ‘our hearts’ (3.104.0349)
 c. *kiingáarot* ‘householder’ (pl. *kekiingarotom*) (3.105.0297)
 d. *toruxo7am* ‘old women’ (3.104.0067) (pl. of *toku7* ~ *toxuu7*; Harrington notes for *toxuu7* that the vowel is “half long”)

3.4.2. SERRANO STRESS. In SE, the first two moras are in “strong” position. This gives the impression of stress on the first syllable if it is long (contains a long vowel (1a,b), or is closed by a consonant (1c-e)), and on both the first and second syllables if the first syllable is short (1f-k).

- (1) SE a. *huunat* ‘bear’
 b. *aa^Rny^Rht* ‘a large kind of ant’, pl. *aa^Rny^Rm*
 c. *cho^Rn7cho^Rn7k* ‘stand up repeatedly’
 d. *kuhkuman* ‘yawn’
 e. *pitkin* ‘fill it’
 f. *wyt\$y^R\$t\$* ‘man’, pl. *wyt\$y^Rham*
 g. *ahy^Rngt* ‘eagle’, pl. *ahy^Rngam*
 h. *nijykchui7v* ‘my late mother’
 i. *nykuumaniv* ‘where I sleep’
 j. *kjaleesa7* ‘buggy’ (< *Sp. calesa*)
 k. *pupuutia7n* ‘fill several containers’

An underlyingly final syllable is normally extrametrical.

The extrametricality of the final syllable leaves short final vowels subject to apocope (cf. 4.2.2), thus giving rise to alternations such as that of the absolute *-t(a)* in (2).

³⁵ Harrington’s note reads: “Jes. R. kíikat = S. kíivako’ = G. (he thot long) kiingáarot, Sp. casero. Is sure this G. form is right, he thinks it over carefully. Que bien! G. pl. kikiingarotom jovóovaṇa, the inhabitatants of Soboba. = S. kíivakom jovónpe.” (3.105.0297) [Jes. = Jesús Jauro; R. = Reyeyño/Luiseño; S. = Serrano; G. = Gabrielino/Tongva; Sp. = Spanish]

- (2) SE 'that nearer one'
- a. nominative *pa -ta* > *pat*
- b. accusative *pa -ta -jy* > *patay*

The full form of *pa-ta-jy*, with unapocopated *-jy*, can be seen in (3).

- (3) SE *Pa-ta-jy = ny-7* *paa^Rvchan.*
 PROX2-ABS-ACC-1SG > 3SG-PST tell.story
 'I told that story (to you).'

The extrametricality of the final syllable appears to be revealed quite conspicuously in glottal stop metathesis (cf. 4.2.6). The inflected verbs in (4) with the future suffix *-iv* show the difference between actually occurring forms and the forms that would be expected if the underlyingly final syllable was counted as in strong position.

- (4) SE a. will run *ya7 -iv* > *yey7v* not **ya7iv*
 b. will eat it *kwa7 -iv* > *kwei7v* not **kwa7iv*

However, with a consonant-initial suffix, the pattern revealed is different. The verbs in (5) have the immediate future suffix *-qa7* 'be going to'. Again the second syllable is melded with the first via glottal stop metathesis.

- (5) SE a. be going to gather from *chi7a -qa7* > *chia7qa7* not **chi7aqa7*
 the ground
 b. be going to burn (intr) *hu7a -qa7* > *hwa7qa7* not **hu7aqa7*

To account for the examples in both (4) and (5), we suggest that stem-final syllables of verbs, unlike those of nouns, remain extrametrical even in the presence of inflectional endings. And the inflectional endings themselves seem to be extrametrical as well. This consideration seems to be parallel to the diachronic development of a pattern of initial stress on verbs in the Cupan languages (see 3.4.7). Perhaps a difference in the accentual treatment of nouns and verbs was a feature of Proto-Takic.

3.4.3. KITANEMUK STRESS. In KI, the stress is always on the first syllable of the word (including prefixes) (Anderton 1988:40), with stress (perhaps secondary stress) apparently also falling on the second syllable if the first is short, as in SE. Even Spanish loans (1c) conform to this pattern. Harrington often wrote stresses on the first two syllables of KI words when the first syllable was short.

- (1) KI a. *tuhihwa7t* ‘grinding stone’ (3.100.0702), *ni-tur=mat* ‘I will grind it’
 (3.98.0026)
 b. *tymkits* ‘big cave’, *tytymkits* ‘big caves’ (3.98.0077)
 c. *kavajo7* ‘horse’ (Sp. *caballo*) (3.98.0461)

3.4.4. LUISEÑO STRESS. LU stress is complex. It features the general Takic rule of “stress the syllable containing the second mora” but with both lexical and constructional exceptionality. A useful statement is provided by Mamet (2010) which is summarized here along with points taken from other authors as indicated. Note that the domain of stress is the stem, with the exception of a few noun stems which, when possessed, show stress on the possessive prefix.

First, a closed syllable is stressed if it is initial or preceded by a short vowel.

- (1) LU a. *hangla* ‘arrowweed’
 b. *no-chukajla* ‘my cane’
 c. *tee7la* ‘belly’

When the first two syllables of the stem are both open, for nouns, stress usually falls on the long vowel. If no long vowel is present, Mamet (2010:242) holds that stress is unpredictable. Munro (1990:223) notes that stress on the second syllable, as in (2d), is the most common pattern for non-derived nouns. Bright (1965:345) is of the same view and provides (2e,f) as examples. Bright also provides (2g,h) as examples of words with unstressed second-syllable long vowels. These seem, however, to be derived forms.

- (2) LU a. *michuul* ‘golden aster’
 b. *waakat* ‘rabbit stick’
 c. *makwit* ‘wild grapes’
 d. *su7ish* ‘jackrabbit’
 e. *chaláka7* ‘horned toad’
 f. *aláwaka* ‘buzzard’
 g. *xwájaat* ‘white’
 h. *áxaat* ‘delicious’

Stress appears on the first syllable of the root in most non-derived verbs.

- (3) LU a. *tika* ‘for a fire to be lit’
 b. *naqma* ‘hear’
 c. *heeja* ‘sing’
 d. *toonav* ‘weave baskets’
 e. *nawwu* ‘fight’

LU verb roots augmented with stress-shifting suffixes of the form -CV, such as *-la* ‘frequentative’ (unfortunately, many of these -CV augments are undefinable), shift stress to the second syllable of the root (Munro & Benson 1973:15).

- (4) LU a. *chakwla* ‘miss, covet’ (*chakwi* ‘grab, seize, catch’)
 b. *chillka* ‘be hatched, of one chicken’ (*chiila* ‘be hatched, of chickens’)

There are a number of LU verbs which appear not to be derived with one of the CV augments, but where stress falls on the second syllable.

- (5) LU a. *unáni* ‘know something’
 b. *uho7van* ‘believe’
 c. *luvi7a* ‘be made, built, become, get better’
 d. *hati7a* ‘go and return’

Reduplicated verb forms have diverse stress patterns which signal different aspectual interpretations.

LU stress can also fall on noun prefixes with a few disyllabic nouns that undergo syncope of the initial vowel (Mamet 2010, Kroeber & Grace 1960:34) as well as with other stems that correspond to the stressless roots in CU (see 3.4.9).

In the present work we do not mark LU stress on the first syllable of roots, on long vowels, or on the vowel of a second, non-final closed syllable. It is also not marked on a vowel followed by a glottal stop. (Underlying glottal stops in LU normally delete after unstressed vowels; this allows the inference that when there is a postvocalic glottal stop, it is because the preceding vowel is stressed.) We mark stress where these rough-and-ready practical generalizations do not apply. We shall see in the next chapter, in the section on LU morphophonemics (4.4), that the many complexities of LU stress can be accounted for by the interplay of some remarkably straightforward rules.

Note that on occasion, for expository clarity, we find it useful to mark stress even when it is covered by the rules above.

3.4.5. ACJACHEMEM STRESS. AC stress is extremely straightforward: ignoring prefixes, AC stress falls on the syllable that contains the second mora. Prefixes sometimes also show stress, presumably secondary stress.

In (1), the stress falls on the second syllable because the first syllable is short. An open syllable containing a short vowel counts as one mora.

- (1) AC
- a. *alat* ‘louse’ (3.121.0770)
 - b. *ajalla* ‘know’ (3.123.0357)
 - c. *aruu\$al* ‘soapstone kettle’ (3.121.0753)
 - d. *mechuul* ‘a plant with yellow flower’ (3.121.0461)
 - e. *moriidhx* ‘be rolled up, wrapped’ (3.123.0339)
 - f. *hatii7kx* ‘go’ (3.121.0751)
 - g. *chalippa* ‘hatch (tr), shell (e.g. acorns)’ (3.123.0439)
 - h. *cheve7x* ‘be cut all to pieces (long object)’ (cf. *cheeva* ‘cut long object in pieces’) (3.123.0435)

In (2), the stress falls on the first syllable because it contains a long vowel. A long vowel counts as two moras.

- (2) AC a. aama ‘hunt’ (3.123.0285)
 b. kuunal ‘sack’ (3.122.0134)

In (3), the stress falls on the first syllable because it is closed and thus contains two moras. A consonantal syllable coda counts as a mora.

- (3) AC naqma ‘hear’ (3.122.0197)

In (4), the stress again falls on the first syllable. In these examples the syllable is closed by the first half of a geminate consonant. We write *tch* for the geminate of *ch*, i.e., [tːʃ] and [tʃ] respectively.

- (4) AC a. lomma ‘knock down’ (3.123.0623)
 b. atchal ‘pet, horse’ (3.116.0467)

Stress that appears to be exceptional can be found under prefixation (5a,b) and under reduplication (5b). The stress in *naqmá77aq* (5a) is also exceptional and, for now, unexplained (compare *naqma* ‘hear’ in (3)). The stress is definitely on the second syllable: The gemination of the glottal stop in the suffix is triggered by the stress on the short vowel preceding it.³⁶ The 3SG prefix *pa-* in both (5a) and (5b) seems to have a secondary stress because the short vowel in the following, stem-initial syllable undergoes syncope.

- (5) AC a. *Noo=n* *naqmá-77a-q* *na-jo* *pa-tkwéj7-qala*.
 1SG.PRO = 1SG > 3SG hear-TR-NFUT.SG 1SG-mother 3SG-die-DS
 ‘Yo oyí que mi mamá se murió. (I heard that my mother died.)’ (3.123.0395)
- b. *Pa-kmísa7-ka-p* *char~chár-q*.
 3SG-shirt-PSD-LOC DISTR~break;tear-NFUT.SG
 ‘His shirt is full of holes.’ (3.123.0515) (cf. Sp. *camisa* ‘shirt’)

³⁶ *Naqma* may be diachronically a compound. *Naq* is ‘ear’, in LU and *ma* may be a truncated form of **maali* ‘hear’, cf. SE *maat\$(i)* ‘hear, listen’. The exceptional stress in (5a) may relate to the complexity of the stem.

Naqmá-77a-q of (5a) and reduplicated *charchárq* of (5b) remain as the only examples among the forms cited above that need to have their stress orthographically marked.

An isolated unexplained exception has been found in “pom7\$ulláh, lit. la uña de ellos, patitos del mar. Also po\$láh.” (their nail/claw, little sea ducks) (3.116.0059). The word *pom7\$ulláh* has stress indicated in a truly unexpected position: after a geminate consonant. We suspect that this was a graphic error on Harrington’s part. Kroeber (1909:249) reports *nu-\$l* for ‘my nail’, without *-áh*. We speculate that *-áh* represents a perhaps exclamatory element appended to the noun.

Again, for expository clarity, we sometimes mark stress even when it is predictable by the rules above.

3.4.6. CUPEÑO STRESS. CU stress is lexical in both verbs and nouns. The most common pattern is stress on the first syllable of the root (1).

- (1) CU a. *tuku-t* ‘wildcat’
 b. *chakwi* ‘catch’
 c. *nishljuvy-l* ‘old woman’
 d. *ny-kañima* ‘my younger brother’

Exceptions probably indicate original long vowels on a second syllable, as in (2).

- (2) CU a. *tyma-l* ‘land’
 b. *qawi-sh* ‘rock’
 c. *nawika-t* ‘woman’
 d. *naxani-sh* ‘man’

A few such stressed second-syllable vowels are indeed long, as in (3).

- (3) CU a. *ulaan* ‘sew’ (cf. LU *ulá7na*)
 b. *kapiija* ‘church’ (< Sp. *capilla*)

Example (3a) may result from the loss of a glottal stop, perhaps from **uláʔan*. Example (3b) is representative of the large set of Spanish loan words which show stress, usually with a double vowel, where there is a stressed syllable in the Spanish original.

There is a fairly large class of stressless roots (see 3.4.8) which shift stress to prefixes (4a) and suffixes (4b).

- (4) CU a. *ná-jy* ‘my mother’
 b. *tyw-qál* ‘was seeing’ (singular subject) (*tyw* ‘see’)

With stressed roots, neither prefixes nor suffixes are stressed, as in (5).

- (5) CU a. *ny-hu* ‘my arrow’
 b. *py-chux-qal* ‘it was melting’ [3SG-melt-PST.IPFV.SG]

In our practical orthography for CU, we do not mark root-initial stress or stress on long vowels later in the word. We mark stress everywhere else. Thus, stress on a prefix or suffix or on a non-initial short root syllable is marked. Occasionally however, as with the other languages, we may mark stresses for expository clarity even when they are predictable by these generalizations.

3.4.7. CAHUILLA STRESS. CA has thoroughly regularized the Cupan stress system: with few exceptions, stress appears on the first syllable of the root (1).

- (1) CA a. *tukut* ‘wildcat’
 b. *chakwi* ‘catch’
 c. *temal* ‘land’
 d. *ulan* ‘sew’
 e. *ne-huja* ‘my arrow, bow and arrow’
 f. *teew-qal* ‘be seeing, see (sg.subj.)’

The “root,” for the purpose of stress placement, extends to reduplicative modification of the root, as in (2). (This is also true of the other Takic languages and perhaps throughout Uto-Aztecan.)

- (2) CA a. *pe-ki~kvalan-* ‘keep staggering’, distrib. of *kival-* ‘wriggle, stagger’ (S&H 81)
 b. *che-pu~pukuch-an-* distrib. of *che-pukush-ngi-* ‘have a slight cramp’ (S&H 159)

In the following situations, where stress falls on some part of the word which is not the first syllable of the root, we mark it orthographically.

Stress may fall on prefix. This is often the prefix of a stressless root (see 3.4.9) as in (3), usually a monosyllabic root with a short vowel in an open syllable.

- (3) CA *né-je* ‘my mother’

Stress also falls on the prefix of the stressless verb, *yax* ‘say, do’, as in (4).

- (4) CA *pé-jax-qal* ‘he was saying, says’

Spanish loans retain their original Spanish stress. When that stress falls on some syllable other than the first, it is marked, as in (5).

- (4) CA a. *domíngo* ‘Sunday’ (Sp. *domingo*)
 b. *kaváju* ‘horse’ (Sp. *caballo*)
 c. *lamésa* ‘table’ (Sp. *la mesa*)
 d. *chemewáva* ‘Chemehuevi’ (Sp. *chemeguava*)

There are also found a few other exceptions, such as in (5), where perhaps an old compounding (5a,b) or reduplicative pattern (5c) have left their trace in the exceptional stress. Other exceptions, like (5d,e), remain to be understood.

- (5) CA a. *temaséske-t* ‘weasel’
 b. *seljhíshche7a-t* ‘tale’
 c. *temtéma7an* ‘not knowing anything, without any purpose’
 d. *sekwáva-l* ‘carrying basket’
 e. *seljáxama* ‘dirty (of clothes)’

3.4.8. STRESS VIEWED DIACHRONICALLY. Munro (1977, 1990) considers the TV and SE systems to be conservative. Munro (1990) argues that the emergence of the Cupan systems includes several stages. The first was the development of a pattern of initial stress on verbs, departing from the second-mora system, in all Cupan languages. Proto-Inland Cupan (Cupeño and Cahuilla) underwent a second innovation, the extension of the initial-stress pattern to nouns, except where long vowels were present. Then vowel length was lost. Following this loss, CA stress fell uniformly on the first syllable, while CU retained the old stress pattern, yielding a system of lexical stress. CA retains evidence of the former long vowels in that they do not syncope, as in plural formation. Yates (2017) points out that the persistence of the long vowel environment blocking CA syncope shows that vowel shortening must have taken place subsequent to the separation of the two languages. This would provide another instance of neighboring, related languages participating in a common sound change; cf. the common development of the vowels **o*, **y* > *e*, *o* in TV and LU discussed above.

In Wanikik or Pass CA (a variety for which little information is available, and which is not treated here), the root-initial stress pattern became word-initial, so that stress could fall on prefixes in all forms. In Desert and Mountain CA, stress falls on the prefix with stressless noun roots and with the verb *yax* ‘do, say’.

3.4.9. STRESSLESS ROOTS. CU has a set of “stressless” roots (cf. Hill & Hill 1968), including both nouns and verbs. With these roots, stress falls on the prefix, or, if there is no prefix, on the suffix if this is stressable. The descriptive facts are covered in Hill (2005) and reviewed briefly in 4.5.1; a diachronic treatment is found in Mamet (2011). Yates (2017) provides an optimality-theory-based account of stress in these constructions, along with a review of theoretical consideration of them prior to his work. CA shows a small number of roots of this sort. A few nouns, mainly kin terms and body parts, exhibit this pattern. The only CA verb with this pattern is *yax* ‘say, do’, where the subject prefix receives the stress. The stressless root analysis also applies in the Coastal Cupan languages, but the hypothesis has yet to be tested for TV.

3.5. MAJOR HISTORICAL DEVELOPMENTS OF TAKIC CONSONANTS.

3.5.1. TAKIC LENITION. Lenition of the intervocalic stops and affricates of Uto-Aztecan appears throughout the NUA languages, varying with unlenited, full-stop reflexes. The variation is taken to represent the difference between fully intervocalic environments, which permitted the lenitions, and environments where the lenition was blocked by a preceding consonant (Manaster Ramer 1993). In many examples in Takic, the failure of a Uto-Aztecan stop to lenite is the only evidence for this lost consonant.

First, the Takic languages share with the rest of Northern Uto-Aztecan the lenition of intervocalic PUA affricate **c*.³⁷ It is realized under lenition variably as *y*, *h*, \emptyset , as seen in (1).

(1)	steal	moon	fish
PUA	<i>*ycy</i>	<i>*mycaC</i>	<i>*kicu</i>
TV		<i>moaa-r</i> (3.103.0051)	<i>keuu-r</i> (3.103.0032) ~ <i>kejuu-r</i> (3.105.0432)
SE	<i>yjy-j</i>	<i>myaa-t\$</i>	<i>kihUU-t\$</i>
KI	<i>yjy-w</i> (3.98.0367)	<i>myaa-t\$</i> (3.100.0412)	<i>kihUU-t\$</i> (3.98.0118)
LU	<i>ujoo-tu</i>	<i>moy-la</i> (cf. acc <i>mooyi-l</i>)	<i>kijuu-l</i>
AC		<i>moy-l</i> (3.122.0200)	<i>kajuu-ma-l</i> (3.121.0686)
CU	<i>yjy-t</i> ‘thief’	<i>myni-lj</i>	<i>kyjú-l</i>
CA	<i>eje-t</i> ‘thief’	<i>meni-lj</i>	<i>kiju-l</i>

For ‘moon’, Inland Cupan shows *ni* for expected *ja*. This development is also seen in the Proto-Takic etymon **kwijja-La*,³⁸ shown in (2). In TV and LU phonological changes have led to the restructuring of this root.

³⁷ = **ç* in the usage of Dakin 2007. To be consistent with our Takic orthography, the Uto-Aztecan affricate should be written with the digraph **ts*, but in published work it is normally represented as **c* or **ç*.

³⁸ **L* represents Proto-Takic lenited **t*.

- (2) PTak *kwiiija-La ‘California black oak, *Quercus kellogii*, or its acorns’
 TV *kwaar* (3.105.0322) (< *kweaa-r < *kwiiija-r)
 SE *kwiiij-t\$*
 KI *kwyyja-t\$* (3.99.0205)
 LU *kwii-la* (< *kwij-la) (cf. acc *kwii-l*, not *kwiiija-l)
 CU *kwini-lj*
 CA *kwii-ij*

The Takic languages also share examples of *v* lenited from PUA *-*p*-, in (3)

- | | | | | |
|-----|--------------------------------|--|------------------------------|--|
| (3) | prickly pear | put (sg.obj) | shave, scrape | cold |
| PUA | * <i>napy</i> | * <i>tap</i> | * <i>sipa</i> | * <i>sypy</i> |
| TV | <i>naavo-t</i>
(3.102.0398) | <i>tavo-</i> (3.102.0593) | <i>\$iiv</i>
(3.105.0152) | <i>\$ovoo-7</i> (3.105.0433) |
| SE | <i>naav-t</i> | <i>tavy-j</i> | <i>\$iiv</i> | <i>\$yvy-t</i> ‘wind’ |
| KI | <i>naavyh-t</i>
(3.98.0193) | <i>tav-ihwa7t kiwy\$taj</i>
‘pot rest stone’
(3.98.0062) | <i>\$iiv</i>
(3.98.0062) | <i>\$yvy-t</i> ‘cold’ (3.98.0278),
‘wind’ (3.98.0464) |
| LU | <i>naavu-t</i> | <i>tav-ani</i> | <i>\$iv-ax/i</i> | <i>\$uvoo-nga</i> ‘in the winter’ |
| AC | | <i>tav-anna7</i> ‘put it!’
(3.123.0606) | | <i>\$avoo-nga</i> ‘in the winter’
(3.123.0503) |
| CU | <i>navy-t</i> | <i>tava_s</i> | <i>siv-in</i> | <i>syv^y-l</i> ‘wind’ |
| CA | <i>nave-t</i> | <i>tav</i> | <i>siv</i> | |

Morphophonemic alternations between *p* and *v* in the Takic languages occur, but these are not regular and are mainly unproductive. For instance, all the languages have rare examples in frozen reduplications and compounds with *p*-lenition, as in (4).

- (4) a. TV *pa~vaa-r* ‘wet’ < *paa-r* ‘water’ (3.103.0107)
 b. SE *paa^R~vahi7* ‘six’ < *paahi7* ‘three’
 c. KI *paa~vahi7* ‘six’ < *paahi7* ‘three’
 d. LU *paa-viva-t* ‘wild tobacco’ < *paa-* ‘big’ + *piiva-t* ‘tobacco’
 e. AC *pa~vaahaj* ‘six’ (3.122.0040) < *paahaj* ‘three’ (3.122.0038)
 f. CU *pu~vu-la-m* ‘doctors’ < *puu-l* ‘doctor’
 g. CA *pa7-vu7u-l* ‘powerful doctor’ < *pa-* ‘big’ + *puu-l* ‘doctor’

The CA form in (4g) shows an example of the kinds of contradictions often found in synchronic forms. Here the non-intervocalic environment *-a7_u-* is not one where we would expect *p*-lenition. Further, this example is a reminder that many instances of the glottal stop in CA seem to be of a secondary nature and remain to be accounted for.

With consonants other than *p*, lenition does not occur with the prefix **paa-*, as shown in the LU word in (5), where we might expect **paaxukat*.

- (5) LU *paakukat* ‘spider sp.’ < *paa-* ‘big’ + *kukat** ‘spider’ (the latter not attested in LU, but cf. CU *kukat* ‘black widow spider’)

This is paralleled by the fact that Hopi, which is outside the Takic group, has only *p*-lenition, which there, is quite productive. We take this to be evidence that *p*-lenition may be an older feature than the other lenitions found in Takic.

The intervocalic *p*-lenition of Takic and Hopi is almost certainly a development independent of the widespread SUA lenition of initial **p*. In the development of Tepiman and of Nahuatl, intervocalic position has blocked **p*-lenition. Also, Tübatulabal, within NUA, lacks *p*-lenition altogether (Stubbs 2011:11) though it has lenition of initial velars, **k*, **kw* > *h*, *w*, presumably, again, as an independent development.

A productive *p/v* pair is found in the Serran locative suffixes, SE *-v(a7) ~ -p(a7)* and KI *-ve(a) ~ -pe(a)*. Forms with *v* are illustrated in (6). In all cases, the *v*-form of the suffix follows a vowel.

- | | | |
|-----|---|--|
| (6) | SE <i>-v ~ -va7</i> | KI <i>-ve ~ -vea7</i> |
| | <i>paa-v</i> ‘in the water’ | <i>ooka-ve</i> ‘in the sand’ (a place, ‘La Arena’) (3.98.0442) |
| | <i>qaii-v</i> ‘on the mountain’ | <i>ahuuna-ve</i> ‘inside’ (3.100.0673) |
| | <i>qaii-va7</i> ‘in the mountains’ | <i>ahoo-ve</i> ‘in the cave’ (3.98.0013) |
| | <i>chachaamy-v</i> ‘in our songs’ | <i>hawkupit\$u7i-vea</i> ‘in the meeting’ (3.98.0381) |
| | <i>too^Rnga-va7</i> ‘in the summer’ | <i>tangata-vea</i> ‘in the sack’ (3.100.0417) |
| | <i>myaa-va7</i> ‘in the moonlight’ | <i>nihuuna-vea</i> ‘in my heart’ (3.98.0363) |
| | <i>paa^Rkwyñi-va7</i> ‘on the mud’ | <i>ooka-vea</i> ‘in the sand, in the arroyo’ (3.100.0338) |

Examples with *-p* appear in (7). In many cases, these follow a consonant, an environment that might be expected to block lenition. But also there are a number of

exceptional forms, where no consonant appears before the suffix. This suggests that the $v \sim p$ alternation has been to some degree lexicalized. Note that SE *paa^Rkwyñi-t* ‘mud’ is attested with both the *-va7* and the *-pa7* allomorphs and appears in both (6) and (7). Similarly, KI *ooka-t\$* ‘sand, sandy place, dry arroyo bottom’ appears with both *-ve* \sim *-vea* and *-pea*.

(7)	SE <i>-p</i> \sim <i>-pa7</i>	KI <i>-pe</i> \sim <i>-pea</i>
	<i>myym-p</i> ‘in the ocean’	<i>hahavokah-pe</i> ‘in the sycamores’ (3.98.0066)
	<i>alambri7-p</i> ‘on the barbed wire’	<i>Nyviy-pe</i> ‘medicine place’ (3.98.0345)
	<i>ky^Rvy^Rhka-p</i> ‘in the hole’	<i>Maarynga-pe</i> ‘at Morongo’ (3.98.0045)
	<i>nykwak-pa7</i> ‘in my youth’	<i>kaleesa7-pea</i> ‘in the buggy’ (3.100.0341)
	<i>kut\$aa-pa7</i> ‘on the wood’	<i>pok-pea</i> ‘on the road’ (3.100.0463)
	<i>navy^R-pa7</i> ‘in last position (“at the foot”)’	<i>ni-hoona-pea</i> ‘in my bed’ (3.100.0602),
	<i>paa^Rkwyñi-pa7</i> ‘on the mud’	<i>a7-ooka-pea</i> ‘Rio Chiquito (Kern River) (“in its sand”)’ (3.98.0339)

The story of lenition being blocked by consonants is true only of underlying or etymological stem-final consonants. In many instances, the superficial stem-final consonant is in fact underlyingly prevocalic with the vowel having been lost by syncope (see chapter 4), as in the examples in (8). Here, the underlying vowel is revealed in the plural. Such examples thus are then part of the group that includes the vowel-final stems of (7).

(8)	SE	locative	absolutive	plural
	a.	<i>naav-p</i> ‘on the prickly pear cactus’	<i>naav-t</i>	<i>naavy-m</i>
	b.	<i>qaikw-p</i> ‘on the rope’	<i>qaikw-t</i>	<i>qaiku-m</i>
	c.	<i>\$aaw-p</i> ‘on the bread’	<i>\$aaw-t</i>	<i>\$aawa-m</i>
	d.	<i>\$umaan-p</i> ‘on the bow’	<i>\$umaan-t</i>	<i>\$umaana-m</i>
	e.	<i>weilj-p</i> ‘in the cup’	<i>weilj-t</i>	<i>weilja-m</i>

Lenition of **t* was apparently complete in Proto-Takic; we represent the resulting Proto-Takic consonant as **L*. **L* becomes *r* in TV and *t\$* in Serran. It becomes *l* in the Cupan languages and, secondarily, also *ly* in Inland Cupan. Examples of this lenition within roots are given in (9). (Intervocalic lenition to *l* also appears in Tübatulabal.

Lenition to *r* appears in the Numic languages but is almost certainly an independent development.)

(9)	head louse	nail, claw	be, dwell	hot
TV	<i>araawt</i> (3.014.0331)	<i>-t\$uur</i> (3.103.0627)	<i>xaroo</i> (3.104.0031)	<i>oroo</i> (3.103.0032)
SE	<i>a^Rt\$ym</i> (pl.)		<i>qat\$(y)</i>	<i>y^Rt\$y^R</i>
KI	<i>-at\$ym</i> (pl.) (3.98.0125)		<i>kat\$</i> (3.100.0382)	
LU	<i>ulát</i>	<i>\$ulát</i>	<i>qal</i>	
AC	<i>alat</i> (3.121.0770)	<i>-\$l</i> (Kroeber 1909:249)	<i>qaal</i> (3.123.0629)	
CU	<i>ala7at</i>	<i>-\$ul7a</i>	<i>qal</i>	
CA		<i>salul</i>	<i>qal</i>	

A conspicuous result of this lenition is the split of the absolutive suffix **-ta* into allomorphs *-t(a)* and *-r(a)* in TV, *-t(a)* and *-t\$(a)* in Serran, and *-t(a)* and *-l(a)* in Cupan (usually with loss of word-final vowels). In Inland Cupan, **l*, from **t*, palatalizes to *ly* after *i* (with some exceptions in CA). The Cupan languages preserve no evidence of the conditions for lenited vs. non-lenited **t*, with both *-L(a)* and *-t(a)* absolutes appearing synchronically following the same vowels. See 5.1.1 for more detail and examples.

There are two distinct patterns of *k*-lenition in Takic, lenition of **k* next to low vowels in TV and intervocalic *k*-lenition in Cupan. *K*-lenition does not apply in Serran.

Lenition of **k* next to a low vowel in TV is illustrated in (10).

(10)		PTak	TV	other Takic
a.	be, dwell	<i>*katy</i>	<i>xaroo</i> (3.103.0079)	SE <i>qat\$(y)</i>
b.	woodrat	<i>*kaawa-La</i>	<i>xaa-r</i> (3.103.0478)	LU <i>qaw-la</i>
c.	mountain	<i>*kawii-cha</i>	<i>xaa(y)-y</i> (3.102.0506)	AC <i>qawii-ch</i> (3.123.0655)
d.	bark, shell	<i>*kocho-La</i>	<i>-xo~xot\$</i> (3.102.0630)	LU <i>qesh-la</i> ‘seashell’
e.	negative	<i>*kaj</i>	<i>xaaj</i> (3.103.0551)	SE/LU/CU <i>qaj</i>
f.	give	<i>*maka</i>	<i>maxaa-x</i> (3.104.0499)	SE <i>maqa-j</i>
g.	person	<i>*taaka-ta</i>	<i>taaxa-t</i> (3.105.0100)	KI <i>taaka-t</i> (3.100.0486)
h.	sand, earth	<i>*ooko-La</i>	<i>ooxo-r</i> (3.105.0397)	KI <i>ooka-t\$</i> (3.98.0083)

- i. ear **naaka* *-naa~nax* (3.104.0326) AC *naaqa-m* (3.124.0268)

Cupan intervocalic *k*-lenition is illustrated in (11). This lenition seems also to be restricted to the environment of low vowels.

(11)		PTak	LU	AC	CU	CA
	a. give	<i>*maka</i>	<i>maxáni</i>	<i>maxanna</i> ⁷ (3.122.0042)	<i>max_s</i>	<i>max</i>
	b. person	<i>*taaka-ta</i>	<i>a-taax</i>	<i>a-tax</i> (3.121.0783)	<i>a-tax-7a</i>	<i>taxlis-we-t</i>
	c. sand, earth	<i>*ooko-La</i>	<i>ex-la</i> 'earth'	<i>exxa-l</i> 'earth, land' (3.121.0766)	<i>haxa-l</i> 'sand'	<i>i7exi-sh</i> 'desert'
	d. dove	<i>*makoo-La</i>	<i>mixee-l</i>	<i>maxee-l</i> (3.123.0361)	<i>maxí-lj</i>	<i>maxaji-lj</i>
	e. willow	<i>*saka-ta</i>	<i>\$axá-t</i>	<i>\$axa-t</i> (3.122.0201)		<i>saxa-t</i>
	f. dry up	<i>*waaka</i>	<i>waxa</i>	<i>waxq</i> (3.123.0376)	<i>wax</i>	<i>wax-qa</i>

There are sporadic examples of initial *x*, apparently from **k*, in the Cupan languages, especially in phonaesthetic contexts. Other instances of initial *x* in Cupan reflect **h*, e.g. CU *xyy* 'blow, of wind', LU *xoojax/i* 'blow out, air off, blow on, as wind', cf. PUA **hyka* (Stubbs 2011 #2558). LU *xulax/i* 'sweat oneself' illustrates problems with Cupan initial *x*, resembling both Kawaiisu *huva* (in Stubbs 2011 #2248) and Western Numic **kunga* (Stubbs 2011 #2246), as well as **-sur~la*³⁹ in Southern Uto-Aztecan languages (Stubbs 2011 #2249).

3.5.2. PUA **R~L* IN TAKIC. While lenition of PUA **t* to Proto-Takic **L* is the source of some examples of *l* and *r* in Takic languages, including the very productive lenited absolutive suffixes, Merrill (2013) has shown that many examples of these liquids in lexical items come from PUA **r~l*. From this source, Serran has *r*, Coastal Cupan has both *r* and *l*, and Inland Cupan has *l*. Hopi (with *r* and *l*) and Tübatulabal (with *l*) also retain this conservative feature, while in Numic this liquid often appears as *n*. Merrill (2013) presents several cognate sets illustrating this PUA consonant, including examples with Takic cognates. A focus specifically on the Takic materials not only uncovers new

³⁹ We substitute Merrill's PUA **r~l* for Stubbs's *<*L>* throughout; we reserve the symbol **L* for Takic lenited **t*.

evidence, but raises additional issues in the development of PUA **r~l*, especially its apparent association with sound symbolism.

(1) and (2) are two of Merrill's cognate sets. We add SE and AC to (1). Note that the LU final sequence *-ax/i* marks the alternation between intransitive *-ax* and transitive/causative *-i* that appears for most LU verbs, e.g. *chulúpax* 'go in' vs. *chulúpi* 'put in, make go in'. We have given only one gloss; the other is easily derived in most cases (see 10.4).

- (1) PNUA **curu* 'go in, put in' (Merrill 2013 #7, Stubbs 2011 #1244a): SE *churup-*, KI *tsurup-* (3.98.0257) (and KI *tsu7r-* 'get stuck (as in mud)' (3.100.0624)), LU *chulúpax/i*, AC *chaluupa* (3.123.0464), CU *chulup-*

For 'go in', CA has *pax*, a reflex of a very widespread UA etymon. However, CA *pe-chupaq-* 'stick in, get stuck, e.g. in mud) and *chupi* 'dip in water', along with the KI and LU words in parentheses in (1), hint that **ru* in (1) may be a distinct morpheme historically.

- (2) PUA **ramu* (?) (Merrill 2013 #9): CA *lumu-* 'have chickenpox', CU *lumú7ilj* 'measles', LU *lamúlamax* 'have bumps', Yaqui *rumui* 'bumpy'

Stubbs's (2011) set #1405 includes other Takic items that should be considered: SE *rimyymy7k* 'be lumpy' and CA *limulímu* 'bumpy' (of road). LU *kumalúmax*⁴⁰ 'repeatedly have lumps'⁴¹ links all these to Stubbs's #1406, which includes Rarámuri *ko7mo-* 'lumps (as in batter)'. Note that this supports Merrill's doubts about a PUA reconstruction for this item (given in (2) above with a question mark), which he suggests might instead reflect a post-PUA episode when Takic and Taracahitan participated in a single speech community. The vowel changes also suggest that these words might be survivors of an earlier system of phonaesthetic alternations, only partially inherited in the daughter languages.

A similar extension of a possible phonaesthetic paradigm can be shown for Merrill's (2013) set in (3), to which we add AC.

⁴⁰ Synchronically an example of *l-* reduplication.

⁴¹ "be bumpy" in Stubbs (2011:249). We give the sense found in Elliott (199:411).

- (3) PUA **kara* ‘ring, rattle’: Tübatulabal *halaala7it* ~ *ahalala* ‘rattle’, Hopi *qalalata* ‘ring, clank’, LU *kaarax/i* ‘ring bell, croak, belch’, AC *kaar7q* ‘he is belching’ (3.123.0644), Classical Nahuatl *kalaani* ‘jingle, rattle’, *kakalaka* ‘rattle’

To this set might also be added SE *qaa^R7-k* ‘belch, burp’, with loss of **r* from expected *^xqaa^Rr7k*, and Southern Numic **karaka* ‘rattle, clatter, crackle’ (**kata-ka*, set #1542 in Stubbs 2011). This would mean that some examples of *r* in Southern Numic may represent primordial **r~l* which has phonetically merged with the *r* that results from the more recent process of Numic *t*-lenition.

The phonaesthetic paradigm seen in part in (3) includes also a lenition of initial **k* to *x*, *h*. Examples of the larger paradigm appear in (4). These are significant because while they all have the same vowel (except for *xiidhax/i* ‘growl of humans’) they show that at least in LU and CA, *r* and *l* participate in a set of phonaesthetically-motivated consonant alternations *r ~ l ~ dh ~ s ~ ch*. (LU *r* also participates in a regular normal vs. diminutive derivational alternation with *dh*, discussed in 14.13.) Note that LU is the only Takic language with both *r* and *l* participating in these alternations. For LU, extensive paradigms involving changes in vowel length and reduplication, reflecting aspectual distinctions, have been documented (Elliott 1999); we have not illustrated most alternations of this type. Note also LU *xaraash* ‘throat, voice’. We add AC to (4).

- (4) LU *xaalax/i* ‘make noise’, *xalax* ‘rattle, sound, be loose’, *xalálax/i* ‘make a screeching noise, as of a wagon’, *xaarax/i* ‘growl’, *xaraajax/i* ‘snore’, *xaadhax/i* ‘snarl’, *xadhax/i* ‘growl at, once’, *xiidhax/i* ‘growl of humans, such as shamans’, *kaasax/i* ‘squeak, creak’, *xachax/i* ‘rattle, of a deer’s-hoof rattle’; AC *xaraaja* ‘snore’ (3.123.0530); CU *xal* ‘rattle’, *xalej* ‘clear throat’; CA *xala~xala* ‘sound of turning doorknob’, *xacha~xacha* ‘swishing sound’, *xaw* ‘sound of eating crispy things’; Northern Tepehuan *aráávai* ‘belch’, Cora *hara7a* ‘vomit’

The consonant frame *x...l* appears with other vowels as well, as seen in (5), with examples that also show consonant alternations.

- (5) a. LU *xel-ax/i* ‘clear throat, gargle’, *xilé~xil-ax/i* ‘clear throat continuously’; AC *xellaqan* ‘I scrape my throat’ (3.122.0142); CU *xalyj* ‘clear throat’ (cf. *xal-in* ‘rattle s.th.’)
- b. LU *xiil-ax/i* ‘rush, of water’, *xilii~xil-ax/i* ‘continually make rushing noise’, *xil-ax/i* ‘rain’, *xool-ax/i* ‘slobber, drool, salivate’, *xoos-ax/i* ‘creak, as of shoes’, *xos-ax/i* ‘crunch, of toast’

In (5a), LU and AC show differently accented forms of a root *xele* while CU has *xalyj* as a different version of the root (the formative *-yj* is of unknown status). What motivates the difference is unclear. Examples of this type of vowel alternation occur in ordinary as well as sound-imitative verbs. Two CU examples are *achiwi ~ ichaaj* ‘make’, *axí7a ~ ixá7* ‘cough’.

The phonaesthetic group seen in (6), may represent another example of an **r ~ l ~ s* alternation.

- (6) TV *koruuram* ‘thunder sound’ (3.105.0471), KI *kuru7r-* ‘make booming sound’ (3.98.0388), LU *kuruurax/i* ‘sigh, make sigh’ (ceremonial word meaning to be speechless due to deep sadness)

Given LU *kaarax/i* ‘ring bell, croak, belch’ and *kaasax/i* ‘squeak, creak’, it may not be too far-fetched to suggest that the root **kuru* in (6) is connected to the well-known PUA root **kusu* ‘make a characteristic sound (as of an animal, musical instrument)’ (Stubbs 2011 #1539). And note that **kus* also appears in words for ‘throat’ in both NUA and SUA (Stubbs 2011 #1503). This raises the question of whether **s* may have been the basic consonant in some phonaesthetic series with reflexes of **r~l*.

The possibility of a relationship between **r~l* and **s* is raised by TV *koorenax* ‘step on’ (3.105.0144). This might relate to Stubbs (2011) #936 **kysa* ‘step on’.

One sound-imitative or *phonaesthetic* set, in (7), may reflect a widespread loan, i.e., a *Wanderwort*.

- (7) PNUA **wiiru* ‘play flute’ (Stubbs 2011 #912), TV *weroo7ax* ‘play flute’ (3.103.0560), SE *wiirui7n* ‘play reed flute, whistle’, KI *wiro7i* ‘play instrument’ (3.98.0206), LU *wiiru* ‘play flute’, CA *wiiru*, Ute *wiinappy* ‘flute’

In this set the first-syllable vowels correspond, reflecting **i*, but the second vowel is indeterminate. This is the only stem recorded with *r* for CA, so it is surely a loan into that language.

Numic languages other than Ute have a different first-syllable vowel, *o*, as (8).

- (8) Kawaiisu *wojo* (Zigmond et al. 1990), Timpisha Shoshone *woino* (Dayley 1989), Northern Paiute *wohinu* (Liljeblad et al. 2012)

Stubbs (2011) also includes in his set #912 Tübatulabal *luulu7 ~ uuluulu7*.

Hopi *leena* ‘reed flute’, is problematic, as pointed out by Stubbs. If it is related to the *wo...* set of Numic, then the initial *l* is regular (< **w* before a non-high vowel), but since the regular reflex of **o* in Hopi is *ö*, the vowel *e* is unexpected.⁴² Furthermore, we would expect the second consonant to be *r* or *l*, not *n*. So this word probably has a different source.

This *Wanderwort* is not confined to Uto-Aztecan, cf. Sierra Miwok *lul-a-* ‘flute’ (Freeland & Broadbent 1960, Broadbent 1964) and Maidu *jálulù* (Shipley 1963).

Merrill’s (2013) set (5), ‘a kind of hawk’, is clearly sound-imitative. Sibley (2003:115) states that the cry of *Falco sparverius* ‘sparrow hawk’, the probable referent of many of these words, is “a shrill screaming *killy killy killy*.” Peterson (1961:61) has it as “a rapid high *klee klee klee* or *killy killy killy*.” Merrill’s set (5), which he refers to Stubbs 2011 #743, is shown in (9). While some of the words in (9) may be regarded as *Wanderwörter*, we think they are primarily onomatopoeic and probably derived independently in the different language groups.

- (9) PUA **kyri*: Northern Paiute *kini7i* ‘marsh hawk’, Timpisha Shoshone *kinni7* ‘falcon’, Western Shoshone (Duck Valley) *kinii* ‘hawk, falcon’, Western Shoshone (Gosiute) *kiniih* ‘chicken hawk’, Hopi *kjeele* ‘sparrow hawk’, Mayo *keré7re* ‘a raptor’ (possibly a species of *Caracara*), Ópata *keere* ‘kind of hawk’, Warihó *kerecí* ‘small hawk’, Rarámuri *kiričí* ‘small hawk’

To Merrill’s set we should add Southern Paiute *kyrinnangkatsi* ‘sparrow hawk’ (< *qiri’n’naŋqa-ts* > Sapir 1931:638), Tübatulabal *tiktikiil* ‘small chicken-hawk’

⁴² In fact, no example of Hopi *e* has a really clear Uto-Aztecan etymology.

(< tiktigi-l > Voegelin 1958),⁴³ TV *pakii\$ar* ‘gavilancito (little hawk)’ (3.103.0055), SE/KI *paakihat\$* ‘hawk sp.’, KI *kyjykyjyyt\$* ‘a small red hawk’ (3.98.0372), LU *kulókulumaj* ‘redbreasted hawk’, *kulókulòkamaj* ‘sparrow hawk’, and *paakishla* ‘chicken hawk’, CU/CA *kisilj* ‘chicken hawk’, and CA *keleklemal* ‘sparrow hawk’ (from C. Hart Merriam).⁴⁴

This set is particularly interesting since similar forms for this bird are found all over North America; the ones we have identified appear in (10). Evidently participation in this sound-imitative tendency dates to PUA times, and within the family the word has developed in a surprisingly regular way in spite of its obvious onomatopoeic properties. (The LU form even moves away from onomatopoeia in favor of regular sound change in the vowels!)⁴⁵

- (10) Plains Miwok *kiliksa:je*, Northern Sierra Miwok *kiliksa:je*, Southern Sierra Miwok *lekleksa* ‘small hawk’ (Broadbent 1964), Eastern Pomo *ki-já:* (McLendon 1973), Nutuntu Yokuts *likik*, Nisenan *lil’-ly* (from Merriam), Antoniano Salinan *skeleelé7*, Migueleño Salinan *skeléle*, Barbareño Chumash *xellex* ‘red-tailed hawk’, Ineseño Chumash *kilik* ‘hawk sp., small and reddish’ (Santa Ynez Band of Chumash Indians 2003), Sahaptin *liix̄ti* ‘small species of hawk’, Klamath *čliklak* ‘sparrow hawk’ (Barker 1963), Zuni *tsililik’o* ‘sparrow hawk’ (Newman 1958), Ojibwe *gekekoons* ‘pigeon hawk, *Falco columbarius*’ (Rhodes 1985), Osage *letó* ‘hawk, falcon’ (Quintero 2009), Tzotzil *liklik* ‘*Falco sparverius*’ (Laughlin 1975)

Merrill’s (2013) set (4) for ‘turkey vulture’ is seen in (11).

- (11) PUA **wiruku*: Kitanemuk *wirukuht* (3.98.0111), Yaqui *witru*, Mayo *witru*, Rarámuri *wirú*, Tubar *wilú*, Huichol *wiryky*

This can also be expanded with SE *wirukt* and Hopi *wisoko*, which shows *s* for expected *r*, providing another example of an *r/s* pair. Related forms are also attested in Numic, in all three branches. Central Numic has Timpisha Shoshone *wihnumpi* (Dayley 1989) and Western Shoshone *winumpytsi* (< wen-num-bitch >, from Merriam); Western Numic has

⁴³ Also cf. *Likliigibit* ‘little Liklik’, the name of a story character (Voegelin 1935:194-195).

⁴⁴ http://www.archive.org/stream/bancroft_chartmerriam_1556_60#page/n155/mode/2up;p.163

⁴⁵ The unreferenced forms of (10) come from J. Hill’s participation in the Hunter-Gatherer project (see chapter 1, note 5). Her notes regarding the sources have become unavailable.

Northern Paiute *wiho* (Liljeblad et al. 2012) and Southern Numic is represented by Southern Paiute *wikkumpytsi* (< $wi^xqu'-mp\ddot{t}s$ > Sapir 1931:715).

This set represents a *Wanderwort* which is also found in Yokuts languages, and evidently from Yokuts, in TV.

- (12) TV *wii7\$o7* ‘aura (vulture)’ (3.103.0209) < Yokuts ‘condor’, cf. Chawchila *wič*² (Newman 1944:202), Chulchansi *wič*², Yawelmani *wič*², Choynimni *we-č*² (p. 176)

In addition to the possibility of relationships of unknown function between $*r\sim l$ and $*s$, noted above, some sets have irregularities involving $*n$. We expect the reflex of PUA $*r\sim l$ in the SUA languages to be $*r\sim l$. However, note the possible sets in (13). In (13b), the Kawaiisu form is cognate, but the Rarámuri word should have *l*.

- (13) a. KI *\$ara7* ‘chop, crack’ (3.98.0481), *\$ererk* ‘split, slice’ (3.98.0272), SE *\$ara7* ‘split’
CA *salaa* ‘fingers split open’, with Tepiman **sani* ‘crack’ (Stubbs 2011 #287)?
b. KI *myriivyk* ‘lose’, with Stubbs 2011 #1394: Kawaiisu *myy7ny* ‘lost’ and Rarámuri *méne/méni* ‘lose (vt.)’ (CA *kily meli* ‘not to be enough’ may be related)

A possible set, seen in (14), internal to Takic, also shows an $r/l \sim n$ relationship, noted by Stubbs (2011:27). The initial *t* of TV is not regular.⁴⁶

- (14) TV *toraarke7* ‘round one’ (3.104.0169), SE *chynynk* ‘roll’, LU *choorax/i* ‘be round’,
chooraat ‘ball-like’, *chorax/i* ‘roll once’, CU *chynyn* ‘roll’, CA *chenen* ‘roll’ (Stubbs 2011
#446 $*cynV \sim cyr\sim lV$)

While the exercise of seeking examples of reflexes of PUA $*r\sim l$ in Takic has revealed some problems, we have also been able to identify several good new sets in addition to those given in Merrill (2013).

⁴⁶ The TV root *toraare7* ‘round’ may instead be a loan from Spanish *dólar* ‘dollar’, back-formed from the plural *dólares* (cf. English trisyllabic *tamale*, based on the Spanish plural *tamales* rather than the disyllabic singular *tamal*). After Mexican independence, the Spanish *dólar*, the ‘piece of eight’, was replaced by the Mexican *peso*, rendering the etymology of *toraare7* opaque, if indeed it was a loan.

- (15) PTak **haro/u-* ~ **horo* ‘make hole, drill hole’: TV *horoope7* ‘pierced’ (3.105.0156), *horoopkenax* ‘poke hole’ (3.103.0497); SE *ho^Rro^Rro^R7n* ‘be deep of hole’; KI *horokyk* ‘drill hole’ (3.99.0450), *horork* ‘build fiesta ramada’ (3.98.0233); LU *harahurharahuurax/i* ‘repeatedly make holes’, *harúqla* ‘drill repeatedly’, *haruuray* ‘hole in middle of sand painting for feather burial’

The set in (15) has non-conforming vowels – LU should have **heruu* – but probably is valid. Stubbs (2011) is puzzled by the relationships in his ‘hole’ set #665. That set seems to mix reflexes of our set in (15) with reflexes of a denominal derivation **hoo-ta* ‘make hole, dig’ from **hoo-* ‘hole’. In Stubbs’s set, Northern Paiute *tyhonna* ‘dig roots’ probably belongs with our set (15), as may Rarámuri *hora* ‘dig, make holes’. However, Central Numic **hota* and Southern Numic **hora* (reconstructed from the daughter forms given by Stubbs) must reflect the denominal verb from **ho-ta*.

- (16) PTak **qara* ‘fall’: KI *kara* ‘shell corn (make grains fall off)’ (3.98.0463), *karara7y* ‘fall, of down (as from a feather headdress)’ (3.98.0458); LU *qarax/i* ‘slide off’, *qarápax/i* ‘fall, crumble’; AC *qar7q* ‘fall (pl.subj)’ (3.123.0644); CU *xalew* ‘fall (sg.subj)’; CA *xalal* ‘sink, go down’

In (16), we would expect *k* or *q* in the CU and CA forms, so they may not be part of the set.

- (17) SE *huurk* ‘peek out, rise over horizon, come up (of plants)’; KI *huuryk* ‘peep out’ (3.98.0257); LU *hulax/i* ‘sprout, poke through’; AC *huula7x* ‘look out’ (3.122.0210); CA *hulaqan* ‘peek’

Stubbs (2011) includes most of these forms in his set #1910 **hur~la*. His suggestion to include Tubar *huuda* ‘sun is up’ would make this a PUA etymon.

- (18) TV *poriinok* ‘fall’ should be added to Stubbs 2011 #138, which includes SE *-pulin* ‘woman’s daughter’, CU *pulin* ‘bear child’, CA *puli* ‘fall, be born’, *-pulin* ‘woman’s daughter’, and Classical Nahuatl *-pil* ‘son, daughter, offspring’. Cora *péri* ‘son, daughter, child’ may be part of the set, although the vowel is wrong.

In light of Merrill's (2013) proposals, the etymology for TV *worooyt* 'man', along with *worixwe7* 'grown up, of child' (3.103.0681), and SE *wyt\$y^R\$t\$* 'man', pl. *wyt\$y^Rham*, raise interesting problems. Both forms appear to be derivations from a verb reconstructed by Stubbs (2011, #1100) as **wyl~ra/i* 'grow to maturity'. Given Tepiman *gy7ylyg* 'maturity,' the verb may date to PUA, in which language it was derived from **wyC-* 'big, long, old'. The problem involves the source of **l~r*, because there appear to be two sets of derivations from **wyC-*, one with a suffix beginning with **r~l*, and the other with **t*. **t* can then be lenited to *r*, *l*, or *t\$* (in Serran) – somewhat mysteriously, since **wyC-* does not normally permit lenition; cf. the Numic long-object prefix or the Takic augmentative suffix. The Tepiman forms reflect **r~l*. For instance, Tohono O'odham has *ge'e ~ ged* 'big' and *ge'el* 'maturity', from **wyr~l*, but also *ge'eda* 'get big, grow' with *d* from **y*. Tepiman **y* is another reflex of PUA **r~l* (Dakin 2001; she writes the PUA consonant as **r*). It is also attested in Nahua *weyi* 'big'. Tubar has *we-tu* 'be big', with the verbalizing suffix **-tu*. SE *wyt\$y^R\$t\$* may also reflect **wy-tu*. Given Takic unity, it would seem that SE *wyt\$y^R\$t\$* 'man' and TV *worooyt* 'man' must have a shared derivational history, with SE *wyt\$y^R-* and TV *woroo-* both from PTak **wyLu < *wy-tu*. However, the fact that the absolutive suffix of SE *wyt\$y^R\$-t\$* is lenited while that of TV *worooy-t* is not shows that the two forms differ somewhat in their histories and the idea that TV *worooyt* and *worixwe7* reflect **l~r*, and not **t*, cannot be ruled out.

3.5.3. SERRAN *h* FROM **s*. A clade-defining change, PNUA **s > h*, appears in the Serran languages. The same change appears in Tepiman. However in Tepiman this is part of a chain shift **h > 7*, **s > h*, and **c > s*. This is not the case in Serran, where **h* and **c* remain.

The change is not perfectly regular, since Northern Uto-Aztecan **s* appears in the Serran languages as both *h* and *\$*, and in some postvocalic contexts as *r* alternating with *h*. (This alternation is discussed in 4.2.5.) Sometimes *s* also occurs. It might be supposed that the reason for the difference between SE *h* and *\$* is that it reflects a difference between **s* and **\$* that must be reconstructed for Proto-Cupan, especially as inherited in CU. But the historical dynamic remains unclear since the SE forms and the CU forms do not align very well. This is illustrated in (1), to which we also add forms from LU, where the sibilant *\$* corresponds to both CU *s* and *\$*, except for (1e), where all three languages show *s*.

(1)		SE	CU	LU
a.		<i>h</i>	<i>s</i>	<i>\$</i>
	deer	<i>hukah-t</i>	<i>suqa-t</i>	<i>\$uuka-t</i>
	star	<i>huu7-t\$</i>	<i>su7u-l</i>	<i>\$u7la</i>
	grass sp.	<i>haam-t</i>	<i>sama-t</i>	<i>\$amut</i>
b.		<i>h</i>	<i>\$</i>	<i>\$</i>
	whisper	<i>hawa~hawah-k</i>	<i>\$awa-</i>	<i>\$awaay</i>
	my heart	<i>ny-huun</i>	<i>ny-\$uun</i>	<i>no-\$uun</i>
	ripe	<i>a-kwahi7</i>	<i>kwa\$-</i>	<i>kwa\$i-sh</i>
c.		<i>\$</i>	<i>s</i>	<i>\$</i>
	raw	<i>\$ay-t</i>	<i>sawi-t 'sour'</i>	<i>\$awó-t</i>
	shave	<i>\$iiv</i>	<i>siv-</i>	<i>\$iv-</i>
	whip (v.)	<i>\$akwi7</i>	<i>sakwit-</i>	<i>\$iqwi</i>
d.		<i>\$</i>	<i>\$</i>	<i>\$</i>
	bloom	<i>\$yy7</i>	<i>\$y7-</i>	<i>\$oo7</i>
	bread	<i>\$aaw-t</i>	<i>\$awi-sh</i>	
	feces	<i>ny-\$aa7</i>	<i>ny-\$a7i</i>	<i>no-\$aa7</i>
e.		<i>s</i>	<i>s</i>	<i>s</i>
	sneeze	<i>ha7tis-k</i>	<i>atís-</i>	<i>hatís</i>

Original **h* remains unchanged, as in SE *huunat* 'bear', CU *hunwyt* 'bear'.

Serran also shows *r* from **s*. This *r* is in alternation with *h*, with *r* word-finally in SE and in syllable-final position generally in KI. Elsewhere it is *h*. This can be illustrated by the word for 'older brother', as in (2).

- (2) a. SE *ny-paar*, pl. *ny-paaha-m*
 b. KI *ni-paar*, pl. *ni-paaha-m* (3.98.0366)
 c. LU *no-paa\$* ~ *no-paa7a\$*
 d. AC *no-pa7\$* (Kroeber 1909:249)
 e. CU *ny-pa\$-ma*
 f. CA *né-pas*

The CU word for 'older brother' occurs only with the suffix *-ma*, which usually has a diminutive sense. The CA form is a monosyllabic stem. However, the fact that the LU

form is alternatively a disyllabic form with a glottal stop as a medial consonant suggests that the reconstruction might be PTak **pa7sa*. For more on *r ~ h* in Serran, see 4.2.5, 4.3.3. (The TV word for ‘older brother’, *-paa7 ~ -pa7* [3.104.0360], lacks the **-s* component that underlies the *r ~ h* alternation.)

3.5.4. **-w- > Ø*: AN AREAL FEATURE. TV and Serran share a fairly regular loss of intervocalic **-w-*. This is an areal feature that is found in Southern Numic and in other Numic languages as well. The TV form in (1b) is exceptional and is probably a LU loan word. The *w* in TV *koraaw-k* (1a) and *saaw-t* (1c) is a secondary development. It represents not a retention of **w* but rather a reduction of postvocalic **o*: **kuraawy-k > *kuraawo-k > *kuraao-k > *koraao-k > koraaw-k* and **saawy-t > *saawo-t > *saao-t > saaw-t*.

(1)	TV	SE	KI	LU	CU (CA)
a. firewood	<i>koraaw-k</i> ‘get firewood’ (3.103.0295)	<i>kut\$ay-t ~ kut\$aa-t</i>	<i>kut\$aa-t</i> (3.99.0101)	<i>kulaawu-t</i>	<i>kyláwy-t</i>
b. squirrel sp.	<i>\$okaawo-t</i> (3.103.0022)	<i>hikaay-t</i>	<i>hikay-t</i> (3.98.0100)	<i>\$ukaawu-t</i>	<i>sykáwy-t</i>
c. raw	<i>saaw-t</i> (3.105.0154)	<i>\$ay-t</i>	<i>\$ay</i> (3.98.0457)	<i>\$awó-t</i>	(CA <i>sawe-t</i>)
d. mountain, hill	<i>xaa(j)-j</i> (3.102.0336)	<i>qaii-ch</i>	<i>kaj-ts</i> (3.98.0351)	<i>qawí-sh</i>	<i>qawí-sh</i> ‘rock’
e. oak sp.		<i>ipaa.a-t\$</i>		<i>paawi-sh</i>	<i>pawi-sh</i>
f. horn	<i>a7-aa7a-n</i> ‘its horn’ (3.102.0632)	<i>ny7-aa^R7</i> ‘my horn’	<i>ni7-aa7</i> ‘my horn’ (3.98.0106)	<i>no-7aaw</i> ‘my horn’	<i>ny-7aw-7a</i> ‘my horn’
g. rat	<i>xaa-r</i> (3.103.0478)	<i>qaa^R-t\$</i>	<i>kaa-t\$</i> (3.99.0355)	<i>qaw-la</i>	<i>kawa-l</i>
h. rattlesnake	<i>\$oo-t</i> (3.102.0705)	<i>hyy^Rng-t</i>	<i>hyyng-t</i> (3.99.0312)	<i>\$oowu-t</i>	<i>sywy-t</i>
i. spirit, devil	<i>tooj-t\$</i> (3.103.0058)	<i>tyyj-t</i>	<i>tyyj-t</i>	<i>toowi-sh</i>	<i>tywi-sh</i> ‘a deity’

CHAPTER 4

MORPHOPHONOLOGY

4.0. INTRODUCTION. This chapter presents the major processes that are important for the interpretation of example forms in the chapters on morphology and syntax. Processes specific to certain morphological environments are detailed as needed in other sections. Sound symbolism and various low-level phonetic processes that do not alter phonemic representations are not systematically discussed in this chapter, but they are mentioned as they arise here and elsewhere. A complete treatment of the morphophonology of the Takic languages is beyond the scope of this study. Throughout this chapter, our approach is inspired in part by Swadesh and Voegelin's (1939) approach to Tübatulabal phonology and emphasizes the ordered application of phonological rules to derive surface forms from abstract underlying representations.

4.1. TONGVA MORPHOPHONOLOGY. While most of the individual morphophonological processes suggested by the scanty TV data are rather straightforward, their interactions can be rather intricate, making our analysis somewhat tentative.

4.1.1. VOWEL ALTERNATIONS. A series of interesting processes are triggered by left-edge inflection, including prefixation and reduplication of initial syllables in plurals and distributives.

The forms of (1) (where word-internal ~ marks reduplication) show a remarkable variety in the phonetic shapes of the roots involved. Stress in TV falls on the syllable containing the second mora (see 3.4.1). Consequently, when a root with a short first syllable begins a word, the stress falls on the second root syllable, with consequent lengthening of the stressed vowel. When such a root acquires a preceding short syllable, whether by reduplication (1a-h) or by prefixation (1i-l), then the stress falls on the first root syllable, and that vowel, the first root vowel, is lengthened. The second root syllable, not stressed in the reduplicated or prefixed form, does not undergo lengthening. Since the stressed and unstressed vowel systems are qualitatively distinct, the shift of stress within the root has qualitative consequences. In unstressed position in TV, as discussed

in 3.4.1, there is only a three-way contrast among the vowels: *a*, *e*, *o* (in our practical spelling), while in stressed position there are five vowels: *a*, *e*, *i*, *o*, *u*. Further, in stressed position, underlyingly short vowels lengthen and in certain unstressed positions they delete. Only the stressed syllables reveal the underlying vowel quality for vowels other than *a*.

(1)	TV	unprefixed, unreduplicated	prefixed, reduplicated
	a.	<i>pekwaar</i> -r ‘berry’ (3.104.0392)	<i>pe~piikwaar</i> -r ‘berries’ (3.104.0392)
	b.	<i>tovaar</i> -r ‘cottonwood tree’ (3.103.0760)	<i>to~tuuvaar</i> -r ‘cottonwood trees’ (3.104.0069)
	c.	<i>tokoo</i> -r ‘woman’ (3.104.0110)	<i>to~tookoo</i> -m ‘women’ (3.104.0166) / <i>to~tookoo</i> -ro-m (3.105.0344) / <i>to~took</i> -ra-m (3.104.0031)
	d.	<i>moriive</i> -t\$ ‘poor’ (3.104.0769)	<i>mo~mooreve</i> -m ‘poor ones’ (3.104.0769)
	e.	<i>novoo</i> -r ‘basket tray’ (3.103.0116)	<i>no~noovo</i> -r ‘basket trays’ (3.104.0101)
	f.	<i>pokii</i> -j ‘thief’ (3.104.0399)	<i>po~vuuk</i> -ja-m ‘thieves’ (3.104.0399)
	g.	<i>epuujo</i> -k ‘tiene vergüenza (be ashamed)’ (3.104.0208)	<i>ep~iipj</i> -a-r ‘uno que es sinvergüenza (one who is shameless)’ (3.103.0684)
	h.	<i>ne</i> - <i>neev</i> ‘my foot’ (3.102.0636) (<i>ne</i> - ‘my’)	<i>ne</i> - <i>nee</i> ~ <i>nev</i> ‘my feet, legs’ (3.102.0636)
	i.	<i>naxaa</i> - <i>kwa</i> -x ‘hear’ (3.104.0398)	<i>a</i> - <i>naa</i> ~ <i>nax</i> ‘3SG’s ear’ (3.103.0753)
	j.	<i>e\$ee</i> -j ‘picture, design’ (3.105.0298)	<i>ne</i> -7 <i>ee</i> \$ <i>e</i> -n ‘my body painting’ (3.105.0298)
	k.	<i>a</i> - <i>heoo</i> -ro-t ‘wise person’ (3.105.0371)	<i>a</i> - <i>hii</i> ~ <i>he</i> -ro-m ‘wise people’ (3.105.0371)

By comparing the forms in (1a), *pekwaar*, *pe~piikwaar*, it can be established that the underlying form has short *i* in the first syllable. This *i* reduces to *e* in the initial syllable of *pekwaar* but it appears (stressed and consequently lengthened) in reduplicated *pepiikwaar*. Thus, by removing the secondary effects of stress, the underlying form of ‘berry’ can be identified as *pikwa*.

Example (1f), *pokii*-j, *po~vuuk*-ja-m, shows even more differences in the form of the root found in the singular and in the plural, but the underlying form *puki* can be identified with confidence. In *pokii*, the underlying *u* of the first syllable, being unstressed, reduces

to *o*. In the plural, the stress falls on the root-initial syllable. This not only preserves its underlying vowel quality but also lengthens it, to *uu*. A complication with *povuukjam* (1f) is that the second root vowel is lost (syncopates) following the syllable containing the long *uu*. In TV, syncope, the loss of a non-final vowel in rhythmically weak position, requires the presence of a following syllable, which is *-ja* in this example. (Note that *-ja* has lost its final vowel by apocope – word-final vowel deletion – in the singular form *pokij*.) Finally, the root-initial *p*, finding itself between vowels in the reduplicated plural, lenites to *v* (cf. 4.1.2). Thus underlying *puki* appears as *pokii* in the singular and *vuuk* in the plural.

Example (1g), *epuujo-k*, *ep~iipj-a-r*, though quite regular, is remarkable in a number of ways:

First, it shows VC- reduplication. This reduplicative pattern is not found elsewhere in Takic (though it is found in Tübatulabal, for both vowel- and consonant-initial roots). In TV this is the reduplicative pattern for vowel-initial roots. A variant application of VC- reduplication is found with TV roots beginning in a long vowel, as in *iita-r* ‘coyote’ (3.105.0381), pl. *e7~iita-ro-m* ‘coyotes’ (3.105.0381). Here the C of the VC- formula is a glottal stop.

Second, the reduplicated noun form in example (1g), *ep~iipj-a-r*, shows the loss of the root-final vowel *o* (cf. the unreduplicated verb *epuujo-k*) before the vowel-initial nominalizing suffix *-a*. This is an example of the vowel replacement rule $V_1 -V_2 > V_2$ whereby a suffix-initial vowel replaces the final vowel of the preceding element.

Third, like (1f), (1g) shows deletion of the second root vowel, *u*. However, as different as the allomorphs *epuujo* and *iipj* are, the underlying form of the root can be identified as *ipujU*, though with the root-final vowel underspecified. At this point in our understanding we cannot determine whether to identify it as *o* (< PTak **y*) or *u* (< PTak **u*). Since the underlying forms model the implicit synchronic nature of the language, there will necessarily be many instances of underspecified vowels in syllables that never receive the stress.

Note that the intervocalic *p* of *ipujU* does not lenite to *v*. Consonant lenition does not apply in underived contexts.

Example (1k) (*a-heoo-ro-t*, pl. *a-hii~he-ro-m*) is also interesting. Initial *a-* is treated as a prefix, probably the adjectival prefix *a-*. The related verb is *heoo-na-x* ‘know’ and *-ro-*, in the derived noun, is a “characterizing” derivational suffix (see 14.5). The root can be

identified as underlyingly *hio* (cognate with Serran **hiy* ‘see’). In the plural it is unstressed and simplifies (monophthongizes) to *-he-*.

Modifications of the underlying root occur throughout the examples of (1). The abstract forms that can be posited for the roots in (1) are given in (2), to which we add the word for ‘coyote’ mentioned above as a representative long vowel root, (2l).

(2) TV		root		reduplicated
a.	‘berry’	<i>pikwa</i>	<i>pekwa-a-r</i>	<i>pe~piikwa-r</i>
b.	‘cottonwood’	<i>tuva</i>	<i>tova-a-r</i>	<i>to~tuuva-r</i>
c.	‘woman’	<i>toko</i>	<i>tokoo-r</i>	<i>to~tooko-m / to~tooko-ro-m / to~took-ra-m</i>
d.	‘poor’	<i>morivII</i>	<i>moriive-t\$</i>	<i>mo~mooreve-m</i>
e.	‘basket tray’	<i>novo</i>	<i>novoo-r</i>	<i>no~noovo-r</i>
f.	‘thief’	<i>puki</i>	<i>pokii-j</i>	<i>po~vuuk-ja-m</i>
g.	‘ashamed’	<i>ipujU</i>	<i>epuujo-k</i>	<i>ep~iipj-a-r</i>
h.	‘my foot’	<i>nevV</i>	<i>ne-neeV</i>	<i>ne-nee~nev</i>
i.	‘hear’, ‘ear’	<i>naxa</i>	<i>naxaa-kwa-x</i>	<i>a-naa~nax</i>
j.	‘mark’	<i>e\$e</i>	<i>e\$ee-j</i>	<i>ne-7ee\$e-n</i> ‘my body painting’
k.	‘see, be wise’	<i>hio</i>	<i>a-heoo-ro-t</i>	<i>a-hii~he-ro-m</i>
l.	‘coyote’	<i>iitaa</i>	<i>iita-r</i>	<i>e7~iita-ro-m</i>

Where it cannot be determined whether an unstressed vowel should be identified as underlying *e* or *i*, it is represented as *I*. In (2d), it can be established that the root-final vowel is long since it doesn’t undergo syncope, but from available evidence, we cannot establish whether it is underlyingly *ee* or *ii*. Similarly, *U* is used in underlying form where the underlying vowel could equally be *o* or *u*. The choice to write *I*, *U* for the indeterminate reduced vowels rather than *E*, *O* is motivated by the fact that small cap *o* is visually hard to distinguish from lower case *o*. Where there is a presumed underlying vowel but there is no evidence regarding which vowel it might be, we write *V*. Thus in (2h) *V* represents some unknown short vowel. The canonical form for TV roots is vowel-final, but no example is attested that would tell us what the vowel might be for the root ‘foot’. All attested examples of this root are root-final, as in (1h), where the presumed final vowel is lost by apocope, or else they show the root with a suffix that triggers

deletion of that vowel by syncope, such as in *ne-neev-nga* ‘en mi pie (on my foot)’ (3.104.0061).⁴⁷

4.1.2. LENITION. As noted in 3.5.1, lenition of intervocalic *p* and *t* to *v* and *r* respectively, resulting from the creation of an intervocalic environment for the consonant in reduplication, appears in some reduplicated forms, but not in others. Though many examples of the remaining oral stop, **k*, have undergone lenition to *x* (as in (1i) above), *k* does not lenite in derivation. The development **k* > *x* is restricted to the environment of low vowels: **ka* > *xa*, **ko* > *xo* and **ak* > *ax*, **ok* > **ek* > *ex*.

Examples of lenited *p* and *t* are shown in (1).

(1)	TV	with <i>p</i> > <i>v</i> lenition	base form
	a.	<i>po~voaana</i> ‘day before yesterday’ (3.105.0158)	<i>poaana</i> ‘yesterday’ (3.104.0116)
	b.	<i>pa~vaahe7</i> ‘six’ (3.102.0659)	<i>paahe7</i> ‘three’ (3.104.0093)
	c.	<i>pa~vaa-r</i> ‘wet’ (3.102.0567)	<i>paa-r</i> ‘water’ (3.102.0567)
	d.	<i>paa~vavo-t</i> ‘water baby’ or ‘big yellow butterfly’ (3.103.0057)	
	e.	<i>po~vuuk-ja-m</i> ‘thieves’ (3.104.0399)	<i>pokii-j</i> ‘thief’ (3.104.0399)
		with <i>t</i> > <i>r</i> lenition	
	f.	<i>ta~raaxe-m</i> ‘little girls less than 15’ (3.104.0382)	<i>taxaa-j</i> ‘little girl’ (3.104.0382)
	g.	<i>ta~raaxa-t</i> ‘people’ (3.103.0349)	<i>taaxa-t</i> ‘person’ (3.103.0349)
	h.	<i>te~riihve-m</i> ‘good, pl.’ (3.103.0476)	<i>tehoove-t</i> ‘good’ (3.103.0476)

Many examples with root-initial initial *p*, *t* do not display lenition, as seen in (2).

(2)	TV	a.	<i>pa~paajtxo7a-r</i> ‘bows’ (3.103.0734)	<i>paajtxo7a-r</i> ‘bow’ (3.103.0734)
		b.	<i>pe~piikwa-r</i> ‘berries’ (3.104.0392)	<i>pekwa-r</i> ‘berry’ (3.104.0392)
		c.	<i>-pii~pe-n</i> ‘breasts’ (3.104.0067)	<i>-pii-n</i> ‘breast’ (3.104.0067)
		d.	<i>ta~taaxo-ro-m</i> ‘gopher snakes, king snakes’ (3.105.0314)	<i>taaxo-r</i> ‘gopher snake, king snake’ (3.105.0314)

⁴⁷ Diachronically TV *-nevV* is from PTak **navo*, which would support *-neve* as the underlying form for TV. We lack the TV morphological data that could test this identification.

- | | | |
|----|---|--|
| e. | <i>to~took-ra-m</i> ‘women’ (3.104.0166) /
<i>to~tooko-ro-m</i> (3.105.0344) /
<i>to~tooko-m</i> (3.104.0031) | <i>tokoo-r</i> ‘woman’ (3.104.0110) |
| f. | <i>to~toom\$a-r</i> ‘oaks’ (3.104.0143) | <i>toom\$a-r</i> ‘oak sp.’ (3.104.0143) |
| g. | <i>to~toomja-ra-m</i> / <i>tomjaaram</i> /
<i>to~toomja-m</i> ‘captains’ (3.103.0727) | <i>tomjaa-r</i> ‘captain’ (3.103.0727) |
| h. | <i>to~tuuva-r</i> ‘cottonwood trees’
(3.104.0069) | <i>tovaa-r</i> ‘cottonwood tree’
(3.103.0760) |

Clearly two different CV- reduplicative patterns must be recognized; both are of the same superficial form but one blocks intervocalic lenition. A possible model may be provided by SE, which has reduplicative prefixes in CV-, which would provide a leniting environment, and in CVh-, which would not. It would seem that in TV, the phonetic difference between the two kinds of reduplication has been lost but the effect remains. The C of the VC- reduplicative pattern, as in (3), repeated from 4.1.1 (1g), does not participate in lenition; it is an unchanged copy of the consonant beginning the second syllable.

- | | | | |
|-----|----|--|--|
| (3) | TV | unreduplicated verb | reduplicated derived noun |
| | | <i>epuujo-k</i> ‘be ashamed’
(3.104.0208) | <i>ep~iipj-a-r</i> ‘one who is ashamed’ (3.103.0684) |

There are some examples of apparent variation. For instance, derived from the root **kuta* ‘wood, stick’ is the place name *Akuuranga* ‘Where there is much wood, La Presa’ (3.102.0061). The alternation of *t* and *r* here may have an explanation based on the reconstruction **kut-ta* ‘stick-absolutive suffix’ for *kuta*. The *t* beginning the absolutive suffix **-ta*, being postconsonantal, is not in a leniting environment and thus remains unchanged. Then the preconsonantal, root-final **t* is lost. However, in *Akuuranga* (< **a-kut-aa-nga*), the root-final **t* remains and appropriately lenites to *r*.

4.1.3. SYNCOPE AND APOCOPE. Unstressed short vowels between syllables are subject to syncope. The addition of a suffix commonly creates the conditions for the loss of a vowel, as in (1).

(1)	TV		syncopated
	a.	<i>akaawko-t\$</i> ‘crow’ (3.103.0208)	<i>akaawk-t\$a-m</i> ‘crows’ (3.103.0208)
	b.	<i>t\$aavo-t</i> ‘fire’ (3.103.0731)	<i>t\$aav-ta</i> ‘fire (genitive case)’ (3.104.0030); <i>t\$aav-nga</i> ‘in the fire’ (3.104.0068)
	c.	<i>to\$ooko-t</i> ‘cottontail rabbit’ (3.104.0667)	<i>to\$ook-ta-m</i> ‘cottontails’ (3.104.0067)
	d.	<i>a-xaaxe-n</i> ‘its egg’ (3.103.0761)	<i>a-xaax-ne-m</i> ‘its eggs’ (3.103.0669)

Syncope is regarded as a regular rule; the absence of syncope is then exceptional. In the example *iita-r* ‘coyote’ (3.105.0381), *e7~iita-ro-m* ‘coyotes’ (3.105.0381), the plural is not the syncopated **e7iitrom*. We have presumed that the second syllable of *iita-* is underlying long: *iitaa* (cf. 4.1.1 (2l)). Long vowels reduce to short in unstressed position but they do not syncope.

Prefixation often entails syncope of a vowel that corresponds to a stressed and lengthened vowel in the unprefixated form.

(2)	TV	singular	plural	UF
	a.	good <i>tehoove-t</i> (3.103.0476)	<i>te~riihve-m</i> (3.103.0476)	<i>tihovi</i>
	b.	my tooth <i>ne-taama-n</i> (3.103.0169) / <i>ne-taame-n</i> (3.104.0060)	<i>ne-taa~tma-n</i> (3.103.0615) / <i>ne-taa~tam</i> (3.103.0753)	<i>tama</i> / <i>tami</i>
	c.	woman <i>tokoo-r</i> (3.104.0110)	<i>to~tooko-r(a-m)</i> (3.104.0166) / <i>to~took-ra-m</i> (3.105.0344) / <i>to~tooko-ro-m</i> (3.104.0031)	<i>toko</i>

Example (2c), where Harrington recorded forms with and without syncope, shows that this process may be variable. If it is variable within an individual’s usage, it may depend on speech style. If it is variable across speakers, we may posit that there are competing underlying forms. For some speakers the underlying form would be *toko* (with possible syncope of the vowel of the second syllable) while for others it would be *tokoo* (without

syncope). Whether the underlying form is *toko* or *tokoo*, the singular form *toko* is the same.

In (2c), the forms for ‘women’ show a variability in the form of the absolutive suffix (-*ra* or -*ro*) when in combination with the plural suffix -*m*. See more on this below at 4.1.5. The derivations of the four listed plural forms are shown in (3). Note that syncope (the elision of a short vowel between syllables) must precede the shortening of long vowels in unstressed position. Apocope deletes a word-final short vowel and must precede syncope (see below). For the derivation in (3a), it doesn’t matter whether the underlying form for ‘woman’ contains a long second vowel or not; the derivation works out the same whether the underlying form is *toko* or *tokoo*. The choice of *toko* or of *tokoo* as underlying form makes a difference though in (3b,c,d). (A dash – marks the non-application of a rule.)

(3)	TV	a.	b.	c.	d.
		<i>to~ toko(o) -ra</i>	<i>to~ tokoo -ra -mo</i>	<i>to~ toko -ra -mo</i>	<i>to~ tokoo -ro -mo</i>
		[PL~woman-ABS]	[PL~woman-ABS-PL]	[PL~woman-ABS-PL]	[PL~woman-ABS-PL]
stress		<i>to-tóko(o)-ra</i>	<i>to-tókoo-ra-mo</i>	<i>to-tóko-ra-mo</i>	<i>to-tókoo-ro-mo</i>
apocope		<i>to- tók(o)-r</i>	<i>to-tókoo-ra-m</i>	<i>to-tóko-ra-m</i>	<i>to-tókoo-ro-m</i>
syncope		–	–	<i>to-tók-ra-m</i>	–
shortening		<i>to-tóko-r</i>	<i>to-tóko-ra-m</i>	–	<i>to-tóko-ro-m</i>
lengthening		<i>to-tóoko-r</i>	<i>to-tóoko-ra-m</i>	<i>to-tóok-ra-m</i>	<i>to-tóoko-ro-m</i>
		<i>totookor</i>	<i>totookoram</i>	<i>totookram</i>	<i>totookorom</i>

The forms in (4) show the plural morpheme -*mo* in stressed position with consequent lengthening to -*moo*. The possessive prefixes seem to supply their own domain for stress. We find evidence for this also in LU (4.4.3).

(4)	TV	<i>po- -mo havo -ni</i>	<i>po- -mo ki~ kii -ni</i>
		[3-PL-blanket-PSD]	[3-PL-PL~house-PSD]
stress (1)		<i>po-mó-havo-ni</i>	<i>po-mó-ki-kii-ni</i>
stress (2)		<i>po-mó-havó-ni</i>	<i>po-mó-ki-kíi-ni</i>
apocope		<i>po-mó-havó-n</i>	<i>po-mó-ki-kíi-n</i>
lengthening		<i>po-móo-havóo-n</i>	<i>po-móo-ki-kíi-n</i>
reduction		<i>pu-móo-havóo-n</i>	<i>pu-móo-ki-kíi-n</i>
		<i>pomoohavoon</i> ‘their blankets’	<i>pomookekiin</i> ‘their houses’
		(3.103.0704)	(3.104.0388)

The derivations in (5) shows that apocope must precede syncope.

(5)	TV	a.	<i>a- xaxi -ni</i> [3SG-egg-PSD]	b.	<i>a- xaxi -ni -mo</i> [3SG-egg-PSD-PL]
	stress		<i>a-xáxi-ni</i>		<i>a-xáxi-ni-mo</i>
	apocope		<i>a-xáxi-n</i>		<i>a-xáxi-ni-m</i>
	syncope		–		<i>a-xáx-ni-m</i>
	lengthening		<i>a-xáaxi-n</i>		<i>a-xáax-ni-m</i>
	vowel reduction		<i>a-xáaxi-n</i>		<i>a-xáax-ni-m</i>
			<i>axaaxen</i> ‘its egg’ (3.103.0761)		<i>axaaxnem</i> ‘its eggs’ (3.103.0669)

If syncope was applied before apocope, the result for (5a) would be ^x*axaaxn*.

Prefixation with possessive prefixes or by reduplication provides contexts for syncope.

(6)	TV	unsyncoated form	syncoated prefixed form	underlying
	a.	<i>kokuume7</i> ‘trastes (dishes, utensils)’ (3.103.0127)	<i>a-kuukme7</i> ‘sus trastes (her dishes)’ (3.105.0368)	<i>kukumi7</i>
	b.	<i>epuujo-k</i> ‘be ashamed’ (3.104.0208)	<i>ep~iipj-a-r</i> ‘one who is ashamed’ (3.103.0684)	<i>ipuju</i>

The examples in (6) are interesting in that despite appearances, there are no underlying long vowels in either of these.

Another interesting example is given in (7), repeated from 4.1.1 (1k).

(7)	TV	<i>a-heoo-ro-t</i> ‘wise person’ (3.105.0371)	<i>a-hii~he-ro-m</i> ‘wise people’ (3.105.0371)	<i>hio-ru</i>
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This example at first inspection looks like it must involve syncope, but in fact it shows the reduction of a vowel cluster in an unstressed syllable, with the second vowel being lost. The derivation of the forms of (7) is given in (8). The prefix *a-* is the adjectivalizing prefix. The conditions for syncope – short V in $\acute{V}C_CV$ – are not found in either derivation in (8) and syncope is omitted from the list of rules applied.

(8)	TV	a.	<i>a- hio -rU -ta</i> [ADJZ-see-NMLZ-ABS]	b.	<i>a- hi- hio -rU -mo</i> [ADJZ-see-NMLZ-PL]
	stress		<i>a-hió-rU-ta</i>		<i>a-hí-hio-rU-mo</i>
	apocope		<i>a-hió-rU-t</i>		<i>a-hí-hio-rU-m</i>
	lengthening		<i>a-híó-rU-t</i>		<i>a-híi-hio-rU-m</i>
	vowel reduction		<i>a-híó-rU-t</i>		<i>a-híi-hi-rU-m</i>
			<i>aheoorot</i> ‘wise one’		<i>ahiiherom</i> ‘wise ones’

The verb *nahoo7enax* ‘be commanding’ (3.105.0109) or *hoo7enax* (3.103.0274), of apparently the same meaning, shows a different facet of syncope. The alternating second-mora stress rule of TV does not stress the second mora itself but only the syllable containing the second mora. Thus, a stressed long-vowel syllable has its first mora in strong position and the second in weak. The immediately following syllable, then, is in a strong position and is exempt from syncope. Compare the derivations of the verb *hoo7enax* ‘order (as of captains)’ (3.103.0164), which has an underlying long vowel, and of the verb *t\$e7eenax* ‘be singing, sang’ (3.104.0093), which does not, given in (9). For more detail on the verb ‘sing’, see 4.1.6.

(9)	TV	a.	<i>hoo7 -ina -xa</i> [order-CAUS-NFUT]	b.	<i>t\$í7e7 -ina -xa</i> [song-CAUS-NFUT]
	stress		<i>hóo7-ina-xa</i>		<i>t\$í7é7-ina-xa</i>
	apocope		<i>hóo7-ina-x</i>		<i>t\$í7é7-ina-x</i>
	syncope		–		<i>t\$í7é7-na-x</i>
	7n > n		–		<i>t\$í7é-na-x</i>
	lengthening		–		<i>t\$í7ée-na-x</i>
	vowel reduction		<i>hóo7-ina-x</i>		–
			<i>hoo7enax</i> ‘order’		<i>t\$e7eenax</i> ‘sing’

The example in (10) shows that syncope in TV nouns can occur after a heavy syllable, *paajt-* in (10a) and *t\$aav-* in (10b). Evidently there are different constraints on syncope in verb derivation as above in (9) and in noun inflection as in (10). The forms in (10a) indicate that ‘bow’ has two competing underlying forms, *paajtuXU* in the first column and *paajtxU* in the second; the consonant cluster *-jtx-* is truly unusual. (Are we perhaps dealing with a loan word here?) The final *-7a* of the second form of (10a) looks like a

suffix, but its meaning or function has not been identified. It is not a “possessed” suffix because it occurs in the non-possessed *paajtxo7ar* ‘bow’. (10b) is repeated from (1b).

(10)	TV	unsyncoated		syncoated
	a.	<i>a-paajtox</i> ‘his bow’ (3.105.0292)	=	<i>a-paajtxo7</i> ‘his bow’ (3.105.0153) <i>paajtxo7ar</i> ‘bow’ (3.103.0734)
	b.	<i>t\$aavo-t</i> ‘fire’ (3.103.0731)		<i>t\$aav-ta</i> ‘fire (genitive case)’ (3.104.0030) <i>t\$aav-nga</i> ‘in the fire’ (3.104.0068)

Two more examples of exceptions to syncope are shown in (11) along with postulated underlying forms with long vowels in appropriate positions.

(11)	TV			UF
	a.	<i>haraa\$ave-t</i> ‘person from <i>Haraasa Wimuunga</i> (San Clemente Island)’ (3.102.0343)		<i>haraa\$ave-ta-m</i> ‘people from <i>Haraasa Wimuunga</i> ’ (3.102.0343)
	b.	<i>moriive-t\$</i> ‘poor’ (3.104.0769)		<i>mo~mooreve-m</i> ‘poor ones’ (3.104.0769)
				<i>morii-vii-t\$a</i>

In the gentilic formation in (11a), we can see that the source root, the name of the community, retains its final vowel, suggesting that it may be underlyingly long. This blocks apocope but shortens in surface form because it remains unstressed. (11b) is a strange word. It has the uncommon absolute suffix *-t\$* (see 5.1.2. (4) for a list, and 14.10.1 for a discussion of etymology), and like a Serran word, it drops the absolute before the plural suffix. The stem seems to have the underlying form *morii-vii*, with *morii* of unidentified meaning, plus the nominalizing derivational suffix *-ve*, which is not subject to apocope; thus its underlying form is presumed to have a long vowel: *-vii*. (We posit underlying *ii* rather than *ee* because of comparative evidence.)

4.1.4. SEQUENCES OF VOWELS WITHIN ROOTS. Sometimes the spellings encountered in Harrington’s notes can be quite misleading. This is particularly true with the confusion of various spellings for sequences of two vowels in juxtaposition. Often the first vowel is written as a glide, sometimes as a vowel, sometimes as a vowel plus a homorganic glide.

A few examples of these inconsistent representations are given in (1) (with the Harrington spellings of the sounds in question not normalized for our practical spelling).

(1)	TV		prefixed	UF
	a.	<i>wejoo7ro</i> ‘will defecate’ (3.105.0041)	<i>a-wjoo7en</i> ‘his feces’ (3.105.0374)	<i>wio7</i>
	b.	<i>wejoo7ro</i> ‘will defecate’ (3.105.0041)	<i>we~wjoo7ar</i> ‘defecator’ (3.105.0374)	<i>wio7</i>
	c.	<i>kjuur ~ kijuur</i> ‘fish’ (3.103.0032)	<i>ke~kjuuram</i> ‘fish (pl.)’ (3.103.0286) ~ <i>ke~kijjorom</i> (3.103.0286)	<i>kiuu ~ kijuu</i>
	d.	<i>\$ijoot</i> ‘star’ (3.102.0588)	<i>\$o~\$joot</i> ‘stars’ (3.104.0374) / <i>\$i~\$joot</i> (3.103.0022)	<i>\$io</i>
	e.	<i>pwaana</i> ‘yesterday’ (3.104.0116)	<i>po~vwaana</i> ‘day before yesterday’ (3.105.0158)	<i>puana</i>

If the written glide in (1a-d) was underlying, then the expected results of syncope would be quite different from what is actually encountered, as in the “prefixed” column of (1). However, in (1c) there are two different plurals reported. These can be explained by reference to two competing underlying forms, one with a glide, *kijuu*, and the other without it, *kiuu*, with long *uu* postulated because of its resistance to syncope (also cf. the corresponding long vowel in e.g. SE *kihuut\$* ‘fish’). We show the derivation of the plurals of ‘fish’ in (2). (The two derivations differ also in the form of the absolutive suffix, whether with *a* or with *o*. This difference is discussed in detail in 5.1.1.1.)

(2)	TV	<i>ki~kiuu-ra-mo</i> [PL~fish-ABS-PL]	<i>ki~kijuu-ro-mo</i> [PL~fish-ABS-PL]
	apocope	<i>ki-kiuu-ra-m</i>	<i>ki-kijuu-ro-m</i>
	stress	<i>ki-kiúu-ra-m</i>	<i>ki-kíjuu-ro-m</i>
	lengthening		<i>ki-kíjuu-ro-m</i>
	vowel reduction	<i>ki kiúu-ra-m</i>	<i>ki-kíju-ru-m</i>
		<i>kekeuuram</i>	<i>kekijjorom</i>

The patterns in (2) can be referred to as a template. All the forms of (1), other than ‘fish’ itself, behave like *kekeuuram*, not *kekijjorom*. Thus they are normalized in (3) with no

glide. It is unknown whether ‘fish’ is unique in showing competing underlying forms of the sort it has.

(3)	TV	prefixed/reduplicated
	a.	<i>weoo7ro</i> ‘will defecate’ <i>a-weoo7en</i> ‘his feces’
	b.	<i>weoo7ro</i> ‘will defecate’ <i>we~weoo7ar</i> ‘defecater’
	c.	<i>keuur ~ kejuur</i> ‘fish’ <i>ke~keuuram / ke~kijjorom</i> ‘fish (pl.)’
	d.	<i>\$eoot</i> ‘star’ <i>\$o~\$eoot / \$e~\$eoot</i> ‘stars’
	e.	<i>poaana</i> ‘yesterday’ <i>po~voaana</i> ‘day before yesterday’

There are two plurals for ‘star’ (3d), *\$o\$eoot* and *\$e\$eoot*. In the first, the reduplicative syllable seems to copy the second, unreduced vowel of the surface form *\$eoot* while the second copies the first vowel of the underlying form *\$io*. However, there may be a different account.

The TV word for ‘star’ corresponds poorly to the words for ‘star’ in most other Tactic languages: Serran *huu7-t\$*, LU *\$u7-la* (acc. *\$uu7u-l*), AC *\$u77a-l* (3.121.0774), CU *su7u-l*. These represent PTak **suu7u-La*. The CA word for ‘star’ is different, having the augmentative suffix *-we*: *su7-we-t*. TV *\$eoo-t* may represent a development parallel to the CA form, with both from PTak **\$uu7u-wy-ta*. The augmentative suffix vowel **y* accounts for the TV vowel *oo*. The unlenited absolutive of TV *\$eoot* is selected by the augmentative suffix, as it is in CA. The etymological glottal stop was lost preconsonantly, creating the intervocalic environment for the elision of **w*. The vowel *-e-* of TV *\$eoot* may be the result of a dissimilation: **u-oo > *i-oo > e-oo*.⁴⁸

The two plurals of TV *\$eoot*, then, may be accounted for by reference to two diachronic stages. In the plural *\$o~\$eoot*, the reduplicative syllable may represent a reduplication based on the undissimilated form **\$uoot*. **\$uoot* reduplicates as **\$u~\$uoot*. This then modernizes to *\$o~\$eoot*. The plural *\$e~\$eoot* is based on the present-day form of the stem, whose first vowel is now a front vowel.

4.1.5. ABSOLUTIVES IN A AND O. The vowel of the absolutive suffix is lost in final position by apocope, as seen in (1). The vowel of the absolutive is sometimes as *o* (1a–c) and

⁴⁸ This is the mirror image of the development of Spanish *ue* from Romance **ɔ*, which is reconstructed as coming through the intermediate stages **oɔ > *uɔ > *uo*, and then dissimilating to *ue* (Penny 2002:52).

sometimes *a* (1d,e). In both TV and the Cupan languages, the absolutive suffix appears as either **-ta*, or **-ty* before the plural suffix **-my*. The two forms of the absolutive have two different diachronic sources, as discussed in 5.1.1.1. Another form of the absolutive suffix is *-ja*, as in (1e). This form of the TV absolutive corresponds to SE *-ch*, KI *-ts*, LU *-sh/-cha*, AC *-ch*, and CU/CA *-sh*. The *j* of *-ja* can be thought of as a seriously lenited *ch*.⁴⁹

(1)	TV	singular	plural	UF
	a.	<i>iita-r</i> ‘coyote’ (3.105.0381)	<i>e7~iita-ro-m</i> ‘coyotes’ (3.105.0381)	<i>iitaa</i>
	b.	<i>a\$aaw-t</i> ‘eagle’ (3.102.0480, 3.103.0023)	<i>a\$aaw-to-m</i> ‘eagles’ (3.105.0336)	<i>a\$aawV</i> or <i>a\$aawV</i>
	c.	<i>pa7ii-t</i> ‘mouse’ (3.104.0507)	<i>pa7ii-to-m</i> ‘mice’ (3.102.0614)	<i>pa7i</i>
	d.	<i>piit\$okwa-r</i> ‘fly’ (3.104.0064)	<i>piit\$okwa-ra-m</i> ‘flies’ (3.104.0064)	<i>piit\$Uukwaa</i>
	e.	<i>pokii-j</i> ‘thief’ (3.104.0399)	<i>po~vuuk-ja-m</i> ‘thieves’ (3.104.0399)	<i>puki</i>

4.1.6. CONSONANT CLUSTER REDUCTIONS. There are many examples whereby an expected sequence of word-internal consonants loses the first member. Inflections and derivations involving the verb ‘sing’ (1) illustrate three such reductions, $7n > n$, $nr > r$, and $77 > 7$. The underlying verb root has short vowels and a final glottal stop, *t\$e7e7*, as in the rightmost column. (The examples in (1) are from Harrington 3.104.0093.)

(1)	TV	a.	be singing, sang	<i>t\$e7eenax</i>	<	<i>t\$e7e7-ina-xa</i> [song-CAUS-NFUT]
		b.	will sing	<i>t\$e7ee7ero</i>	<	<i>t\$e7e7-ina-roo</i> [song-CAUS-FUT]
		c.	sing!	<i>t\$e7ee7</i>	<	<i>t\$e7e7-i(na)</i> [song-CAUS.IMP]
		d.	singer	<i>t\$e7eenar</i>	<	<i>t\$e7e7-ina-a-ra</i> [song-CAUS-NMLZ-ABS]

⁴⁹ In his earlier work, Harrington transcribed absolutive *-j* as $\langle \text{ç} \rangle$, showing that TV *j* in final position was phonetically devoiced, at least for the speakers Harrington was working with at the time.

e.	singers	<i>tʃe7eenarom</i>	<	<i>tʃe7e7-ina-a-ro-mo</i> [song-CAUS-NMLZ-ABS-PL]
f.	singers	<i>tʃe7ee7erom</i>	<	<i>tʃe7e7-ina-a-ro-mo</i> [song-CAUS-NMLZ-ABS]
g.	song	<i>tʃe7ee7ej</i>	<	<i>tʃe7e7-i(na)-ii-ja</i> [song-CAUS-RES-ABS]

The details of the derivations leading from the underlying forms of the righthand column of (1) to the actually occurring forms in the central column are spelled out in (2).

(2)	TV	(1a)	(1b)	(1c)	(1d)
		<i>tʃi7e7-ina-x</i>	<i>tʃi7e7-ina-rUU</i>	<i>tʃi7e7-i</i>	<i>tʃi7e7 -ina -a -ra</i>
	V > Ø / _V	–	–	–	<i>tʃi7e7-in-a-ra</i>
	stress	<i>tʃi7é7-ina-x</i>	<i>tʃi7é7-ina-rUU</i>	<i>tʃi7é7-i</i>	<i>tʃi7é7-in-a-ra</i>
	apocope	–	–	<i>tʃi7é7</i>	<i>tʃi7é7-in-a-r</i>
	syncope	<i>tʃi7é7-na-x</i>	<i>tʃi7é7-in-rUU</i>	–	<i>tʃi7é7-n-a-r</i>
	<i>nr > r</i>	–	<i>tʃi7é7-i-rUU</i>	–	–
	<i>7n > n</i>	<i>tʃi7é-na-x</i>	–	–	<i>tʃi7é-n-a-r</i>
	final V shortening	–	<i>tʃi7é7-i-rU</i>	–	–
	V lengthening	<i>tʃi7ée-na-x</i>	<i>tʃi7ée7-i-rU</i>	<i>tʃi7ée7</i>	<i>tʃi7ée-n-a-r</i>
		<i>tʃe7eenax</i>	<i>tʃe7ee7ero</i>	<i>tʃe7ee7</i>	<i>tʃe7eenar</i>
		‘sing’	‘will sing’	‘sing (sg.)!’	‘singer’
		(1e)	(1f)	(1g)	
		<i>tʃi7e7-ina-a-ro-mo</i>	<i>tʃi7e7-ina-a-ro-mo</i>	<i>tʃi7e7-i-ii-ja</i>	
	V > Ø / _V	<i>tʃi7e7-in-a-ro-mo</i>	<i>tʃi7e7-in-a-ro-mo</i>	<i>tʃi7e7-ii-ja</i>	
	stress	<i>tʃi7é7-in-a-ro-mo</i>	<i>tʃi7é7-in-a-ro-mo</i>	<i>tʃi7é7-ii-ja</i>	
	apocope	<i>tʃi7é7-in-a-ro-m</i>	<i>tʃi7é7-in-a-ro-m</i>	<i>tʃi7é7-ii-j</i>	
	syncope	<i>tʃi7é7-n-a-ro-m</i>	<i>tʃi7é7-in-ro-m</i>	–	
	<i>nr > r</i>	–	<i>tʃi7é7-i-ro-m</i>	–	
	<i>7n > n</i>	<i>tʃi7é-n-a-ro-m</i>	–	–	
	V lengthening	<i>tʃi7ée-n-a-ro-m</i>	<i>tʃi7ée7-i-ro-m</i>	<i>tʃi7ée7-ii-j</i>	
	V reduc./sh.	<i>tʃi7ée-n-a-rU-m</i>	<i>tʃi7ée7-i-rU-m</i>	<i>tʃi7ée7-i-j</i>	
		<i>tʃe7eenarom</i> ‘singers’	<i>tʃe7ee7erom</i> ‘singers’	<i>tʃe7ee7ej</i> ‘song’	

In example (1b) the final vowel does not apocopate and consequently has a different pattern of syncope. We presume that the future suffix is resistant to apocope because of

vowel length, but diachronically it must have had a final glottal stop (cf. the SE motion suffix *-tʃu7*). The SE cognate also informs our identification of the underlying vowel of the TV future suffix as *u* rather than *o*.

Examples (1c,g) involve a morphologically motivated reduction of causative *-ina* to *-i*. This is indicated in (1) by placing *na* in parentheses. The dropped *na* element is omitted from the representations in (2).

As mentioned in 4.1.5, the plurals (1e,f) show an absolutive suffix in *o*, as compared to the absolutive in *a* found in the singular (1d).

The two words for ‘singers’ have the same underlying form as the first but different applications of syncope, (1e) losing one vowel and (1f) the other. (1e) shows the more “regular” pattern, counting off strong and weak positions left to right.

Example (1g) is a resultative nominalization, ‘s.th which is sung’. This also involves the morphological contraction of *-ina* to just *-i* (which in turn reduces to *e*).

Several remaining morphophonological processes in TV having to do with stem formation will be reviewed at appropriate places in the chapters on nouns and verbs.

4.2. SERRANO MORPHOPHONOLOGY. The most complete account of SE morphophonology appears in K. Hill (1967). We treat SE morphophonology in some detail here, since there has been little publication on this language in comparison to the Cupan languages.

A summary of the phonological rules discussed in this section is given in (1). The rules are listed in a logical order (certain rules must precede or follow certain other rules) and are referenced to the sections in which they discussed. Note that contractions are morpheme-specific processes.

(1)	SE	1.	vowel replacement	4.2.1
		2.	metathesis in k-class roots	4.2.6
		3.	glottal stop insertion	4.2.2
		4.	developments of *k	4.2.4
		5.	apocope	4.2.2
		6.	syncope	4.2.3
		7.	length reassignment	4.2.10
		8.	glottal stop vowel metathesis	4.2.6
		9.	<i>ai</i> to <i>ei</i> assimilation	4.2.6

10.	dative contraction	4.2.1
11.	glottal stop glide metathesis	4.2.6
12.	glide vocalization	4.2.1, 4.2.2, 4.2.6, 4.2.7
13.	<i>h</i> absorption	4.2.5
14.	<i>y</i> assimilation	4.2.8
15.	<i>kk</i> contraction	4.2.4
16.	accusative contraction	4.2.2, 4.2.12.1
17.	indicative contraction	4.2.12.2
18.	<i>h</i> and <i>r</i> alternation	4.2.5
19.	<i>sh</i> and <i>ch</i> alternation	4.2.5
20.	final vowel shortening	4.2.2
21.	final <i>h</i> > \emptyset after long vowel	4.2.5
22.	<i>h</i> assimilation	4.2.5
23.	vowel shortening	4.2.10
24.	cluster reduction	4.2.11.3

4.2.1. VOWEL REPLACEMENT. The deepest morphophonological rule identified is the replacement of a vowel by a following suffix-initial vowel. This rule probably pertains to most of Uto-Aztecan and being deep within the morphological system, does not in itself result from any diachronic sound change. In (1), the first column shows the form with stem-final vowel before a consonant-initial suffix and the second a form with that vowel replaced by the initial vowel of a suffix. Most vowel-initial suffixes in SE begin with the vowel *i*. The long vowels of SE are phonological units for this process though we write them with a sequence of letters: *aa*, *yy*, *uu*, etc.

(1)	SE	a.	<i>koutkina-qa7</i> ‘be going to cut it’	<i>koutkin-i-ch</i> ‘s.th. cut’
		b.	<i>kuuhana-qa7</i> ‘be going to call’	<i>kuuhan-ichun</i> ‘call for’
		c.	<i>kuumana-qa7</i> ‘be going to go to sleep’	<i>kuuman-ia7-t\$</i> ‘sleepyhead’
		d.	<i>pichyy-ka7</i> ‘be going to arrive’	<i>pich-iv</i> ‘will arrive’
		e.	<i>waan7kina-qa7</i> ‘be going to dig’	<i>waan7kin-ihwa7-t</i> ‘digging tool’

Only one suffix beginning with *a* has been identified, *-av(a)* ‘keep on doing’. Since *-av(a)* occurs only after consonant-final, k-class verb stems it does not provide any exemplification of vowel replacement.

Two suffixes begin with *y*. One is the resultative suffix *-y7*, which occurs only with *k*-class verb stems, which, as mentioned above, are all consonant-final.

The other suffix in *-y* is the genitive case ending. In most instances the theoretical genitive case ending is lost by apocope, word-final short vowel deletion (see 4.2.2). But sometimes the genitive case suffix is followed by a final glottal stop, as in (2). Note especially the variability in (2c); the variable word-final glottal stop is also discussed in 4.2.2. Example (2d) shows the assimilation of the genitive suffix to the rhoticity of the preceding vowel. This phenomenon is discussed in 4.2.7.

- (2) SE a. *Ama-ch ny^Rh-t-y7 a-jy7 = kwyn aa-p tu7a-j.*
 DIST-GEN woman-ABS-GEN 3SG-mother = QUOT.3SG DIST-LOC pound-IND
 ‘The woman’s mother was pounding there.’
- b. *ny-paah-y7 a-hiintu7a7*
 1SG-Older-GEN 3SG-wife
 ‘my older brother’s wife’
- c. *a-jyk-∅ a-huun ~ a-jyk-y7 a-huun*
 3SG-mother-GEN 3SG-heart 3SG-mother-GEN 3SG-heart
 ‘his mother’s heart’
- d. *ny-qoo^Rh-y^R7 a-wy^Rt\$yhav*
 1SG-OlderS-GEN 3SG-husband
 ‘my older sister’s husband, my brother-in-law’

The plural forms in (3) provide the full form of the stems of (2b) and (2c). This shows that the genitive case vowel, *y*, has replaced the stem-final vowel, *a*. These forms also illustrate the word-final *r* ~ non-final *h* alternation, discussed below.

- (3) SE
- | | singular | plural | genitive singular |
|--------------------|----------------------------|-------------------------------|--|
| ‘my older brother’ | <i>ny-paar</i> | <i>ny-paaha-m</i> | <i>ny-paah-y7</i> (2b) |
| ‘my older sister’ | <i>ny-qoo^Rr</i> | <i>ny-qoo^Rha-m</i> | <i>ny-qoo^Rh-y^R7</i> (2d) |

In (1) and (3), the vowel beginning the suffix replaces the final vowel of the preceding morpheme. This is quite general in SE. Most exceptions to vowel replacement are the result of processes like metathesis or consonant loss. The latter includes, at least diachronically, the loss of intervocalic *w. Examples arise, for instance, with the augmentative suffix, which has initial *w, cf. LU *hun-wu-t*, CU *hun-wy-t*, CA *hun-we-t* ‘bear’, which are augmentatives of the words for ‘badger’, LU *huuna-l* and CU/CA *huna-l*. In Serran, *-wy has lost both its initial *w and its productivity. A trace of *-wy remains in Serran *huuna-y-t* ‘bear’, where the final *a* of the root is retained before a suffix-initial vowel. However, not only is the vowel historically not suffix-initial, but this word is usually pronounced *huuna-t*, with the remnant of *-wy completely obliterated, leaving only the resistance to syncope of the vowel *a*. and the selection of the *t* form of the absolutive suffix. Serran ‘badger’ has been created anew, adding *-v(i)* to the root ‘bear’, cf. SE *huuna-v-t*, KI *huuna-vi-t*.

Using a derived form was evidently a way to avoid saying the “real” word for ‘bear’, which would have been disrespectful and maybe dangerous.⁵⁰ This development involving ‘badger’ and ‘bear’ must be quite old. In both Tübatulabal and Hopi the old ‘badger’ sense has been completely displaced: Tübatulabal *uuna-l* ‘grizzly bear’, Hopi *hoona-w* ‘bear’. In Hopi, a new word for ‘badger’ has been created, the short-vowel form *honani*.⁵¹ The contemporary Tübatulabal word for ‘badger’ is unattested. Tübatulabal also has a second ‘bear’ word, *moʔolohj* ‘black bear’.⁵² This *Wanderwort* also appears as KI *moʔloj* (3.98.0104). It may relate to Proto-Utian **mulu-* ‘black, dark’ (Callaghan 2014:327).

4.2.2. APOCOPE, GLOTTAL STOP INSERTION, AND FINAL VOWEL SHORTENING. Two important word-final morphophonological processes that SE shares with the other Takic languages are apocope and vowel shortening. Word-final short vowels delete and long vowels

⁵⁰ This situation finds a parallel in various euphemistic Indo-European usages for ‘bear’, such as in Germanic “the brown one,” in Slavic “the honey eater” – cf. Russian *medved* ‘bear’, *měd* ‘honey’.

⁵¹ Vowel length alteration as a signal of size difference seems also to be found in TV, with smaller *\$uukat* ‘venado (deer)’ (3.104.0066) vs. larger *\$okaat* ‘ciervo (stag)’ (3.103.002). But the reverse is also found: *t\$enuuhoʔ \$okaat* ‘venadito chiquito (little deer)’ (3.105.0391).

⁵² *Moʔolohj* is glossed “the brown bear” by Voegelin (1958:224), possibly in reference to the “cinnamon” phase of the black bear. California has only two species of bear, the grizzly bear and the black bear; “brown” bears are found in Alaska.

shorten. The result of these processes is that final syllables are reduced by one mora. The shortening of word-final long vowels is illustrated in (1).

- | | | | |
|-----|----|--|------------------------------|
| (1) | SE | long (non-final) | shortened (word-final) |
| | a. | <i>a-kii-v</i> ‘at his house’, <i>kii-ch</i> ‘house-ABS’ | <i>a-ki</i> ‘his house’ |
| | b. | <i>ni-ñaa-m</i> ‘my relatives’ | <i>ni-ña</i> ‘my relative’ |
| | c. | <i>cha-ñuu-j</i> ‘our-possession (acc.)’ | <i>ni-ñu</i> ‘my possession’ |

The process of apocope affects most of the vocabulary of SE. The deleted short vowel is often indicated by a final parenthesized vowel, dubbed the “apocopic vowel” (for more on such vowels, see 10.2.1). This vowel is absent from citation forms but it surfaces under appropriate conditions. One such condition is in verb stems when followed by indicative *-j*. The indicative suffix occurs under a number of conditions, the most common being when the verb is followed by the auxiliary, which often consists of no more than a pronominal, as in (2), but it may contain a modal or evidential and tense as well as pronominals, as in (3) (for more on the auxiliary, see chapter 9).

- (2) SE a. *aav(y)* ‘tell about, relate history’; *aavy-j* = [n]_{AUX} ‘I am telling about it’
 b. *jo^Rhjo^R7(a)* ‘look at’; *jo^Rhjo^R7a-j* = [n]_{AUX} ‘I’m looking at it’
- (3) SE a. *naminkin(a)* ‘change into’
Namin-k-ina-j = [kwyny = my-7]_{AUX} *pyy-taq* *hukaa-m* *py-my-n.*
 change.into-K-CAUS-IND = QUOT = 3PL-PST 3PL-REFL deer-PL 3-PL-like
 ‘They changed themselves into deer.’
- b. *\$yy7(a)* ‘bloom’
\$yy7a-j = [ta = vy-7]_{AUX} ?
 bloom-IND = IRR = 3SG-PST Q
 ‘Did it bloom? / Was it blooming?’
- c. *ahqaj(y)* ‘take care of’
Ahqajy-j = [kwyn]_{AUX} *ama-j* *añii7ch-ti.*
 take.care.of-IND = QUOT.3SG > 3SG DIST-ACC baby-ACC
 ‘She was taking care of the baby.’ (Gluttonous Wife)

There are exceptions to apocope in a small number of frequent elements. To protect the final vowel from apocope, a glottal stop is added. This “inorganic” glottal stop occurs only when the element is unsuffixed; when an affix is added the glottal stop is not present, as in (4).⁵³

(4)	SE	with ʔ	without ʔ
	a.	<i>amaʔ</i> ‘that, he, she, it’	<i>ama-j</i> (acc.), <i>ama-ch</i> (gen.)
	b.	<i>iviʔ</i> ‘this’	<i>ivi-j</i> (acc.), <i>ivi-ch</i> (gen.)
	c.	<i>nyyʔ</i> ‘I’	<i>nyy-j</i> ‘me’ (acc.)
	d.	<i>-qaʔ</i> ‘immediate future: be going to VERB’	<i>-qa-j = n</i> ‘I’m going to VERB’
	e.	<i>añiiʔchiʔ</i> ‘small one’	<i>añiiʔchi-ti ~ añiiʔch-ti</i> (acc.)

The same rule of glottal stop insertion seems to have been involved in the process of borrowing words from Spanish. But here, the glottal stop added to circumvent the loss of the final short vowel of the Spanish original is treated as inherent to the stem, and such words are treated grammatically as consonant-final forms. The plural of a consonant-final form normally entails an augment *-ja-* being added to the stem, as seen in (5).

(5)	SE	singular	plural	Spanish
	a.	<i>ghaatuʔ</i> ‘cat’ ⁵⁴	<i>ghaatuʔ-ja-m</i>	<i>gato</i>
	b.	<i>lameesaʔ</i> ‘table’	<i>lameesaʔ-ja-m</i>	<i>la mesa</i> ‘the table’
	c.	<i>jaaviʔ</i> ‘key’	<i>jaaviʔ-ja-m</i>	<i>llave</i>

Some Spanish words have entered SE with final consonants, either as in the Spanish original or by vowel deletion in the borrowing process. In (6a), the *j* of the *-ja-* augment is inaudible after the palatal consonant *lj*. In (6e), the SE singular is based on the Spanish plural (*pollitos*) and the plural is based on the Spanish singular (*pollito*).

⁵³ “Inorganic” is a term used by Edward Sapir (1930:59) for glottal stops that do not figure in the “organic” (underlying) form. Within contemporary linguistics, these terms sound charmingly old fashioned, but they provide a succinct expression of an important distinction.

⁵⁴ Note that KI has avoided the introduction of the new sound *gh* and uses *ng* as a substitute for the Spanish *g* of *gato*: KI *ngaatyʔ* ‘cat’.

(6)	SE	singular	plural	locative	Spanish
	a.	<i>variilj</i> ‘barrel’	<i>variilj-a-m</i>	<i>variilj-p</i> ‘in the barrel’	<i>barril</i>
	b.	<i>vatoon</i> ‘button’	<i>vatoon-ja-m</i>	(<i>vatoon-p*</i>)	<i>botón</i>
	c.	<i>dhumiiing</i> ‘Sunday’	–	<i>dhumiiing-p</i> ‘on Sunday’	<i>domingo</i>
	d.	<i>peeris</i> ‘pear’	<i>peeris-ja-m</i>	<i>peeris-p</i> ‘on the pear’	<i>peras</i> ‘pears’
	e.	<i>pujiiitus</i> ‘little chick’	<i>pujiiitu7-ja-m</i>	–	<i>pollito(s)</i>
	f.	<i>taxeer</i> ‘scissors’	<i>taxeer-ja-m</i>	(<i>taxeer-p*</i>)	<i>tijera</i>

SE has a few word-final long vowels. Some occur in expressive forms like *haa* ‘yes’. Another source is from the loss of word-final *h*, as in *ny-pii* ‘my sugar’; cf. absolutive *pii-h-t\$* ‘sugar’.

Sometimes a word-final short vowel is what remains when the second of two vowels in an underlying vowel cluster deletes, leaving the other vowel, as seen with *mu* ‘shoot!’. The derivation of forms of the verb ‘shoot’ is shown in (7). Glottal stop insertion, mentioned above, affects a small number of specially marked elements. (In underlying form, the grave accent marks a vowel that is exceptional to apocope.) The inserted glottal stop removes the vowel from word-final position and serves to block the application of apocope.

(7)	SE	‘shoot’	indicative	imperative	future	immediate future
			<i>mua -j</i>	<i>mua</i>	<i>mua -iv</i>	<i>mua -qà</i>
	vowel replacement		–	–	<i>mu -iv</i>	–
	glottal stop insertion		–	–	–	<i>mua -qà7</i>
	apocope		–	<i>mu</i>	–	–
	contraction		<i>mu -j</i>	–	–	–
			<i>muj</i>	<i>mu</i>	<i>muiv</i>	<i>muaqa7</i>
			‘shoot(s)’	‘shoot!’	‘will shoot’	‘be going to shoot’

Contractions involving the glide *j* are the source of many word-final examples of *i*. The indicative suffix *-j* appears as *-i* with most verbs in 7, as in *ja7-i* ‘run’. Another example is the accusative case, underlyingly *-jy*. With the absolutive and plural suffixes in weak position there is a *Vj* contraction to *i* (see 4.2.11.1), as with *kiichi*, the accusative of *kiich* ‘house’, seen in (8).

(8)	SE	‘house’	nominative	accusative
			<i>kii -cha</i>	<i>kii -cha -jy</i>
			[house-ABS]	[house-ABS-ACC]
		apocope	<i>kii -ch</i>	<i>kii -cha -j</i>
		contraction	–	<i>kii -ch -i</i>
			<i>kiich</i>	<i>kiichi</i>

By comparison, closely related KI lacks the accusative-case contraction rule, cf. KI *kii-ts* ‘house’ (3.100.0556), acc. *kii-tsa-j* (3.99.0263).

With underlyingly monosyllabic and disyllabic forms the contraction does not take place. The vowels that fail to undergo contraction are in meterically “strong” position (cf. 4.2.3).

(9)	SE	nom.	<i>nyy7</i>	<i>y mi7</i>	<i>ivi7</i>	<i>ama7</i>	<i>pat ~ pata7</i>
		acc.	<i>nyy-j</i>	<i>y mi-j</i>	<i>ivi-j</i>	<i>ama-j</i>	<i>pata-j</i>
			‘I, me’	‘you (sg.)’	‘this (prox.)’	‘that (dist.)’	‘that (prox2)’

Under the right circumstances the otherwise lost vowel *y* of *-jy* may surface, as in (10), where the non-syllabic nature of the cliticized pronominal =*n* has redefined the word boundary with respect to apocope.

(10)	SE	<i>Pa-ta-jy = n</i>	<i>hi i ~ hi -j.</i>
		PROX2-ABS-ACC = 1SG > 3SG	DUR ~ see-IND
		‘I see that one.’	

The first person singular pronominal =*n* is underlyingly *ny*. Example (10) should be compared with (11). In (11), the final *y* of the accusative suffix deletes, resulting in *pataj* (< *pa-ta-jy*). This is because underlying *ny* now appears in full, the past tense clitic =*7* having blocked the deletion of the underlying short *y* in *ny*. The loss of its final vowel in (10) makes =*n* (< *ny*) syllable-final, blocking the deletion of the preceding vowel, but in (11), since the past tense form of the pronominal, *ny7*, is a full syllable, it does not block apocope in the preceding word.

- (11) SE *Pa-ta-j = ny-7* *hii~hi-j*.
 PROX2-ABS-ACC = 1SG > 3SG-PST DUR~see-DUR
 ‘I saw that one.’

Example (12) is a stylistic variant of (11), showing that *ny7*, as a full syllable, has a freedom of order not available to an element that must appear only as a clitic.

- (12) SE *Ny7 pataj hiihij*. ‘I saw that one.’

Suffixes, like roots, lose their word-final short vowel by apocope. This is illustrated by the examples in (13).

- (13) SE a. *anga7-av* ‘meet repeatedly’, *anga7-ava-j = ny*. ‘I kept on meeting them’ (-*av(a)* ‘repetitive’ – underlying -*aava*; long vowels shorten in weak position but they resist metathesis and syncope.)
 b. *ahiihi-7n* ‘be giggling’; *ahiihi-7na-j = m* ‘they are giggling’ (-*7na* ‘stative’)
 c. *chawyy-t\$u7* ‘go to pick’, *chawyy-t\$u7a-j = m* ‘they went to harvest’ (-*t\$u7a* ‘motion’), cf. *chawe-j* ‘be picking s.th.’
 d. *chio^Rp-k-in* ‘stick s.th. on’, *chio^Rp-k-ina-j = n* ‘I stuck it on’ (-*ina* ‘causative’)
 e. *oo^Rvav-t* ‘strong one’, *oo^Rvav-ta = n* ‘I’m strong’ (-*ta* ‘absolute’)
 f. *atuuka-v* ‘all night’, *atuuka-va = n chaat\$u7* ‘I sang all night’ (-*v(a)* ‘locative’)

It may be useful here to revisit the nature of the presumed Proto-Takic stress rule (see 3.4.7). The rule is to stress the syllable containing the second mora, except that the word-final syllable is extrametrical, i.e., not stressable. This excludes word final stress (except in monosyllables to be sure). This simple rule provides the etymological underpinning of the vast part of the Takic vocabulary. But even an overwhelmingly general rule such as this has its exceptions. The SE demonstratives *ivi7* ‘this’ and *ama7* ‘that’ (see (4), above) are exceptional in that while the regular rule of stress placement applies, the extrametricality of the final syllable is suspended. This is one diachronic origin of the environment for the “inorganic” glottal stop mentioned above.

- (14) SE a. *Kwiimky = n* *miaa-qa7*. ‘I’m going [to go] north.’
 north = 1SG go-IFUT

- b. *Miaa-qa-j = n* *apuu-jka7*. ‘I’m going [to go to the] east.’
 go-IFUT-IND = 1SG east-DAT
- c. *Acham = ch* *paa7-qa-m*. ‘We’re going to drink.’
 1PL.PRO = 1PL drink-IFUT-PL
- d. *Paa7-qa-j = ch*. (same but with no independent pronoun)
 drink-IFUT-IND = 1PL

In (14a), *-qa7* is followed by no suffix and appears with word-final glottal stop. In (14b), the verb with *-qa7* takes the indicative suffix *-j* before the cliticized pronominal *=n* ‘I’ and the glottal stop does not appear. In (14c) the ending *-qa7* shows its noun-like behavior in that it gets a plural suffix *-m* to agree in number with its subject, *acham* ‘we’. But when the verb is followed by AUX, as in (14d), it takes indicative *-j* just like any other verb. This indicative suffix is restricted to verbs and provided a useful fieldwork test for whether an element was a verb or not.

Another instance of a glottal stop that may have been induced by an ancient stress is the word-final glottal stop which marks past tense with certain pronominal forms within the auxiliary. The pronominals which are given with an initial cliticization mark = cannot occur initially in a clause.

(15)	SE	unmarked	past		
	a.	<i>=n</i>	<i>ny7</i>	‘I’	1SG, 1SG > SG (> SG)
	b.	\emptyset	<i>vy7</i>	‘he/she/it’	3SG, 3SG > 3SG (< SG)
	c.	<i>vyn</i>	<i>vyny7</i>	‘he/she/it-me’	3SG > 1SG (> SG)
	d.	<i>=ch</i>	<i>chymy7</i>	‘we’	1PL, 1PL > SG (> SG)
	e.	<i>=mt\$</i>	<i>mt\$y7</i>	‘you (pl.)’	2PL, 2PL > SG (> SG)
	f.	<i>=m</i>	<i>my7</i>	‘they’	3PL, 3PL > 3/2SG (> SG)
	g.	<i>myn</i>	<i>myny7</i>	‘they-me’	3PL > 1SG (> SG)

‘You (pl.past)’ is attested in a single elicited example of doubtful authenticity:

(16)	SE	<i>Yym = ta = mt\$y-7</i>	<i>paa7-i</i>	?
		2PL.PRO = IRR = 2PL-PST	drink-IND	Q
		‘Did you people drink?’		

Other AUX pronominals lack forms marked for past tense. It is especially noteworthy that several forms marked for plural object are marked solely by the retention of the morpheme-final vowel.

(17)	SE		subject	object	
	a.	<i>ny</i>	‘I’	‘them/you pl.’	1SG > 3PL/2PL
	b.	<i>vy</i>	‘he/she/it’	‘them/you pl.’	3SG > 3PL/2PL
	c.	<i>vyny</i>	‘he/she/it’	‘me + ‘them/you pl.’	3SG > 1SG > 3PL/2PL
	d.	<i>chymy</i>	‘we’	‘them you pl.’	1PL > 3PL/2PL
	e.	<i>my</i>	‘they’	‘them/you pl.’	3PL > 3PL/2PL
	f.	<i>myny</i>	‘they’	‘me + ‘them/you pl.’	3PL > 1SG > 3PL/2PL

Similarly, certain modals are marked for third person plural subject by the retention of their final vowel, seen in (18). The shortest form of the modal is found with third person singular subject, which is zero. Third person singular object is also zero. The non-zero third person singular pronominal is *vy*. This is used when there a non-zero object to be marked or with past tense. The first person singular form included in the right-hand column in (18) to show that the full form of the modal appears when there is a following overt pronominal.

(18)	SE		3SG.SUBJ	3PL.SUBJ	1SG.SUBJ
	a.	irrealis	<i>t</i>	<i>ta</i>	<i>ta = n</i>
	b.	quotative	<i>kwyn</i>	<i>kwyny</i>	<i>kwyny = n</i>
	c.	inferential	<i>tq</i>	<i>tqa</i>	<i>tqa = n</i>
	d.	emphatic, ‘such a’	<i>pyt\$</i>	<i>pyt\$y</i>	<i>pyt\$y = n</i>
	e.	it seems	<i>mitkin</i>	<i>mitkina</i>	<i>mitkina = n</i>

We postulate that the plural marking of object in (17) and of subject in (18) is accomplished by the lengthening of the word-final vowel, thus occasioning its retention, in line with the generalization that short vowels delete and long vowels shorten in final position. The origin of the vowel lengthening is reconstructable as the plural marker **m*. This **m* has been dropped with compensatory vowel lengthening in the auxiliary pronominals as well as in the plural possessive prefixes *chyy-*, *yy-*, *pyy-*, as in (19). *Chyy-*

is the form for ‘our’ used by Dorothy Ramón; Sarah Martin used *cha-*. Mrs. Ramón regarded *cha-* as “archaic” (Ramón & Elliott 2000:390).

- (19) SE *ny-ki* ‘my house’ *chyy-ki* ‘our house’
 my-ki ‘your (sg.) house’ *yy-ki* ‘your (pl.) house’
 a-ki ‘his/her/its house’ *pyy-ki* ‘their house’

4.2.3. SYNCOPE. The second environment for vowel deletion (after apocope) is weak position within the word. Vowel deletion includes the loss of short vowels and the shortening of long vowels. Recall that strong position is the portion of the word that includes the first two moras, that is, the first syllable and, if the first syllable is short, also the second syllable. Any subsequent syllable is in weak position. A syllable after a weak syllable is again in strong position. There is in effect an alternating secondary stress. In weak position long vowels shorten and if followed by an obstruent consonant, short vowels delete.

Examples showing syncope and the effects of strong and weak position are given in (1), with strong position marked by underline.

- (1) SE a. *raakwchun* ‘eat for’ < *raakw-ichun*
 b. *chichint* ‘boy’ < *chichina-t*
 c. *jaayt\$ikchun* ‘hold for’ < *jaayt\$ik-ichun*

In (1a) the long vowel *aa* counts as two moras as do the two initial syllables *chichi* in (1b). Thus the following vowel, being before an obstruent (*ch* in (1a) and *t* in (1b)), syncopates. Example (1c), with *jaayt\$ikchun(a)* syncopated from *jaayt\$ik-ichun(a)*, is more elaborate. It is mapped out in the derivation in (2). The final underlying extrametrical syllable is necessarily in weak position. (The palatalization of *k* is unmarked in the surface form since it is preceded by *i*.)

- (2) SE
- | | strong | weak | strong | weak | strong | extrametrical |
|----------------------|---------------------------------|----------|--------------------|-----------|------------|---------------|
| underlying syllables | <i>jaa</i> | <i>y</i> | <i>t\$<u>i</u></i> | <i>ki</i> | <i>chu</i> | <i>na</i> |
| syncope/apocope | – | – | – | <i>kj</i> | – | <i>n</i> |
| | <i>jaayt\$ikchun</i> ‘hold for’ | | | | | |

Example (3) shows no syncope. The first syllable, *kuu*, is long such that the second syllable, *ha*, is weak. But *ha* is followed by a non-obstruent, *n*, which blocks syncope. The next syllable of (1c), namely *ni*, is now in strong position since its preceding syllable is weak, and consequently syncope of *i* is blocked.

(3) SE *kuuhanichun* ‘call for’ = *kuuhan-ichun*

In SE, “syncope” extends to the loss of short vowels in weak position before a final obstruent, as shown in the singular and plural nouns cited in (4), where the vowel is lost in the singular, before the word-final obstruent, the absolutive suffix *-t*, *-t\$*, *-ch*, but it remains in the plural, where the suffix is the non-obstruent *-m*.

(4) SE	singular	plural
a. golden eagle	<i>ahy^Rng-t</i>	<i>ahy^Rnga-m</i>
b. ground squirrel	<i>qoo^Rng-t</i>	<i>qoo^Rngi-m</i>
c. great horned owl	<i>muum-t</i>	<i>muumu-m</i>
d. prickly pear cactus	<i>naav-t</i>	<i>naavy-m</i>
e. child	<i>majh-t\$</i>	<i>majha-m</i>
f. palm tree	<i>mamahw-t\$</i>	<i>mamahu-m</i>
g. body louse	<i>\$yvat\$-t\$</i>	<i>\$yvat\$y-m</i>
h. shaman	<i>hoo^Rm-ch</i>	<i>hoo^Rmi-m</i>
i. badger	<i>huuna-v-t</i>	<i>huuna-vi-m</i>
j. much, many	<i>wyywy^Rh-t</i>	<i>wyywy^Rha-m</i>

Apparent exceptions found in (4i,j), where the deleting vowel seems not to be in weak position according to the pattern above. However, the second vowel of (4i), which is derived from *huunat* ‘bear’ (cf. (5a) below), is underlyingly long and (4j) is a reduplicated form based on the quantifier *wyy^Rr* (with the *r ~ h* alternation discussed in chapter 3) such that the second syllable of *wyywy^Rh-t* is also underlyingly long. This places the following vowel in weak position and its deletion is then seen as quite regular. The underlyingly long vowels in the second syllables of (4i,j) are then subject to later shortening, see 4.2.11.

There are many examples with vowels in the same kind of environment but where no vowel deletion takes place, as in (5). These could be marked as “negative exceptions”: even though the structural description is met, the rule fails to apply. We can avoid such an unprincipled account by positing underlyingly long vowels in the positions where expected deletion does not take place, as in the rightmost column of (5).

(5) SE	singular	plural	underlying form
a. bear	<i>huuna-t</i>	<i>huuna-m</i>	<i>huunaa</i>
b. gray fox	<i>qoo^Rt\$a-t\$</i>	<i>qoo^Rt\$a-m</i>	<i>qoo^Rt\$aa</i>
c. butterfly	<i>lalava-t\$</i>	<i>lalava-m</i>	<i>lalavaa</i>
d. cricket	<i>maakika-t\$</i>	<i>maakika-m</i>	<i>maakiikaa</i>

With respect to (5a), Harrington collected a form *huunayt* for ‘bear’, with a two-vowel sequence where our long vowel *aa* is posited. *Huunayt* would represent a regular development, via intervocalic **w* loss (as mentioned above in 4.2.1), from **huuna-wy-ta* [badger-AUGM-ABS], which retains the **w* seen in the Cupan forms LU *hunwut*, CU *hunwyt*, CA *hunwet*. Our underlying *huunaa*, then, represents a monophthongization of *huunay*.

4.2.4. DEVELOPMENTS OF **k*. The initial consonant of the immediate future suffix *-qa7* exhibits variability as given in (1). Additional discussion of this variability appears in 11.2.3.1.

(1) SE	Forms of the immediate future suffix
a.	<i>aja-qa7</i> ‘be going to get them’
b.	<i>hiy-ka7</i> ‘be going to see, look at’
c.	<i>ahqajy-ka7</i> ‘be going to babysit’
d.	<i>waak-ka7</i> ‘be going to dry up’
e.	<i>wiaan-qa7</i> ‘be going to send’
f.	<i>aa^Rch-ka7</i> ‘be going to make a mistake’

To understand the forms of this suffix, it is useful to review the development of Northern Uto-Aztecan **k* in Takic and in SE, with particular attention to **ka*.

In initial position, **k* develops as *q* before the non-high vowels, **a* and **o*.

- (2) SE PNUA SE
- a. *katy qat\$ ‘sit, dwell, stay, be somewhere (sg.)’
- b. *ko7- qo^R7a-j ‘die (pl.)’ (with indicative -j)

It appears as *k* before the high vowels, **i*, **y* and **u*.

- (3) SE a. *kii-ta kii-ch ‘house’
- b. *kyy7- kyy^R7 ‘bite’
- c. *kut-ta ku-t ‘fire’

In intervocalic position, **ka* is affected by both the preceding and following vowel, as in (4). The other **kV* sequences seem to develop as in (2b) and (3) regardless of what vowel precedes.

- (4) SE Intervocalic development of **ka*
- | | | PTak | SE | |
|----|--------------------------------------|----------------------|--------------------------------------|-----------------|
| a. | * <i>aka</i> > <i>aq</i> | * <i>maka</i> | <i>maq</i> -j | ‘give’ |
| b. | * <i>ika</i> > <i>ik</i> | * <i>sikaawyt-ta</i> | <i>hikaay-t</i> | ‘squirrel sp.’ |
| c. | * <i>oka</i> > <i>o^Rq</i> | * <i>soka</i> | <i>ho^Rqa^Rn</i> | ‘boil, seethe’ |
| d. | * <i>uka</i> > <i>uk</i> | * <i>tuuka</i> | <i>tuuk</i> | ‘night’ |
| | | | <i>a-tuuka-v</i> | ‘all night’ |
| e. | * <i>yka</i> > <i>y</i> | * <i>myka</i> | <i>my^Rka^Rn</i> | ‘kill (sg.obj)’ |

In SE, the short vowels that typically undergo word-final deletion have, with a few exceptions, been reduced to just two, high *y* and low *a*, the three high vowels, **i*, **y*, and most instances of **u* having merged in that position as **y*, and *a* represents the merger of **a* and **o*. A rare example of **o* in that position is *-pa^Rn(a)* ‘egg’ < **pano*. In this example, the original **o* has left its trace in the rhotic nature of the vowel of the preceding syllable (cf. the normal development PTak **o* > SE *o^R*).

The diachronic pattern of (4) continues as a synchronic pattern in SE suffixation, as can be seen in the difference between *q* and *k* in (1a) *aja-qa7* and (1c) *ahqajy-ka7*.⁵⁵ At times the motivating environment for a particular form disappears within a derivation

⁵⁵ The stem-final vowel *y* of *ahqajy-ka7* does not undergo syncope because it is in strong position: the alternating strong weak-pattern gives *ah* strong (*ah* is bimoraic), *qa* weak, *jy* strong.

as in (1d-f). In (1d), *waak-kaʔ*, the verb stem is *waak(y)*, with underlying final *y*, which makes the ending have *k*, as in (1b,c), with the underlying *y* being lost through the general rule of syncope. This particular derivation is not entirely opaque. Since the verb stem ends in *ak*, the nature of the thematic vowel can be inferred: If the thematic vowel was *a*, then the verb would end in *aq*, in accord with (4a). In contrast, for (1e,f), one needs to be grammatically aware of related forms to choose the correct form of the suffix. In (1e), *wiaan-qaʔ*, the verb stem is *wiaan(a)*, with thematic *a*, as seen in *wiaana-j=n* ‘I’m sending it’, and thus the suffix begins in *q*, in accord with (4a). In (1f), *aa^Rch-kaʔ* ‘be going to make a mistake’, the verb stem is *aa^Rch(y)*, and consequently the suffix begins with *k*.

A further development of **k* needs to be mentioned. SE has back stops of three distinct articulatory places, farthest back *q*, a medium back *k*, and a somewhat palatalized *kj*. *K* and *kj* are differentiated only in a limited range of environments and our practical orthography writes *kj* only in environments where there is a potential contrast with *k*. *Kj* contrasts with *k* only before the vowel *a* and when not followed by a vowel, i.e. in final or preconsonantal position. In the latter position, *kj* usually results from the loss of a following underlying *i*. Even in those environments, the contrast is available only if *kj* is not preceded by a palatal articulation, whether the vowel *i* or a consonant *j*, *ñ*, *lj* (with or without intervening *ʔ* or *h*). All examples of initial *kja* are in Spanish loan words. Examples of *k* and *kj* in environments where contrast is possible are given in (5).

(5)	SE	<i>k</i>		<i>kj</i>
	a.	<i>kakaataʔ</i> ‘quail’		<i>kjaleesaʔ</i> ‘buggy’ (< Sp. <i>calesa</i>)
	b.	<i>ahqajykaʔ</i> ‘be going to babysit’		<i>pyjykjaʔ</i> ‘to him/her/it’
	c.	<i>hwaa^Rnk</i> ‘he jumped’		<i>hwaa^Rnkj</i> ‘jump on it!’
	d.	<i>manumʔk</i> ‘it turned around’		<i>manumʔkj</i> ‘turn it around!’
	e.	<i>nijykchuiʔv</i> ‘my deceased mother’		<i>munankjchun</i> ‘boil s.th for’

The notation *kj* is somewhat misleading in that prevocalic *kj* is not a palatalized *k* in the usual sense, such as the palatalized *k*-sound of English *cube*, *circular*, but rather a *k* sound that is articulated not as far back as SE *k* and the latter, in turn, is not as far back in articulation as *q*. For an English listener, differentiating these three series is difficult. We hope that in our account here we have identified the various forms correctly.

When a vowel is lost after a consonant from **k* by syncope or by apocope, as in (6), the effect of the vowel on the consonant remains. Example (6e) shows the same process applying to *h*. This is the origin of preconsonantal *kj*, *q^R*, and *hw* as well as some instances of *kw*. It should be noted that these developments apply only in syncope and apocope. If the vowel (V₁) following the **k* sound is replaced by another vowel (V₂) across a morpheme boundary, then only V₂ can have any effect.

- | | | | |
|-----|----|--|---|
| (6) | SE | unsyncoated | syncoated |
| | a. | <i>huurkin</i> ‘peek in’ | <i>huurkj-t\$u7</i> (< <i>huur-k-i(na)-t\$u7</i>) ‘go peek in’ |
| | b. | <i>qaa^Rqo^R-m</i> ‘white sage bushes’ | <i>qaa^Rq^R-t\$</i> ‘white sage’ |
| | c. | <i>cheeqo^R-m</i> ‘twins’ | <i>cheeq^R-t\$</i> ‘twin’ |
| | d. | <i>qaiku-m</i> ‘ropes’
<i>ny-qaiku7</i> ‘my rope’ | <i>qaikw-t</i> ‘rope’ |
| | e. | <i>mamahu-m</i> ‘palm trees’ | <i>mamahw-t\$</i> ‘palm tree’ |

The example *ni-cheeq^R* ‘my twin’, cf. (6c), shows *q^R* < *qo^R* via apocope rather than syncope, but the process is the same: with the loss of the vowel, *qo^R* becomes *q^R*.

Another source of *kj* by syncope is from the loss of a preceding *i*, as in (7) with *kj* from underlying *-ik*, the irrealis subordinator. Example (7c) shows an unsyncoated occurrence of the suffix.

- | | | | |
|-----|----|----|--|
| (7) | SE | a. | <i>ny-wiin-kj</i> ‘for me to throw it away’ (< <i>wiin</i> ‘throw away’) |
| | | b. | <i>my-kut\$ia7n-kj</i> ‘for you to make a fire’ (< <i>kut\$ia7n</i> ‘make a fire’) |
| | | c. | <i>a-kuuman-ik</i> ‘for him to sleep’ (< <i>kuuman</i> ‘sleep’) |

The consonants *q^R* and *hw* – as well as *kw* – count as unitary sounds within SE (rather than just shortened pronunciations of *qo^R*, *hu* – or of *ku*) inasmuch as they behave as units under reduplication, as seen in (8).

- | | | |
|-----|----|--|
| (8) | SE | reduplicated |
| | a. | <i>q^Ri7mu7-k</i> ‘cough’ <i>q^Rih~q^Ri7mu7-k</i> ‘be coughing’ |
| | b. | <i>hwaa^Rn-k</i> ‘jump’ <i>hwa~hwaa^Rna-7n</i> ‘jump repeatedly, be jumping’ |

The consonant k^R , as in k^Rijj-k ‘hate’, is also presumably a unit parallel with q^R and hw , but it is quite rare and the only reduplicated example attested is the unrevealing whole root-copying distributive $k^Rijj\sim k^Rijj-k$ ‘hate in general’.

The vowel of underlying ki can also be lost in word-final position. This is most commonly found in imperatives of transitive k-class verbs in $-in(a-)$. The imperative is formed by truncating the final syllable of the underlying form: $-ina > -i$. Then the rule of apocope removes the remaining vowel, but the effect of the underlying vowel i on the preceding k remains. This process creates an open-ended set of contrasts between k and kj , the forms in k being the intransitive indicatives and the forms in kj being the imperatives of the transitives, as in the examples in (9).

(9)	SE	intransitive	transitive indicative	transitive imperative
	a.	<i>hajaqk</i> ‘collapse’	<i>hajaqkin</i> ‘knock down’	<i>hajaqkj</i> ‘knock it down!’
	b.	<i>churupk</i> ‘enter’	<i>churupkin</i> ‘put in’	<i>churupkj</i> ‘put it in!’
	c.	<i>kumu7k</i> ‘turn over’	<i>kumu7kin</i> ‘turn over’	<i>kumu7kj</i> ‘turn it over!’
	d.	<i>pitk</i> ‘get full’	<i>pitkin</i> ‘make full’	<i>pitkj</i> ‘fill it!’
	e.	<i>hwaa^Rnk</i> ‘jump’	<i>hwaa^Rnkin</i> ‘make jump’	<i>hwaa^Rnkj</i> ‘make him jump!’
	f.	<i>jarukk</i> ‘get clean’	<i>jarukkin</i> ‘make clean’	<i>jarukkj</i> ‘clean it!’

A special context for the development of k that should also be mentioned is the reduction of the kk sequence found with k-class verbs with suffixes beginning in k (or q). All k-class verb stems end in consonants. The frequent development of a theoretical sequence Ckk , as with the immediate future forms, simplifies to Ck , such that the thematic k and the suffixal k merge into one, as shown in (10), with the immediate future forms of the verbs of (9).

(10)	SE		‘be going to ...’	
	a.	collapse	<i>hajaq-k</i>	<i>hajaq-ka7</i> < <i>hajaq-ky-qà</i>
	b.	enter	<i>churup-k</i>	<i>churup-ka7</i> < <i>churup-ky-qà</i>
	c.	turn over	<i>kumu7-k</i>	<i>kumu7-ka7</i> < <i>kumu7-ky-qà</i>
	d.	get full	<i>pit-k</i>	<i>pit-ka7</i> < <i>pit-ky-qà</i>
	e.	jump	<i>hwaa^Rn-k</i>	<i>hwaa^Rn-ka7</i> < <i>hwaa^Rn-ky-qà</i>
	f.	get clean	<i>jaruk-k</i>	<i>jaruk-ka7</i> < <i>jaruk-ky-qà</i>

4.2.5. MORE CONSONANT ALTERNATIONS. Consonant alternations involving reflexes of NUA *s have been discussed in chapter 3, but they are revisited here in brief.

There is an alternation of word-final *r* and non-final *h*, which applies to certain vocabulary with PTak *s.

- (1) SE
- a. *ny-paar* ‘my older brother’
ny-paaha-m (pl.)
ny-paah-chui7v ‘my deceased older brother’
 - b. *ni-taar* ‘my cross uncle’
ni-taaha-m (pl.)
ni-taah-chui7v ‘my deceased cross uncle’
 - c. *ny-majr* ‘my son, my child’
majh-ch ‘child’
majha-m ‘children’
 - d. *wir* ‘put them’ (imperative)
wiha-j ‘put them’ (indicative)
wihaa-qa7 ‘be going to put them’
ny-wiuh-k ‘for me to put them’ (with irrealis subordinator)

Where **h* remains in final position it is a reflex of original **h* rather than of *s. Word-final *h* (< **h*) is dropped after a long vowel, as in (2c,d).

- (2) SE
- a. i. *ny-pah* ‘my paternal aunt, female cousin’
ii. *ny-pah-i* (accusative)
iii. *ny-paha-m* (plural)
 - b. i. *ny-kah* ‘my apron’
ii. *kahaa-ch* ‘apron’ (non-possessed)
 - c. i. *ny-pii* ‘my sugar’ (< *ny-piih*)
ii. *piiuh-t\$* ‘sugar’ (non-possessed)
iii. *piiha-v* ‘in the sugar’ (locative)
 - d. i. *pii* ‘he is nursing’ (< *piiuh*)
ii. *piiha-j=m* ‘they are nursing’

Inherited *r* (see Section 3.5.2), unrelated to *s, does not alternate with *h*.

- (3) SE a. i. *ni-chuur* ~ *ni-chuuri7* ‘my maternal grandmother or her sister’
 ii. *ni-chuuri7-ja-m* ‘(pl.)’
 b. i. *joo^Rr(a)* ‘plow (verb)’
 ii. *joo^Rra-j=n* ‘I’m plowing’
 iii. *ta=n joo^Rr-iv* ‘I’ll plow’

The *r* which alternates with *h* is retained as *r* in (4) even though it begins the syllable. This is apparently because the retention of the underlying vowel is occasioned by cliticization. The retention of *r* instead of its replacement by *h* under cliticization is also found in KI, see 4.3.3 (4). Note that the quantifier *wyy^Rr* ‘much’ relates to the adjective *wyywy^Rht*, pl. *wyywy^Rham* ‘much, many’ (cf. 4.2.3 (4j) and 7.2.1 (4) and (5)).

- (4) SE *Wyy^Rra=m* *ichu7-k-in* *kwa7-i7aa-t\$-i*
 much = 3PL > 3SG make;fix-K-CAUS eat-NMLZ-ABS-ACC
 ‘They fixed a lot of food.’

Another alternation involving SE *h* is the assimilation of *h* after the high vowels *i*, *y*, and *y^R* to the place of articulation of a following affricate. This process was characteristic of Sarah Martin’s speech; other speakers seem not to use this assimilation to the same extent. There are two facets to this rule: *h* > *sh* / *i/y_ch* (5a,b) and *h* > *\$* / *y^R_t\$* (5c).⁵⁶ With preceding *i* and following *t\$*, the assimilation does not occur, as in *piiht\$* ‘sugar’. No example has been identified to determine whether *h* assimilates as *\$* to a following *t\$* after the non-rhotic high vowel *y*.

- (5) SE a. *chish* ~ *chky^Rn* ‘poke repeatedly’ (< *CVh-* + *chiky^Rn* ‘poke’)
 b. *chysh* ~ *chyva7* ‘be following’ (< *CVh-* + *chyyva7* ‘follow’) (also heard as unassimilated *chyhchyva7* from Louie Marcus)
 c. *wyt\$y^R\$-t\$* ‘man’ (< *wyt\$y^Rha* + *-t\$a* ‘absolute’), pl. *wyt\$y^Rha-m* ‘men’

A similar assimilation is also heard in *kwiht* ‘carrying net’, [kwi:θt], with *h* showing anticipatory assimilation to the following dental *t*. Since there is no separate SE phoneme

⁵⁶ This assimilation is also attested in CU: *wih* ‘two’ + *-chi-m* ‘ABS-PL’ > *wishchim* ‘the two of them’.

θ and the word for carrying net is not **kwiidht* [kwi:ðt] (there is no devoicing of *dh* before an obstruent; cf. *Saavadhp* ‘on Saturday’), this assimilation does not figure in the normalized spelling. It is of interest to mention *kwijit* [kwi:çt̚] ‘oak sp.’ once again. If *kwijit* was underlyingly **kwiiht*, the expected pronunciation would be **kwiiht̚* [kwi:çt̚], with similar anticipatory assimilation.

Compare (6), with a low vowel, and no *h > sh* assimilation.

(6) SE *chah~cht* ‘be singing’ (< *CVh-* + *chaat* ‘sing’)

In (7), the root vowel shortens in the context of *CVh-* reduplication, making it subject to syncope.

(7) SE	<i>CVh~ chaa -t</i>
	[CONT~song-VBLZ]
shortening with <i>CVh-</i> reduplication	<i>chah-cha-t</i>
apocope	<i>chah-cha-t</i>
syncope	<i>chah-ch-t</i>
	<i>chahcht</i> ‘be singing’

Still another alternation involving *h* needs to be mentioned. In (8), the *h* seen in the singular form of the noun is not found in the plural. There appears to be a constraint excluding syllable-final *h* + non-obstruent.

(8) SE	singular	plural
a. deer	<i>hukah-t</i>	<i>hukaa-m</i>
b. grasshopper	<i>wo^R7o^Rh-t</i>	<i>wo^R7oo^R-m</i>
c. gopher	<i>miingah-t</i>	<i>miinga-m</i>
d. woman	<i>nyy^Rh-t</i>	<i>ny-nyy^R-m</i>

In (8a,b), underlying *h* has been absorbed into the vowel with compensatory lengthening: *hukah-m* > *hukaa-m*. In (8c), h-absorption has taken place, but the derived long vowel has had its length reduced by the constraint against long vowels in successive syllables: *miingah-m* > *miingaa-m* > *miinga-m* (see below in 4.2.11). In (8d) compensatory lengthening does not apply because the vowel is already long.

A rare consonant alternation that should be mentioned is the postvocalic lenition of *ch* to *sh* before *t*. The two occurrences of this are illustrated in (9). The identity of *-ta-* in (9b) is unknown; perhaps the plural is back-formed from the accusative.

- (9) SE a. *naash-t* ‘girl’, pl. *na~naacha-m*
 b. *ny7-aachi7* ‘my animal’, acc. *ny7-aash-ti*, pl. *ny7-aash-ta-m*

Postconsonantal *ch* remains before *t*, cf. *añii7ch-ti*, the accusative of *añii7chi7* ‘small one’ and *ch* is not excluded from the environment before *t\$*, as in examples like *miaach-t\$* ‘stingy one’, *ny-piich-t\$u-i7v* ‘my having been somewhere’.

The lenition *ch* > *sh* before *t* may be a moribund process. It does not apply in (10) with the English loan-word *watch*.

- (10) SE *Pyy-ñu* *wach-t-i = m* *jyyvy-kja7* *puraq-k-in*
 3PL-possession watch-ABS-ACC = 3PL > 3SG outside-DAT exit-K-CAUS
pyy-kawtynga-nu7.
 3PL-pocket-ABL
 ‘They took their watches out of their pockets.’
 <Peenyu’ watchtim yeveka’ perra’xkin peeqahtengenu’. > (R&E 242)

Sh is rare in SE. Aside from the two high-frequency lexical items of (9) and the assimilations of *h* given in (5a,b), *sh* has been found only in the examples given in (11). All these are probably loan words. Prevocalic *sh* has been found in only one example, *-qaisham* (11d).

- (11) SE a. *luumish* ‘lame’, *luumish-tu7* ‘become lame’ (< CA *luumi-sh* ‘paralyzed, crippled person or animal’)
 b. *pa7ish* ‘mouse’, acc. *pa7ish-ti*, pl. *pa7i-m* (quite irregular; < CA *pa7ish**, cf. CA *pa7i-we-t* ‘field mouse’)
 c. *piipish* ‘near’ (cf. CA *pish* ‘arrive’) ¹
 d. *ny-qaish* ‘my opponent’, acc. *ny-qaish-ti*, pl. *ny-qaisha-m*

¹ *Piipish* is Sarah Martin’s pronunciation; Dorothy Ramón’s form is *piipch* (R&E 5).

4.2.6. METATHESIS.

4.2.6.1. GLOTTAL STOP METATHESIS. Glottal stop metathesis is a striking feature of SE phonology. When stems that end in underlying V7V occur with a consonant-initial suffix, as with the immediate future suffix *-qa(ʔ)* ‘be going to’, the glottal stop appears metathesized following the second vowel.⁵⁷ Only single short vowels in weak position permit this metathesis. The first syllable, whether short (1a) or long (1b-d), absorbs the (short) vowel of the following syllable and the length feature originally associated with the first vowel is heard on the second vowel of the resulting vowel cluster. The first vowel of such a combination reduces to a brief glide-like transition.

- (1) SE a. i. *chiʔa-j* ‘gather, pick up from the ground’
 ii. *chiaʔ-qaʔ* ‘be going to gather’
 b. i. *joo^Rʔ(a)* ‘spread out to dry’
 ii. *jo^Raaʔ-qa-j = n* ‘I’m going to spread it out to dry’
 c. i. *moo^Rʔ(a)* ‘smoke, be smoky’
 ii. *mo^Raaʔ-qaʔ* ‘it’s going to smoke, be smoky’
 iii. *mo^Raaʔ-jan* ‘smoke out’
 d. i. *\$iiʔ(a)* ‘urinate’
 ii. *\$iaaʔ-qaʔ* ‘he’s going to urinate’
 e. i. *uuʔ(a)* ‘take’
 ii. *uaaʔ-qaʔ* ‘he’s going to take it’¹

¹ It is not clear if *uaaʔqaʔ* would be phonetically distinct from *waaʔqaʔ**. The ephemeral initial glottal stop might make a difference.

For some reason the motion suffix *-t\$uʔ(a)* does not regularly trigger glottal stop metathesis. The exceptionality is demonstrated by the motion form of *uuʔ(a)* ‘take’, which is syncopated *uuʔ-t\$uʔ* ‘go take’, not metathesized **uaaʔt\$uʔ*. This occurs in the usage of both Sarah Martin in the 1960s and Dorothy Ramón in the 1990s. Variability is demonstrated by the fact that the metathesized form *\$iaaʔ-t\$uʔ* ‘go urinate’ (< *\$iiʔ(a-)*) was collected from Louie Marcus, also in the 1960s.

⁵⁷ The glides *j* and *w* do not figure as consonants for this rule. SE excludes clusters *ʔj* and *ʔw* from the syllable coda.

If the verb is underlyingly of the form *-aa7a* or *-a7a*, the first vowel disappears entirely, as in the examples (2ii) and (2iii). (Note that before the indicative suffix there is no glottal stop metathesis, the postvocalic sequence *7j* being excluded from the SE syllable, unlike its permitted occurrence in KI: SE *hu7a-j* ‘it is burning’, not **hwa7j*.)

- (2) SE a. i. *paa7(a)* ‘drink’
 ii. *paa7-qa7* ‘be going to drink’
 iii. *paa7-t\$u7* ‘drink while moving along’
 iv. *paa7-i=n* ‘I’m drinking’
 b. i. *kwa7(a)* ‘eat (tr.)’
 ii. *kwa7-qa7* ‘be going to eat it’
 iii. *kwa7-t\$u7* ‘eat it while in motion’
 iv. *kwa7-i=n* ‘I’m eating it’
 c. i. *ja7(a)* ‘run’
 ii. *ja7-qa7* ‘be going to run’
 iii. *ja7-t\$u7* ‘go running along’
 iv. *ja7-i=n* ‘I’m running’
 d. i. *jaa7(a)* ‘take’
 ii. *jaa7-qa7* ‘be going to take it’
 iii. *jaa7-t\$u7(a)* ‘take it along’
 iv. *jaa7-i=n* ~ *jaa7a-j=n* ‘I’m taking it’

The indicative forms *kwa7-i* (2b.iv), *ja7-i* (2c.iv) illustrate the point that disyllabic short-first-syllable verbs take the indicative suffix even in the absence of following auxiliary material (with the exception of the three verbs of being in a location, *yk*, *qat\$*, and *wyn*, and two verbs of motion, *kim* ‘come’ and *nym* ‘walk’).

Although clusters of like vowels are simplified in some derived contexts as in (2), they are permitted in others. These arise in morphologically underived forms from the diachronic loss of *w* (see 3.5.3), as in (3), with the dot separating the long *aa* from the following short *a*. Example (3) has been perceived as having three syllables.

- (3) SE *ipaa.a-t\$* ‘valley oak, *Quercus lobata*’, with hiatus from the loss of **w* (cf. LU *paawi-sh* ‘scrub oak, *Q. dumosa*’)

Across a morpheme boundary, as in (4), they may arise from the replacement of the final vowel of a two-vowel stem by the initial vowel of the suffix.

- (4) SE a. *mi-i7a-t\$* ‘one that goes’ (< *miaa -i7a -t\$a* [go-AGTV-ABS])
 b. *mi-iv* ‘will go’ (< *miaa -iv* [go-FUT])

The derivations of (4) are displayed in (5). The indicative form of ‘go’ is also included in (5). Unsuffixed ‘go’ occurs in the imperative form *mia*.

(5) SE	<i>miaa -i7a -t\$a</i>	<i>miaa -iv</i>	<i>miaa -j</i>
	[go-AGTV-ABS]	[go-FUT]	[go-IND]
vowel replacement	<i>mi-i7a-t\$a</i>	<i>mi-iv</i>	–
apocope	<i>mi-i7a-t\$</i>	–	–
contraction	–	–	<i>mi-j</i>
	<i>mii7at\$</i> ‘one that goes’	<i>miiv</i> ‘will go’	<i>mij</i> ‘go(es)’

Sequences *a7-i* often metathesize preconsonantly to what is heard as *ei7* in the speech of Sarah Martin. This may be a variable feature since it is represented as <ay7> in Ramón and Elliott (2000) and in the Harrington field notes. Note that clitics do not provide the environment for metathesis of stem-final 7 with a vocalized indicative suffix (6a–c.i). For convenience of morphological segmentation, we arbitrarily treat the results of metathesis as affecting the suffix: we regard the suffix as having absorbed the glottal stop and the length feature. Note that with short vowels, the metathesized *i* seems indistinguishable from *j*.

- (6) SE a. i. *jaa7-i=n* ~ *jaa7a-j=n* ‘I’m taking it’
 ii. *je-ii7v* ‘will take it’ (-*iv* ‘future’)
 iii. *je-ii7chun* ‘take it for someone’ (-*ichun* ‘benefactive’)
 b. i. *kwa7-i=n* ‘I’m eating it’
 ii. *kwe-i7v* ‘will eat it’ (-*iv* ‘future’)
 iii. *kwe-i7-t* ‘have just eaten it’ (-*i-t* ‘immediate past’)
 c. i. *\$ara7-i=n* ‘I’m splitting it’
 ii. *\$are-i7v* ‘will split it’ (-*iv* ‘future’)

Certain consonants may completely absorb the features of the first of the sequence of two vowels resulting from metathesis, such that $qo^R > q^R$, $ky^R > k^R$, $hu > hw$, with examples given in (7). In principle one would expect also $ku > kw$, but there is no example. These changes also are seen when the underlying glottal stop is lost in combination with irrealis *-ik*, as in (7b.v, 7c.iv).

(7) SE	unmetathesized	with metathesis
a.	$qo^R > q^R$	
	i. $qoo^R7a-j = m$ ‘they ache’	ii. $q^Raa7-qa7$ ‘it is going to ache’
		iii. $q^R-ii7v = t$ ‘it will ache’
b.	i. $qo^R7a-j = my7$ ‘they died’	ii. $q^Ra7-qa-j = m$ ‘they are going to die’
		iii. q^Ra7-t ‘sickness, illness, disease’
		iv. $ta q^R-i7v$ ‘they will die’
		v. pyy^Rq^R-ik ‘for them to die’
c.	$ky^R > k^R$	
	i. $kyy^R7a-j = vy7$ ‘it bit him’	ii. $k^Raa7-qa7$ ‘it’s going to bite’
		iii. $k^R-ii7v = t$ ‘it will bite’
		iv. $vyn a-k^R-ik$ ‘for him to bite me’
d.	$hu > hw$	
	i. $kut hu7a-j$ ‘the fire is burning’	ii. $hwa7-qa7$ ‘it’s going to burn’
		iii. $ta hw-i7v$ ‘they’ll burn’
e.	i. $huu7a-j = vy7$ ‘he farted’	ii. $hwaa7-qa-j = n$ ‘I’m going to fart’
		iii. $hw-ii7v = t$ ‘he’ll fart’

The loss of glottal stop before k as in (7b.v, 7c.iv) seems to be peculiar to the irrealis subordinator *-ik* (see (14) below); the metathesized glottal stop remains with the adverbializing suffix *-ik*; cf. $po^Rqa^Rtk-i7k$ ‘suddenly’. Compare the unmetathesized KI cognate $pokatki7-ik$.

Metathesis is also found non-derivationally, that is, as a diachronic process. The result is found in non-alternating forms, as in $hwii7t$, pl. $hwii7-m$ ‘jackrabbit’, from $*huu7i-ta$. The unmetathesized root is attested in Cupan but with a short first vowel and a different absolutive suffix, cf. LU $\$u7i-sh$. KI also has $hwii7t$, pl. $hwii7m$ (3.98.0104). This indicates that KI also had glottal stop metathesis as a process, at least diachronically.

The metathesis of glottal stop and vowel appears in the context $V_1\gamma V_2C$, which becomes $V_1V_2\gamma C$, but it is limited by a number of constraints.

- (8) SE Constraints on metathesis of $V_1\gamma V_2C$
- a. V_2 must be in weak position.
no metathesis in *huuhu7at*\$ ‘beetle’
 - b. V_1 must be a single vowel.
no metathesis in *atiy^R7at*\$ ‘big’
 - c. C cannot be a laryngeal: neither glottal stop nor *h*.
kumu7u7k ‘it’s turned over’
kupi7aht ‘wild cherry’
There are no consonant sequences $\gamma\gamma$ or γh in SE.
 - d. C cannot be a word-final glide: neither *j* nor *w*
ho^R7aj ‘sew’
kwa7aw ‘while eating it’
Word-final γj , γw do not occur in SE.
 - e. Initial glottal stops do not participate in metathesis.
Initial glottal stops probably do not exist in underlying form and are inserted as needed, as to separate prefixes from vowel-initial stems. Prefixes, including reduplicative prefixes, do not create an environment for metathesis.
 - f. Cliticized elements do not provide a context for metathesis.
\$ara7-i=n ‘I’m splitting wood’ vs. *ta=n \$arei7v* ‘I will split wood’, with *-iv* ‘future’
kwa7-i=t? ‘Are you eating it?’ vs. *kwei7-t* ‘have just eaten’, with *-i-t* ‘immediate past-singular’
 - g. Some elements metathesize variably.
The agentive suffix is heard as both *-ia7-t*\$, pl. *-ia7-m* and *-i7a-t*\$, pl. *-i7a-m*. Sometimes the *i* of *-i7a-t*\$ is in strong position and triggers metathesis; sometimes it is in weak position, where metathesis does not apply.

The examples in (9) show that nouns and verbs beginning in $CV\gamma VC$ are treated differently, with the nouns not showing metathesis.

- (9) SE a. noun *ky7a-t* ‘gum plant’ < *ky7a-ta*
 b. noun *pa7aq-t\$* ‘wild sunflower’ < *pa7aqa-t\$a*
 c. verb *ho^Ra7qa7* ‘be going to sew’ < *ho^R7a-qa7*

Metathesis in nouns like those of (9) is blocked by the fact that the second syllable is in strong position (cf. the second-mora stress pattern). It seems that for verbs, their final syllable is extrametrical, with the consequence that the second syllable remains in a weak position and is subject to metathesis.

A similar exception is seen in (10) (= (8c)), where the glottal stop in the weak–strong sequence *-u7a-* does not metathesize.

- (10) SE *huuhu7at\$* ‘beetle’
 S W S

Metathesis is not found with certain endings, as in (11). It seems reasonable to assume that the ‘keep on’ suffix *-av* (11a) has an underlyingly long vowel. That length feature, lost later in the derivation, blocks metathesis. The adjectivalizing suffix of (11b) is often heard as *-i7* in word-final position. Whatever feature it is generates the glottal stop, that same feature guarantees that the suffix is in “strong” position with respect to glottal stop metathesis. In (11) that feature is notated with the grave accent mark.

- (11) SE a. *anga7av* ‘meet repeatedly’ < *anga7* ‘meet’ + *-aava* ‘keep on’
 b. *huwa7ik* ‘differently’ < *huwa* ‘other’ + *-7i* ‘adjectivalizer’ + *-ka* ‘adverbializer’

Sometimes a metathesized form (12a) provides the derivational basis for yet another metathesis (12c).

- (12) SE a. *mo^Raa7-t* ‘smoke’ (< *moo^R7a -ta*; cf. *moo^R7(a)* ‘smoke, be smoky’)
 b. *mo^Raa7-p* ‘in the smoke’ (< *moo^R7a -pa*)
 c. *mo^Raa-j7ka7* ‘to the smoke’ (< *mo^Raa7-jka7* < *moo^R7a -jykja7*)

Mo^Raa7ka7 in (12c) shows the result of two different applications of glottal stop metathesis. With vowels, glottal stop metathesis results in the length feature of the first

vowel being absorbed by the second: $oo^R7a > o^Raa7$. With glides, there is no length reassignment: $o^Raa7j > o^Raa7$. While SE does not allow the unmetathesized sequence $7j$ in the syllable coda, closely related KI does (Anderton 1988:45), as also does more distantly related Hopi.⁵⁸

Another example of glide metathesis is given in (13), which shows that it is an active process, affecting inflected forms of Spanish loan words as well as more well-installed vocabulary.

- (13) SE a. *ykwela7* ~ *ykwela7* ‘school’ (< Sp. *escuela*)
 b. *ykwela-j7ka7* ‘to school’

A special case of glottal stop metathesis is seen in the metathesis with the irrealis subordinator *-ik* where the glottal stop is lost. Examples (14a,b) show stems with no glottal stop with this subordinator; (14c-h) show stems with the lost glottal stop.

- (14) SE a. *a-kuuman-ik* ‘for him to sleep’ < *kuumaana*
 [3SG-sleep-IRR.SUB]
 b. *ny-mi-ik* ‘for me to go’ < *miaa*
 [1SG-go-IRR.SUB]
 c. *ny-puhpt\$u-ik* ‘for me to send him away’ < *puh~put\$u7a*
 [1SG-send.away-IRR.SUB]
 d. *my-tah-ik* ‘for you (sg.) to hurry up’ < *tahi7a*
 [2SG-hurry-IRR.SUB]
 e. *ny-pa-iik* ‘for me to drink’ < *paa-7a*
 [1SG-drink-IRR.SUB] [water-VBLZ]
 f. *vy = n a-k^R-iik* ‘for him to bite me’ < *kyy^R7a*
 [3SG = 1SG 3SG-bite-IRR.SUB]
 g. *a-je-iik* ‘for him to carry it’ < *jaa7a*
 [3SG-carry-IRR.SUB]
 h. *ny ny7-aja-t\$u-ik* ‘for me to go get them’ < *aja -t\$u7a*
 [1SG > 3PL 1SG-get-MOT-IRR.SUB]

⁵⁸ Further, Kitanemuk allows word-final $V7j$ while Hopi does not; Hopi $V7j$ develops only before a following syllable.

Metathesis has become morphologized in SE. It appears in some derived forms in such a way that the metathesis appears to be directly applied as a derivational process.

- (15) SE metathesized nouns with no overt phonological context for metathesis
- a. *ni-nyaa7* ‘my basket’, pl. *ni-nyaa7-m* ‘my baskets’; cf. *nyy7(a)* ‘weave a basket’, *nyy7a-j=n* ‘I’m weaving a basket’
 - b. *ni-tyaa7* ‘my roast’; cf. *tyy7(a)* ‘roast, make a roast’, *tyy7a-j=n* ‘I’m roasting it’

The possessed nouns of (15) may be derived from theoretical absolutive forms *nyaa7-t** ‘basket’ and *tyaa7-t** ‘roast’, analogous to attested *mo^Raa7-t* ‘smoke’ < *moo^R7(a)* ‘smoke, be smoky’, as seen above in (12). But even if so, the forms in (16) are derivationally opaque; they exhibit no phonetic material which would motivate the metathesis. The attested noun form for ‘roast’, instead of *tyaa7t**, is the resultative noun *ty-ii7-ch* (< *tyy7a-* + *-i* ‘resultative’ + *-ch* ‘absolutive’), with the meaning ‘s.th which has been roasted’.

The metathesized verb forms of (16) seem rather arbitrary, particularly so when compared with the various imperative and completive verb forms of (17), which show no metathesis.

- (16) SE metathesized verb forms: imperatives and completives
- a. *piaa7* ‘hit it with a thrown object’, imperative of *pii7(a)*
 - b. *chia7* ‘pick it up’, imperative of *chi7a-j*
 - c. *\$y\$ya7* ‘bloomed’, completive of *\$yy7(a)*
- (17) SE non-metathesized imperative and completive glottal stop verbs
- a. *tyy7* ‘roast it!’, imperative of *tyy7(a)*
 - b. *ho^R7* ‘sew!’, imperative of *ho^R7(a)*
 - c. *kyy^R-ky^R7* ‘bitten’, completive of *kyy^R7(a)*
 - d. *kwa~kwa7* ‘eaten’, completive of *kwa7(a)*
 - e. *uu7* ‘get him!’, imperative of *uu7(a)*
 - f. *joo^R7* ‘spread it out!’, imperative of *joo^R7(a)*
 - g. *joo^R~jo^R7* ‘spread out’, completive of *joo^R7(a)*

As mentioned above at (1) in this section, it is unknown why *uu7(a)* ‘get, take’ (cf. (17e)) is exceptional to metathesis with the motion suffix *-t\$u7(a)* (18c,d). This exceptionality does not extend to the inflectional suffixes *-qa7* ‘immediate future’ (18d), *-iv* ‘future’ (18e), or *-ik* ‘irrealis subordinator’ (18f).

- | | | | | |
|------|----|----|----------------------------|--|
| (18) | SE | a. | simple form | <i>uu7(a)</i> ‘get, take’ |
| | | b. | indicativized | <i>cha-m7 uu7a-j</i> ? ‘did you get it?’ |
| | | c. | motion | <i>uu7-t\$u7(a)</i> ‘go get’ (not <i>*uaa7-t\$u7</i>) |
| | | d. | motion indicativized | <i>uu7-t\$u7a-j = vy7</i> ‘he went to get it’ |
| | | e. | immediate future | <i>uaa7-qa7</i> ‘be going to get’ |
| | | f. | imm.fut. indicativized | <i>uaa7-qa-j = n</i> ‘I’m gonna get it’ |
| | | g. | future | <i>u-ii7v</i> ‘will get’ |
| | | h. | with irrealis subordinator | <i>ny7-u-iik</i> ‘for me to get’ |

4.2.6.2. OTHER METATHESES. Another kind of metathesis, not involving the glottal stop, is found in the derivation of k-class verb roots. K-class verb roots must be consonant-final. One way to accomplish this is by metathesis: CV1CV2 > CV1V2C. Synchronic examples are few. *Katu* ~ *kout* in (1) is the only one we have identified in the available data.

- | | | | |
|-----|----|-----------------------|---|
| (1) | SE | athematic verb | derived k-class verbs |
| | | <i>katu7(a)</i> ‘cut’ | <i>kout-k</i> ‘get cut’ (<i>ou</i> < <i>au</i>) |
| | | | <i>kout-k-in</i> ‘cut’ |

The meaning difference, if any, between athematic *katu7* and k-class *koutkin* is not clear.

Diachronically this sort of metathesis must have figured in the derivation of k-class roots (see 10.0), many of which exhibit vowel clusters. Examples without glottal stops are given in (2).

- | | | | |
|-----|----|----|--|
| (2) | SE | a. | <i>cho^Riich-k</i> ‘shrivel’ |
| | | b. | <i>hioo^Rch-k</i> ‘climb, rise up’ |
| | | c. | <i>jeip-k</i> ‘become thin’ |
| | | d. | <i>niat\$-k-in</i> ‘lock’ |
| | | e. | <i>suiit-k</i> ‘get tight’ |

- f. *\$uat\$-k* ‘freeze’
- g. *viuur-k* ‘roll up’
- h. *vo^Raar-k* ‘get thick in consistency, like mush or gravy’

A final example of metathesis is seen in *hoowkp* ‘one’, which, despite its appearance, relates to the Uto-Aztecans etymon **syNV* ‘one’. The component *hoo-* is an assimilated form of **hyy-*, a regular development from **syNV*. The component *-wkp* is a metathesized form of **-kupu*, a Northern Uto-Aztecans formative found in the names of several numerals (see 15.1.1. for further discussion of this element). Besides *-wkp* in ‘one’, this element appears as *-kuv-* in two other SE numerals and as *-kop* in Hopi numerals between 15 and 20 (Hopi *o* is Uto-Aztecans **u*). Examples are given in (3). (See 15.2 for a more comprehensive discussion of numerals.)

(3)	SE	Hopi
	<i>hoowkp</i> ‘one’	<i>sỳy^hkop</i> ‘sixteen’
	<i>wachkuvik</i> ‘seven’	<i>rookop</i> ‘seventeen’
	<i>ma7kuvik</i> ‘nine’	<i>pajy^hkop</i> ‘eighteen’
		<i>nary^hkop</i> ‘nineteen’

It appears that, piece-for-piece, SE *hoowkp* ‘one’ and Hopi *sỳy^hkop* ‘sixteen’ are cognates.

4.2.7. VOWELS OR GLIDES. Since the word-initial prevocalic glottal stops characteristic of the pronunciation of many Uto-Aztecans languages have all but disappeared in SE, the super-short first vowel in a vowel cluster resulting from glottal stop metathesis, when the vowel in question is *i* or *u*, is difficult if not impossible to distinguish from *j* or *w* respectively. Our practice is to write words with initial vowel or glide depending on their derivation. The vowel-initial forms have a potential pronunciation with a prothetic glottal stop which glide-initial forms do not, but sometimes the choice is unclear. One environment that is a good test for vowel versus glide is after vowel-final prefixes, where a glottal stop occurs after a vowel-final prefix before a vowel-initial stem, as in *a7-u-iik* ‘for 3SG to take it’, from *uu7(a)* ‘take’ plus the irrealis subordinator *-ik*.

4.2.8. INTRUSIVE J. An intrusive *j* (or *i* after a consonant; see 4.2.13.3) is sometimes heard before *j*, as in *mamajjyv̆k* ‘help’, which is also heard as *mamajyv̆k*. This can have the effect of changing a preceding *a* into *e* (after *j*), as in *jeej~ja7 ~ jaa~ja7*, both of which are reduplicated forms of *jaa7* ‘take’. Unfortunately, the meaning difference, if any, between unreduplicated *jaa7* and reduplicated *jeejja7 ~ jaaja7* is unclear.

An interesting example was encountered with the root *jy7a-* ‘beautiful’, which is attested only reduplicated. In (1a), the intrusive *j* figures in the reduplication. This was a one-time occurrence for Sarah Martin. On subsequent occasions of this word, as in (1b), the intrusive *j* did not appear. Similarly, there was no intrusive *j* recorded with this root for Dorothy Ramón (1c).

- (1) SE a. *Kwyn hakup jy7aaj~jy7aj-7n a-juu7nin.*
 QUOT.3SG very ST~beautiful-ST 3SG-flute.music
 ‘His music was beautiful.’
- b. *Ama7=kwyn kwakii-t juu7nin, kwyny pujuuchuv*
 DIST=QUOT.3SG younger.one-ABS play.flute QUOT.3PL>3SG everywhere
maat\$ a-ñuu-j. Jy7aa~jy7a-7n=kwyn waha7.
 hear 3SG-possession-ACC ST~beautiful-ST=QUOT.3SG also;too
 ‘The younger one played his flute, and they heard his (music) everywhere. It was beautiful too.’
- c. *Hakup=kwyny=vy-7 jy7aa~jy7a-7n-ka7 tiy^Rva-t\$ Ø.*
 very=QUOT=3SG-PST ST~beautiful-ST-CHAR land;world-ABS be
 ‘It was a very beautiful world.’
 <Hakup kwenevu’ ye’aye’anka’ tervatt.> (R&E 7)

4.2.9. THE TWO VOWELS Y. Morphophonemically there are two vowels *y* in SE, one that assimilates in rhoticity (with *a^R*, *y^R*, *o^R*) or in rounding to the vowel (with *u*) of the neighboring syllable, and one that does not. The diachronic origin of the difference is unknown. Both roots and affixes provide examples of the assimilation. Among the pronominal elements with *y*, the third person forms show the assimilation while the other persons do not. In (1) forms for ‘their’ and ‘your (pl.)’ are compared. This assimilation is

underrepresented in Ramón and Elliott (2000).⁵⁹ Whether that means that the assimilation often did not take place in Dorothy Ramón's speech or that the transcription did not represent all occurrences of it, we can't tell.

(1)	SE	vowel	their –	your (pl.) –
	a.	knees	<i>a^R pyy^R-ta^Rmo^R7</i>	<i>yy-ta^Rmo^R7</i>
	b.	feathers	<i>o^R pyy^R-po^Rh</i>	<i>yy-po^Rh</i>
	c.	hearts	<i>u puu-hun</i>	<i>yy-hun</i>
	d.	blood	<i>y^R pyy^R7-y^Rt\$</i>	<i>yy7-y^Rt\$</i>

With the vowels that show neither rhoticity nor rounding, namely *a*, *i*, *y*, the environment for assimilation does not exist and no assimilation takes place and the vowel of the 3PL prefix is the same as that of 2PL.

(2)	SE	vowel	their –	your (pl.) –
	a.	father	<i>a pyy-na7</i>	<i>yy-na7</i>
	b.	house	<i>i pyy-ki</i>	<i>yy-ki</i>
	c.	mother	<i>y pyy-jy7</i>	<i>yy-jy7</i>

The resultative suffix *-y7*, which occurs with k-class verbs, assimilates to the rhoticity or rounding of the preceding vowel, as in (3a-d). (3e) shows the suffix in a non-assimilating environment.

(3)	SE	a.	<i>nguha^Rh-k</i> 'go around a bend'	<i>nguha^Rh-y^R7-k</i> 'be around a bend'
		b.	<i>aa^Rn7-k</i> 'open'	<i>aa^Rn-y^R7-k</i> 'be open'
		c.	<i>pivo^Rch-k</i> 'become grayish'	<i>pivo^Rch-y^R7-k</i> 'be grayish'
		d.	<i>turuh-k</i> 'become quiet, still'	<i>turuh-u7-k</i> 'be quiet, still'
		e.	<i>hwaam-k</i> 'smile'	<i>hwaam-y7-k</i> 'be smiling'

Root morphemes occur with different treatments of *y*. Some roots show rounding assimilation before the motion suffix *-t\$u7(a)*, others do not, as seen in (4). The exceptionality of (4b) may lie in avoidance of the disfavored sequence *wu*.

⁵⁹ Cf. *pyy-nu* 'their possessions' in 4.2.5 (10). This corresponds to *puu-ñu* in Sarah Martin's usage.

- (4) SE a. *pichyy* *pichy-j* ‘arrive’ *pichuu-t\$u7* ‘arrive (moving along)’
 b. *chawyy* *chawe-j* ‘harvest’ *chawyy-t\$u7* ‘go along harvesting’

4.2.10. FORMS OF THE FIRST PERSON SINGULAR POSSESSIVE PREFIX. An alternation unique to a specific morpheme is worth mentioning because the prefix meaning ‘my’ is encountered so often. This prefix has two forms in SE, *ni-* and *ny-*. Their selection depends on the stem-initial consonant. *Ni-* is found before coronal consonants and *y*; both *ni-* and *ny-* are found before *ñ* and *\$*; and *ny-* is found elsewhere. The “elsewhere” form *ny-*, with a transitional glottal stop inserted, is used before a vowel-initial stem. The fact that *ny-* is found before the coronal consonants *dh-* and *l*, which are found stem-initially only in loan words, suggests that *ny-* figures as the unmarked form. The comparative evidence points to an origin involving both **i* and **y*; cf. the Hopi possessive prefix *i-* ‘my’ and the object prefix *iny-* ‘me’. (Hopi also retains the full form of the first person plural prefix *ita-* ‘our’, which in Takic has reduced to *cha-*) The forms of the prefix are displayed in (1). With set (1b), there is some sort of interaction between the prefix vowel and the vowel of the following noun stem, but the nature of that interaction has so far eluded any satisfactory characterization. (Since the forms of this prefix do not depend on the application of the other morphophonemic rules, the rule covering this element is not included in the list of derivational steps at the beginning of this section 4.2.)

- (1) SE a. *ni-* *ch* *ni-chuur* ‘my maternal grandmother’
 j *ni-yy7* ‘my mother’
 n *ni-na7* ‘my father’
 r *ni-raakw* ‘my food’
 s *ni-sarteenkj* ‘my frying pan’ (< CA *-sartéen-ki* < Sp. *sartén*)
 t *ni-taar* ‘my cross uncle (MoBr, FaSiHu)’

 b. *ni-* *ñu* *ni-ñu* ‘my possession’
 ny- *ña* *ny-ña* ‘my relative’
 ni- *\$a* *ni-\$a* ‘my soup’
 ny- *\$i* *ny-\$i* ‘my guts’
 ni- *\$u* *ni-\$uur* ‘my navel’
 ni- ~ ny- *\$y* *ni-\$yy7* or *ny-\$yy7* ‘my head’ (recorded both ways)

- c. *ny-* *h* *ny-huun* ‘my heart’
k *ny-ka7* ‘my paternal grandrelative’
kw *ny-kwaari7* ‘my maternal grandfather’
m *ny-maq* ‘my younger parallel uncle’
ng *ny-ngajka7* ‘my hip’
p *ny-paar* ‘my older brother’
q *ny-qoo^Rr* ‘my older sister’
v *ny-vravkjt\$*i** ‘for me to talk (acc.)’
w *ny-wadh* ‘my tail’
dh *ny-dheeve7kjt\$*i** ‘for me to owe him (acc.)’ (< Sp. *debe*)
l *ny-leeva7* ‘my coat’ (< Sp. *leva*)
 \emptyset *ny7-aachi7* ‘my animal’
ny7-ichu7kinihwa7t ‘my coffee pot’
ny7-oo^R ‘my bone’
ny7-yjka7 ‘my female friend’

The allomorphy found in this prefix is found only in “eastern” SE (from Twentynine Palms), represented in Sarah Martin’s usage. In “western” SE, as in the usage of Dorothy Ramón (Ramón & Elliott 2000), only *ny-* is found. Considering that Sarah Martin was a generation older than Dorothy Ramón, the difference may alternatively represent a recent phonological leveling.

4.2.11. LENGTH ADJUSTMENTS IN POSSESSED FORMS. Two adjustments are of interest under this title. The first is a rhythmic constraint on long vowels: successive syllables with long vowels are excluded.⁶⁰ If an otherwise long vowel occurs in an initial syllable of a stem, after a prefix with a long vowel, it shortens. This is illustrated in (1). (This shortening is not found in KI; see 4.3.5.)

- | | | | |
|-----|----|-----------------------------------|--------------------------------------|
| (1) | SE | long vowel | shortened vowel |
| | a. | <i>ny-paar</i> ‘my older brother’ | <i>pyy-par</i> ‘their older brother’ |
| | b. | <i>cha7-aashtam</i> ‘our horses’ | <i>pyy7-ashtam</i> ‘their horses’ |

⁶⁰ Some compounds, such as *too^Rng-kii-ch* ‘brush house’ [heat.of.the.day-house-ABS], provide superficial exceptions, but the successive long syllables are brought together by the syncope of the vowel of the intervening syllable: *too^Rng-kii-ch* is from underlying *too^Rnga-kii-ch*.

Other length adjustments under possession are more remarkable. In many nouns and nominalizations, where the non-possessed form contains a long vowel that is not in the first syllable, the possessed form has the length feature transferred to the first vowel, as in (2a), sometimes with transfer of the rhotic feature from the second (originally long) vowel to the first, as in (2b). This restructuring allows for the syncope of the originally long vowel, as in (2d). This behavior of length and rhoticity suggests that they may be autosegmental features; they are associated lexically with particular segments but in derivations they are subject to movement so as to be associated with other segments.

(2)	SE	non-possessed	possessed
	a.	<i>pakyy-t</i> ‘shirt’	<i>ny-paaky7</i> ‘my shirt’
	b.	<i>navyy^R-tʂ</i> ‘foot’	<i>ni-naa^Rvy7</i> ‘my foot’
	c.	<i>chamaqaan</i> ‘think’	<i>ni-chaamqana7</i> ‘my thought, what I think’
	d.	<i>pichuutʂu7</i> ‘arrive’	<i>ny-piichtʂui7v</i> ‘my having arrived’

A different pattern is seen in (3), where the second-syllable long vowel seen in non-possessed *qa^Rvaa-ch* ‘ear’ and *kahaach* ‘apron’ seems to be secondary, perhaps associated with the special form of the absolutive suffix, *-ch*, found with absolutive forms of nouns that are almost always possessed.

(3)	SE	a.	<i>qa^Rvaa-ch</i> ‘ear’	<i>ny-qa^Rv</i> ‘my ear’
		b.	<i>kahaa-ch</i> ‘apron’	<i>ny-kah</i> ‘my apron’

4.2.12. CONTRACTIONS.

4.2.12.1. ACCUSATIVE. With longer nouns, whose absolutive suffix falls in weak position, i.e., later in the word than in the syllable containing the second mora, the accusative form shows *-i* following the last consonant. That is, underlying *-Ta-jy* contracts to *-Ti*,

with *-Ti* meaning *-ti*, *-t\$*i**, or *-chi* as may be. The *-i* of the accusative suffix, being in origin the vocalization of the glide *j*, is not followed by a glottal stop.⁶¹

(1) SE	nominative	accusative	locative
a. 'sun'	<i>taamia-t</i>	<i>taamia-t-i</i>	<i>taamia-p</i>
b. 'deer'	<i>hukah-t</i>	<i>hukah-t-i</i>	–
c. 'moon'	<i>myaa-t\$</i>	<i>myaa-t\$-i</i>	<i>myaa-v</i>
d. 'house'	<i>kii-ch</i>	<i>kii-ch-i</i>	<i>kii-v</i>
e. 'creosote bush'	<i>jaa^R-t\$</i>	<i>jaa^R-t\$-i</i>	<i>jaa^R-t\$a-v</i>

Example (1e) is unusual in that that the final *-t\$a-* of this element is retained before the locative suffix *-v*. This suggests that synchronically it may be part of the stem rather than the absolute suffix even though accusative contraction applies.

Accusative contraction also applies with the plural suffix *-my*, such that underlying *-my-jy* reduces to *-m-i*, as in *huwa-m-i taaq-ta-m-i* 'other people (acc.)'.

4.2.12.2. INDICATIVE. Before the indicative suffix *-j*, vowel clusters monophthongize by dropping their second component and long vowels shorten, as in the examples in (1).

(1) SE	indicative	underlying	related forms
a.	<i>mi-j</i> 'go'	<i>miaa -j</i>	<i>miaa-qa7</i> 'be going to go' <i>mia</i> 'go!' <i>miaa-t\$u7</i> 'go along'
b.	<i>hi-j</i> 'see'	<i>hiy -j</i>	<i>hiy-ka7</i> 'be going to see' <i>hiy7</i> 'look!' <i>hiu-t\$u7</i> 'go see'
c.	<i>pichy-j</i> 'arrive'	<i>pichyy -j</i>	<i>pichyy-ka7</i> 'be going to arrive' <i>pichuu-t\$u7</i> 'arrive (in motion)'

⁶¹ Pace Elliott, who transcribes the accusative suffix as though *-i7* in Ramón & Elliott 2000. Elliot's practice is to write a left quotation mark before every word-initial vowel and a right quotation mark after every word-final vowel and after some word-final glides as well. Many of his word-medial right quotation marks correspond to glottal stops, but many do not. And many preconsonantal glottal stops remain unnotated.

- d. *je-j* ‘catch, take’ *jaay -j* *jaay-ka7* ‘be going to catch’
 ja ~ jaay7 ‘catch it!’
 jaau-tʂu7 ‘catch (while moving)’

Examples (1b-d) show anticipatory assimilation of underlying *y* to the *u* of the motion suffix *-tʂu7a-*.

Also falling within this category of contraction is that found with verbs underlyingly ending in *a7a*, discussed above in 4.2.6.(2). For such verbs the indicative form almost always loses the stem-final vowel with consequent vocalization of the indicative suffix, as in (2).

- | | | | | | |
|-----|-------------|----|-------------------------------------|----|---------------------------------|
| (2) | SE | a. | <i>kwa7a -j</i> | b. | <i>paa -7a -j ny</i> |
| | | | [eat-IND] | | [water-VBLZ-IND 1SG] |
| | apocope | | – | | <i>paa-7a-j n</i> |
| | contraction | | <i>kwa7-i</i> | | <i>paa-7-i n</i> |
| | | | <i>kwa7i</i> ‘eat it, be eating it’ | | <i>paa7i = n</i> ‘I’m drinking’ |

The verb *jaa7(a)* ‘take, bring, carry’ provides the single attested exception to the above contraction. Its indicative-suffixed form was recorded both with and without contraction, as in (3).

- (3) SE *Jaa7-i = n*. ~ *Jaa7a-j = n*.
 take;carry-IND = 1SG > 3SG
 ‘I’m taking it.’

The verb *jaa7* also retains its final *a* with the different-subject subordinator *-w*, as in (4) (i.e., it is not heard as **jaa7u*).

- (4) SE *Ynana-j = n* *jaa7a-w*.
 know-IND = 1SG > 3SG take;carry-DS
 ‘I knew he was carrying it.’

4.2.12.3. SIMPLIFICATION OF *TCH*. The reduplicated form *a-tuh~chin-i-m* ‘older ones’ exhibits a consonant cluster reduction of *htch* to *hch* as shown in (1). The corresponding

singular, *a-tuchin-i7*, is morphologically an adjective, parallel to *a-waak-i7* ‘dry’, derived from the verb *waak(y)* ‘get dry’. In underlying form we mark the adjectival suffix *-i7*, pl. *-i-m*, with an accent to represent the rule feature that accounts for the variable presence of the glottal stop (cf. 4.2.2). The verb theoretically underlying *atuchini7*, *tuchin(a)**, is unattested. The present-day SE word for ‘get older, of a child’, *atuchinivk*, is derived from *atuchini7*. In (1), the morphophonological rules presented in previous sections are applied one by one. (The spell-out of the reduplicative syllable in CVh- is not given as a separate derivational step.)

(1) SE	singular	plural
	<i>a- tuchina -ì</i>	<i>a- CVh- tuchina -ì -my</i>
	[ADJZ-get.older-RES]	[ADJZ-PL~get.older-RES-PL]
vowel replacement	<i>a-tuchin-ì</i>	<i>a-tuh-tuchin-ì-my</i>
word-final glottal stop	<i>a-tuchin-i7</i>	–
apocope	–	<i>a-tuh-tuchin-ì-m</i>
syncope	–	<i>a-tuh-tchin-ì-m</i>
cluster reduction	–	<i>a-tuh-chin-ì-m</i>
	<i>atuchini7</i> ‘older one’	<i>atuhchinim</i> ‘older ones’

In the above examples, adjectivalization is doubly marked (*a-* + *-i(7)*) as is pluralization (reduplication + *-m*). It is interesting that the impossibility of the consonant cluster *htch* does not impede the application of syncope; the damage done by creating the impossible consonant cluster is repaired by a later rule. We will see in the CU section below that syncope in CU is sometimes blocked to avoid the creation of unwanted consonant clusters.

4.2.13. EXTERNAL SANDHI.

4.2.13.1. CONSONANT REDUCTION BETWEEN WORDS. Within words, double, re-articulated consonants can be created by vowel deletion. But sequences of identical consonants across word boundaries tend to reduce to a single consonant. This can create instances of phonetic ambiguity.

(1) SE	a.	<i>\$aaw-t-i=t</i>	<i>ty-ii7v</i>	<i>tuu-v.</i>	>	<i>\$aawti tyii7v tuuv.</i>
--------	----	--------------------	----------------	---------------	---	-----------------------------

- (2) SE *Ny aje-j.* > *Ny-7-ajej.*
 1SG > 3PL get(pl.obj)-IND
 ‘I got them.’

Similarly, example (3) unambiguously has *my7* [3PL-PST] and not *my* [3PL > 3PL] because the verb *tavy-j* is lexically a singular object verb.

- (3) SE *Kwyny = my-7 aa-m aa-p tavy-j.* > *Kwyny my-7-aam aap tavyj.*
 QUOT = 3PL-PST DIST-PL DIST-LOC put(sg.obj)-IND
 ‘They placed her there.’

An example like (4) is ambiguous. It has no object noun and a verb which is used with either singular and plural object. Disambiguation has to come from context.

- (4) SE *Chiky^Rna-j = ny-7 a-huuna-jka7.* > *Chiky^Rnajny-7-ahuunajka7.*
 poke-IND = 1SG-PST 3SG-middle-DAT
 ‘I stuck it in.’

The same kind of inter-word confusion may be created by a similar rule of pronunciation but with the opposite effect. Word-final glottal stop is often lost when the following word begins with *h*. Sentence (5) is instructive. It was earlier transcribed with *ny7* [1SG > 3SG.PST], which is homophonous with *ny* [1SG > 3PL] in this context. Now that the grammar is understood better, the original transcription can be understood to have been an overcorrection.

- (5) SE *Qaj = ny haiipa7n nyy7 weilja-m jaruk-k-in.*
 NEG = 1SG > 3PL INDF.TIME 1SG.PRO dish-PL clean-K-CAUS
 ‘I had never washed dishes.’

Sentence (6) is from a context where the plurality of the object is established. Outside of that context, the sentence could equally well be interpreted as having *vy-7* [3SG-PST] (with third person singular object, which is unmarked), phonetically losing its glottal stop because of the following *h*-initial word *hami7* ‘anyone’ (but which in turn loses its glottal stop before the *h*-initial verb *hiihij*).

- (6) SE *Wary7 jangk qaj = vy hami(7) hii~hi-j.*
 true but NEG = 3SG > 3PL INDF.HUMAN DUR~see-IND
 ‘But nobody saw them.’

Sentence (7) must have underlying *vy-7* [3SG-PST] not *vy* [3SG > 3PL] because with an intransitive verb, *hakwaan* ‘be hungry’, there can be no object, plural or otherwise.

- (7) SE *Kwyny = vy-7 hakup hakwaan. > Kwynyvy hakup hakwaan.*
 QUOT = 3SG-PST very be.hungry
 ‘He was very hungry.’

4.2.13.3. INTRUSIVE I. The intrusive *i* (or *j* after a vowel) before *j* mentioned above in 4.2.8 has also been observed between words, as in (1a), where *aap jaja7* is heard as *aapijaja7*, and in (1b), where *hakup juu7-* is heard as *hakupijuu7-*.

- (1) SE a. *Pyy-na7 = kwyn aa-p -i- ja~ja7 nym-iv.*
 3PL-father = QUOT.3SG DIST-LOC -INTRUSIVE.I- REP~run walk.around-SS.SIMUL
 ‘There their father ran around here and there.’
- b. *Hakup -i- juu7-i7a-t\$ = kwyn.*
 very -INTRUSIVE.I- cry-AGT = QUOT.3SG
 ‘He was quite a crybaby.’

4.3. KITANEMUK MORPHOPHONOLOGY. KI data come almost entirely from the field notes of John Peabody Harrington. Anderton (1988) used these, along with smaller bodies of material collected by other authorities, to prepare a grammar and dictionary. We have addressed the problem of vowel length, which Anderton felt unable to resolve, in 3.1.1.3, and have determined that length contrasts were present and can be reconstructed with some confidence for many lexical items. However, other uncertainties remain. Paradigmatic information in the materials is rather spotty, so it is difficult to be sure

about the generality of some of the phonological processes. However, many patterns are clear.

A striking difference between KI and the other Takic languages is that KI lacks examples of allomorphic variation induced by syncope. Given that KI permits complex final consonant clusters, it seems likely that syncope occurred in the past, but it has been lexicalized and these clusters have not been found to alternate with non-syncopated structures.

4.3.1. APOCOPE. Some nouns show loss of the final stem vowel *-a* when possessed, as in (1).

- (1) KI a. *huuna-ts* ‘heart’ (3.98.0363) *a-huun* ‘his heart’ (3.98.0384)
 b. *kwatsita-ts* ‘tail’ (3.98.0352) *a-kwatsit* ‘his tail’ (3.98.0209)

The absolutive suffixes have the underlying form *-Ca*, in accord with the historical structure **-ta*. The *a* is lost in final position but it surfaces in accusatives and in the plural of *taaka-t*, which, like SE *taaq-t*, pl. *taaq-ta-m*, seems to be unique in having an absolutive suffix which is retained in the plural, as in (2).

- (2) KI a. *kaa-t\$* ‘rat’ (3.99.0359) *kaa-t\$a-j* ‘rat (acc.)’ (3.98.0250)
 b. *kut\$aa-t* ‘stick’ (3.98.0472) *kut\$a-ta-j* ‘stick (acc.)’ (3.98.0285)
 c. *jyva-t\$* ‘door’ (3.98.0018) *jyva-t\$a-j* ‘door (acc.)’ (3.100.0374)
 d. *taaka-t* ‘person’ (3.98.0288) *taaka-ta-j* ‘person (acc.)’ (3.98.0069)
 taaka-ta-m ‘people’ (3.98.0248)

While we treat these vowels as part of the absolutive suffix, Anderton (1988) assigns the vowel to the suffix that follows, with accusative *-aj* and plural *-am*.

4.3.2. VOWEL-INITIAL CLITICS. Certain clitics of KI, e.g. =*uvu* ‘past’, =*yvyn* ‘3 > 1’, are analyzed as vowel-initial. This is a striking difference from the situation in SE, where no constituent of the auxiliary complex begins in a vowel. When the SE auxiliary complex is cliticized an ephemeral vowel may appear before the auxiliary. This is controlled by the stem and the vowel varies in accordance with the underlying form of the stem-final

morpheme. The KI clitic =*uvu* ‘past’ fairly clearly relates to *uvea* ‘already’ (*uvia* in SE), so its initial vowel is definitely part of the clitic. The initial vowel of the pronominal clitic =*yvyn* is more doubtful. The SE equivalent is *vyn* ‘3SG > 1SG’. More study is needed to verify if KI =*yvyn* is correctly segmented. However, for now we treat KI clitics like this one as vowel-initial as well, as in Anderton’s (1988) analysis.

4.3.3. VOWEL + VOWEL REDUCTION. The initial non-front vowel of a suffix (verb extender *-an*) or clitic (past = *uvu7*, plural imperative = *yt\$*, 2 > 1 = *ytsi*, interrogative = *yt*, and a few others) is lost following another vowel or morpheme boundary (Anderton 1988:67), as in (1a). Final glottal stop apparently is invisible to this process, as seen in (1b) and a glide evidently counts as a vowel, as in (1c).

- (1) KI a. *my-mii =yt* > *mymii = t* ‘Are you going?’ (3.100.0650)
 b. *tša-kwa7 =yt\$* > *tsakwa7 = t\$* ‘Let’s eat.’ (3.98.0060)
 c. *kaj =ytsi hiu* > *kaj = tsi hiu* ‘Do not look at me.’ (3.98.0351)

4.3.4. THE *H* ~ *R* ALTERNATION. Nouns ending in *ha* undergo apocope (4.3.1 above), feeding a change *h* > *r* word-finally when *h* is from **s*, as in (1) (with CU forms added showing unchanged *s*). The KI examples are those of Anderton (1988:54) with Harrington references added. SE shows the same alternation, see 4.2.5.

- (1) KI a. *ni-kooha-m* ‘my older sisters’ (3.98.0366) *ni-koor* ‘my older sister’ (3.98.0366) CU *-qisma*
 b. *ni-paaha-m* ‘my older brothers’ (3.98.0366) *ni-paar* ‘my older brother’ (3.98.0366) CU *-pa\$ma*
 c. *my-taaha-j* ‘your mother’s brother (acc.)’ (3.99.0364) *ni-taar* ‘my mother’s brother’ (3.98.0364) CU *-ta\$ma*

What seems to be the same process can be seen in a possible stem derivation in (2), presumably also with *h* from **s*, although there are apparently no cognates for this stem outside Serran except for TV *-ngoong* ‘throat neck’ (cf. Stubbs 2011 #1512).

- (2) KI *a-ngoho* ‘neck, throat, voice’ (3.98.0278) *a-ngorky7* ‘tumpline’ (3.99.0477)

This allows the generalization that *r* from **s* appears finally in the syllable, not just finally in the word as in SE. (SE ‘neck’ is *a-ngo^Rho^R7*. No SE word for ‘tumpline’ is attested.)

The process also applies to verb stems (Anderton 1988:56), as seen in (3).

- (3) KI a. *ni-pihan* ‘I suckle him’ *a-pir* ‘he is nursing’ CU *pis*
 (3.99.0353) (3.98.0094)
- b. *kwahan* ‘cook it!’ *a-kwar* ‘it is cooked’ CU *kwa\$* ‘get ripe’
 (3.98.0253) (3.100.0399)
- c. *pyy-7aahan* ‘they wash it’ (3.98.0226) *a-7aar* ‘he bathes himself’ CU *a\$*
 (3.100.0066)
ni-aar = mat ‘I will bathe’
 (3.100.0339)

The example with the past clitic =*uvu7* in (4) shows that *r* from **s* remains under cliticization even prevocally.

- (4) KI *tuuh-ihwa7t* ‘grinding stone’ (3.100.0499) *a-tuur = uvu7* ‘he was grinding it’ (3.100.0503) PUA **tusu* (Stubbs 2011 #1081)

This pattern obtains in SE as well, see 4.2.5 (4). This is the only example we know of where clitic status is a conditioning factor in a morphophonemic alternation.

Anderton (1988:55) observes that *woh* ‘two’ and *tsoh* ‘fish sp.’ are exceptions to this generalization. The *h* in *woh* is from **h*, not **s*, cf. CU *wih*, LU *weh*. The word *tsoh* is almost certainly a loan, likely from the same, presumably non-Uto-Aztecan, source as Tübatulabal *chooh* ~ *tsooh* ‘bullhead’ (Voegelin 1935:142, 179), which also patterns as a loan.⁶²

There are other exceptions, which occur in a few verbs when the thematic suffixes *-yk*, *-k* are lost before clitics beginning with consonants, =*mat* ‘future’ and =*nehe*, of unknown meaning (Anderton 1988:69). With three of these verbs, the loss of the thematic suffix leaves underlying *h* in pre-clitic position, which, as seen in (4), is treated

⁶² Another example of this *Wanderwort* seems to be AC *ta\$uxxa* ‘fish sp.’ from Harrington, cited by Woodward (2007:204).

as a final position for the alternation $h \sim r$ from $*s$. However, final h in the verb roots in (5) does not become r . Here root-final h is not from $*s$ but apparently from $*k$; the SE cognate of KI *-murah-k* (5a) is *muraq-k* ‘loosen’ (with $aq < *ak$).⁶³

- (5) KI a. *ni-murah-k* + =*nehe* > *ni-murah=nehe* ‘I let it loose’ (3.98.0232)
 b. *ni-horoh-k* + =*mat* > *ni-horoh=mat* ‘I’m going to pierce’ (3.100.0360)
 c. *ni-\$eah-k* + =*mat* > *ni-\$eah=mat* ‘I will part my hair’ (3.98.0355)

4.3.5. LENITION; NO VOWEL SHORTENING. As in the other Takic languages, there are examples of lenition of p to v , although rather rare. An example is seen in *a-pii~viiha7* (3.98.0125), the reduplicated possessed form of *piiha-t\$* ‘sugar, honey’ (3.98.0597) (cf. SE *piih-t\$*).

This example, *a-pii~viiha7*, also shows two long-vowel syllables in a row. In SE, an underlyingly long vowel shortens if there is a long vowel in the preceding syllable (cf. 4.2.11). This rule of shortening is apparently absent from KI.

4.4. COASTAL CUPAN MORPHOPHONOLOGY. The morphophonology of LU has been treated by a number of scholars, including Kroeber and Grace (1960), Munro and Benson (1973), Davis (1976), Munro (1990), and Mamet (2010). They agree that a synchronic account of LU requires a good deal of marking within the lexicon. It is held that LU morphophonology appears more regular in diachronic perspective and may offer important evidence for reconstruction (Mamet 2010). Several of these authors suggest solutions intended to be general accounts of LU phonology. The appearance of a large dictionary (Elliott 1999) permits a better assessment of the high frequency of seemingly exceptional forms, and reveals that these earlier proposals account for the behavior of only parts of the LU lexicon.

The previous accounts have all suffered from not having the perspective informed by an overall survey of Takic structure and, more importantly, from a lack of abstractness, with a tendency to try to derive surface forms directly from other surface forms, such as deriving the plural from the singular. This, in our view, amounts to a logical fallacy along

⁶³ In SE there is a strong tendency for preconsonantal q to fricativize to $[\chi]$ and the SE allophone $[\chi]$ usually corresponds to KI h in this environment.

the same lines as trying to derive one contemporary species from another contemporary species, such as humans from apes (or vice versa).

We take a fresh look at LU morphophonology, emphasizing the ordered application of phonological rules to derive surface forms from abstract underlying representations. We also present details on AC morphophonology where this differs from the patterns in LU. Unfortunately, for most of the AC vocabulary we have almost no paradigmatic information, so our phonological analysis must be based on very few examples and thus remains somewhat speculative.

4.4.1. OVERVIEW OF RULES. In outline, the major morphophonemic rules of Coastal Cupan (CC) are those in (1). These rules are largely shared by LU and AC, with the conspicuous exception of rules (4) and (10), which do not apply in AC.

- (1) CC
1. vowel replacement (by a vowel beginning a suffix)
 2. stress
 3. apocope
 4. deglottalization (after unstressed vowels)
 5. syncope
 6. vowel shortening
 7. insertion of glottal stop (following a word-final stressed vowel)
 8. vowel lengthening
 9. intervocalic lenition
 10. *ch* lenition
 11. vowel reduction
 12. secondary stress

These rules are not peculiar to Coastal Cupan though some of the details are formulated differently in the other Takic languages. Rules 1-3, 5, 7 and 9 are common to all of Takic. CU shares rule 4. Rules 6 and 8 also apply in TV. Rule 10 is common to LU and its two Inland neighbors, CU and CA. Rule 12 seems to be applicable more widely than just in LU, but secondary stress rules have been little studied.

Historically intervocalic lenition, Rule 9, was once quite general: $p, t, k > v, l, x$. This rule, together with the rule that produced *ch* from lenited **t* when preceded by **i*, created the consonantism of the absolute suffix. In the contemporary languages, lenition seems

to apply as an active (although not entirely regular) phonological process only to *p*. The other lenitions have been lexicalized and consequently do not figure in the morphophonology. *Kw* seems not to participate in lenition, neither in Cupan nor in the other Takic languages. A phoneme *xw* appears in all four Cupan languages but not as a reflex of **kw*. Hinton (1990) suggests that Cupan *xw* may derive from a Yuman-language substratum.

We posit that many LU morphemes have underlyingly long vowels that never appear as long in surface forms. All underlyingly long vowels shorten when not in stressed position. Since there is usually but one stressed syllable per word in LU, that means that many underlyingly long vowels appear phonetically only as short. However, the vowel length feature protects the vowels from syncope.

An example is the vowel of the diminutive suffix (see 4.4.2 below) which shows an alternation *-ma-* ~ *-may*. The allomorph *-ma* never undergoes syncope, i.e., it never reduces to just *-m-* in contexts where other morphemes do reduce. Equally well when *-ma* appears in final position in some place names (cf. 15.4.2 (9)), it does not undergo apocope (Rule 3). Thus we can postulate an underlying form for the *-ma* allomorph as *-maa*. Since it is never stressed, it surfaces only with a short vowel.

4.4.2. LIMITS TO ABSTRACTNESS. Morpheme-specific alternations like those of the diminutive suffix *-ma-* ~ *-may* often must be dealt in terms of arbitrary changes rather than by the postulation of increasingly abstract inputs. This suffix appears as *-ma-* when followed by the absolutive suffix and *-may* elsewhere, as in (1).

- | | | | |
|-----|----|--|--|
| (1) | LU | <i>-ma-</i> + absolutive | <i>-may</i> elsewhere |
| | a. | <i>\$awaa-ma-la</i> ‘daughter’ | <i>nu-\$waa-may</i> ‘my daughter’ |
| | b. | <i>axá\$-ma-l</i> ‘sweet pea’ | <i>nu-7axá\$-may-ki</i> ‘my sweet pea’ |
| | c. | <i>muuka-ma-l</i> ‘type of small bird’ | <i>muuka-may-ma-l</i> ‘type of small bird,
diminutive’ (double diminutive)
<i>muuka-may-wu-t</i> ‘type of small bird,
augmentative’ (diminutive + augmentative) |

Given this pattern, one possibility is to posit that a morpheme in *-j* is added to *-ma* except before the absolutive suffix, a possibility with no support elsewhere in LU

morphology. Another possibility is to posit a basic *-maj* which is reduced to *-ma* by a general phonological process of loss of *j* before *l*. Against this suggestion is the fact that LU has sequences of *j* followed by *l*, as in examples like those of (2) with the “subject relative-clause future” complex *-luwu-t*.

- (2) LU
- a. *qwa\$aa-j-luwu-t* ‘which will shrivel’
 - b. *xwiteej-luwu-t* ‘who will have a big gut’
 - c. *arġj-luwu-t* ‘who will dart eyes’
 - d. *chiluuj-luwu-t* ‘who will speak Spanish’

Granted the above, the most economical solution for the *-ma-* ~ *-maj* alternation is to recognize a pair of related underlying allomorphs: a truncated form *-ma*, which is selected before the absolutive suffix, and a fuller form *-maj*, which occurs elsewhere. Underlyingly these have long vowels: *-maa* and *-maajV*. (“V” in underlying form means that a particular vowel cannot at this time be identified.) This is an example, then, of a very specific solution for a particular morpheme. This diminutive morpheme may be a grammaticalization of the widespread word for ‘child’, e.g. SE *-majr*, KI *-majr* (3.98.0088), AC *amajja7-ma-l* ‘little boy’ (3.123.0282/), CA *maj-lju7* ‘give birth’ (lit. child-make).

4.4.3. APPLICATION OF THE RULES. Rule 1, vowel replacement, deals with the replacement of a stem-final or suffix-final vowel by a suffix-initial vowel: $V_1 -V_2 > V_2$, where $-V_2$ indicates a vowel at the beginning of a suffix. Examples of this process are given in (1).

- (1) LU
- a. set a fire *chuj-ik* < *chuju -ik*
 - b. be burned *chuj-ax* < *chuju -ax*
 - c. be burned repeatedly *chujú~chuj-ax* < *chuju chuju -ax*

Example (1c), with the root duplicated, shows that this root ends underlyingly in *u*.

Rule 2 is the stress placement rule inherited from Proto-Northern Uto-Aztecan. It places the stress on the syllable containing the second mora, with the proviso that the word-final syllable is extrametrical. The application of this stress rule in Cupan has an apparent complication: Mostly, stress placement skips over the prefixes and applies to

the stem. But with the class of “stressless” roots, it applies instead to the prefixes. A possible solution to this contradiction is to postulate that stress placement applies both to the prefixes and to the stems. If the stem is a “stressless” stem, then only the prefix receives the stress. But for normal stems, the prefixes and the stems may, at some point in the derivation, both be stressed. This seems to survive into surface structure with only the last stress in a word being heard as “primary stress” while secondary stress earlier in the word usually goes unnoted. However, the vowels of the pronominal elements in the prefixes are often unexpectedly resistant to the reductions characteristic of vowels in unstressed position. Herein may lie a reason why the unstressed pronominal possessor prefixes of LU are often transcribed by field workers as *no-*, *o-*, *po-* rather than as *nu-*, *u-*, *pu-*, which is what would be expected in a truly unstressed position.

Another seemingly exceptional class of examples is a stress pattern found with stems which have copied roots, as seen in (2).

(2)	LU	a.	be shot repeatedly	<i>pata~vát-ax</i>	< <i>pata pata -ax</i>
		b.		<i>patá~vat-ax</i>	< <i>pata pata -ax</i>
		c.	be paid repeatedly	<i>nechi~néch-ax</i>	< <i>neche neche -ax</i>
		d.		<i>niché~nich-ax</i>	< <i>neche neche -ax</i>

(2a,c) have stress on the third syllable while (2b,d) have apparently normal stress. They show a short first syllable with the stress falling on the second syllable as specified by the rule. However (2a) and (2c), and (2b) and (2d), apparently are respectively variants of the same formation. No semantic distinction between the two forms is reported. The explanation seems to be in the different application of the stress rule called for by the reduplicative pattern rather than any deeper morphological difference. It would seem that in forms like (2a,c), each underlying doubled root is subject to stress, which falls on the first syllable, the second syllable being extrametrical. In forms like (2b,d), the whole word is the domain of stress placement. A strong indicator of the double stress at work in forms like (2a,c) is the fact that in (2c), *nechinéchax*, the vowel of the first syllable, *ne-*, retains the vowel *e*, which if completely unstressed, should reduce to the vowel written *i*. Thus a secondary stress can be posited: *nèchinéchax*. When a LU word receives two stresses, then, the later stress is primary and any earlier stress is secondary, which in standard transcriptions is not represented.

Jumping ahead somewhat, 4.4.1 (1) Rule 9 provides for the intervocalic lenition of *p* to *v* seen above in (2a,b): *pata-pat-ax* > *pàtavátax*, *patávatax*.

For words that show stressed short vowels in initial syllables, there are several possibilities: One is that the stress is lexically marked. This seems not to be as unusual in LU as one might expect. A second is that some such elements may involve geminate consonants, with consonant gemination providing an environment for stress placement and at the same time blocking syncope of the following vowel (4.4.1 (1), rule 6). Stressed short vowels in what appear to be open syllables are in fact phonetically followed by a geminate consonant Kroeber and Grace (1960:9). This gemination has almost universally been dismissed as an allophonic detail and omitted from the written representation of LU. Harrington though, represented this detail quite consistently in his LU fieldnotes. To our knowledge, the only published writer on Luiseño grammar who represents this feature orthographically is Malécot (1963-64). A third possibility is that at least for verbs, the root-final syllable may be extrametrical, i.e., outside the domain for stress placement. This possibility has been mentioned above for SE (cf. 4.2.6).

Rule 3 is apocope, the deletion of final short vowels. Surface word-final vowels in LU are underlyingly long or are otherwise protected. A rule of vowel reduction (rule 11) shortens underlyingly long vowels in unstressed position. Derived long vowels, however, can be found in LU in unstressed position, see 4.4.7.

Rule 4, deglottalization, deletes a glottal stop after an unstressed vowel. Surface glottal stop occurs postvocally in LU only after stressed vowels. Our practical spelling system for LU exploits this fact by omitting stress marks from syllables with postvocalic glottal stops. AC does not have this rule. Instead, a glottal stop following an unstressed vowel remains, but it is subject to a rule of metathesis that displaces the glottal stop rightward to the last possible position, discussed below in 4.4.8.

Deglottalization does not affect the glottal stop heard in root-initial position. That is functionally a very different glottal stop, perhaps introduced by rule.

Rule 5 is syncope. An unstressed short vowel deletes if allowed by syllable structure constraints. This process may apply iteratively, working its way left to right through a word. The derivation in (3) shows repeated applications of syncope. The example word is *chamqasívmawishmi*, the accusative of the nominalization *chamqasívmawichum* '[that] we have a tail'. Note that the stress rule treats both the prefix and stem as stressable. The element *-maw-* has not been identified.

(3)	LU	<i>chamo- qasívi maw -ii -cho -mo -jo</i> [1PL-tail-(?)-NMLZ-ABS-PL-ACC]
	2. stress	<i>chámo- qasívi maw -ii -cho -mo -jo</i>
	3. apocope	<i>chámo- qasívi maw -ii -cho -mo -j</i>
	5. syncope (first application)	<i>chám- qasívi maw -ii -cho -mo -j</i>
	syncope (second application)	<i>chám- qasív maw -ii -cho -mo -j</i>
	syncope (third application)	<i>chám- qasív maw -ii -ch -mo -j</i>
	10. <i>ch</i> lenition	<i>chám- qasív maw -ii -sh -mo -j</i>
	11. vowel reduction	<i>chám- qasív maw -i -ch -mU -j</i>
	12. secondary stress	<i>chàm- qasív maw -i -ch -mU -j</i>
	contraction ¹	<i>chàm- qasív maw -i -sh -m -i</i> <i>chamqasívmawishmi</i> ‘[that] we have a tail’

¹ The contraction here deals with the accusative case suffix. The same contraction with the accusative occurs in AC, as in (4b) below. It is also found in SE and in CU-CA.

In AC, a shift in constraints on syllable structure, permitting complex sequences of final consonants, results in an extension of syncope. This extension can only rarely be retrieved from synchronic AC alternations. Synchronically, the AC stems that exhibit word-final clusters that are clearly the result of short vowel loss (rule “SV” in (4)) when compared with LU forms, like AC *atkwéj7x* ‘sick’ (3.123.027), LU *atakwájax*; AC *wakpçh* ‘broom’ (3.116.0173), LU *wakpish*; and AC *qenxch* ‘collarbone’ (3.123.0401), LU *qenxat*, occur in no morphological contexts in which the syncope does not occur.

An example of a morpheme sequence that displays alternations is the gentilic (GENT) sequence *-wa7-ch* ~ *-w7-ch*, ‘one from, located at, etc.’, where the first form appears after consonants, the second after vowels. The two examples in (4) show how vowel syncope accounts for this pattern, with AC syncope applied right-to-left. Vowel shortening, Vowel reduction, Rule 11, shortens unstressed long vowels, as in the unidentified element *-xoo* in (4a). The rule of gemination lengthens an intervocalic consonant after a short stressed vowel. Note that this rule applies in both Coastal Cupan languages but its result is not included in the LU transcription.

(4)	AC	a.	<i>wona-xoo-nga-wa7a-cha</i>	b.	<i>pa7a7qwa-nga-wa7a-cha-a</i>
			DIST-(?)-LOC-GENT-ABS		on.top-LOC-GENT-ABS-ACC
	2.	stress	<i>woná-xoo-nga-wa7a-cha</i>		<i>pa7á7qwa-nga-wa7a-cha-a</i>
	3.	apocope	<i>woná-xoo-nga-wa7a-ch</i>		<i>pa7á7qwa-nga-wa7a-cha</i>
	5.	syncope (1)	<i>woná-xoo-nga-w7a-ch</i>		<i>pa7á7qwa-nga-wa7-cha</i>
		syncope (2)	–		<i>pa7á7qwa-ng-wa7-cha</i>
	11.	V reduction	<i>woná-xo-nga-w7a-ch</i>		–
	SV	AC short V	<i>woná-xo-nga-w7-ch</i>		–
		gemination	<i>woná-xxo-nga-w7-ch</i>		
			<i>wonaxxongaw7ch</i>		<i>pa7a7qwangwa7cha</i>
			‘the one from there’		‘the one on top (acc.)’
			(3.123.0612)		(3.123.0557)

Rule 6 shortens an underlying long vowel in a non-final closed syllable, as in *max-nga*, the locative of LU *maaxi-sh* ‘acorn flour’. Note that the long vowel remains in a final closed syllable: LU *no-maax* ‘my flour’.

Rule 7 inserts a glottal stop following a word-final stressed vowel, as in the distal locative LU *wuná7*, AC *woná7*. This element can be seen in non-final position in (4a), where no glottal stop is inserted. Note that *wuná7/woná7*, like many other Tactic demonstratives, is exceptional to the usual extrametricality of the final syllable.

Rule 8 lengthens stressed vowels in open syllables. This process creates many examples of derived long vowels. Grammatically related forms must be carefully compared to determine whether a phonetically long vowel is underlying long or short.

Rule 9, as mentioned above, lenites intervocalic *p* to *v* when the *p* is initial in a root or suffix.

Rule 10, *ch* lenition, deaffricates *ch* to *sh* in the syllable coda. (There are exceptions in derivational processes, notably in stem duplications.) As shown in 3.2.4, AC lacks this rule, and has only *ch* with very rare exceptions. The exceptions probably represent interference from LU, which all of Harrington’s AC informants also spoke.

The rule of vowel reduction, rule 11, reduces unstressed vowels in LU to the set *a, I, U*. Vowel reduction has affected underlying representations in a big way. There are many morphemes which occur with a non-low vowel syllable that is never stressed. For such morphemes the reduced vowel can be aligned with a nonreduced vowel only from comparative evidence. Many of our representations of the underlying forms are informed by comparative evidence even though we have not yet found synchronic, language-

internal evidence to justify some of them. Consequently, there remain many instances of the reduced vowels *I* and *U* in underlying forms. Further, there are many elements that must be postulated as having underlyingly long vowels because of their exceptionality to apocope and syncope but which are never stressed. These two must be inspected in detail to establish that they indeed should be represented as having underlying long vowels. As pointed out in 3.1.2.2, AC vowel reduction is more thoroughgoing, with most unstressed vowels appearing as *a* or a central vowel of some type (all of these are written as *a* here).

Rule 12 changes all but the rightmost stress in a word to secondary stress.

The examples in (5) show vowel reduction and deletion processes. These are analyzed in (6).

- (5) LU
- a. *mukát* ‘big, great’, *momkatum* ‘big ones, great ones’
 - b. *\$aamut* ‘grass, weeds’, *no\$ámki* ‘my grass’
 - c. *naavut* ‘prickly pear’, *nonávki* ‘my prickly pear fruit’, *navki* ‘gather prickly pear fruit’
 - d. *piivat* ‘tobacco’, *pivnga* ‘on the tobacco’
 - e. *aanat* ‘ant’, *antum* ‘ants’
 - f. *iikat* ‘carrying net’, *iknga* ‘in the carrying net’
 - g. *pawxit* ‘ponderosa pine’
 - h. *puloov* ‘good’, pl. *popluv* (inan.), *popluvum* (anim.)
 - i. *eevish* ‘awl’, *no7eev* ‘my awl’
 - j. *maaxi-sh* ‘acorn flour’, *nomaax* ‘my acorn flour’, loc. *max-nga*
 - k. *kulaawu-t* ‘wood, stick’, *nokulaaw* ‘my stick’
 - l. *avaaxat* ‘cottonwood tree’, *no7avaax* ‘my cottonwood tree’

(6) LU	morphology	underlying form
a. <i>muká-t</i>	[big-ABS]	<i>moka -ta</i>
<i>mo-mka-tu-m</i>	[PL~big-ABS-PL]	<i>CVV- moka -to -mo</i>
b. <i>\$aamu-t</i>	[grass-ABS]	<i>\$aamU -ta</i>
<i>no-\$am-ki</i>	[1SG-grass-PSD]	<i>no- \$aamU -kii</i>
c. <i>naavu-t</i>	[prickly.pear-ABS]	<i>naavo -ta</i>
<i>no-nav-ki</i>	[1SG-prickly.pear-PSD]	<i>no- naavo -kii</i>
<i>nav-k-i</i>	[prickly.pear-(?)-INTR]	<i>naavo -k- -ii</i>

d.	<i>piiva-t</i>	[tobacco-ABS]	<i>piiva -ta</i>
	<i>piv-nga</i>	[tobacco-LOC]	<i>piiva -ngaa</i>
e.	<i>aana-t</i>	[ant-ABS]	<i>aana -ta</i>
	<i>an-tu-m</i>	[ant-ABS-PL]	<i>aana -to -mo</i>
f.	<i>iika-t</i>	[carrying.net-ABS]	<i>iika -ta</i>
	<i>ik-nga</i>	[carrying.net-LOC]	<i>iika -ngaa</i>
g.	<i>pa-wxi-t</i>	[great-pine-ABS]	<i>paa wexe -ta</i> ¹
h.	<i>puloov</i>	[good]	<i>poloovU</i>
	<i>po-pluv</i>	[PL~good]	<i>CVV- poloovU</i>
	<i>po-pluvu-m</i>	[PL~good-PL]	<i>CVV- poloovU -mo</i>
i.	<i>eevi-sh</i>	[awl-ABS]	<i>eevi -cha</i>
	<i>no-7eev</i>	[1SG-awl]	<i>no- eevi</i>
j.	<i>maaxi-sh</i>	[acorn.flour-ABS]	<i>maaxi -cha</i>
	<i>no-maax</i>	[1SG-acorn.flour]	<i>no- maaxi</i>
	<i>max-nga</i>	[acorn.flour-LOC]	<i>maaxi -ngaa</i>
k.	<i>kulaawu-t</i>	[stick.of.wood-ABS]	<i>kulaawo -ta</i>
	<i>no-kulaaw</i>	[1SG-stick.of.wood]	<i>no- kulaawo</i>
l.	<i>avaaxa-t</i>	[cottonwood-ABS]	<i>avaaxa -ta</i>
	<i>no-7avaax</i>	[1SG-cottonwood]	<i>no- avaaxa</i>

¹ The expected LU word for 'pine' is *wixét**, cf. SE *wo^Rqo^Rht* (3.101.0033), Hopi *lōqö*. *Wixét* survives in LU only as a song word of uncertain meaning.

The derivations in (7) show the application of relevant rules from 4.4.1 (1) above with several items from (5) and (6).

(7)	LU	<i>paa wexe -ta</i>	<i>poloovU</i>	<i>CVV- poloovU -mo</i>
		[great-pine-ABS]	[good]	[PL~good-PL]
2.	stress	<i>páa wexe -ta</i>	<i>polóovU</i>	<i>póo~ poloovU -mo</i>
3.	apocope	<i>páa wexe -t</i>	<i>polóov</i>	<i>póo~ poloovU -m</i>
5.	syncope	<i>páa wxe -t</i>	–	<i>póo~ ploovU -m</i>
6.	shortening	<i>pá wxe -t</i>	–	<i>pó~ ploovU -m</i>
11.	reduction	<i>pá wxi -t</i>	<i>pulóov</i>	<i>pó~ pluvU -m</i>
		<i>pawxit</i> 'ponderosa pine'	<i>puloov</i> 'good'	<i>poplulum</i> 'good ones'

		<i>maaxi -cha</i>	<i>no- maaxi</i>	<i>maaxi -ngaa</i>
		[acorn.flour-ABS]	[1SG-acorn.flour]	[acorn.flour-LOC]
2.	stress	<i>máaxi -cha</i>	<i>nó- máaxi</i>	<i>máaxi -ngaa</i>
3.	apocope	<i>máaxi -ch</i>	<i>nó- máax</i>	–
5.	syncope	–	–	<i>máax -ngaa</i>
6.	shortening	–	–	<i>máx -ngaa</i>
9.	<i>ch</i> lenition	<i>máaxi -sh</i>	–	–
11.	reduction	<i>máaxi -sh</i>	–	<i>máx -nga</i>
12.	secondary stress	–	<i>nò- máax</i>	–
		<i>maaxish</i>	<i>nomaax</i>	<i>maxnga</i>
		‘acorn flour’	‘my acorn flour’	‘on the acorn flour’

Some items retain long vowels in closed non-final syllables, as seen in (8). These are lexical exceptions vowel shortening.

- (8) LU a. i. *\$oowut* ‘black diamond rattlesnake’
 ii. *\$oowtum* (plural) (not **\$owtum*)
 iii. *\$oowmal* (diminutive) (not **\$owmal*)
 b. i. *avaaxat* ‘cottonwood tree’
 ii. *avaaxyik* ‘at the cottonwoods’ (not **aváxyik*)
 iii. *aváxmawish* ‘full of cottonwood trees’
 iv. *aváxmal* (diminutive)

In the absence of any phonological explanation for the failure of such roots to shorten as expected, they must be lexically marked as exceptions to the rule. (8a) is “regular” in its exceptionality, showing exceptionality to shortening in both inflection (8a.ii) and derivation (8a.iii). The pattern in (8b) may be one of inflection (8b.ii) versus derivation (8b.iii,iv). Inflected forms such as the dative-case *avaaxyik* are exceptional to shortening but the derived forms are not.

Further instances of syncope are found with the loss of initial-syllable unstressed vowels after CV- prefixes as in (9). For clarity, we mark all stresses in (9). The deletion occurs even if the prefix has only (unmarked) secondary stress (see above). Most of the roots in (9) are underlyingly stressless; this is marked with subscript *-s*.

- (9) LU morphology underlying form

a.	<i>tamát</i> ‘tooth, mouth’	[tooth;mouth-ABS]	<i>tama_s -ta</i>
	<i>nó-tma</i> ‘my teeth’	[1SG-tooth;mouth]	<i>no- tama_s</i>
	<i>cham-tamáa</i> ‘our teeth’ ¹	[1PL-tooth;mouth-(?)]	<i>chamo- tama_s -aa</i>
b.	<i>\$awáama-la</i> ‘daughter, girl’	[daughter-DIM-ABS]	<i>\$awaa -may -laa</i> ²
	<i>no-\$wáamay</i> ‘my daughter’	[1SG-daughter-DIM]	<i>no- \$awaa -may</i>
c.	<i>qasívi-sh</i> ‘tail’	[tail-ABS]	<i>qasivi_s -cha</i>
	<i>ní-qshiv</i> ‘my tail’	[1SG-tail]	<i>no- qasivi_s</i> ³
	<i>cham-qasív</i> ‘our tails’	[1PL-tail]	<i>chamo- qasivi_s</i>
d.	<i>qilá-t</i> ‘nape of neck’	[nape-(?)-ABS]	<i>qele_s -a -ta</i> ⁴
	<i>nó-qli</i> ‘the nape of my neck’	[1SG-nape]	<i>no- qele_s</i>
	<i>cham-qil-á7</i> ‘our napes’	[1PL-nape-PSD]	<i>chamo- qele_s -à</i> ⁵
e.	<i>\$ulá-t</i> ‘claw, fingernail’	[nail;claw-ABS]	<i>\$ula_s -ta</i>
	<i>nú-\$la</i> ‘my fingernail’	[1SG-nail;claw]	<i>no- \$ula_s</i> ⁶
	<i>cham-\$ulá7</i> ‘our fingernails’	[1PL-nail;claw-PSD]	<i>chamo- \$ula_s -à</i>
f.	<i>nó-plu</i> ‘my right hand’	[1SG-right.hand]	<i>no- pilo_s</i> ⁷
	<i>chám-pilu</i> ‘our right hands’	[1PL-right.hand]	<i>chamo- pilo_s</i>

¹ *cham-tamaa* ‘our teeth’ seems irregular; we would expect **chám-tama* (cf. (9f)).

² *\$awaamala* is a member of the class of nouns that take the long form of the absolutive suffix in the nominative case (4.4.5). Most nouns with the diminutive *-ma-* take the normal, short form of the suffix. See above in 4.4.2 for the alternation of forms of the diminutive suffix.

³ The fact that ‘tail’ takes singular possessive prefixes in *i* is a problem. It looks like it assimilates to the non-syncopating vowel *i* of the second(!) syllable of the underlying form. Compare (9b), which has the expected prefix in *o*. See also note 6 below.

⁴ The stem of *qelá-t* seems to be morphologically complex, but *-a* remains unidentified. It cannot be identified with the **-a7* of 14.2 because that ending derives nouns from verbs.

⁵ The fact that the ‘our’ form has a possessed suffix which figures in stress placement and that the ‘my’ form lacks a possessed suffix and is consequently stressed on the prefix is beyond the scope of the morphophonological rules under consideration here. This may be part of the behavior of a particular grammatical class.

⁶ The prefix vowel *u* may represent an assimilation to the first root vowel, which is also *u* (and which is subject to syncope – after the assimilation).

⁷ *-p(i)lu* is almost certainly related to *puloov* ‘good’ (cf. SE *ny-ma a7aj* ‘my right [“good”] hand’) but with truncation and irregular change in the first vowel.

The forms in (9c) offer another good set of examples to demonstrate derivations using the rules presented in (1) above. This root, though three syllables in length, is grammatically a stressless root. When it is possessed, the stress placement rule applies only to the prefix. With no prefix to stress, the stress goes on the default syllable, the one

containing the second mora. The stressless nature of the root suggests that the long vowel in *qasivish* is secondary, a product of the process of vowel lengthening (rule 7).

(10)	LU	<i>qasivi_s-cha</i> [tail-ABS]	<i>ni- qasivi_s</i> [1SG-tail]	<i>chamo- qasivi_s</i> [1PL-tail]
	2. stress	<i>qasívi -cha</i>	<i>ní- qasivi</i>	<i>chámo- qasivi</i>
	3. apocope	<i>qasívi -ch</i>	<i>ni- qasiv</i>	<i>chámo- qasiv</i>
	5. syncope	–	<i>ní- qsiv</i>	<i>chám- qasiv</i>
	8. lengthening	<i>qasíivi -ch</i>	–	–
	10. <i>ch</i> lenition	<i>qasíivi -sh</i>	–	–
	11. reduction	<i>qasíivi -sh</i>	<i>ní- qsiv</i>	<i>chám- qasiv</i>
		<i>qasiivish</i> ‘tail’	<i>niqsiv</i> ‘my tail’	<i>chamqasiv</i> ‘our tails’

Nóqli, *nú\$la*, and *nóplu* (9d,e,f) are interesting in that they indicate that there is a constraint on apocope. If apocope were applied generally, then those forms should be **nóqil*, **nú\$ul*, **nópil*. Apocope has applied to *níqsiv* so it clearly can operate on a stressless root. The solution seems to be that stressless lexical roots of the shape CVCV (two short syllables) are exempt from apocope.

The forms in (9d,e) show rule 7, glottal stop insertion following a final stressed short vowel (4.4.1 (1)).

The accusative suffix can also provide a context for syncope. The examples in (11) show accusative plurals. (10a) shows syncope but in (11b,c) syncope is blocked by its prior application after the first syllable. Syncope requires the environment VC_CV. With the plural suffix, *-m*, plus a following accusative suffix *-i*, the vowel preceding the plural suffix may be syncopeated, as in (11a). The rule of syncope normally cannot create a sequence of three consonants, generally disallowed in LU. (But see (12b).)

(11)	LU	plural	accusative plural
	a. <i>-7aawmawish</i> ‘horned’	<i>-7aawmawichum</i>	<i>-7aawmawishmi</i>
	b. <i>aanat</i> ‘ant’	<i>antum</i>	<i>antumi</i>
	c. <i>\$oowut</i> ‘black diamond rattlesnake’	<i>\$oowtum</i>	<i>\$oowtumi</i>

The word for ‘man/men’ in (12) looks strange. There are two plural forms, both seemingly quite irregular.

(12)	LU	‘man’	nominative	accusative
	a.	singular	<i>ja7ášh</i>	<i>ja7áachi</i>
	b.	plural ₁	<i>ja7ájchum</i>	<i>ja7ájshmi</i>
	c.	plural ₂	<i>jaajichum</i>	<i>jaajishmi</i>

The accusative form *ja7ájshmi* (12a) looks especially strange in that its stressed syllable is closed with a consonant cluster *-jsh*, which unexpectedly provides a context for syncope: *-j-chu-m-i* > *-j-sh-m-i*. However, both plurals can be seen as regular if it is understood that the singular *ja7ášh* is the irregular one: it seems to be a contraction of expected **ja7ájsh*. The accusative singular, *ja7áachi* shows regular open-syllable stressed vowel lengthening and shares the irregularity of the nominative in the loss of underlying *-j-*, i.e., it is not **ja7ájchi*.

The underlying form *ja7aji* that would provide **ja7áj-sh* would also generate the plural *ja7ájchum* (plural₁), showing regular syncope of underlying *ja7ájichum* to *ja7ájchum*. The accusative plural then treats *-jsh* as a possible syllable coda, as mentioned in the section on LU syllable structure in chapter 3, and this allows for the syncope of the following vowel. The syncope rule as presently stated does not operate after a consonant cluster, but clearly if the consonant cluster is a permissible syllable-final consonant cluster, then syncope can occur. The overarching constraint on syncope throughout Takic is that of permitted syllable shapes.

The derivation of the singular of (12a) are given in (13). In (13), “syncope (2)” is the application of the rule as it allows vowel deletion to create a viable syllable-final consonant cluster. Note also that the underlying form *ja7aji* ends with the fully specified vowel *i*, not the underspecified vowel *ɪ*. It is known to be *i* because a stem-final *i* governs the selection of the accusative in *-cha/-cho-*. Otherwise, the selection of *-cha/-cho-* must be lexically specified.

(13)	LU	<i>ja7aji -cha</i> [man-ABS]	<i>ja7aji -cho -mo</i> [man-ABS-PL]	<i>ja7aji -cho -mo -jo</i> [man-ABS-PL-ACC]
	2. stress	<i>ja7áji -cha</i>	<i>ja7áji -cho -mo</i>	<i>ja7áji -cho -mo -jo</i>
	3. apocope	<i>ja7áji -ch</i>	<i>ja7áji -cho -m</i>	<i>ja7áji -cho -mo -j</i>
	5. syncope (1)	–	<i>ja7áj -cho -m</i>	<i>ja7áj -cho -mo -j</i>
	syncope (2)	<i>ja7áj -ch</i>	–	<i>ja7áj -ch -mo -j</i>
	10. <i>ch</i> lenition	<i>ja7áj -sh</i>	–	<i>ja7áj -sh -mo -j</i>
	contraction	<i>ja7á -sh</i>	–	<i>ja7áj -sh -mi</i>
	11. reduction	–	<i>ja7áj -chu -m</i>	<i>ja7áj -sh -mi</i>
		<i>ja7ásh</i> ‘man’	<i>ja7ájchum</i> ‘men’	<i>ja7ájshmi</i> ‘men (acc.)’

The second plural, *jaajichum* (12c), seems more challenging. It has lost the glottal stop but somehow the effects of the underlying glottal stop remain. If the underlying root *ja7aji* simply loses its glottal stop, it becomes *jaaji*; adding the inflections to *jaaji* gives the non-occurring forms *^xjaajichum*, *^xjaajshmi*.

The surprisingly straightforward solution appears to be that *jaajichum* (plural₂) is a reduplicative plural. The derivation is shown in (13), anticipating fuller discussion of deglottalization further on. Note that deglottalization (14, rule 4 in 4.4.1 (1)) between identical short vowels results in a single short vowel, not a derived long vowel.⁶⁴ Reduction, rule 10 in (14), is assumed to apply to the degemination of a consonant after a long vowel. The long vowel of the CVV- reduplication is lexically exempt from vowel shortening before a derived consonant cluster, cf. (1, rule 7) above. Since that rule does not apply, it is not given in (14).

(14)	LU	CVV- <i>ja7aji -cho -mo</i> [PL~man-ABS-PL]	CVV- <i>ja7aji -cho -mo -jo</i> [PL~man-ABS-PL-ACC]
	2. stress	<i>jáa~ ja7aji -cho -mo</i>	<i>jáa~ ja7aji -cho -mo -jo</i>
	3. apocope	<i>jáa~ ja7aji -cho -m</i>	<i>jáa~ ja7aji -cho -mo -j</i>
	4. deglottalization	<i>jáa~ jaji -cho -m</i>	<i>jáa~ jaji -cho -mo -j</i>
	5. syncope (1)	<i>jáa~ jji -cho -m</i>	<i>jáa~ jji -cho -mo -j</i>
	syncope (2)	–	<i>jáa~ jji -ch -mo -j</i>
	10. <i>ch</i> lenition	–	<i>jáa~ jji -sh -mo -j</i>
	contraction	–	<i>jáa~ jji -sh -mi</i>
	11. reduction	<i>jáa~ ji -chu -m</i>	<i>jáa~ ji -sh -mi</i>

⁶⁴ See 4.4.7 for double vowels from loss of intervocalic *x* late in the derivation.

jaajichum ‘men’*jaajishmi* ‘men (acc.)’

The contraction of word final *jsh* to *sh* is not restricted to *ja7á-sh*. It has also been found in *hi-sh*, the accusative of the indefinite demonstrative pronoun *hij-cha*. *Hij-cha* is an example of a form that has a long absolutive suffix (see below in 4.4.5). In the accusative, the absolutive suffix appears in its short form, here *-sh*. The short-absolutive form of the word, theoretical *hij-sh*, undergoes the reduction *jsh* > *sh*, giving the attested form *hi-sh*.

Resultative nominalizations in *-i-sh* show a pattern of non-deletion of the vowel of the resultative morpheme *-i*, as in (15). This indicates that this morpheme is underlyingly a long vowel. Underlying forms are specified for the examples.

- | | | |
|---------|---|---|
| (15) LU | | underlying form |
| a. | <i>chujish</i> ‘cremation’
<i>pom-chuj-i</i> ‘their cremation (that they accomplished)’
cf. <i>chujax</i> ‘be burned, cremated, fired’
transitive <i>chujik</i>
reduplicated <i>chujúchujax</i> ‘be burned now and then’ | <i>chujju -ii -cha</i>
[po- -mo]- <i>chujju -ii</i>
<i>chujju -ax</i>
<i>chujju -ik</i>
CVCV́- <i>chujju -ax</i> |
| b. | <i>taván-i-sh</i> ‘dedication of a ceremonial enclosure, initiation, inauguration’
<i>pom-taván-i</i> ‘their initiation’
cf. <i>tavánax</i> ‘be set up, inaugurated’
transitive <i>tavánik</i>
reduplicated <i>tavantavánax</i> ‘repeatedly be put’ | <i>tavann -ii -cha</i>
[po- -mo]- <i>tavannV -ii</i>
<i>tavannV -ax</i>
<i>tavannV -ii</i>
<i>tavannV tavannV -ax</i> |
| c. | <i>leep-i-sh</i> ‘smoothed, tanned of leather’
<i>no-leep-i</i> ‘my tanned leather thing’
cf. <i>leepax</i> ‘be soft’
reduplicated <i>lipeelipax</i> ‘continually be soft’
transitive <i>leep-ik</i> | <i>leepe -ii -cha</i>
<i>no- leepe -ii</i>
<i>leepe -ax</i>
CVCV́- <i>leepe -ax</i>
<i>leepe -ik</i> |

Example (15c) shows the non-application of lenition in the underived context of the root-medial *p*. The application of the rule of lenition to underived contexts would result in a paradox. If all intervocalic *p*'s were to lenite, there would be no intervocalic *p*'s; but the question arises only because intervocalic *p* exists.

This example also shows some of the weirdness associated with reduplication. The underlying length of *leepe* is assigned to the second syllable of the copied root in the reduplicative pattern that underlies *lipeelipax*.

Also of interest is the strangely accented causative form *paa7ní7ax*, shown in (16).

- | | | | | | |
|------|----|------------------------------------|--------------|-------------|-------------------------|
| (16) | LU | <i>Puné-j</i> | <i>chaam</i> | <i>po-j</i> | <i>paa-7-ní-7ax.</i> |
| | | 3SG.ANIM-ACC | 1PL.PRO | 3SG-ACC | water-VBLZ-CAUS-PST.PFV |
| | | 'We made her drink it.' (H&E 1035) | | | |

This verb is doubly exceptional. The failure of the closed first syllable to shorten is odd and the accentuation cannot be handled by any known rule. This verb may be exceptional because of the application of some sort of contrastive emphasis, going beyond the normal rules that are devised as a description of normal word patterns. We suspect this to be a *nonce* form.

The identification of the underlying phonological shape of the resultative nominalizing suffix *-i* as underlyingly long, *-ii*, allows us to evaluate the idea that items like the noun and verb in (17) are related by this same suffix.

- | | | | | | |
|------|----|----|-----------------|--------------|---|
| (17) | LU | a. | noun: | nominative | <i>maaxish</i> 'acorn flour' |
| | | | | dative | <i>maxjik ~ maxjuk</i> |
| | | | | locative | <i>maxnga</i> |
| | | | | possessed | <i>nomaax</i> 'my acorn flour' |
| | | | | diminutive | <i>maxmal</i> |
| | | b. | verb: | intransitive | <i>maaxaq</i> 'be ground, pounded' |
| | | | | transitive | <i>maaxiq</i> 'grind, pound' |
| | | c. | deverbal nouns: | | <i>maaxkat</i> 'one who pounds acorns into flour' |
| | | | | | <i>maaxwut</i> 'one who sometimes pounds acorns into flour' |
| | | | | | <i>maaxpish</i> 'acorns for pounding into flour' |
| | | | | | <i>maaxilash</i> 'grinding tools' |
| | | | | | <i>omaaxila</i> 'your grinding tools' |

The noun in (17a), in terms of the rules under discussion, is absolutely normal. It undergoes syncope as expected and the long vowel shortens in a well behaved way in the resulting closed syllable. The verb, which putatively underlies the noun, is the strange

one. While its final vowel syncopates in the normal way, the remaining verb stem vowel fails to shorten. The nominalizations based on the verb, with their retained long vowels (*maaxkat*, *maaxpish*, etc.) contrast with the noun derived from *maaxish*, the phonologically well-behaved diminutive *maxmal*. The verb appears to be the grammatically marked member of the set. Thus even if the noun *maaxish* was at one time derived from the verb *maaxa*, in synchronic LU the derivation has to be considered as working in the other direction.

Mamet (2010:262) claims that very few nouns exhibit syncope where the final stem vowel is *a*. This is a questionable assessment; we find that stem final *a* is subject to syncope just like the other vowels. Monomorphemic noun stems that show syncope of their root-final vowels *a* like those of (18) are not uncommon vocabulary.

- (18) LU
- a. *piiva-t* ‘tobacco’, *piv-nga* ‘on the tobacco’
 - b. *aana-t* ‘ant’, *an-tu-m* ‘ants’
 - c. *iika-t* ‘carrying net’, *ik-nga* ‘in the carrying net’
 - d. *mooma-t* ‘ocean’, *mom-nga* ‘in the ocean’, *mom-jax* ‘from the ocean’
 - e. *paa7a-t* ‘mountain sheep’, diminutive *pa7-ma-l*
 - f. *kiika-t* ‘householder’, pl. *kik-tu-m*

Exceptions to syncope are to be accounted for with appropriate underlying forms, usually attributable to long vowels in syllables that fail to syncopate and/or fail to apocopate as in (19). To demonstrate that there is nothing special about underlying *aa*, non-apocopating examples with stem-final *u* (underlying *uu*) are shown in (19d,e).

- | | | | |
|------|----|---|---------------------|
| (19) | LU | | underlying form |
| | a. | <i>naana-t</i> ‘sunshine, sun’ | <i>naanaa -ta</i> |
| | | <i>naana-nga</i> ‘in the sunshine’ | <i>naanaa -ngaa</i> |
| | b. | <i>iiva-l</i> ‘large wooden spoon’ | <i>iivaa -la</i> |
| | | <i>no-7iiva</i> ‘my large wooden spoon’ | <i>no- iivaa</i> |
| | c. | <i>chii7a-t</i> ‘hip’ | <i>chii7aa -ta</i> |
| | | <i>no-chii7a</i> ‘my hip’ | <i>no- chii7aa</i> |
| | d. | <i>chaatu-sh</i> ‘magical song’ | <i>chaatuu -cha</i> |
| | | <i>nu-chaatu</i> ‘my magical song’ | <i>no- chaatuu</i> |
| | e. | <i>puumu-sh</i> ‘ceremonial eagle feather’ | <i>puumuu -cha</i> |
| | | <i>no-puumu</i> ‘my ceremonial eagle feather’ | <i>no- puumuu</i> |

4.4.4. SOME VARIABLY REPRESENTED ITEMS. Some items are variably represented in the sources as shown in (1).

- (1) LU
- a. *pii7at* ‘killed game, witchcraft victim’; *nopii7a* ‘my victim’ (Elliott 1999:712), but *popi7a* ‘his victim’ (H&E 1371), both from the same consultant, Mrs. Villiana Hyde
 - b. *owla* ‘blood, vein, artery’, acc. *oowul*; *no7ow* ‘my blood’ (Elliott 1999:215), but *no7oow* ‘my blood’ (Munro 1990), with data from the same consultant, Mrs. Hyde, but collected ten years earlier
 - c. *neeqat* ‘an edible plant, greens’; *noneeqa* ~ *noneeq* ‘my greens’ (Elliott 1999:603)

For both (1a) and (1b), our rules predict the long form of the possessed nouns. We have no principled explanation to offer regarding the short vowel form *popi7a* (1a), but we speculate that the short vowel of *no7ow* may be by analogy with the shortened vowel of *owla*. (Accusative *oowul* shows that the vowel is underlying long in ‘blood’.) The variation of *noneeqa* and *noneeq* in (1c) may indicate an indeterminacy regarding whether the second vowel of *neeqat* is taken to be underlyingly long or short. If the vowel is long, it shortens in unstressed position in both *neeqat* and *noneeqa*; if underlyingly short, it remains unchanged in *neeqat* but is lost by apocope in *noneeqa*. This kind of variation is not unexpected, but it complicates efforts to untangle LU phonology.

Davis (1976:212-213) observes that certain suffixes undergo syncope after unstressed vowels. In particular, the suffix sequences *-ku-tu-m* ~ *-ka-tu-m* ‘future relative, plural subject’, *-nga-wi-sh* ‘belonging to, part of’, *-ma-wi-sh* ‘having, full of ...’ and *-ka-wi-sh* ‘those of ...’ show syncope. Examples are given in (2). (Note that LU *-w(i)* here is a gentilic suffix corresponding to our posited *-wa7a* for AC above in 4.4.3 (4).)

- (2) LU
- a. *oovi-k-tu-m* ‘those who are going to give’ (Davis 1976:213)
 - b. *oovi-vu-k-tu-m* ‘those who habitually give’ (Davis 1976:213)
 - c. *laxooja-ng-wi-sh* ‘person from La Jolla’, pl. *laxooja-ng-wi-chu-m* (Davis 1976:213)
 - d. *tumám-ka-wi-sh* ‘northerner’, pl. *tumám-ka-w-chu-m* (Harrington 1978[1933]:112)
 - e. *waam-ka-wi-sh* ‘far person (person from far away)’, pl. *waam-ka-w-chu-m*, cf. *waam* ‘far’ (Harrington 1978[1933]:112)

The suffix *-ku-tu-m* ~ *-ka-tu-m* becomes *-k-tu-m* after an unstressed short vowel. The same structure appears in *-vu-k-tu-m* ‘those who habitually (VERB), are responsible for (VERB)-ing’. Also after a short unstressed vowel, In (2c) the first vowel of *-nga-wi-sh* ‘belonging to (especially a place)’ is lost (2c). In (2d) it is the second vowel of *-ka-wi-sh* ‘those of’ that is lost, in (2d). From the point of view of the rules under discussion (those of 4.4.2 (1)), the forms of (2) are morphophonologically regular. Once again, the regularity comes in part from the recognition that many superficially short, unstressed vowels are phonologically underlyingly long. Note that *waam* ‘far’ in (2e) is underlyingly consonant final and consequently does not undergo closed-syllable shortening. The rule of closed-syllable shortening applies only to derived environments.

Derivations for the forms in (2) are presented in (3) to demonstrate their regularity and to illustrate that there is nothing special about suffixes that participate in syncope. We assume, somewhat arbitrarily but prejudiced by comparative evidence, that the underlying form of *-ku-tu-m* ~ *-ka-tu-m* ~ *-k-tu-m* involves *-ka* rather than *-kU*. (For many nouns the absolutive changes from *-Ca* to *-Co* in the plural, as in (2c). This is discussed in 6.1.1.1.) In (3d,e), syncope may operate after a short unstressed vowel, so long as syncope is applied progressively within a word.

(3)	LU	a.	<i>oovii -ka -to -mo</i> [give-IFUT-ABS-PL]	b.	<i>oovii -vii -ka -to -mo</i> [give-HAB-IFUT-ABS-PL]
	2.	stress	<i>óovii -ka -to -mo</i>		<i>óovii -vii -ka -to -mo</i>
	3.	apocope	<i>óovii -ka -to -m</i>		<i>óovii -vii -ka -to -m</i>
	5.	syncope	<i>óovii -k -to -m</i>		<i>óovii -vii -k -to -m</i>
	11.	reduction	<i>óovi -k -tU -m</i> <i>ooviktum</i> ‘those who are going to give’		<i>óovi -vi -k -tU -m</i> <i>oovivuktum</i> ‘those who habitually give’
		c.	<i>laxoojaa -nga -wi -cha</i> [La.Jolla-LOC-GENT-ABS]	c.	<i>laxoojaa -nga -wi -cho -mo</i> [La.Jolla-LOC-GENT-ABS-PL]
	2.	stress	<i>laxóojaa -nga -wi -cha</i>		<i>laxóojaa -nga -wi -cho -mo</i>
	3.	apocope	<i>laxóojaa -nga -wi -ch</i>		<i>laxóojaa -nga -wi -cho -m</i>
	5.	syncope	<i>laxóojaa -ng -wi -ch</i>		<i>laxóojaa -ng -wi -cho -m</i>
	10.	<i>ch</i> lenition	<i>laxóojaa -ng -wi -sh</i>		–
	11.	reduction	<i>laxóoja -ng -wi -sh</i>		<i>laxóoja -ng -wi -chu -m</i>

	<i>Laxoojangwish</i> 'one from La Jolla'	<i>Laxoojangwichum</i> 'ones from La Jolla'
	d. <i>tomam -ka -wi -cho -mo</i> [north-CHAR-GENT-ABS-PL]	e. <i>waam -ka -wi -cho -mo</i> [far-CHAR-GENT-ABS-PL]
2. stress	<i>tomám -ka -wi -cho -mo</i>	<i>wáam -ka -wi -cho -mo</i>
3. apocope	<i>tomám -ka -wi -cho -m</i>	<i>wáam -ka -wi -cho -m</i>
5. syncope	<i>tomám -ka -w -cho -m</i>	<i>wáam -ka -w -cho -m</i>
11. reduction	<i>tumám -ka -w -chu -m</i> <i>tumamkawchum</i> 'northerners'	<i>wáam -ka -w -chu -m</i> <i>waamkawchum</i> 'people from far away'

4.4.5. LONG AND SHORT ABSOLUTIVES. The accusative of most LU nouns with long absolute suffixes (*-ta*, *-la*, *-cha*) has a normal (short) absolute. The nominative is marked and the accusative is not. This is the reverse of the usual situation in Takic and is one of the most striking peculiarities of LU grammar. The obvious treatment of this within the framework of our rules is to recognize that the so-called long absolutes are just that: absolute suffixes with added vowel length to mark the nominative (which is also the citation form). This vowel length feature blocks apocope of these suffixes which then surface with a short vowel (by vowel reduction). The long absolute suffix also provides a context for syncope so that often the nominative shows a shortened version of the stem. In such items, the accusative (which for these nouns is the morphologically unmarked form) is more revealing regarding the underlying stem form. How this came about diachronically is a puzzle that has repeatedly attracted the attention of students of LU but no entirely satisfactory account has emerged. For our present purposes we simply recognize that a class of nouns takes a lengthened absolute suffix. Nominatives and accusatives of several members of this class are shown in (1).

(1)	LU	nominative	accusative	root/stem
a.	salt	<i>eng-la</i>	<i>eengi-l</i>	<i>eenge</i>
b.	plant sp.	<i>\$ex-la</i>	<i>\$eexi-l</i>	<i>\$eexe</i>
c.	blackberry	<i>pikw-la</i>	<i>pikwi-l</i>	<i>píkkwe</i>
d.	blood, vein, artery	<i>ow-la</i>	<i>oowu-l</i>	<i>oowo</i>
e.	antelope	<i>ton-la</i>	<i>toona-l</i>	<i>toona</i>
f.	slug sp.; penis	<i>woʔ-la</i>	<i>wooʔi-l</i>	<i>wooʔe</i>

g.	spruce	<i>juj-la</i>	<i>juuji-l</i>	<i>juuje</i>
h.	wind	<i>hung-la</i>	<i>huungu-l</i>	<i>huungU</i>
i.	water	<i>paa-la</i>	<i>paa-l</i>	<i>paa</i>
j.	black oak	<i>kwii-la</i>	<i>kwii-l</i>	<i>kwii</i>
k.	mesquite	<i>ee-la</i>	<i>ee-l</i>	<i>ee</i>
l.	arrow	<i>huu-la</i>	<i>huu-l</i>	<i>huu</i>
m.	house	<i>kii-cha</i>	<i>kii-sh</i>	<i>kii</i>
n.	tarweed	<i>iqee-la</i>	<i>iqee-l</i>	<i>eqee</i>
o.	poison oak	<i>ijaa-la</i>	<i>ijaa-l</i>	<i>ijaa</i>
p.	quartz crystal	<i>wijaa-la</i>	<i>wijaa-l</i>	<i>wijaa</i>
q.	sycamore	<i>\$ivee-la</i>	<i>\$ivee-l</i>	<i>\$evee</i>
r.	cloud	<i>tuvii-cha</i>	<i>tuvii-sh</i>	<i>tuvii</i>
s.	forest	<i>jamii-cha</i>	<i>jamii-sh</i>	<i>jamii</i>
t.	river, stream	<i>wanii-cha</i>	<i>waní-sh</i>	<i>wani</i>
u.	daughter, girl	<i>\$awaama-la</i>	<i>\$awaama-l</i>	<i>\$awaa -maa</i>

In terms of our rules, only one form in (1) is regarded as “irregular,” namely (1c) *pikwla* ‘blackberry’, acc. *pikwil*, whose underlying form has to be specified as having a geminate consonant: *pikkwe*. The postulation of an underlying geminate consonant following a stressed short vowel Kroeber and Grace (1960:9) is supported by the fact that this stressed short vowel is exceptional to open syllable lengthening. It should be noted though that the gemination was regularly recorded by Harrington for both LU and AC. This situation differs from that of the lexically accented short-vowel root for ‘name’, underlying *túngu*, which shows open syllable lengthening; see below at (4e).

To show how the regular patterns work, we provide the derivations in (2). Again, we offer no account of the origin of the difference between the long and short absolutes; synchronically the selection is according to the rules of a noun class. In the morphology [ABS_{NOM}] marks the lengthened nominative absolute.

(2)	LU	nominative	accusative	nominative	accusative
		<i>toona -laa</i>	<i>toona -la</i>	<i>tuvii -chaa</i>	<i>tuvii -cha</i>
		[antelope-ABS _{NOM}]	[antelope-ABS]	[cloud-ABS _{NOM}]	[cloud-ABS]
	2. stress	<i>tóona -laa</i>	<i>tóona -la</i>	<i>tuvíi -chaa</i>	<i>tuvíi -cha</i>
	3. apocope	–	<i>tóona -l</i>	–	<i>tuvíi -ch</i>
	5. syncope	<i>tóon -laa</i>	–	–	–

6. shortening	<i>tón -laa</i>	–	–	–
10. <i>ch</i> lenition	–	–	–	<i>tuvíi -sh</i>
11. reduction	<i>tón-la</i>	–	<i>tuvíi -cha</i>	–
	<i>tonla</i> ‘antelope’	<i>toonla</i>	<i>tuviicha</i> ‘cloud’	<i>tuviish</i>
	nominative	accusative	nominative	accusative
	<i>wani -chaa</i>	<i>wani -cha</i>	<i>kíi -chaa</i>	<i>kíi -cha</i>
	[river-ABS _{NOM}]	[river-ABS]	[house-ABS _{NOM}]	[house-ABS]
2. stress	<i>waní -chaa</i>	<i>waní -cha</i>	<i>kíi -chaa</i>	<i>kíi -cha</i>
3. apocope	–	<i>waní -ch</i>	–	<i>kíi -ch</i>
5. syncope	–	–	–	–
8. lengthening	<i>waníi -chaa</i>	–	–	–
10. <i>ch</i> lenition	–	<i>waní -sh</i>	–	<i>kíi -sh</i>
11. reduction	<i>waníi -cha</i>	–	<i>kíi -cha</i>	–
	<i>waníicha</i> ‘river’	<i>wanísh</i>	<i>kíicha</i> ‘house’	<i>kíish</i>

The forms of ‘salt’ in (3) are regular but they may need some explanation.

- (3) LU a. nominative *eng-la* ‘salt, salt lick’
 b. accusative *eengi-l* ‘salt (acc.)’
 c. dative *eng-jik* ‘at the salt’
 d. possessed *nu-7eeng* ‘my salt’

The underlying form for the root ‘salt’, (3a), is *eenge*, as given above in (1a). In (3a,c), syncope has applied. Syncope feeds the rule of length adjustment, i.e., a long vowel shortens in a closed syllable derived through syncope. The effect is that this rule makes a long vowel short in a closed syllable when that syllable is followed by another syllable. (3d) ends in a closed syllable, but that closed syllable was created by apocope, a non-rhythmic rule which does not entail length adjustments. Consequently underlyingly long vowels can appear in final closed syllables.

Not surprisingly, there are irregularities in this noun class, as seen in (4).

- (4) LU a. *ex-la* ‘land, earth, dirt’, acc. *eexi-l*, dat. *ex-jik* ‘at the land’, *no-7eex* ‘my land’,
 pl. *no-7eexu-m*
 b. *\$uun-la* ‘heart’, acc. *\$uuni-l*, *no-\$uun* ‘my heart’
 c. *kuu-ta* ‘elderberry’, acc. *kuu-t*, *kuu-tpa-t* ‘elderberry bush’

- d. *ash-la* ‘owned animal’, *no-7aash* ‘my animal’, *o-7aachu-m* ‘your animals’,
pom-7aash-man ‘with their animals’, *aash-nga* ~ *ash-nga* ‘on horseback or
 mounted on some other domestic animal’
- e. *tung-la* ‘name’, acc. *tuungu-l*, *no-túng* ‘my name’, *no-tuungu-m* ‘my names’
- f. *too-ta* ‘stone’, acc. *toot*, *no-tó7* ‘my stone’

Example (4a) shows signs of a lexical split. The underlying form of the non-possessed series is *eexl*, as evidenced by the accusative form *eexi-l*, while that of the possessed form is *eexu*, as seen in the plural *no-7eexu-m*. The stem-final *u* may be motivated by the fact that consonant-final forms in LU acquire a stem augment *-u-* before the plural suffix.

In (4b) the absolutive nominative *\$uun-la* shows a long vowel in an unexpected position. The root, *\$uunl*, is evidently exceptional to vowel shortening.

(4c) shows another root that is exceptional to shortening. Cognate forms contain glottal consonants, cf. TV *kohuu-t* (3.103.0715), SE *kuuh-t*, KI *kuuhu-t\$* ‘elderberry fruit’ (3.99.0142), CU *ku7u-t*.

(4d) shows some unexplained irregularities in vowel length. The possessed form *pom-7aash-man* ‘with their animals’ and the locative *aash-nga* ‘on horseback’ indicate the vowel *aa* is resistant to closed-syllable shortening. Nevertheless closed-syllable shortening is found in an alternative form for ‘on horseback’, *ash-nga* and in the absolutive *ash-la*. Elliott (1999:135) comments, “Although absolutive forms exist, they are rarely used.” Apparently strangeness can creep in when one creates an absolutive form for a term that almost always used only as a possessed form. The locative *ash-nga* (or *aash-nga*) is also strange as an animate noun inflected for local case (cf. 5.4).

The underlying form for (4e) appears to be *túngu*, with an exceptionally accented short vowel in underlying form. The derivations in (5) show how the forms in (4e) can be accounted for.

(5)	LU	absolutive		possessed	
		nominative	accusative	singular	plural
		<i>túngu -laa</i>	<i>túngu -la</i>	<i>no- túngu</i>	<i>no- túngu -mo</i>
		[name-ABS _{nom}]	[name-ABS]	[1SG-name]	[1SG-name-PL]
	2. stress	–	–	<i>nó- túngu</i>	<i>nó- túngu -mo</i>
	3. apocope	–	<i>túngu -l</i>	<i>nó- túng</i>	<i>nó- túngu -m</i>
	5. syncope	<i>túng -laa</i>	–	–	–

6. lengthening	–	<i>túungU -l</i>	–	<i>nó- túungU -m</i>
10. reduction	<i>túng -la</i>	–	–	–
11. 2ndary stress	–	–	<i>nò- túng</i>	<i>nò- túungU -m</i>
	<i>tungla</i>	<i>tuungul</i>	<i>notúng</i>	<i>notuungum</i>
	‘name’	‘name (acc.)’	‘my name’	‘my names’

AC does not have long absolutes, and AC nouns that correspond to long absolutes in LU have ordinary accusative forms with a suffix *-a*. The relationship between the AC and LU forms is somewhat variable, as seen in the examples in (6). The LU accusatives, where attested by Elliott (1999), are given in parentheses. Taking into account the neutralization of unstressed vowels in AC, the nouns in that language resemble the LU accusative forms.

(6)		AC	LU
a.	owned animal	<i>atchal</i> (3.116.0467)	<i>ashla</i>
b.	poison oak	<i>ajal</i> (3.121.0458)	<i>ijaala</i> (<i>ijaal</i>)
c.	black abalone	<i>ajl</i> (3.116.0058)	<i>ajla</i>
d.	salt	<i>enggal</i> (3.121.0683)	<i>engla</i> (<i>eengil</i>)
e.	earth, land	<i>exxal</i> (3.121.0766)	<i>exla</i> (<i>eexil</i>)
f.	arrow	<i>huul</i> (3.121.0757)	<i>huula</i> (<i>huul</i>)
g.	house	<i>kiich</i> (3.123.0380)	<i>kiicha</i> (<i>kiish</i>)
h.	sack	<i>kuunal</i> (3.122.0134)	<i>kunla</i> (<i>kuunul</i>)
i.	gopher	<i>moot</i> (3.116.0408)	<i>moota</i> (<i>moot</i>)
j.	moon	<i>mojl</i> (3.121.0663)	<i>moojla</i> (<i>moojil</i>)
k.	plain, valley	<i>palvanch</i> (3.121.0728)	<i>palvunla</i> (<i>palvunil</i>)
l.	berry	<i>pikkol</i> (3.121.0469)	<i>pikwla</i> (<i>pikwil</i>)
m.	woodrat	<i>qawwal</i> (3.122.0062)	<i>qawla</i>
n.	shell	<i>qetchal</i> (3.116.0062)	<i>qeshla</i> (<i>qeechil</i>)
o.	red abalone	<i>qexl</i> (3.116.0057)	<i>qexla</i>
p.	coot (bird)	<i>\$ajl</i> (3.116.0307)	<i>\$ajla</i>
q.	pronghorn	<i>tonnal</i> (3.116.0403)	<i>tonla</i> (<i>toonil</i>)
r.	rock	<i>toot</i> (3.122.0212)	<i>toota</i> (<i>toot</i>)

4.4.6. LONG VOWELS IN SPANISH LOANS. In Spanish loan vocabulary, the LU length feature corresponds to the location of stress in the Spanish original. In terms of our rules, the

only exceptionality in forms like those of (1) (from Davis 1976:212) is that the stress is lexically specified.

- (1) LU a. *Rinkóonngi* ‘from Rincon’ (Sp. *rincón*)
 b. *poxardhúinkinga* ‘in his garden’ (Sp. *jardín*)
 c. *popaanki* ‘his bread’ (Sp. *pan*)

If we consider the application of the rules to the words in (1), we find that the only phonological process that obtains is vowel reduction, though the prefixes acquire secondary stress (if their non-reduced vowel quality is correctly reported). For the sake of discussion we assume the underlying forms given in (2a) and the output of the rules as those in (2b), which correspond to the spelling forms (2c).

- | | | | | |
|-----|----|---------------|----------------------------------|----------------------|
| (2) | LU | from Rincon | a. <i>rinkóon -ngii</i> | [Rincon-ABL] |
| | | | b. <i>rɪnkóon -ngɪ</i> | |
| | | | c. <i>Rinkoonngi</i> | |
| | | in his garden | a. <i>po- xardíin -kii -ngaa</i> | [3SG-garden-PSD-LOC] |
| | | | b. <i>pò- xardíin -kɪ -nga</i> | |
| | | | c. <i>poxardiinkinga</i> | |
| | | his bread | a. <i>po- páan -kii</i> | [3SG-bread-PSD] |
| | | | b. <i>pò- páan -kɪ</i> | |
| | | | c. <i>popaanki</i> | |

There are no vowel-initial suffixes to consider, so vowel replacement is irrelevant. The stress rule does not apply (except to the prefixes) because the roots are lexically stressed. Stop lenition might figure in (1c) in that underlying *p* might lenite to *v* after the possessive prefix, but native vocabulary does not show lenition after possessive prefixes either. There is no apocope because there are no word-final short vowels. There is no environment for syncope and thus no environment for vowel shortening is created. (The fact that stressed vowels do not undergo closed-syllable shortening is the regular pattern for underlyingly consonant-final syllables.) There is no stressed short vowel in an open syllable and thus vowel lengthening can't apply. (Prefixes are exceptional to lengthening in LU, unlike their counterparts in TV.) There is no *ch* to lenite and there is no glottal stop to delete. Secondary stress occurs on the prefix in the normal way. Thus the

underlying forms of (2a) are converted into the output forms of (2b), which are the pronunciations corresponding to the practical spelling forms of (1c, 2c). It can be observed, at least from this sample, that LU accommodates Spanish loan words rather gracefully.

4.4.7. SOME UNSTRESSED LONG VOWELS. An important suite of LU constructions, including some adjectives, the present plural of intransitive thematic verbs, the future tense of these verbs, and the future imperfective suffix, exhibit unstressed *-aa-*. These show an unstressed long *aa* deriving from intransitive verbs with thematic *-ax* with a following suffix beginning underlyingly with *-(ʔ)a*. The *x* of *-ax* is elided and the glottal stop following *x* deletes as well.

The examples in (1) involve the suffix *-ʔana* which Elliott (1999) refers to as the “present participle.” Jacobs (1975:188) derives this from original *ax-won-u*, but we need not concern ourselves with the intermediate stages here. The *n* of this suffix is lost before a syllable-final *t*, leaving just *-a-*; *-an-* and *-ana-* appear elsewhere. The abstract morpheme-initial glottal stop is posited on the basis of the pattern of syncope (Rule 5). However, the existence of that glottal stop is supported by the AC data, where it does not delete in all examples, as it does in LU. We show the paradigm fully only for (1a); the other examples are said to show the same pattern (Elliott 1999). We provide the forms that are attested.

- (1) LU
- a. *chóoraat* ‘round, ball-like or circular’, pl. *chóoraantum*, acc. *chóoraanti*, dat. *chóoraanik*, loc. *chóoraananga*, ins. *chóoraanaman* (*choor-ax* ‘be round’)
 - b. *ávaat* ‘red’, pl. *ávaantum*, *ávaanamal* ‘little red thing’, poss. *noʔávaatki* ‘my red thing’ (*av-ax* ‘be red’)
 - c. *churóʔaat* ‘complete’, pl. *churóʔaantum* (*churóʔ-ax* ‘be complete, settled’)
 - d. *juvátaat* ‘black, dark’, poss. *nojuvátaanaki*
 - e. *kó\$aat* ‘sweet’, pl. *kó\$aantum*, poss. *nokó\$aatki*, *kó\$anamal* ‘little sweet thing’ (*ko\$-ax* ‘be sweet’)
 - f. *mátaat* ‘pause in a song’, pl. *mátaantum*, dat. *mátaanik* (*mat-ax* ‘be ended, of a song’)
 - g. *\$áapaat* ‘frostbitten’, pl. *\$áapaantum*, poss. *no\$áapaan(a)ki* (*\$aap-ax* ‘be frozen’)

- h. *tápaat* ‘ended’, pl. *tápaantum*, poss. *notápaatki*, dim. *tápaanamal* (*tap-ax* ‘be finished’)

A few derivations of forms from (1) are provided in (2) to illustrate our approach. (The final vowel of adjectivalizing *-7ana* does not undergo syncope when the following syllable underlyingly has a long vowel. Whether this is part of a general pattern remains to be investigated.)

(2)	LU	<i>choor -ax -7ana -ta</i> [roll-INTR-ADJZ-ABS]	<i>choor -ax -7ana -ta -jo</i> [roll-INTR-ADJZ-ABS-ACC]
	2. stress	<i>chóor -ax -7ana -ta</i>	<i>chóor -ax -7ana -ta -jo</i>
	3. apocope	<i>chóor -ax -7ana -t</i>	<i>chóor -ax -7ana -ta -j</i>
	5. syncope	–	<i>chóor -ax -7an -ta -j</i>
	x deletion of <i>x7</i>	<i>chóor -a -ana -t</i>	<i>chóor -a -an -ta -j</i>
	contractions	<i>chóor -a-a -t</i>	<i>chóor -a -an -ti</i>
	11. vowel reduction	–	<i>chóor -a -an -ti</i>
		<i>chooraat</i> ‘round thing’	<i>chooraanti</i> ‘round thing (acc.)’
		<i>choor -ax -7ana -ik</i> [roll-INTR-ADJZ-DAT]	<i>choor -ax -7ana -ngaa</i> [roll-INTR-ADJZ-LOC]
	1. replacement	<i>choor -ax -7an -ik</i>	–
	2. stress	<i>chóor -ax -7an -ik</i>	<i>chóor -ax -7ana -ngaa</i>
	6. vowel shortening	–	<i>chóor -ax -7ana -nga</i>
	x deletion of <i>x7</i>	<i>chóor -a -an -ik</i>	<i>chóor -a -ana -nga</i>
	11. vowel reduction	<i>chóor -a -an -ik</i>	–
		<i>chooraanik</i> ‘to the round thing’	<i>chooraananga</i> ‘on, at the round thing’
		<i>avv -ax -7ana -maa -la</i> [red-INTR-ADJZ-DIM-ABS]	<i>no- juvatt -ax -7ana -kii</i> [1SG-dark-INTR-ADJZ-PSD]
	2. stress	<i>áv v -ax -7ana -maa -la</i>	<i>nó- juvát t -ax -7ana -kii</i>
	3. apocope	<i>áv v -ax -7ana -maa -l</i>	–
	6. vowel shortening	<i>áv v -ax -7ana -ma -l</i>	<i>nó- juvát t -ax -7ana -ki</i>
	x deletion of <i>x7</i>	<i>áv v -a -ana -ma -l</i>	<i>nó- juvát t -a -ana -ki</i>
	11. vowel reduction	–	<i>nó- juvát t -a -ana -ki</i>
	12. secondary stress	–	<i>nò- juvát t -a -ana -ki</i>
		<i>ávaanamal</i> ‘little red thing’	<i>nojuvát aanaaki</i> ‘my red thing’

Further examples of unstressed *aa* from *-ax* ‘intransitive’ are found with the future-tense *-an*, as in *nakaan* ‘will be closed’, *tuu\$aan* ‘will be crumbled’, *chaqwaan* ‘will be seized’. This pattern is also found with the present singular and the same-subject suffix *-t*, e.g. *heejaat* ‘while singing’ (cf. 11.4.1). Again, the underlying *n*, which seems to be a part of the environment for this development, is lost before syllable-final *t*.

Unstressed long *a* also appears in the future imperfective suffix *-maan*. Kroeber and Grace (1960) recorded *-maxan* for this suffix. The future imperfective is always *-maxan* in AC: *moll-a-maxan* ‘will remember’ (3.123.0388), *moon-maxan* ‘will come’ (3.123.0286), *ayáll-a7-maxan* ‘will know’ (3.123.0395), *qaal-maxan* ‘will lie’ (3.123.0268). Again, unstressed long *a* results from the loss of *x*, but this shows that the glottal stop is not a necessary part of the process. The element *-max* may be grammaticalized from the verb *max*, which in CU is the future-tense form of the suppletive verb *hiw*, *qal*, *max* ‘to be, be in a place’. In the speech of Mrs. Villiana Hyde, consultant for all of the more recent work on LU, the *x* is never present, as in (3d) below.

In summary, there are five different morphological contexts where *aa* in unstressed position results from the contraction of an underlying *x*. It seems likely that every unstressed *aa* in LU represents a loss of underlying *x*. But it should be noted that the motion suffix *-mun* ~ *-munaa* (<*-mon*> ~ <*-monaa*> in the spelling of Elliott 1999) ‘go along doing, keep on doing’ provides an instance of unstressed *aa* where loss of underlying *x* cannot be demonstrated. We speculate that the motion suffix involves something like underlying *-muna* ~ *-muna-xa* (with, for now, no further identification of *-xa*).

These unstressed long vowels do not appear in AC. Forms cognate to the LU adjectives in *-aa(n(a))* appear in (3). As can be seen, the intransitive suffix *-x* (in AC, there is never a preceding vowel) is not lost in these forms. The nasal is retained (it appears in LU only when a suffix follows the absolutive). The vowel is short, as expected in a closed syllable. In AC the underlying glottal stop that we have proposed for LU is present and metathesized to follow *n*. The behavior of glottal stop in unstressed syllables in AC is discussed below. Some of the items in (3) were transcribed without the glottal stop in *n7t*. In his note on *wimxan7t* (3g) Harrington wrote “Ch. [clearly heard] forever, change all *-xan7t* forms to go like this.” We have followed this directive in our spellings, with the inserted glottal stops in square brackets.

- (3) AC
- | | | |
|----|-------------------------|--|
| a. | <i>choor-x-an[7]-t</i> | ‘round’ (3.123.0453) |
| b. | <i>pawit-x-an7-t</i> | ‘gray, dirty white color’ (3.123.0632) |
| c. | <i>pora~vír-x-an7-t</i> | ‘lumpy’ (3.123.0630) |
| d. | <i>karii7-x-an[7]-t</i> | ‘steep’ (3.123.0492) |
| e. | <i>xway-x-an7-t</i> | ‘white’ (3.123.0590) |
| f. | <i>chel7-x-an7-t-a</i> | ‘forked (acc.)’ (3.123.0586) |
| g. | <i>wim-x-an7-t</i> | ‘heavy’ (3.123.0527) |

Similarly, unstressed long vowels do not appear in AC futures, as seen in (4). The underlying sequence *a-an* shortens to *-an*.

- (4) AC
- | | | |
|----|---------------------|--|
| a. | <i>alaq-x-an</i> | ‘will wake up’ (3.123.0340) |
| b. | <i>moj7-x-an</i> | ‘will rest’ (3.123.0509) |
| c. | <i>huq-x-an</i> | ‘will run’ (3.122.0223) |
| d. | <i>kwom7~kom-an</i> | ‘will knock over several times’ (3.122.0065) |
| e. | <i>matt-an</i> | ‘will knock down’ (3.122.0065) |
| f. | <i>xojj-an</i> | ‘wind will blow’ (3.123.0417) |

4.4.8. GLOTTAL STOPS IN ACJACHEMEM. The items in 4.4.7 (4) and 4.4.7 (5) require attention to the behavior of glottal stop in AC. While LU, under rule 4, has no glottal stops in unstressed syllables, AC abounds in them. They appear, for instance, in the suffix sequences *-w7-t*, an agentive (cf. 14.5) (1a,b), *-nga-w7-ch* ‘belonging to, from’ (1c,d), and *-ma7-ch* ‘full of’ (1e,f).

- (1) AC
- | | | | |
|----|---|---|--|
| a. | <i>huu7na-w7-t</i> ‘teacher’ (3.123.0590) | < | <i>huu7na-q</i> ‘show’ (3.123.0591) |
| b. | <i>kaara-w7-t</i> ‘great belcher’
(3.123.0644) | < | <i>kaar7-q</i> ‘belch’ (3.123.0644) |
| c. | <i>pí-qsav-nga-w7-ch</i> ‘belonging to its tail’ (3.123.0348) | < | <i>pí-qsav</i> ‘its tail’ (3.123.0645) |
| d. | <i>wona-xxo-nga-w7-ch</i> ‘someone from that side’ (3.123.0612) | < | <i>woná-x</i> ‘that side’ (3.123.061) < <i>woná7</i> ‘there’ (23.123.0409) |
| e. | <i>ex-ma7-ch</i> ‘dirty’ (3.123.0487) | < | <i>exxa-l</i> ‘earth, land’ (3.123.0487) |
| f. | <i>po-towla-ma7-ch</i> ‘having roots’ (3.123.0381) | < | <i>po-towwal</i> ‘its base’ (3.123.0381) |

These suffixes have initial continuants. Since the glottalization in verb stems appears to be associated with a stem-final sequence V + continuant + V, the suspicion arises that the continuant feature triggers the glottalization. The derivational suffix sequence *-p-ch* ‘instrument’, as in *ngooxa-la-p-ch* ‘mill’ (3.123.0329) < *ngooxa-q* ‘grind’ (3.123.0329), with an initial obstruent, is never ^x*-p7ch*. However, the instrumental suffix sequence *-la-ch*, as in *a\$-la-ch* ‘bathing place’ (3.123.0363) < *a\$\$a-q* ‘bathe’ (3.123.0364), is equally well never recorded with glottalization, so the feature may be morpheme specific.

In addition to appearing in these common suffixes, a glottal stop appears in the unstressed final syllable of many thematic verbs where these verbs have intervocalic continuants, as in (2). In order to illustrate the behavior of these glottal stops, the imperative forms are chosen here. Harrington observed that the glottal stops were easiest to hear in these forms. (2a) and (2b) are the only examples we have identified where Harrington collected both intransitive and transitive imperatives for the same verb root.

(2)	AC	intransitive imperative	transitive imperative
	a.	<i>in7x</i> ‘go away!’ (3.123.0612)	<i>inna7</i> ‘take it off!’ (3.123.0606)
	b.	<i>\$angaw7x</i> ‘get pricked!’ (3.123.0602)	<i>\$angawwa7</i> ‘prick it!’ (3.123.0601)
	c.	<i>heel7x</i> ‘sing!’ (3.123.0538)	<i>\$uvva7</i> ‘scorch it!’ (3.123.0367)
	d.	<i>juu7x</i> ‘get wet!’ (3.123.0408)	<i>ka\$üla7</i> ‘wink at him!’ (3.123.0648)
	e.	<i>a-\$uun heew7x</i> ‘be happy!’ (3.123.0564)	<i>puuna7</i> ‘go around it!’ (3.123.0380)
	f.	<i>kaar7x</i> ‘belch!’ (3.123.0644)	<i>chujja7</i> ‘burn it, light it!’ (3.123.0473)

As with the suffixes, these glottal stops appear where the final sequence of the stem is V + continuant + V in the majority of thematic verbs, but not in all. This may result from inconsistent perception of the glottal stop (Harrington found it hard to hear), but it may also show that the glottalization is a feature that must be noted in the lexicon. Nevertheless, these glottal stops never appear where C in stem-final VCV is an obstruent.

Comparing the form in (1b), *kaara-w7-t* ‘great belcher’ with the imperative in (2f), *kaar7-x* ‘belch’, and with the transitive imperatives, we can see that (1b) might be expected to be ^x*kaara7-w7-t*. We believe that what has happened here is that the first

from intransitive verbs. This is another instance of the metathesis of 7 and a following *an*. In these AC adjectives, the glottal stop of the theme is not lost as it is in LU. Apparently, the metathesis is blocked by the obstruent consonant in *-x*, the intransitive thematic suffix, and the glottal stop remains in its original position.

- (5) AC a. *chel7q* 'it is fork-shaped, crotch-shaped' (3.123.0587); *chella7q* 'make a notch, groove' (3.123.0586) *chel7xan7ta* 'forked thing, crotch of a tree (acc.)' (3.123.0586)
- b. *puuna7* 'go around' (3.123.0380) *puun7xan[7]t* 'peso [coin]' (3.123.0306)

The glottal stop in the theme remains if an increment intervenes between it and the agentive and the future, as in the examples in (6). One such is the *-x* intransitive thematic suffix, as in (6d), so the metathesis with the tense suffix *-an* never occurs with intransitive futures.

- (6) AC a. *ajalla7* 'know' (3.123.0395) *ajal7kaw7t* 'wise person' (3.123.0395)
- b. *pella7* 'dance, kick' (3.123.0356) *pal7kaw7t* 'muy pateador (very much a kicker)' (3.123.0355)
- c. *mojja7na* 'annoy, bother!' (3.123.0620) *mojja7na-w7t* 'annoying person' (3.123.0620)
- d. *moj7x* 'be tired!' (3.123.0620) *moj7x-an* 'will be tired' (3.123.0509)

Glottal stops that follow underlyingly stressed syllables remain in position, as seen in (7), even when these follow V + continuant + V sequences, as in (7b). In (7c) we might expect **anom7*, following the model of *voreewom7* 'sheep (pl.)', mentioned above, but this does not occur.

- (7) AC a. *huu7na-q* 'show, teach' (3.123.0591) *huu7naw7t* 'teacher' (3.123.0590)
- b. *wara7wara-q* 'get up' (3.123.0291) *wara77aw7t* 'early riser' (3.123.0292)
- c. *ano7* 'coyote' (3.121.0772) *anom* 'coyotes' (3.121.0772)

In summary, in AC a glottal stop that appears in suffixes with initial continuants, as well as in thematic verb stems which have final sequences *V + continuative + V*, can

metathesize with following vowels and with *n* and *m*. Other glottal stops do not exhibit this behavior.

4.4.9. MORE ON CH AND SH. The lenition of *ch* to *sh* in the syllable coda is attested in all the Cupan languages except AC. Occasional examples are also to be found in Serran. This alternation is of course fed by vowel deletion, which creates closed syllables, and it has been the object of generative phonological accounts by Munro and Benson (1973) and Davis (1976). However, there are some exceptions in LU and CA. The alternation is illustrated in (1).

(1)	LU	<i>ch-</i>	<i>-sh</i>
	a.	<i>jungaavi-chu-m</i> ‘turkey vultures’	<i>jungaavi-sh</i> ‘turkey vulture’
	b.	<i>kii-cha</i> ‘house’	<i>kii-sh</i> ‘house (acc.)’
	c.	<i>puuchi-l</i> ‘eye (acc.)’	<i>puush-la</i> ‘eye’
	d.	<i>neechu</i> ‘grow old, of a woman’	<i>nesh-ma-l</i> ‘old woman’
	e.	<i>wachi</i> ‘beat seeds off plants’	<i>wash-pi-sh</i> ‘seed beater’
	f.	<i>chukájla-sh</i> ‘walking stick’	<i>no-shkájla</i> ‘my walking stick’
	g.	<i>chipómka-t</i> ‘liar’	<i>chi~shpómka-tu-m</i> ‘liars’

Ch remains unlenited before a number of derivational suffixes that truncate the thematic vowels of verb stems, as seen in (2).

(2)	LU	a.	<i>nechi</i> ‘to pay’, <i>nech-xami</i> ‘make pay’, <i>nech-kawut</i> ‘one who pays’ (K&G:22)
		b.	<i>tuuchi</i> ‘tie up’, <i>tuuch-kawu-t</i> ‘something that often gets entangled’ (K&G:22)
		c.	<i>wichi</i> ‘to throw away, turn lose’, <i>wich-kixa</i> ‘make turn loose, throw away’ (K&G:22)
		d.	<i>wach-qa</i> ‘are a few of things’, <i>wach-qat</i> ‘were a few yesterday’, <i>wach-qu\$</i> ‘used to be a few’ (Davis 1976:202)
		e.	<i>wach-muk</i> ‘stood a few’, <i>wach-luwut</i> ‘what will be few’, <i>wach-wunut</i> ‘a few standing’ (Elliott 1999)

Furthermore, reduplication often provides exceptions to the alternation, as in (3). The singular form in (3b) also shows reduplication and is similarly exceptional to the rule (cf. (1g)), which shows “regular” reduplication with *ch* > *sh*).

- (3) LU a. *nech~nechi* ‘pay now and then’ < *neche* ‘pay’ (K&G 23)
 b. *cha~chngi-chu-m* ‘gods’ < *Changi~chngi-sh* ‘name of a deity’ (K&G 23)
 c. *chaku~chku-sh* ‘crest on bird’ (K&G 23)

Several noun constructions (that may involve derivational augments) do not show the alternation (examples from Davis 1976:199).

- (4) LU a. *po7echva* ‘his left hand’
 b. *pomuchvi* ‘its summit’
 c. *wachxat* ‘shoe’

What is striking about all the examples offered is that they involve patterns of derivation, while the patterns observed earlier with *ch* > *sh* involve inflection. Thus the rule *ch* > *sh* applies under inflection but usually not in stem derivation. Examples like *nesh-ma-l* ‘old woman’ and *wash-pi-sh* ‘seed beater’, (1d,e) above, show that some stem derivations trigger *ch* > *sh*.

4.4.10. DELABIALIZATION OF KW, QW. Kroeber and Grace (1960:24) note that the labial element of *kw*, *qw* is lost before *k*, *q*, *s*, *\$*, *l*, *j*. However, Elliott (1999) does not record this loss, including examples such as those in (1).

- (1) LU a. *chaqwkawut* ‘easily seized’; *chaqwla* ‘wrestle’, from *chaqwi* ‘catch’
 b. *a-qw\$a* ‘cooked’
 c. *chikwlpish* ‘deer’s-hoof rattle’

Elliott (1999) records *hiksash* ‘breath’ (compare *hikwisa* ‘rest, relax’), but Bright (1970) has *hikwsash*. The cognate form is also variable in CU.

4.4.11. ALTERNATIONS OF \$ AND S. *\$* becomes *s* after a front vowel or *j*, even when there is a separating consonant (as in (1a,b,d,e)). The alternation yields two allomorphs of the interrogative clitic =*\$u* ~ =*su*, shown in (1a-d). Only the clitic and its anchoring item are illustrated. Elliott (1999:877) states that =*\$u* often appears where =*su* would be expected. However, =*su* appears only in the environment of a preceding front vowel.

The alternation can also be observed in lexical items, as in (1e-g). (1h) is given by Davis (1976:203) as exceptional *i\$kuni*, but Elliott (1999:190) gives the item as shown, with unexceptional *s* after *i*. Davis also gives exceptional *\$ee\$at* ‘horsefly’. Bright (1970) also recorded the item this way. However, Elliott (1999:851) documents Sparkman’s transcription as unexceptional *\$e(y)sat*. A related form is also variable: Elliott (1999:849) gives *\$ee\$it* ‘gray horsefly’, but notes that Harrington heard *\$eesit*. Davis states that ‘tease’ and ‘horsefly’ were the only two exceptions in his data. However, other exceptions occur, as seen in (1) and (2).

- (1) LU
- a. *pi7* = *su* ‘well = Q’
 - b. *nej* = *su* ‘me = Q’
 - c. *om* = *\$u* ‘you = Q’
 - d. *chaam* = *\$u* = *sh* ‘we = Q = 1PL.SUBJ’
 - e. *aa\$ixi* ‘bathe, wash (someone)’
 - f. *o\$ku* ‘be stingy about something’
 - g. *eskana* ‘be painted’
 - h. *iskuni* ‘tease’
 - i. *\$iskila* ‘stinkbug’

A number of exceptions to the process illustrated above are the product of reduplication, where *\$* often remains (2a,b), although not always (2d,e). Recall that reduplication often blocks the change of *ch* to *sh* as well.

- (2) LU
- ~\$- a. *\$e7a* ‘be shot with an arrow’, *\$e7~\$e7a* ‘be shot with an arrow now and then’
 - b. *\$eexa* ‘pant, as dog’, *\$eex~\$exa* ‘pant now and then’
 - c. *\$icha* ‘squirt out, have diarrhea’, *\$ichí~\$icha* ‘continually ...’
 - ~s- d. *\$ema* ‘be partly broken’, *\$em~sema* ‘be smashed now and then’
 - e. *\$iila* ‘be poured’, *\$iil~sila* ‘be poured now and then’

A second source of exceptions to the generalization illustrated in (1) is the fact that *\$ ~ s* alternation also plays a sound-symbolic role (see 13.13), with *s* apparently being more “diminutive.” This process yields examples of *s* following non-front vowels, as (3c,d). AC apparently shared this system, as suggested by (3e).

(3)	LU	basic form with \$	diminutive with <i>s</i>
	a.	<i>\$uuka-t</i> ‘deer’	<i>suk-ma-l</i> ‘fawn’
	b.	<i>\$oowu-t</i> ‘black diamondback rattlesnake’	<i>soow-ma-l</i> ‘small rattlesnake’
	c.	<i>too\$axi-t</i> ‘cottontail’	<i>toosax-ma-l</i> ‘young cottontail’ (K&G 23)
	d.	<i>ma\$la</i> ‘fern’	<i>mas-ma-l</i> ‘small fern’ (K&G 23)
	AC	e. <i>\$okojh-l</i> ‘big nettle’ (3.122.0047)	<i>so~sk-ma-l</i> ‘little nettle’ (3.112.0047)

4.4.12. FINAL GLOTTAL STOP. Glottal stop always follows an otherwise final stressed short vowel. In all the examples in (1) the glottal stop is inserted by rule (see 4.4.3 (8) for additional examples). Examples (1a,b) have stress on the second and final syllable; they are exceptional to the extrametricality condition of the stress placement rule. Examples (1c,d) involve monosyllabic roots. Presumably by definition, the extrametricality condition applies only to underlying forms with more than one syllable. A simple demonstration that the final glottal stop of *ivi7* ‘this’ is inserted by rule is provided by *ivi=p* [this = 3SG]. When *ivi7* is followed by a clitic, its stressed vowel is no longer word-final and no glottal stop is inserted (and, within the word, the stressed vowel is subject to open-syllable lengthening).

- (1) LU
- a. *ano7* ‘coyote’, acc. pl. *anoo-m-i*
 - b. *ivi7* ‘this’, acc. *ivii-ji*
 - c. *po-pe7* ‘his path’, loc. *pee-nga* ‘on the path’
 - d. *a-wi7* ‘fat, greasy’, *wii-tu* ‘grow fat’

The suffixed forms of these roots show long vowels. This alternation in vowel length is due to the rule of short vowel lengthening in a stressed open syllable, which has been illustrated several times above. We provide a further illustration of this rule in (2) with the forms of (1a,c). Two things are of special interest here: First, the root for ‘coyote’ probably does not have lexical stress. More likely it is exceptional to the extrametricality of the final syllable and it is so treated here. Second, the glottal stop rule must precede vowel lengthening (rule 7 in 4.4.1). Vowel lengthening lengthens a short stressed vowel in an open syllable. The addition of the word-final glottal stop closes that syllable. Note also that prefixes are not subject to lengthening in LU.

(2)	LU		<i>ano</i>	<i>ano -mo -jo</i>	<i>po- pe</i>	<i>pe -ngaa</i>
			[coyote]	[coyote-PL-ACC]	[3SG-road]	[road-LOC]
	2.	stress	<i>anó</i>	<i>anó -mo -jo</i>	<i>pó- pé</i>	<i>pé -ngaa</i>
	3.	apocope	–	<i>anó -mo -j</i>	–	–
	7.	glottal stop insertion	<i>ano7</i>	–	<i>pó- pé7</i>	–
	8.	lengthening	–	<i>anóo -mo -j</i>	–	<i>pée -ngaa</i>
	11.	reduction	–	<i>anóo -mu -j</i>	–	<i>pée -nga</i>
	12.	secondary stress	–	–	<i>pò- pé7</i>	–
		contraction	–	<i>anóo -mi</i>	–	–
			<i>ano7</i>	<i>anoomi</i>	<i>pope7</i>	<i>peenga</i>

4.4.13. PATTERNS OF REDUPLICATION. There are frequent examples of lenition of *p* to *v* intervocalically, but these do not appear in all potential environments as seen with the stem-duplicated forms in (1), from Elliott (1999).

- (1) LU -*v*-
- a. *pojó~voj-a* ‘continually be pounded into flour’
 - b. *pojo~vój-a* ‘be repeatedly pounded into flour’
 - c. *paká~vak-a* ‘be divided into parts’
 - d. *pisa~vís-a* ‘be continually muddied’
 - e. *puxú~vux-a* ‘be continually blown (by the mouth)’
 - f. *puxuu~vux-a* ‘continually be blown slowly (by mouth)’
- p*-
- g. *piqí~piq-a* ‘continually dart out’
 - h. *piqi~píq-a* ‘dart out repeatedly’
 - i. *pamá~pam-a* ‘continually echo’
 - j. *pema~pém-a* ‘repeatedly lie on ground’

A possible semantic difference between the examples in (1a-f) and those in (1g-j) is that those in (1a-f) have undergoer subjects, while those in (1g-j) have thematic subjects. However, the verbs in both sets with transitive thematic vowel *-i* have agent arguments. We consider two hypotheses. First, there may be differences in underlying form such that there are instances of underlying *p* which are exceptional to lenition. Second, there may be differences in the stem-duplicative patterns themselves.

The pairs (1a,b) and (1f,g) demonstrate that at least two duplicative patterns must be recognized: (A) $C_1V_1C_2V_2 > C_1V_1C_2\acute{V}_2-C_1V_1C_2V_2$ and (B) $C_1V_1C_2V_2 > C_1V_1C_2V_2-C_1\acute{V}_1C_2V_2$.

Pattern (A) is that found in (1a,c,e,g,i). Pattern (B) is seen in (1b,d,h,j). Example (1f), *puxuuvuxa*, represents a third pattern, (C): $C_1V_1C_2V_2 > C_1V_1C_2VV_2-C_1V_1C_2V_2$. The root of (1e,f) is also found in *puxpuxa* ‘be blown (by the mouth) now and then’. This shows a fourth pattern: (D) $C_1V_1C_2V_2 > C_1V_1C_2-C_1V_1C_2V_2$. In pattern (D), the failure of the consonant *p* to lenite to *v* is due to the fact that this duplicative pattern does not provide it with the requisite intervocalic environment, as do patterns (A-C). However, the verb *paka* ‘be divided’ which is found duplicated with *-v-* in (1c) *pakávaka* ‘be divided’, is also found duplicated with *-p-* in *pakápakaja* ‘be repeatedly separated’. This strongly suggests that there are several different processes of stem duplication at work, some of which entail lenition of *p* and others that do not. As a consequence we conclude that there is no need to search for different kinds of underlying *p* and that the first hypothesis should be abandoned.

The forms in (1a,b), are a bit odd in that they show no signs of vowel reduction.⁶⁵ We repeat them in (2) along with the expected forms and the forms representing the output of our phonological rules.

(2)	LU	given by Elliott	expected	rule output
	a.	<poyóvoya>	<i>pujóvuja</i>	[pujónuja]
	b.	<poyovóya>	<i>pojuvója</i>	[pòjuvója]

These relate to the verb *poj-ax* ‘be pounded’, which is derived from the root *pojo*.

4.4.14. ALTERNATION OF *ng* AND *j*. The motion suffix *-ngi(m)* (see 10.4.2.2) has the allomorph *-j(m)* in a syllable coda. The *-j(m)* allomorph may be the result of intervocalic loss of *ng* with the consequent devocalization of *i*. Alternatively, the *-j(m)* allomorph may result from syncope of *i* and denasalization of a palatalized *ngj*, the palatalization being a trace of the syncopated *i*. This *ngj* then is replaced by *j* since *ngj* is not a permissible consonant in LU.

⁶⁵ This is not unusual in Elliott’s spellings, where unstressed vowels are often written as though unreduced. We believe this to be from an effort to normalize morphemic representations. It is in contrast with our approach, where we seek to normalize transcription with respect to pronunciation, with consequent multiplication of allomorphs.

4.4.15. OTHER ALTERNATIONS. Munro and Benson (1973) mention a change $t > l$, which they call a “consonant mutation.” It may be an example of a stylistic device of “*l*-reduplication,” not well understood, that is also found in CU (see 10.5.2.5 and Hill 2005: 139). This reduplicative *l*- also appears in alternation with other consonants.

- (1) LU
- a. *tapa~lápi*- ‘tear to pieces’
 - b. *chipi~lípi*- ‘break several shatterable things’
 - c. *qa\$aa~la\$a-* ‘talk loud about someone’
 - d. *qa\$a~l\$-i-sh* ‘noisy, loudmouthed’
 - e. *qwata~láta-* ‘be very shiny’

Furthermore, there are other alternations, of *t* with *dh* and several consonants with *r*. The functions of these alternations remain to be determined.

We have identified only one possible example of lenition of *k* to *x*; it appears to be simply a variable pronunciation: *pi7laka-t* ‘harmful doctor, sorcerer’, *nopi7laka ~ nopi7laxa* ‘my harmful doctor’.

Contrastive vowel length alternations in some verbs have a derivational function and mark semantic differences between related verbs. Some verb pairs of this sort are seen in 4.4.12 (1) and (1) above. Derivational differences of this sort are not phonologically conditioned. In (2) we show only the intransitive forms; all these verbs have derived transitives with the causative suffix *-i*.

- (2) LU
- | | | |
|----|---|---|
| a. | <i>xova-</i> ‘swoop down’ | <i>xoova-</i> ‘hang to the ground’ |
| b. | <i>kuma-</i> ‘have a headache’ | <i>kuuma-</i> ‘have a severe headache’ |
| c. | <i>kova-</i> ‘fall once (pl. subj.)’ | <i>koova-</i> ‘fall (pl. subj.)’ |
| d. | <i>\$anga-</i> ‘be piled up’ | <i>\$aanga-</i> ‘be piled up more than once’ |
| e. | <i>pata~váta-</i> ‘applauded, shot continually’ | <i>pataa~vata-</i> ‘be applauded’ |
| f. | <i>pamá~pama-</i> ‘continually echo’ | <i>pamaa~pama-</i> ‘continually make a rushing sound’ |

Sometimes vowel length differences of this sort are accompanied by various derivational suffixes. Again, while the examples are noted here, they represent

grammatical differences that modify the input to the morphophonological rules and thus belong within verb derivational morphology.

- (3) LU
- | | | |
|----|---|---|
| a. | <i>chaaqa-</i> ‘be laid on side, at an angle’ | <i>chaqá7a-</i> ‘be tilted’ |
| b. | <i>heela-</i> ‘be put underneath, be hidden’ | <i>hilépa-</i> ‘be hidden, concealed, overlooked’ |
| c. | <i>kwiicha-</i> ‘get wrung out’ | <i>kwichá7na-</i> ‘wring out (pl. obj)’ |
| d. | <i>peema-</i> ‘be put face down’ | <i>pemé7a-</i> ‘be put upside down, of container’ |

4.5. CUPEÑO MORPHOPHONOLOGY. The morphophonology of CU is quite different from that of the languages reviewed so far. TV and LU show a dazzling array of rhythmically motivated phonetic changes in roots. CU has very little of this, CU roots being, by comparison, rather stable in form. LU shows only a small number of roots that must be marked for stress; otherwise stress is introduced according to the configuration of the word. In CU, every element, root or otherwise, including the ablaut vowels (see 4.5.3), is specified for stress. This includes the roots and suffixes that are lexically specified as “stressless.”

Only a small number of elements are affected by apocope. The belief that apocope applied more generally in CU led to the vowel-final verb citations in the glossary in Hill and Nolasquez (1973[2005]). We now consider this to be synchronically inappropriate and believe that there has been a general restructuring of the CU verb roots whereby most root-final vowels have been lost in underlying form.

A detailed account of many CU phonological processes appears in Hill (2005). The present reexamination builds on that but presents a new approach, informed by comparative Takic and with attention to specific phonological processes.

For clarity throughout this section, stress is indicated in the examples even where the practical spelling would leave it unmarked.

4.5.1. STRESSLESS ROOTS. Stress alternations in the “stressless” roots of CU are distinctive. Constructions with such roots reveal some distinctive features of CU phonology. There are about 50 stressless roots, including both nouns and verbs. Some suffixes are specified

as stressless as well. The diachronic origins of the stressless roots have been explored by Mamet (2011).

When a stressless verb root is inflected, stress falls on the subject prefix if no suffix is present (1a), or if the only suffix is also specified as stressless (1b), with the stressless root *jax_s* ‘say, do, happen’. (This root also behaves similarly in LU and CA, appearing there with stress on the subject prefix.)

- (1) CU a. *pý-jax* ‘he said’
 b. *pým-jax-wyn* ‘they were saying’

The fact that stress falls on the first syllable in the absence of any other specification of stress is in accord with the intuition, captured in the practical spelling, that initial stress is the “unmarked” situation in CU.

If a stressable suffix is present, then the stress will fall on the rightmost such suffix, as in (2).

- (2) CU a. *py-jax-qál* ‘he was saying’
 b. *py-jax-qal-í* ‘while different subject was saying’
 c. *pym-jax-wyn-í* ‘while they (different subject) were saying’
 d. *ja-násh* ‘will be saying’

Example (2d) shows a regular reduction of *jax* to *ja*. Conditions for the deletion of the consonant *x* are discussed in 4.5.4.2.

Stressable suffixes are lexically specified as stressed but in our discussion we usually refer to them as “stressable” rather than “stressed” because their inherent stress is usually overridden by an occurrence of stress earlier in the word.

Ablaut vowels (see 4.5.3) also attract the stress, as in (3).

- (3) CU *jax-í-qat* ‘be going to say’

The vowel *i* of the nominalizing suffix sequence *-i-sh* (discussed in 13.1) is a stressable suffix. It is homophonous with the ablaut vowel *i* of (3) but grammatically distinct.

- (4) CU a. *myqn-í-sh* ‘killer’ < *myqan_s* ‘kill (sg.obj)’
 b. *kwa7-í-sh* ‘food’ < *kwa7_s* ‘eat’
 c. *kwa7-í-7aw* ‘on the food’
 d. *kwa7-í-nga* ‘in the food’

If there is no prefix and no stressable suffix, only then does the stress fall on the root (5).

- (5) CU a. *jax* ‘will say’
 b. *jáx-wy* ‘plural subjects are saying’
 c. *jáx-wyny* ‘plural subjects will be saying, usually say’

The future (5a) and forms with the unstressable suffixes *-wy_s* ‘present plural’ (5b) and *-wyny_s* ‘customary plural, future imperfect plural’ (5c) do not appear with prefixes.

A similar pattern obtains with stressless noun roots except that the stress is on the possessive prefix only in the complete absence of suffixation (6). Otherwise, with unstressable suffixes, it appears on the vowel before the first such suffix, as in (6b-e) and (6g,h).

- | | | |
|--------|---|-----------------------------------|
| (6) CU | <i>qa_s</i> ‘paternal grandparent, father’s parent’ | <i>ki_s</i> ‘house’ |
| a. | <i>ný-qa</i> ‘my paternal grandparent’ | f. <i>ný-ki</i> ‘my house’ |
| b. | <i>ny-qá-j</i> ‘my paternal grandparent (acc.)’ | g. <i>ny-kí-ka</i> ‘to my house’ |
| c. | <i>ny-qá-m</i> ‘my paternal grandparents’ | h. <i>ny-kí-7aw</i> ‘at my house’ |
| d. | <i>ny-qá-m-i</i> ‘my paternal grandparents (acc.)’ | |
| e. | <i>ny-qá-ma</i> ‘my son’s child’ | |

Although the inflectional suffixes seen in (6), as well as the diminutive *-ma* (6e), are all stressless, we do not cite them with subscript *-s* for “stressless.” That mark is reserved for roots and certain suffixes derived from stressless roots.

It should be mentioned that the stress pattern in CA is different: *né-qa-m* ‘my grandparent’, *né-ki-nga* ‘at my house’.

With a disyllabic stressless root, the stress occasioned by the presence of a suffix falls on the second syllable of the root (7).

- (7) CU *paha_s* ‘father’s older sister, older paternal aunt’
- ný-pa* ‘my father’s older sister’
 - ny-pahá-j* ‘my father’s older sister (acc.)’
 - ny-pahá-m* ‘my father’s older sisters’

In (7a) the final syllable of *paha_s* has been lost via *h*-deletion (4.5.4.9) and then shortening of the word-final vowel: *ný-paha* > *ný-paa* > *ný-pa*.

This stress pattern also places the stress before the absolutive suffix with stressless roots, as in (8).

- | | | | |
|-----|----|---|--------------------------------------|
| (8) | CU | absolutive | possessed |
| | a. | <i>wikí-lj</i> ‘flight feather’ | <i>pý-wik7i</i> ‘its flight feather’ |
| | b. | <i>\$ulú-lji-m</i> ‘fingernails, claws’ | <i>nú-\$ul7a</i> ‘my fingernails’ |

The complications with the glottal stop seen in the possessed forms in (8) and in the vowels of ‘fingernail’ (8b) are dealt with below, in 4.5.2.

There are degrees of the integration of pronominal elements with respect to stress placement. The most integrated are the subject prefixes which accept stress in the absence of any stressed element, whether root or suffix, as in (1). Next are the possessive prefixes which accept stress only when the possessed noun is unsuffixed, as in (6) and (7). The least integrated are the object markers on verbs, which never accept stress. We regard them as proclitics.⁶⁶ An example is given in (9).

- (9) CU *mi_{__}pým-jax* (not **mí-pým-jax*)
 [3PL.OBJ_{__}3PL.SBJ-say]
 ‘they said to them’

In summary, in the inflection of a stressless root, if a stressable suffix is present, then stress falls on the suffix (2, 4), which may be an ablaut vowel (3). On nouns, stressless suffixes on nouns place the stress on the final syllable of the root (6, 7). With no stress-

⁶⁶ Proclitics are followed by the marker __. We find it very useful for the readability of examples to graphically distinguish proclitics from enclitics (marked with =).

governing suffix, stress is on the pronominal prefix (1, 6a,f). Only if there is no subject prefix does the stress fall on the verb root (5).

We have encountered two examples showing that a given root can be treated as stressless or not. ‘Flight feather’ is one. Stressless *wílilj*, *pýwik7i* is given above in (8). Stressed *wíkilj* is also attested. Its possessed form is *pywík* and is found in the name of the Cupeño culture hero *Kísilj Pywík* ‘Hawk Feather’. The other example is *-na* ‘father’. As a kin term it is stressless: *nýna* ‘my father’, but in addressing a Catholic priest, one says *nyná*, with ‘father’ as a stressed root.

4.5.2. POSSESSED NOUNS WITH FINAL -7A AND -7I. A few possessed nouns appear with an unstressable final syllable *-7a* or *-7i*, usually with syncope of the preceding underlying vowel. This is not a normal suffix in several regards: (a) It is exceptional to the stress pattern outlined above. (b) The full form with *-7a* ~ *-7i* appears only in the nominative. (c) It shows some striking irregularities, which are so morpheme-specific that any bending of the phonological rules to accommodate them seems unrealistic.

The origin of this suffix is unclear. As discussed in 5.2.3 and 14.2, it may relate to a nominalizing construction with the suffix sequence **-a7-ta*, with the absolutive lost as expected in a possessed form. However, in both CU and CA *-7a* also appears on underived possessed nouns. These seem to have no relationship with the nominalization. This would also fail to account for the forms in *-7i*.

With a stressless root, the stress would be expected to be on the root-syllable preceding the suffix, as above in 4.5.1 (6) and (7). Instead, in an otherwise unsuffixed form, the stress falls on the possessive prefix as seen in (1).

- (1) CU a. *pý-pyl-7a* ‘its leaf’
 b. *nú-\$ul-7a* ‘my fingernails’
 c. *pý-wik-7i* ‘its flight feather’
 d. *pú-muv-7i* ‘his snot’

With inflected stressless roots we find that the stress falls on the syllable immediately before the inflectional (and unstressable) suffix, but without any evidence of *-7a* or *-7i*, as in (2).

- (2) CU a. *py-pylá-j* ‘its leaf (acc.)’
 b. *ny-šulú-j* ‘my fingernail (acc.)’

-7a ~ *-7i* are also found in some possessed forms with stressed roots, as in (3).

- (3) CU a. *py-7ísh-7a* ‘his pipe’; acc. *py-7ícha-j*; abs. *íchi-sh* ‘pipe’
 b. *py-múk-7i* ‘his sore’; abs. *múkwi-ljy7y-sh* ‘sore’; abs.pl. *múk-7i-lju7-chi-m* ‘sores’
 c. *py-šýnyx-7i* ~ *py-šýnyx-7a* ‘rainbow’

All the forms of (3) are irregular and all in different ways. The possessed forms of (3a) point to an underlying form *ícha*. The nominative possessed, which has the suffix *-7a*, shows regular syncope and affricate lenition: *-7ícha-7a* > *-7ích-7a* > *-7ísh-7a*. The accusative possessed shows the unmodified underlying form, *-7ácha*. But the absolutive form shows a different final vowel, *i*, yielding *íchi-sh*. It is possible that this is a separately derived forms with nominalizing *-i-sh*, but there is no verb attested for it to be derived from. The absolutive forms of (3b) are again irregular, even more so than for (3a). In (3c) we see competing *-7i* and *-7a*. Without a great deal of additional information, any attempt to align this confusion of forms with a principled phonology seems a fool’s errand. We may be dealing with remnants of a once productive pattern, one which has resulted in stem modifications with no clear synchronically segmentable suffix.

Plural inflection of the nominative does not introduce any further irregularity. The examples in (4) show the retention of *-7a* and *-7i* under plural inflection.

(4) CU	nominative	plural	absolutive
	a. <i>ny-7íka-7a</i> ‘my carrying net’	<i>ny-7íka-7a-m</i>	<i>íka-t</i>
	b. <i>ny-sá7wa-7i</i> ‘my nit’	<i>ny-sá7wa-7i-m</i>	<i>sá7wa-t</i>

4.5.3. THE ABLAUT VOWELS. Stressless roots and suffixes derived from them condition the appearance of the ablaut vowels (Heath 1977) that appear in verbal inflection and derivation in both CU and CA.⁶⁷ The ablaut vowels are also discussed in 10.5.2.

There are two ablaut vowels, *a* and *i*. The ablauting suffixes are given in (1).

⁶⁷ These vowels, *a* and *i*, are also preserved in Tübatulabal, where Voegelin (1935:84) calls them “vowel increments.”

- (1) CU 1. *a*-ablauting suffixes
- (-a)-la7a* ‘instrument for VERB-ing’
 - (-a)-lu7* ‘go in order to’
 - (-a)-nuk* ‘same subject subordinator’
 - (-a)-pi* ‘irrealis subordinator’
2. *i*-ablauting suffixes
- (-i)-qa-t* ‘purposive, immediate future’
 - (-i)-vy* ‘realis subordinator’
 - (-i)-vichu* ‘desiderative’
 - (-i)-va7a-sh* ‘agentive’
 - (-i)-vynyq* ‘coming along VERB-ing’

The ablaut vowels appear following stressless verb roots or the stressless suffixes derived from them. These suffixes are displayed in (2).

- | | | | |
|-----|----|---|---|
| (2) | CU | stressless suffix | derived from |
| | a. | <i>-jax_s</i> ‘intransitive’ | <i>jax_s</i> ‘say, do, happen’ |
| | b. | <i>-qal_s</i> ‘imperfective singular’ | <i>qal_s</i> ‘sit, be in a place’ |
| | c. | <i>-wyn_s</i> ‘imperfective plural’ | <i>wyn_s</i> ‘lie, be in a place’ |
| | d. | <i>-max_s</i> ‘benefactive’ | <i>max_s</i> ‘give’ |

When they appear following stressless elements, the ablaut vowels attract stress. Stress attraction with ablaut *i* is invariable. There is some variation with ablaut *a*, as seen in (3b) and (3e), which show that stress does not always fall on ablaut *a*, though as an underlyingly stressed element it resists syncope.

- (3) CU 1. with *a* ablaut
- jax-á-nuk* ‘while same subject was saying’
 - py-jax-á-pi* ~ *pý-jax-a-pi* ‘for him to say’
 - py-jax-á-lu-pi* ‘for him to go to say’
 - tew-á-pi-sh* ‘someone being looked over’
 - kwá7-a-la7a-sh* ‘edible’
2. with *i* ablaut
- jax-í-qat* ‘is going to say’
 - py-jax-í-vy* ‘that he said’

- | | | |
|----|------------------------------|--------------------------|
| h. | <i>py-jax-í-vynyq</i> | ‘he came along saying’ |
| i. | <i>jax-í-vichu-qa</i> | ‘wants to say’ |
| j. | <i>atáxmi kwa7-í-va7a-sh</i> | ‘people eater, cannibal’ |

If a stressed root has a suffix derived from a stressless verb, the ablaut vowel appears where expected but it is unstressed, though its underlying stress, as mentioned above, blocks it from being syncopated, as in the examples in (4).

- | | | | | |
|-----|----|----|--------------------------------|--------------------------------|
| (4) | CU | a. | <i>chúlu = py-jax-a-vynyq</i> | ‘he was coming along going in’ |
| | | b. | <i>súl-7y-qal-i-vy</i> | ‘what you have been tying’ |
| | | c. | <i>py-7ájyw-qal-i-vy</i> | ‘what she was wanting’ |
| | | d. | <i>pym-7icháajwin-wyn-i-vy</i> | ‘what they were making’ |
| | | e. | <i>míjax-wyn-i-q-ta-m</i> | ‘pl. subj. are going to be’ |

While the data are inadequate to decide this point, it may be that only one ablaut vowel is permitted in a construction. Data recorded by Paul-Louis Faye in the 1920s include the form *chym-tyw-í-vy-max-pi* ‘for us to look ahead for ourselves’, not the expected **chym-tyw-í-vy-max-a-pi*. Furthermore, speakers occasionally failed to produce expected ablaut vowels both in the Faye’s data and in J. Hill’s materials from the 1960s. Jacobs (1975), working with Roscinda Nolasquez, who was J. Hill’s principal consultant, never writes them in unstressed position.

4.5.4. PROCESSES INVOLVING CONSONANTS. Certain morphological combinations and regular phonological processes may bring consonants together. Sometimes the result would violate a surface constraint in CU.

4.5.4.1. AGAINST GEMINATION. One such constraint is against the occurrence of geminate consonants. When the rules would generate a sequence of two identical consonants, various adjustments are entailed. Most sequences of two identical consonants are simplified to a single consonant; there is no gemination. For morphological clarity, in the present work both consonants are sometimes shown in the examples.

The sequence *m-m* is exceptional. The morphology frequently creates the sequence *m-m*. This becomes *7m* as illustrated in (1). This change is categorical in CU. CA has the

same process, but in some contexts the disfavored cluster *m-m* in CA simply degeminates (see 4.6.5).

- (1) CU a. *pým-ma* > *pý7-ma* ‘their hands’
 b. *tán-chym-myn-wyn* > *tán-chy7-myn-wyn* ‘we were dancing’

Geminate *ch* is avoided by the by-now familiar change *ch* > *sh*. Phonemically this remains a sequence of identical consonants, but phonetically it is not a geminate, i.e., it is not *[tʃ], nor is it a sequence of two affricates, i.e., not *[tʃtʃ].

- (2) CU *húch-chym-myn* > *húsh-chy7-myn* ‘we skinned’

Example (2) also illustrates the change *mm* > *7m*.

There is a constraint on syncope in nouns such that syncope does not apply if certain clusters of like consonants would be brought together, as in (3).

- | | | | | |
|-----|----|--------------------------------|-------------------|---|
| (3) | CU | singular | plural | |
| | a. | <i>chála-l</i> ‘bark | <i>chála-li-m</i> | not <i>*chál-li-m</i> (or <i>*chál-la-m</i>) |
| | b. | <i>kýly-l</i> ‘manzanita bush’ | <i>kýly-li-m</i> | not <i>*kýl-li-m</i> (or <i>*kýl-la-m</i>) |

See section 4.5.5.4 for discussion of *-i-m* and *-a-m* in the plural.

The sequences *n-n* immediately following a stressed syllable may be avoided by the retention of a vowel that might otherwise undergo syncope, as in (4).

- (4) CU *i_jykwín-inin-qa* > *i_jykwín-ini-qa*, not **i_jykwín-ni-qa*
 [2SG.OBJ_fear-CAUS-PRS]
 ‘I am scaring you’

After an unstressed syllable, the morphological sequence *n-n* reduces to *n*. In (5) syncope creates two double-consonant sequences, which are reduced appropriately: *mm* > *7m*, as mentioned above, and *nn* > *n*.

- (5) CU *mi_hú\$-chymy-myn-inin* > *mi_hú\$-chym-myn-nin* > *mi_hú\$-chy7-my-nin*
 [3PL.OBJ_smoke.tobacco-1PL.SUBJ-PST.PL-CAUS]

‘we made them smoke’

Other sequences of identical consonants reduce as well.

- (6) CU a. *chúlup=py-jax-ngij* > *chúlu=py-ji-ngij* ‘he went away going in’
 b. *chymy-hál-lu7-wyn* > *chym-hál-lu-wyn* > *chym-há-lu-wyn*
 ‘we were going (motion) to search’
 c. *pymy-tysíw-wyn* > *pym-tysí-wyn* ‘they were playing’
 d. *nýq-qa* > *ný-qa* ‘is coming’

4.5.4.2. LOSS OF N AND X BEFORE CERTAIN SUFFIXES. The consonants *n* and *x* are lost before *q*, *ng*. These sequences occur quite frequently due to the fact that important tense-aspect suffixes include *-qa*, *-qal*, and *-qat*; and *-ngij* ‘go away verb-ing’ is a common derivational suffix. These appear following thematic suffixes, including transitive *-in* (sg.subj.) and *-myn* (pl.subj.), and intransitive *-jax*. Root-final *n* and *x* in athematic verbs are also affected. In (1d), *-jax* has lost its final consonant and has had its vowel changed to *i* by assimilation to the vowel of the following *-ngij* (also seen in 4.5.4.1 (6a) above).

- (1) CU a. *háv-in-qa* > *háv-i-qa* ‘is singing’
 b. *já7-jax-qa* > *já7-ja-qa* ‘is running’
 c. *háv-in-ngij-qa* > *háv-i-ngij-qa* ‘is going off singing’
 d. *já7-jax-ngij-qa* > *já7-ji-ngij-qa* ‘is going off running’
 e. *má-max-qa* > *má-ma-qa* ‘is pulverizing acorns’
 f. *nýnm-in-qa* > *nýnm-i-qa* ‘is chasing, following’

The consonant *n* is lost before *l*, *lj*. There is no example of the velar fricative *x* being lost in this environment because the sequence *-jax* plus the purposive motion suffix is *-jax-á-lu7*, with the suffix inducing the ablaut vowel. However, the transitive suffix *-in* and the causative suffix *-nin* produce the sequences *-in-lu7*, *-nin-lu7*, which then undergo further reduction to *-i-lu7*, *-ni-lu7*. After *py-*, *-i-lu7* reduces to just *-lu7*, and the transitive suffix *-in* completely disappears. The processes are displayed step by step in (2). The examples also involve the consonantal modifications *l* > *lj* (4.5.4.5), *kw* > *k* (4.5.4.6), *ch* > *sh* (4.5.4.7) and *ʔ* > \emptyset (4.5.4.8). The rules for these are context sensitive, but their full specification is omitted here.

(2)	CU	<i>týkw py- -in -lu7 -qal</i>	<i>pym- nách -inin -lu7</i>
		[discard-3SG-TR-MOTL-PST.IPFV.SG]	[3PL-sit-CAUS-MOTL]
	syncope	–	<i>pym- nách -nin -lu7</i>
	<i>n > Ø / _l</i>	<i>týkw py- -i -lu7 -qal</i>	<i>pym- nách -ni -lu7</i>
	<i>-i > Ø / py_</i>	<i>týkw py- -lu7 -qal</i>	–
	<i>l > lj / i_</i>	–	<i>pym- nách -ni -lju7</i>
	<i>kw > k</i>	<i>týk py- -lu7 -qal</i>	–
	<i>ʔ > Ø / _q; _#</i>	<i>týk py- -lu -qal</i>	<i>pym- nách -ni -lju</i>
	<i>ch > sh</i>	–	<i>pym- násh -ni -lju</i>
		<i>týk = pyluqal</i>	<i>pymnáshnilju</i>
		‘he was going to empty it out’	‘they were going to set it down’

4.5.4.3. LOSS OF J. The consonant *j* is lost following coronal consonants, *t*, *ch*, *ʃ*, *l*, *n*, and *j*. A few examples are listed in (1).

(1)	CU	a. <i>t</i>	<i>hýt-jax-wy</i>	>	<i>hýt-ax-wy</i>	‘is crouching’
		b. <i>ch</i>	<i>púlich-jax-qa</i>	>	<i>púlich-a-qa</i>	‘is going out’
		c. <i>ʃ</i>	<i>háʃ-jax-qa</i>	>	<i>háʃ-a-qa</i>	‘is going’
		d. <i>l</i>	<i>jál-jax-qa</i>	>	<i>jál-a-qa</i>	‘is flying’
		e. <i>n</i>	<i>híwyn-jax-i-sh</i>	>	<i>híwyn-ax-i-sh</i>	‘one who stands up’
		f. <i>y</i>	<i>húj-jax-i-sh</i>	>	<i>húj-ax-i-sh</i>	‘left over’

Note that *j-j > j* (1f) is also covered by the process of gemination reduction discussed in section 4.5.4.1. Further, *ch-j > ch* blocks the syllable-coda rule *ch > sh*; if *j* was retained, the expected form would be **púlish-ja-qa*.

4.5.4.4. L AND LJ. The lateral consonant *l* becomes *lj* following *i*. The conditioning *i* may be separated from the affected *l* by a glottal stop, as in *chym-chíʔ-lju* ‘we went to gather’. *L* and *lj* contrast only in environments other than after *i*. Many instances of this process can be seen in the examples in this section including in the derivation in 4.5.4.2 (2).

4.5.4.5. BACKING OF KW. The labialized velar stop *kw* backs to uvular [qʷ] when followed by unstressed *a*, as seen in (1) with examples based on the root *kwa_s* ‘eat’, repeated from

above in 4.5.3. This is a strictly allophonic process and is not represented in CU spelling.⁶⁸ Compare the allophonic relationship between *ch* and *sh*, which remain differentiated in the spelling.

- | | | | | |
|-----|----|----|----------------------------------|--------------------------|
| (1) | CU | a. | <i>kwá7-a-la7a-sh</i> | ‘edible’ |
| | | b. | <i>atáx-m-i [qw]a7-í-va7a-sh</i> | ‘cannibal, people eater’ |
| | | c. | <i>[qw]a7-í-sh</i> | ‘food’ |

4.5.4.6. REDUCTION OF SYLLABLE-FINAL *KW*, *XW*. The labialized velar stop *kw* is disfavored in syllable-final position. It may be delabialized, as in *týk=py-lu-qal* ‘he was going to empty it out’, as seen in 4.5.4.2 (2) above. This is a variable process; the word may also be heard as *týkw=py-lu-qal*. An example of *xw* ~ *x* is *ísaxw-i-lj* ‘man’s song’ vs. *ísax-py7-myn* ‘they sang a man’s song’. An alternative to delabialization is the loss of the stop component of *kw*, i.e. *kw* ~ *w*, as in *kwa~wva7-ma-li-m*, the reduplicated plural of *kwava7-ma-l* ‘a big spotted bird that cries in the night and brings bad news’.

4.5.4.7. ALTERNATION OF *CH-* AND *-SH*. As has already been seen in several examples above, CU shows the alternation *ch* ~ *sh*, with the former appearing prevocally and the latter non-prevocally, i.e., *ch* in the syllable onset and *sh* in the syllable coda, as seen in (1). This process is regular in CU, with *-ch* and *-sh* exhibiting complementary distribution, with none of the complexities discussed for the *ch* ~ *sh* alternation in LU in 4.4.9. Example (1c) shows *sh* < *ch* in the context of stem duplication, one of the contexts in LU where the rule of *ch* > *sh* lenition does not apply.

- | | | | |
|-----|----|--------------------------------------|---|
| (1) | CU | <i>ch-</i> | <i>-sh</i> |
| | a. | <i>áchi-lj</i> ‘pet, owned animal’ | <i>ny-7ásh</i> ‘my pet’ |
| | b. | <i>sú7i-sh</i> ‘jackrabbit’ | <i>sú7-cha-m</i> ‘jackrabbits’ |
| | c. | <i>tách-i-qa</i> ‘is splitting s.th’ | <i>tásh-tach-i-qa</i> ‘is tearing s.th into strips’ |

4.5.4.8. THE GLOTTAL STOP. Linguists have generally believed CU roots (and words) begin with consonants though the practical orthography does not include the word-initial

⁶⁸ This phonetic detail was included in the orthography used in earlier publications, such as Hill & Nolasquez 1973[2005] and Hill 2005. In the present study, *qw* represents only the sound sequence *q* followed by *w*.

glottal stops. It makes little difference whether there are underlying glottal stop segments in such elements or if initial vowels acquire an automatic abrupt onset which amounts to the insertion of an “inorganic” glottal stop. But non-initial glottal stops within morphemes are interesting for their patterns of retention and deletion.

4.5.4.8.1. WORD-FINAL GLOTTAL STOP. Word-final stressed short vowels do not occur. There are many examples in which it appears as if there has been a glottal stop inserted to “protect” such a vowel. This is a widespread phenomenon in Takic. Each language, taken individually, seems to have this rule of glottal stop insertion. But equally well, each language shows some unexpected complications. For example, if there is first a rule inserting a glottal stop after a word final short vowel and then a rule specifying that a word-final long vowel shortens, as in SE, the first rule, that of glottal stop insertion, no longer expresses a phonological constraint but rather a morphophonemic process.

In CU, several items that dischronically must have had a glottal stop inserted after what was originally a word-final stressed vowel, now retain that diachronically inserted glottal stop in derived forms. The inserted glottal stop is now morphologized. Examples include the first and second person singular pronouns in (1). (The third person pronoun, *pyʔ*, is not included in (1) because it is not used in the accusative.)

(1)	CU	nominative	accusative
	1	<i>nyʔ</i> ‘I’	<i>nýʔyj</i> ‘me’
	2	<i>yʔ</i> ‘you’	<i>yýʔyj</i> ‘you (acc.)’

With demonstratives, the historically “inorganic” glottal stop has also become lexicalized but with an elaboration. It has acquired an echo vowel, which is also seen in the accusative forms of the pronouns in (1). Examples are given in (2). The “inorganic” origin of the glottal stop in the demonstratives is obscured by arbitrary root changes in the accusative. The stress patterns of the forms in (2) suggest that they are stressless: the stress in the inflected form falls on the syllable before the inflectional morpheme and it is initial in the unaffixed root. *Ish-* may be cognate with Lu *hish* ‘what (acc.)’.

(2)	CU		nominative	accusative
	a.	this, this thing	<i>tʔi</i>	<i>iví-j</i>
	b.	something	<i>ish-míʔi</i>	<i>ish-miví-j</i>

The antiquity of the glottal stops of (1) and (2) is attested by the correspondence sets in (3) where CU forms are aligned with their cognates in SE and Hopi.

(3)		CU	SE	Hopi
	I	<i>nyʔ</i>	<i>nyyʔ</i>	<i>nyʔ</i> ~ (emphatic) <i>nyyʔ</i>
	me	<i>nyʔyʔ</i>	<i>nyyʔ</i>	<i>nyʔ</i>
	this (nom.)	<i>tʔi</i>	<i>iviʔ</i>	<i>iʔ</i>
	this (acc.)	<i>ivíʔ</i>	<i>ivi</i>	<i>it</i>

SE *nyyʔ* 'I' corresponds to the Hopi emphatic form *nyyʔ*. Though the glottal stops are not found in the accusatives of any of the accusative forms of SE or Hopi, the presence of it in the nominative seems to be just as lexicalized as is its correspondent in CU. It should be noted that Hopi has a diachronic loss of morpheme-internal intervocalic glottal stop and Hopi *nyʔ* 'me' may well be from **nyʔyʔ*, which would be exactly equivalent to CU *nyʔyʔ*.

There are many CU verbs which show a word-final glottal stop after a stressed vowel, as in (4). The comparative evidence points to the glottal stop of (4a-d) as a retention rather than a sound introduced by rule. The word-final glottal stop in (4e) is introduced as part of a widespread borrowing pattern and example (1f,g) show contrasting examples with a final stressed long vowel with no glottal stop; there is no insertion of a glottal stop in this environment.

(4)	CU	a.	<i>paʔ</i> 'will drink'	SE <i>paaʔ</i> 'drink'
		b.	<i>kwaʔ</i> 'will eat'	SE <i>kwaʔ-i</i> 'eat'
		c.	<i>chym-chíʔ</i> 'we gathered'	SE <i>chiʔa-j</i> 'gather'
		d.	<i>hiqsáʔ</i> 'will breathe'	(SE <i>hiik</i> 'breathe', Hopi <i>hikwsy</i> 'take a breath')
		e.	<i>tyvxáaʔ</i> 'will work'	(< Sp. <i>trabajar</i> 'to work')
		f.	<i>muu</i> 'will shoot'	SE <i>mu-j</i> 'shoot'
		g.	<i>xyy</i> 'will blow, of wind'	

The SE cognates for (1a-c) are included in support of the idea that CU retains an etymological glottal stop in these examples. *Híik*, the SE cognate of (4d) corresponds to only the first part of the CU *hiqsá7*. CU *xyy* (4g) may relate to the initial syllable of TV *hekaajok* ‘blow, of wind’, Hopi *hyykja-ngw* ‘wind’, and Cahita *heeka* ‘blow’, but if so, the CU initial consonant shows unexpected **h > x*.

4.5.4.8.2. GLOTTAL STOP DELETION. Many elements, both roots and suffixes show the variable presence of a glottal stop. This was treated in Hill (2005) in terms of glottal stop insertion. Now, armed with the comparative perspective, we reverse this and deal with the variably present glottal stop in terms of its deletion in specifiable environments, many of which are environments where the glottal stop is phonotactically disallowed.

Glottal stops do not occur in word-final position after unstressed vowels. The purposive motion suffix *-lu7* (GOPR) will serve to illustrate this deletion. CU *-lu7* (*-lju7* after *i*) corresponds to SE *-t\$u7*, which retains the glottal stop in all environments. The glottal stop is retained non-finally in (1a) but is lost word-finally in (1b,c).

- (1) CU a. *kyláw-lu7-nuk* ‘having gone to get firewood (same subject)’
 get.firewood-GOPR-SS
 b. *py-mí7aw-lu* ‘he arrived’
 3SG.PST-arrive-GOPR
 c. *chym-chí7-lju* ‘we went to gather’
 1PL.PST-gather-GOPR

Two other suffixes that have a final glottal stop are *-tu7* ‘verbalizer on adjectives’ (2a) and *-chu7* ‘become’ (2b).

- (2) CU a. *pisá7-tu7-i-lj* ‘ceremony for the dead’ (lit., ‘occasion of rotting’)
 b. *naxán-chu7-vy-l* ‘old man’

There also are non-final positions in which the glottal stop is lost, all of them, again, after unstressed vowels. The fact that glottal stops remain after stressed vowels allows us to omit writing stress on the vowel before the glottal stop in the practical orthography.

The glottal stop is lost before *p, q, w*, and perhaps other consonants, as seen in (3).

- (3) CU a. *py-jax-á-lu-pi* ‘for him to go say’
3SG-say-ABLAUT-GOPR-IRR.SUB
- b. *týk = ny-lu-qal* ‘I went to empty it’
empty = 1SG.PST-GOPR-PST.IPFV.SG
- c. *chym-hál-lu-wyn* ‘we were going (motion) to search’
1PL-search-GOPR-IPFV.PL

The glottal stop is variably lost before *n*, as seen in (4), where the glottal stop is lost before causative *-nin* (< *-inin*) in (4a) but retained in (4b).

- (4) CU a. *Púj-lu-nin-vichu-qa.*
dine-GOPR-CAUS-DES-PRS.SG
‘He wants to make him go to eat.’ (Jacobs 1975:175.21)
- b. *kyláw-lu7-nin*
get.firewood-GOPR-CAUS
‘will make someone go get firewood’

Example (5) shows glottal stop loss before *m*. This may represent an avoidance of homophony with *7m* from underlying *mm* (cf. 4.5.4.1 (1)). But perhaps the glottal stop is missing in the example because of its general underrepresentation in Jacobs (1975). The example also shows syllable-final glottal stop retention before *n* after a stressed syllable in *pá7-nin-*. Note that causative *-inin* retains its final *n* before *v* and loses it before the *l* of the motion suffix (cf. 4.5.4.2 above).

- (5) CU *Iví-j = ny* *i_pá7-nin-vichu-ni-lu-max-qat.*
this-ACC = 1SG.ERG 2SG.OBJ__drink-CAUS-DES-CAUS-GOPR-BEN-IFUT.SG
‘I’m gonna go over there for you, to make him want to make her drink.’ (Jacobs 1975:63.131)

The formation of the plural imperative provides an environment for glottal stop deletion after a stressed vowel, as in (6). With verb roots that end in glottal stop, the

singular imperative is marked by the addition of an echo vowel to the base form (though if the final stem vowel is *i* or *u*, sometimes *y* is heard instead). In verbs like those of (1) the future is usually identical with the underlying form. The plural is formed by lengthening the vowel of the final syllable of the base form and adding the plural suffix *-m*. The loss of the glottal stop is probably motivated by its phonotactic exclusion from before a syllable-final consonant (quite unlike the situation in Serran and AC).

(6)	CU		imperative	
		future	singular	plural
	a. drink	<i>paʔ</i>	<i>paʔa</i>	<i>paam</i>
	b. breathe	<i>hiqsáʔ</i>	<i>hiqsáʔa</i>	<i>hiqsáam</i>
	c. steal	<i>itúʔ</i>	<i>itúʔy</i>	<i>itúum</i>
	d. gather	<i>chiʔ</i>	<i>chíʔy</i>	<i>chiim</i>
	e. bite	<i>qyʔ</i>	<i>qýʔy</i>	<i>qyym</i>
	f. roost	<i>tiʔáʔ</i>	<i>tiʔáʔa</i>	<i>tiʔáam</i>

4.5.4.9. LOSS OF *H*. *H*-deletion is a minor and somewhat irregular process in CU. *H* may delete before an unstressed vowel, preconsonantly, and possibly word finally, but with exceptions that remain to be understood. The numerals *wih* ‘two’ and *pah* ‘three’ stand out as examples sporting postvocalic *h*.

Diachronic results of *h*-deletion can be seen in the words for ‘large owl’ in (1). There are different implementations in CU and CA.

(1)	CU	CA	
	sg. <i>muu-t</i> ‘large owl’	<i>muu-t</i>	< * <i>múhu-t</i> < * <i>múhu-ta</i>
	pl. <i>muu-ta-m</i>	<i>muh-ta-m</i>	< * <i>múh-ta-m</i> < * <i>múhu-ta-m</i> < * <i>múhu-ta-my</i>

In the singular, both CU and CA lose the intervocalic **h*. The environment for its loss is presumably intervocalic before an unstressed vowel. In the plural, syncope has removed the unstressed vowel, and the *h* remains in CA, but not in CU. In CU, the root for ‘owl’ may have been restructured such that synchronically it has no *h* in underlying form: *muu*.

An example of synchronic *h*-deletion is seen with the stressless root *paha_s* in (2), repeated from 4.5.1 (7).

- (2) CU a. *ný-pa* ‘my father’s older sister’
 b. *ny-pahá-j* ‘my father’s older sister (acc.)’
 c. *ny-pahá-m* ‘my father’s older sisters’

Here the *h* survives only before a (secondarily) stressed vowel. It disappears, along with the vowel *a* in unstressed, final position. The final *a* is possibly removed by apocope, placing *h* in word-final position (but cf. *pah* ‘three’) or else *h*-deletion is first, creating word-final *aa*, which then shortens to *a*, motivated by the phonotactic constraint that long unstressed vowels do not occur in that environment.

To show the some of the limitations on *h*-deletion we cite the examples in (3).

- (3) CU a. *Páhu-l* (a lineage at Soboba)
 b. *páh-chi-m* ‘three of them’
 c. *paas* ‘three times’

Example (3a) shows that an intervocalic *h* before an unstressed vowel is possible in CU. Perhaps the loss of **h* in *muut* ‘owl’ (1a) depends on the fact that both vowels, before and after *h*, are the same. Long (double) *uu* is an acceptable outcome, whereas if *h* were to delete in (3a), the phonotactically unacceptable **Pául* would result. CU has no clusters of unlike vowels.

Example (3b) shows that a word-medial postvocalic *h* is possible. This is incompatible with the account above for the derivation of CU *muutam* ‘owls’. It seems likely that *muutam* is not derived independently from **muhtam* but rather the root for ‘owl’ has been restructured as *muu*, as is found in the singular, and consequently there is no longer any underlying *h* to concern ourselves with in *muutam*. There may be no other example just like *muut*, *muutam* and it certainly would simplify the grammar to drop a phonological rule that covers just one example.

Example (3c) shows preconsonantal *h*-deletion with compensatory lengthening of the vowel. Comparative evidence informs us that the suffix for ‘times’ is the consonant *-s*. This would mean that the derivation of (3c) is **pah-s* > *paa-s*. The loss of *h* here is motivated by the fact that CU does not allow syllable-final consonant clusters. This may be another unique example.

Thus, *h*-deletion operates both diachronically and synchronically but as a collection of minor processes applying to a very small number of examples.

4.5.5. PROCESSES INVOLVING VOWELS. CU also has processes of vowel alternations involving assimilation and neutralization, as well as deletion by both apocope and syncope. There may also be instances of vowel epenthesis but the evidence is much less systematic.

4.5.5.1. PREFIX ASSIMILATION. The assimilation of a stressed prefix vowel to a following *u* has been seen at 4.5.2 above with the examples *nú-\$ulʔa* ‘my fingernails’, *pú-muvʔi* ‘his snot’.

4.5.5.2. SUFFIX ASSIMILATION. A second process of quality change involves unstressed *a* and *y* becoming *i*. This happens consistently in the suffixal combination *-jax-ngij*, which becomes *-ji-ngij*, as in example 4.5.4.2 (1d).

4.5.5.3. VOWEL REDUCTION. The most important quality change is that unstressed *a* becomes very much like *y*. This neutralization, or near neutralization, seems to be less likely, with the vowel less centralized, in secondarily stressed syllables and in closed syllables. The practical orthography writes the underlying form of such vowels where this can be determined, e.g. *atáxam* ‘people’, which is phonetically rather like [ətáxəm].

4.5.5.4. SYNCOPE. CU, like other Takic languages, has a process of syncope in the environment VC_CV. Syncope in the other languages is basically a mora-counting rhythmic rule with the question of underlying, lexical stress having a minor role. In CU syncope seems more sensitive to the immediate environment and tends to be triggered by the effect of lexical stress while mora counting is of minor importance, though it does figure with double-vowel syllables, below. Syncope is constrained by limitations on syllable structure and sequences of consonants, as seen above in 4.5.4.1 (“Against gemination”). Unlike in LU, there is no deletion of vowels in root-initial syllables following possessive prefixes.

Derivations illustrating syncope are given in (1).

(1)	CU	a.	<i>húna -la</i> [badger-ABS]	b.	<i>húna -wy -ta</i> [badger-AUG-ABS]	c.	<i>húna -wy -ta -my</i> [badger-AUG-ABS-PL]
	apocope		<i>húna-l</i>		<i>húna-wy-t</i>		<i>húna-wy-ta-m</i>
	syncope		–		<i>hún-wy-t</i>		<i>hún-wy-ta-m</i>
			<i>hunal</i> ‘badger’		<i>hunwyt</i> ‘bear’		<i>hunwytam</i> ‘bears’

‘Bear’ in CU is the augmentative form corresponding to ‘badger’, in origin presumably a euphemism, the “real” word for ‘bear’ being too strong (cf. 4.2.1, note 3). The addition of the augmentative *-wy* to underlying *húna* has the result that *húna* loses its final vowel by syncope. In the derivation apocope must precede syncope because it removes a possible environment for syncope (see below).

Syncope can apply several times in a single word, working its way left to right. A derivation showing a repeated application of syncope is seen in (2).

(2)	CU	<i>myqan_s -í -qa -ta -my</i> [kill-ABLAUT-IFUT-ABS-PL]
	apocope	<i>myqan-í-qa-ta-m</i>
	syncope (1)	<i>myqn-í-qa-ta-m</i>
	syncope (2)	<i>myqn-í-q-ta-m</i>
		<i>myqníqtam</i> ‘those who are going to kill someone/something’

Some vowels are exceptional to syncope. That is, some vowels fail to delete even though they find themselves in the environment for syncope. The failure of a vowel to syncopate leaves it in place to be part of the environment for the vowel of the following syllable to undergo syncope. An example is given in (3). We arbitrarily mark the exceptionality of the vowel with a grave accent. (Exceptions of this sort may be diachronically from long vowels.)

(3)	CU	a.	<i>nángì -cha</i> [war-ABS]	b.	<i>nángì -wy -ta</i> [war-AUG-ABS]	c.	<i>nángì -wy -ta -my</i> [war-AUG-ABS-PL]
	apocope		<i>nángì-ch</i>		<i>nángì-wy-t</i>		<i>nángì-wy-ta-m</i>
	syncope		–		–		<i>nángì-w-ta-m</i>
	<i>ch > sh</i>		<i>nángì-sh</i>		–		–
			<i>nangish</i> ‘war’		<i>nangiwyt</i> ‘warrior’		<i>nangiwtam</i> ‘warriors’

In (3b) the vowel *i* has failed to undergo syncope. If (3b) behaved the same way as (1b), *húnwyt* ‘bear’, the expected form would be **nángwyt* rather than *nángiwyt*. An inspection of the underlying form, *nángì -wy -ta*, shows that syncope might instead apply to the next vowel, *y*. But since apocope applies before syncope, as it does in all the Takic languages, the environment for the syncope of *y* has been removed. But in (1c), the addition of the plural suffix *-my* preserves that environment and the vowel of *-wy* is lost.

Syncope does not occur after a double-vowel syllable. Each one of the vowels in the pair of vowels constitutes a mora. With a double vowel syllable, the first mora, being stressed, is in strong position. Thus the second mora is in weak position. Correspondingly, with the strong–weak–strong alternation, the vowel of the next syllable is in strong position. A vowel in strong position does not syncope.

(4)	CU	base form	suffixed form	
	a.	<i>páana-t</i> ‘tarantula’	<i>páana-ti-m</i> ‘tarantulas’	not <i>*páan-ti-m</i>
	b.	<i>kucháara</i> ‘spoon’ (< Sp. <i>cuchara</i>)	<i>ny-kucháara-ki</i> ‘my spoon’	not <i>*ny-kucháar-ki</i>

From another perspective, syncope is unable to produce a non-final long-vowel closed syllable. This sort of syllable is acceptable in TV, Serran, and LU, but not in CU.

Spanish loan words like CU *kucháara* (4b) may have a different explanation. In Serran there is a borrowing pattern such that vowel-final Spanish words are borrowed with a glottal stop added at the end, cf. SE *kuchaaraʔ*, KI *kut\$aaaraʔ* (3.98.0483). An underlying stem-final glottal stop in CU would protect the vowel from both apocope and syncope and would then delete by regular rule. That CU once had this pattern for borrowing can be inferred from the example *tyvxáaʔ* ‘will work’, from Spanish *trabajar*, where the stress has protected the glottal stop from deletion.

An interesting pattern emerges with nouns inflected for accusative case. In the singular, the accusative ending does not provide a context for syncope, as seen in (5).

(5)	CU	nominative	accusative	
	a.	<i>pípi-lj</i> ‘strawberry’	<i>pípi-lja-j</i>	> <i>pípi-lj-i</i> not <i>*píp-lj-i</i>
	b.	<i>ísi-lj</i> ‘coyote’	<i>ísi-lja-j</i>	> <i>ísi-lj-i</i> not <i>*ís-lj-i</i>
	c.	<i>káwa-l</i> ‘woodrat’	<i>káwa-la-j</i>	> <i>káwa-l-i</i> not <i>*káv-l-i</i>

There is no presently understood reason for syncope not to apply in the accusative singular. It should be noted, however, that CA has a mystery inserted glottal stop (which blocks syncope) in the equivalents of these CU forms that resist syncope (cf. 4.6.5 (1) below). However, with the addition of the plural suffix, syncope applies normally. Compare especially (5a accusative) and (6a plural) and note also the syncope of the vowel of the absolutive suffix in the accusative plural of (6c).

(6)	CU	singular	plural	
		nominative	nominative	accusative
	a.	<i>pípi-lj</i> ‘strawberry’	<i>píp-lja-m</i>	<i>pip-lja-m-i</i>
	b.	<i>máchisa-t</i> ‘bat’	<i>máchis-ta-m</i>	<i>máchis-ta-m-i</i>
	c.	<i>maxí-lj</i> ‘dove’	<i>maxí-lji-m</i>	<i>maxí-lj-m-i</i>

Also of interest is the fact that the second vowel of (6b) is resistant to syncope. It is not **máshsa-t*, **máshsa-t-m-i*. Syncope may be blocked to avoid the unwanted consonant cluster, **chs* > **shs*. This may also be an instance of the non-applicability of a phonological rule in a non-derived environment: if the rule of syncope could apply to the vowel *i* here, then there would be no evidence to postulate the presence of this vowel in underlying form.

4.5.5.5. VOWEL EPENTHESIS. J. Hill (2005) proposed vowel epenthesis as an explanation for a number of occurrences of vowels which at that time had no other evident explanation. On revisiting the matter, we now find that there is very little evidence for vowel epenthesis in CU.

The examples in (1) were offered (Hill 2005:33) as containing epenthetic vowels to break up word-final consonant clusters. Forms such as these are now understood as having identifiable morphemes in the final syllable. The references are to where the morphemes in question are discussed in chapter 14.

(1)	CU	a.	<i>púj-i-sh</i> ‘full after dining’	14.14.5 (4)
		b.	<i>ísaxw-i-lj</i> ‘the singing’	14.9.3 (1)
		c.	<i>ísaxw-a-t</i> ‘already sung’	14.2.4 (4)
			(< isaxwet > in Hill 2005:33 (65c))	

Focusing on the widespread Takic processes of apocope and syncope has resulted in a new understanding of forms that earlier were framed in terms of somewhat irregular vowel epenthesis (Hill 2005:34-36).

Possibly the only good example of an inserted vowel is the echo vowel that occurs finally in the imperative forms of glottal-stop final verbs; cf. the examples given above in 4.5.4.8.2 (6).

4.5.5.6. SHAPES OF THE ABSOLUTIVE WITH THE PLURAL. CU, along with the other non-Serran Takic languages, has two different forms of the absolutive suffix in terms of vocalism, a fact that is evident only in the nominative plural. The correspondences across the languages are displayed in (1). The Serran languages show absolutives only in *-Ca*.

(1) Absolutive suffix vocalism in Takic

	PTak	CA	CU	LU	TV	Serran
a.	*-ta	-Ca	-Ca	-Ca	-Ca	-Ca
b.	*-ty	-Ce	-Ci	-Cu	-Co	–

In 6.1.1 the theory is advanced that the Takic absolutives have a double origin, an accusative **-ta* and a plural **-ty*. The Serran languages appear to have inherited only **-ta*, and this appears only rarely in the plural. However, in Cupan and TV, the plural suffix from **-my* follows the absolutive. We suggest that the CU *-Ci* absolutives are reflexes of the second suffix, **-ty*. However, the expected vocalism would be *-ty*. In CU, since there is a strong tendency for unstressed *a* to sound just like unstressed *y*, the forms from **-ty* may have been modified to enhance the contrast with forms from **-ta*, and the etymologically expected vowel *y* has shifted to *i* in the **-ty* series of absolutives.

J. Hill (2005) found that the vowel *a* appears in the absolutive if syncope has applied to the preceding syllable, while *i* appears if it has not (the contrast can be seen in 4.5.5.4 (7) above). This is also the rule in MCA (4.6.2). There are, however, a few exceptions, mainly with the plural of nominalizations with *-wyny-t* (see 14.9.1) which is always *-wyn-ti-m*. The deverbal *-wyn-ti-m* exceptions apparently retained their original high vowel and did not fall in line with the development of the complementary distribution

of the absolutive allomorphs between syncopated and non-syncopated plural constructions.

When the process of syncope, removes the vowel immediately before the absolutive suffix, the plural form ends in *-Ca-m*.

(2)	CU	singular	plural	
			underlying form	surface form
	a.	<i>ísi-lj</i> ‘coyote’	<i>ísi-lja-my</i>	> <i>ís-lja-m</i>
	b.	<i>káwa-l</i> ‘woodrat’	<i>káwa-la-my</i>	> <i>káw-la-m</i>
	c.	<i>kíka-t</i> ‘householder’	<i>kíka-ta-my</i>	> <i>kík-ta-m</i>
	d.	<i>nángi-wy-t</i> ‘warrior’	<i>nángi-wy-ta-my</i>	> <i>nángi-w-ta-m</i>
	e.	<i>qyjú-wy-t</i> ‘whale’	<i>qyjú-wy-ta-my</i>	> <i>qyjú-w-ta-m</i>
	f.	<i>myqn-í-qa-t</i> ‘one who is going to kill someone or s.th’	<i>myqn-í-qa-ta-my</i>	> <i>myqn-í-q-ta-m</i>
	g.	<i>sú7i-sh</i> ‘jackrabbit’	<i>sú7i-cha-my</i>	> <i>sú7-cha-m</i>

Interestingly, absolutive plurals in *-Ci-m*, rather than *-Ca-m*, are found in contexts in which there is potential contrast with *-C=am*, where *=am* is the mirative clitic. There is no syncope before the mirative clitic. For instance, *ísilj=am* ‘There’s a coyote!’, but *ís-lja-m*, with syncope, is unambiguously ‘coyotes’. (The informal translation ‘there is an X!’ is intended to suggest the range of meanings of the mirative, used when the speaker has just noticed something.) With a word like *hún-wy-t* ‘bear’ there is no syncope in the plural, *hún-wy-ti-m*, or in the mirative, *hún-wy-t=am* ‘there’s a bear!’. Using the plural form in *-Ci-m*, namely *hún-wy-ti-m*, avoids ambiguity. Once this pattern is established, the ending *-Ci-m* may be selected for any noun with a vowel immediately before the absolutive suffix, even if the mirative form would be different, as in forms like those seen in (3), where the stems are marked for plural by reduplication.

(3)	CU	singular	mirative	plural
	a.	<i>naxáni-sh</i> ‘man’	<i>naxáni-ch=am</i>	<i>ná-nxa-chi-m</i>
	b.	<i>níshljuyv-l</i> ‘old woman’	<i>níshljuyv-l=am</i>	<i>ní-nishljuyv-li-m</i>
	c.	<i>pávy-l</i> ‘deer priest’	<i>pávy-l=am</i>	<i>pa-pávy-li-m</i>
	d.	<i>púu-l</i> ‘doctor’	<i>púu-l=am</i>	<i>pú-vu-li-m</i>
	e.	<i>yjy-t</i> ‘thief’	<i>yjy-t=am</i>	<i>y-7jy-ti-m</i>

There are, however, a few “irregular” plurals in *-Ca-m*, as in (4), but nonetheless the contrast with the mirative remains.

(4)	CU	singular	mirative	plural
	a.	<i>kíi-ma-l</i> ‘boy’	<i>kíi-ma-l=am</i>	<i>kí~ki-ta-m</i>
	b.	<i>nawí-ka-t</i> ‘woman’	<i>nawí-ka-t=am</i>	<i>ná~nwi-ta-m</i>

Nánwitam (4b, plural) is Roscinda Nolasquez’s form though on one occasion she said *nanwitim*. Paul-Louis Faye’s consultants in the 1920s said *nánwiktam*, which is regular.

Nouns derived from stative verbs with the stative suffix *-wyn* and nominalizer *-ta* have singular forms ending in *-wyny-t* and plurals in syncopated *-wyn-ti-m*, as in (5).

(5)	CU	singular	plural
	a.	<i>xwá-jax-wyny-t</i> ‘White person’	<i>xwá-jax-wyn-ti-m</i>
	b.	<i>ljáw-jax-wyny-t</i> ‘cave’	<i>ljáw-jax-wyn-ti-m</i>

The root for ‘white’ is *xwájj*; it loses its final *j* by degemination (cf. 4.5.4.1).

A few other exceptional examples appear in J. Hill’s field notes (some of these appear in Hill 2005), as well as in notes by Paul-Louis Faye and J. P. Harrington. In preparing this comparative grammar, J. Hill has been able to re-check many of these apparently exceptional plural transcriptions against tape recordings. In every case where these exceptional transcriptions could be re-checked, they turned out to be wrongly transcribed. For instance, a transcription <*nántim*> ‘chiefs’ turned out to be pronounced *nýntam*, and <*mukíkmaləm*> turned out to be *mukíkmalim*. These forms are hard to hear; *i* is [ɪ], *a* is [ɛ], and *y* is phonetically somewhere in between. We thus suggest that the exceptional cases which we have not been able to re-check may also be erroneous transcriptions, and that the regularity discussed here, *-ta* following a syllable that has undergone syncope, *-ti* following one that has not, may extend to them as well.

4.6. CAHUILLA MORPHOPHONOLOGY. The discussion in this section depends heavily on the work of Seiler (1977) and of Seiler and Hioki (1979). Additional material has been found in Sauvel and Munro (1981) and in Sauvel and Elliott (2004). The former two sources

reflect DCA, the latter two MCA, but the two varieties differ little in their morphophonological details. A final source is Harrington's field notes on MCA. As in the other sections, we review here only major processes that change the structure of morphemes that appear in the examples. We also depart from earlier analyses of CA somewhat as we attempt to characterize CA morphonemics from a point of view informed by comparative Takic.

CA shares many processes with the other Takic languages, most importantly vowel apocope and syncope. The rules for both of these processes must be adjusted somewhat to deal with various developments found in CA. A major change in CA compared with the other Takic languages is the restructuring of stress. Stress has shifted to the initial syllable, sometimes of the root, sometimes of the whole word. (There are lexical exceptions, especially among Spanish loan words.) A consequence of that change has been to make the representations of the underlying forms of CA all the more abstract, since many of the phonological phenomena, especially the patterns of syncope, remain as if the stress shift had not occurred.

4.6.1. APOCOPE. Apocope functions in CA as it does in all the Takic languages by removing word-final vowels. Examples are given in (1), where the absolutive suffix undergoes apocope in the singular, where it is word-final, but not in the plural, where it is followed by the plural suffix. However in the plural forms, the plural suffix (underlying *-me*) itself is apocopated. (Note that any word-final vowel that occurs in surface form must be treated as an exception to apocope.)

(1)	CA	singular	plural
	a. leaf	<i>pala-t</i>	<i>pala-te-m</i>
	b. arrow	<i>huja-l</i>	<i>huja-le-m</i>
	c. white lizard	<i>tiʔa-l</i>	<i>tiʔa-le-m</i>
	d. small mushroom	<i>tiwi-lj</i>	<i>tiwi-lje-m</i>
	e. flea	<i>muka-sh</i>	<i>muka-che-m</i>

Apocope also applies to at least one loan word (2) .

(2) CA		singular	plural	
	duck	<i>paat</i>	<i>paatu-m</i>	< Sp. <i>pato</i>

This probably results from a reanalysis: *paa-t* [duck-ABS], *paa-tu-m* [duck-ABS-PL].

Also as the other Tadic languages, CA shows the effects of syncope, the rhythmically motivated deletion of medial vowels. The examples in (3) are from DCA; the MCA situation is discussed in 4.6.2

(3) DCA		singular	plural
a.	rattlesnake	<i>sewe-t</i>	<i>sew-ta-m</i>
b.	mountain sheep	<i>paʔa-t</i>	<i>paʔ-te-m</i>
c.	skunk	<i>tekwe-l</i>	<i>tekw-la-m</i>
d.	antelope	<i>teni-lj</i>	<i>ten-lja-m</i>
e.	tick	<i>machi-lj</i>	<i>mash-lja-m</i>
f.	ground squirrel	<i>qingi-sh</i>	<i>qing-che-m</i>

The patterns of syncope are intimately connected with vowel length and/or stress placement in the other Tadic languages, but in CA, which has lost original length distinctions and has restructured stress, roots like those of (1) have to be lexically marked as exceptions to syncope.

4.6.2. ABSOLUTE SUFFIX VOCALISM. CA shares with the other non-Serran languages the occurrence of two different vowels in the absolute suffix. In CA, the vowels that appear in nominative plurals are *a* or *e*.

The complementary distribution found in CU does not occur in DCA, as can be seen in 4.6.1 (3). Both absolutes appear following syllables that have undergone syncope. Hence for DCA, as for LU and TV, the selection of the absolute suffix is a lexical feature of the noun.

In contrast, the vocalism of the absolute suffix in MCA (Sauvel and Munro 1981:35-36) is like that of CU. Absolutes with *-Ca* appear following syllables that have undergone syncope (1a,b), and also in the plurals of nouns with long vowels from VhV, where the *h* appears in the plural (1e,f). Where these conditions do not apply, the plural is *-Ce-m*.

(1) MCA		singular	plural
a.	wildcat	<i>tuku-t</i>	<i>tuk-ta-m</i>
b.	badger	<i>huna-l</i>	<i>hun-la-m</i>
c.	cave	<i>teki-sh</i>	<i>teki-che-m</i>
d.	tick	<i>machi-lj</i>	<i>mash-lja-m</i>
e.	owl	<i>muu-t</i>	<i>muh-ta-m</i>
f.	basket	<i>neat</i>	<i>neh-ta-m</i>

As in CU, there are a few exceptions, e.g. *kia-t* ‘child, baby’, pl. *ki~ki-ta-m* (Sauvel & Munro 1981:37).

The Harrington notes on MCA show that plurals of derivations in *-wene-t* with syncope are also exceptional, like those in CU *-wyny-t*. They show plurals in *-tem* rather than expected *-tam*. However, most of these plurals in the notes have not undergone syncope, as in (2c,d).

(2) MCA		singular	plural
a.	cottonwood	<i>lavvalwene-t</i>	<i>lavvalwen-te-m</i> (3.107.0665)
b.	circular thing	<i>punnewene-t</i>	<i>punnewen-te-m</i> (3.111.0249)
c.	dull, smashed	<i>mattashwene-t</i>	<i>mattaswene-te-m</i> (3.109.0424)
d.	epidemic	<i>mukwene-t</i>	<i>mukwene-te-m</i> (3.108.0742)

4.6.3. ABLAUT VOWELS. In CU, as discussed in 4.5.3, ablaut vowels *i* or *a* follow stressless verb roots and derivational suffixes derived from these roots. In CA, where stress is always stem initial (with the exception of a small set of ‘short’ noun roots with structure CV, and with the verb *jax*, where it is word-initial), the morphological peculiarities that distinguish stressed and stressless verb roots have been almost completely lost, so the presence of absence of the ablaut vowel is rather arbitrary and must be lexically specified. All of the verb roots that permit ablaut happen to be consonant final (there is a list in 10.6.1 (10)), but there are also consonant-final roots that do not permit it. Some CA suffixes trigger following ablaut vowels as well; these are cognate with ablaut-inducing suffixes in CU but with the addition of the nominalizer (*-i*)-*we-t*. Cahuilla ablaut is treated in more detail in 10.6 and 11.6. A few examples with the suffix sequences -

va(ʔa)-sh, an agentive, and *-vaʔa-l*, of varying meanings, often instrumental, exhibit *i*-ablaut, and are seen in (1).

- | | | | |
|-----|----|--------------------------------------|---|
| (1) | CA | non-ablauting roots | ablauting roots |
| | a. | <i>amu-va-sh</i> ‘hunter’ | e. <i>aj-i-va-sh</i> ‘picker (from a tree)’ |
| | b. | <i>aʔalxe-va-sh</i> ‘storyteller’ | f. <i>chiʔ-i-va-sh</i> ‘picker (from the ground)’ |
| | c. | <i>tuxpi-va-sh</i> ‘player’ | g. <i>hing-i-va-sh</i> ‘one that flies’ |
| | d. | <i>chal-vaʔa-l</i> ‘peeler, scraper’ | h. <i>paʔ aj-i-vaʔa-l</i> ‘picking place’ |

4.6.4. CONSONANT ALTERNATIONS: *CH* ~ *SH* AND *L* ~ *LJ*. CA shows the alternation of *ch* and *sh*, whereby the prevocalic affricate *ch* is lenited to the fricative *sh* when it loses its vowel, whether through apocope (4.6.1 (1e, 3f)) or syncope (4.6.2 (1c,d)). This alternation is shared with the other Cupan languages but with differences in exceptionality. In CU the above description fits all examples; *ch* and *sh* distribute as allophones. A practical writing system for CU could use the same symbol for both sounds, except for the powerful interference from English. In LU, the lenition of *ch* to *sh* takes place in inflectional processes but not in stem derivation, where many examples are found of *ch* that does not lenite.

In DCA we have identified but a single lexical exception to non-prevocalic lenition of *ch* to *sh*, the root *luch-* ‘rough’. Two examples containing this non-leniting root are given in (1), (1a) with reduplication and (1b) with the derivational suffix *-we*. We may speculate that this exceptionality resides in its possible status as a loan word, perhaps from Spanish *luchar* ‘battle’.

- (1) DCA
- | | |
|----|-------------------------------|
| a. | <i>luch~lúchaw</i> ‘be rough’ |
| b. | <i>He-push luch-we-t.</i> |
| | 3SG-face rough-NMLZ-ABS |
| | ‘His face is rough.’ (S&H 97) |

MCA has exceptional cases of *ch* before ʔ, including in the very common indefinite *hichʔa* ‘what, which, something’ (3.107.0235) with plural accusative *hichʔame* (3.110.0540) – although the nominative plural is unexceptional *hicham* (3.110.0540). Another example precede the possessive suffix *-ʔa*, *tachʔa* ‘its bark, shell’.

Both MCA and DCA also have an autonomous *sh*. But there is no reverse rule of changing an underlying fricative to an affricate. CA examples of *sh* independent of *ch* are few (only (2b) is attested for MCA), but the words containing autonomous *sh*, as in (2), show no unusual phonological behavior.

(2)	CA	singular	plural	
	a.	locoweed	<i>qashi-lj</i>	<i>qash-lja-m</i> (S&H 167)
	b.	small one	<i>inishi-lj</i>	<i>inishi-lje-m</i> (S&H 65)
	c.	pretty, cute (girl)	<i>sheljshímima</i>	(?) (S&E 704)

There is no known explanation of the unusual occurrence of *sh* in *qashilj* (2a). It might be a loan word (from CU *qa\$ilj*), but however it entered the language, it demonstrates that *sh* may function in CA as an autonomous consonant.

The word *inishilj* (2b) is derived from the adverb *inis* ‘a little, for a little while’ with consonant palatalization in the derived noun being an expression of diminution. The MCA form of the adverb, *inish*, is already palatalized, and the MCA noun shows additional palatalization in the form *iñishilj*. Other examples showing diminutive palatalization is *eljka*, the diminutive of *elka* ‘pretty (girl)’, and *keñish* ‘tasty one’, an expressive nominalization related to *kenma* ‘delicious, tasty’.

Sheljshímima (2c) is an expressive form.

In DCA, Harrington occasionally recorded *sh* before a vowel in what are probably examples of relaxed or slurred speech, as in (3), where the desiderative suffix, usually *-vichu*, appears with *sh*.

(3)	MCA	<i>Ne7</i>	<i>kile7</i>	<i>pe-n-qwa7-i-vishu-qa.</i>
		1SG.PRO	NEG	3SG.OBJ-1SG-eat-ABLAUT-DES-PRS
		‘I don’t want to eat it.’ (3.111.0068)		

MCA also has a couple of loans with initial \$, recognized as foreign words by Harrington’s consultant Adán Castillo. These are *\$aa7vet* ‘White person, magician’ (3.107.0822) and *\$ahoovayt* ‘a dance’ (3.109.0269).

As in CU, the absolutive suffix *-ljV* occurs after stems ending in the vowel *i* to the exclusion of *-lV*. Presumably at one time there was an allophonic rule $l > lj$ after *i*. But

in the present-day language, a few words show the sequence *il*, as in *ĩlu* ‘thread’, from Spanish *hilo*, and *ly* can be found in environments other than after *i*, as in *muljak* ‘lizard’, *ajamalj* ‘raccoon’ (probably < **aja-maj-La* [raccoon-DIM-ABS]). While this feature appears with great regularity in the MCA speech of Katherine Sauvel, the speech of Harrington’s MCA consultant, Adán Castillo, apparently lacked this palatalization. For ‘lizard’, Harrington recorded *mullak* with geminate *ll* (3.107.0378). Neither absolute *l* nor *l* in other suffixes following *i*, or in stems following *i*, shows palatalization in the Harrington notes, as seen in (4). Also note that Harrington often writes *e* for lowered *i*, as seen in (4i). Compare Harrington’s *ivvilo7* (4c), with *o* representing lowered *u*, with *ivilju7* in Sauvel and Munro (1980).

(4) MCA	i.	ii.
a. “pino” (probably ‘fir’)	<i>jujje-l</i> (3.111.0827)	<i>jujji-le-m</i> (3.113.0224)
b. oak tree	<i>kwiññe-l</i> (3.110.0290)	<i>kwiññi-la-m</i> (3.113.0224)
c. speak Cahuilla	<i>ivvilo7-</i> (3.108.0513)	
d. vein (of silver)	<i>willewen-t</i> (3.113.0096)	

4.6.5. SYNCOPE. Syncope in CA may be restricted in the presence of a morpheme boundary, as is perhaps also true of CU but definitely not in LU. Compare (1a) and (1b). The whole stem of (1a) resists syncope while in (1b) the stem-final vowel is syncopeated in the plural. It is possible that the grammar could flag each vowel as exceptional to syncope or not, but it is probably much less costly for the entire root *waxachi* to be specified as subject to syncope, with the medial vowel being protected by not being at a boundary.

(1) CA	singular	plural
a. dove	<i>maxaji-lj</i>	<i>maxaji-lje-m</i>
b. frog	<i>waxachi-lj</i>	<i>waxash-lje-m</i>

The morpheme boundary requirement may be suspended in reduplication, as shown by the examples in (2). (2b) also shows the *ch* > *sh* change.

- (2) CA a. *pele-* ‘heavy’ *tax-pe~ple-mu-* ‘get too heavy’
 b. *chapi-* ‘split’ *cha~shpi-* ‘split (pl.subj)’ < *cha~chapi-*

Morpheme-internal syncope is also attested diachronically in compounding. The noun *pasnat* ‘tar, pitch’ is derived from *pa-* ‘great’ and **sanat* ‘pitch’. In contemporary CA, **sanat* has been replaced by *saanat* ‘gum’, either expressively lengthened or a loan word from LU *\$aanat*.

Syncope feeds a number of processes in CA. The examples in (3) show intervocalic *h*-deletion (3a,b,d-g) and homorganic glide deletion (3h) and possibly also in (3c). The surface form for ‘cradle’, *siat* (3f,h), could correspond to either posited underlying form.

(3) CA		singular		underlying
a. owl		<i>muu-t</i>	pl.	<i>muh-ta-m</i> <i>muhu</i>
b. roadrunner		<i>pui-sh</i>	pl.	<i>puh-che-m</i> <i>puhi</i>
c.	~	<i>puui-sh</i>		<i>puwi</i> (?)
d. wooden mortar		<i>paa-l</i>	poss.	<i>-pah-7a</i> <i>paha</i>
e. fur, down		<i>pui-lj</i>	poss.	<i>-pih-7i</i> <i>pihi</i>
f. cradle		<i>sia-t</i>	loc.	<i>sih-nga</i> <i>siha</i>
g.			poss.	<i>-sih-7a</i> <i>siha</i>
h.		<i>sia-t</i>	poss.	<i>-sij-7a</i> <i>sija</i>

Intervocalic glides that are homorganic with the preceding vowel delete: *ijV* > *iV*, *uwV* > *uV*. The pair of possessed forms for *siat* ‘cradle’ (8g,h) attest to a variable interpretation of what form underlies *siat*.

The dictionary spellings of Seiler and Hioki (1979) are somewhat inconsistent with such items. This suggests that the glide deletion may be variable and perhaps also that these items were variably perceived. The spellings of ‘roadrunner’ above, *pui-sh* (3b) and *puui-sh* (3c) may represent the difference between a form derived from underlying *puhi*, with the “real” deletion of *h*, and one from *puwi* in which the *w* was heard (*puwish*?) but interpreted as a lengthening of the first vowel. The word for ‘palm tree’ is given as both < *mawul* > and < *mawl* > (Seiler & Hioki 1979:103). Since CA otherwise has no final consonant clusters, both should be written *maul*. *Hawaish* ‘mist, fog’ (< *hawaj-i-sh* >) is written < *háway-š* > (ibid. p. 49). Another example is *huat* ‘iodine bush’. But glides that

would be expected to delete, appear in the Seiler and Hioki spellings of the Spanish loan words < sandíya > (*sandíja*) ‘watermelon’ and < míyel̃ > (*mijelj*) ‘honey’, even though their Spanish originals, *sandía* and *miel*, have no intervocalic glides.

4.6.6. GLOTTAL STOP INSERTION AND DELETION AND DOUBLE CONSONANT REDUCTION. Like *h* and the glides, the glottal stop shows variation in its occurrence. The question arises as to whether the glottal stop is inserted in certain contexts or whether the glottal stop is underlying in all instances and is contextually deleted.

There seems to be at least one clear pattern of glottal stop insertion, which is seen with the combination of absolutive suffix plus the accusative case suffix. However this has come about, it can be regarded synchronically as an arbitrary part of the contraction process whereby underlying *-Ta -je* [-ABS-ACC] reduces to *-Ci*. This contraction process is common to all the Takic languages except for KI, but only CA embellishes it with the glottal stop. Sometimes, as in (1i), the glottal stop is heard after the absolutive suffix.

(1)	CA	nominative	accusative
	a. fire	<i>ku-t</i>	<i>ku-ʔt-i</i>
	b. house	<i>ki-sh</i>	<i>ki-ʔch-i</i>
	c. blossom	<i>se-l</i>	<i>se-ʔl-i</i>
	d. dress	<i>ela-t</i>	<i>ela-ʔt-i</i>
	e. moon	<i>meni-lj</i>	<i>meni-ʔlj-i</i>
	f. money	<i>qichi-lj</i>	<i>qichi-ʔlj-i</i>
	g. little bird	<i>wikikma-lj</i>	<i>wikikma-ʔlj-i</i>
	h. smoke tree	<i>naswe-t</i>	<i>naswe-ʔt-i</i>
	i. wooden mortar	<i>paa-l</i>	<i>paa-ʔl-i ~ paa-lʔ-i</i> (Seiler 1977:55)

It is interesting that the CA forms that have the glottal stop in the accusative correspond to CU forms that resist syncope of the syllable preceding the absolutive + accusative sequence (see 4.5.5 (6)). Presently we have no principled account for either the CA glottal stop insertion or for the CU resistance to syncope.

A similar contraction takes place in the plural, with *-me -je* [-PL-ACC] reducing to *-mi*, but without any added glottal stop. And correspondingly, the CU plurals do not resist syncope.

There are other suffixes that commonly show alternations with and without glottal stops. For most of these it can probably be demonstrated that the variable glottal stop is underlying, not inserted. An instructive example is provided by the agentive suffix, as in (2).

(2)	CA	singular	plural
	cook (n.)	<i>kul-va-sh</i>	<i>kul-va7-che-m</i>

The CA agentive suffix is almost certainly cognate with the CU suffix sequence *-va7a-sh* of the same meaning. This cognacy suggests that the CA suffix is underlyingly *-va7a-sh* and the glottal stop is retained in the plural but deleted in the singular. An account of this posits a rule of contraction whereby a sequence V_17V_1 simplifies to V_1 under specifiable conditions, possibly in unstressed position within a morpheme. This contraction logically follows the application of syncope since the result of the contraction does not undergo syncope. The derivation of the singular and plural of ‘cook’ is shown in (3).

(3)	CA	<i>kul -va7a -che</i>	<i>kul -va7a -che -me</i>
		[cook-AGTV-ABS]	[cook-AGTV-ABS-PL]
	apocope	<i>kul -va7a -ch</i>	<i>kul -va7a -che -m</i>
	syncope	–	<i>kul -va7 -che -m</i>
	contraction	<i>kul -va -ch</i>	–
	<i>ch > sh</i>	<i>kul -va -sh</i>	–
		<i>kulvash</i>	<i>kulva7chem</i>
		‘cook’	‘cooks’

Note that in certain circumstances in CA *-va7a-sh*, just as in CU, induces an ablaut vowel *i* (see 4.6.3 (1)).

The alternations seen in the root ‘kick, dance’, as in (4), suggest we may need further refinements of our understanding of glottal stop contraction.

(4)	CA	a. <i>nechéngenqa</i> ‘he kicks me’
		b. <i>pa chengenva7al</i> ‘dancing place’
		c. <i>chenge7nilj</i> ‘dance’

The derivations in (5) show how the glottal stops in these forms behave. The grave accent marks exception to apocope.

(5)	CA	<i>ne- chenge7en -qà</i>	<i>pa chenge7en -va7a -la</i>	<i>chenge7en -i -lja</i>
		[1SG-kick-PRS]	[place kick-INS-ABS]	[kick-NMLZ-ABS]
	apocope	–	<i>pa chenge7en -va7a -l</i>	<i>chenge7en -i -lj</i>
	syncope	–	–	<i>chenge7n -i -lj</i>
	contraction	<i>ne- chengen -qà</i>	<i>pá chengen -va7a -l</i>	–
		<i>nechéngenqa</i>	<i>pa chengenva7al</i>	<i>chenge7nilj</i>
		‘he kicks me’	‘dancing place’	‘dance’

The suffix *-va7a* fails to undergo contraction. Perhaps there is something that protects it, perhaps alternating stress: *pa chéngenvà7al*. Compare the example above, *kulvash*, presumably from underlying *kulva7ash*. With alternating stress this would have a different pattern: *kúlva7àsh*. Perhaps different patterns of secondary stress determine whether contraction will apply. Or *-va7a* might simply be exceptional to contraction.

Syncope, as presently formulated, requires a morpheme boundary. The fact that syncope takes place in *chenge7nilj* suggests that either there may be a morpheme boundary within *chenge7en* or else the rule of syncope might need to be refined, maybe allowing syncope in late parts of longer roots.

Many other instances of glottal stop appear mysterious if one is restricted to comparing attested related forms.

The glottal stop in the noun *wavu7wet* ‘big, long, tall one’ looks like it is arbitrarily intrusive if one compares this word to the adjective *wavuma* ‘long, tall’ or the adverb *wavun* ‘long’. The glottal stop may be the suffix *-7*, which makes verbs from noun and adjective roots, as in *pa7* ‘drink’ derived from the root of *pal* ‘water’. *Wavu7wet* is derived from the unattested verb with the augmentative morpheme *-we* serving as a nominalizer.

Some CA elements seem to be in the process of losing original glottal stops and when those glottal stops appear, it seems like they are being inserted for no good reason. One such element is the verbalizing suffix *-lu7*. Most of the time it loses its underlying glottal stop but sometimes it appears in the pronunciation, such as in *hem7ewlu7niweneh* ‘they initiated girls’. Attesting to the original nature of this glottal stop is the SE cognate *-t\$u7*, which always has the glottal stop. Unfortunately the data available at this time are too

limited to allow a detailed account of when the glottal stops of such elements are retained and when not.

In Adán Castillo's MCA, an intrusive glottal stop shows up in some nominative plurals that are not agentives, and where there is no comparative evidence for an underlying glottal stop. Note that all of these plurals show absolutive *-te*, which implies an absence of syncope (although the Castillo materials are not consistent on this point). They include most of the attestations of monosyllabic noun roots (6a-d) and two forms which have the suffix *-wen(e)*; (6m) 'cottonwood' is usually *lavvalwene-t*, *lavvalwen-te-m* as in 4.6.2 (2a). These forms, in (6l,m), show syncope, which does not usually occur in *-wene-t* derivations in MCA. (6l,m) are also highly unusual in that they end in consonant clusters, generally not found in CA.

(6)	MCA	singular	plural
a.	house	<i>ki-sh</i>	<i>kiʔ-che-m</i> (3.109.0505)
b.	fire	<i>ku-t</i>	<i>kuʔ-te-m</i> (3.108.0772)
c.	chief	<i>ne-t</i>	<i>neʔ-te-m</i> (3.107.0305)
d.	road	<i>pi-t</i>	<i>piʔ-te-m</i> (3.107.0557)
e.	flea	<i>mukka-sh</i>	<i>mukʔa-che-m</i> (3.107.0366)
f.	story	<i>selíschija-t</i>	<i>selíschijaʔ-te-m</i> (3.107.0033)
g.	old-timer	<i>yewevi-sh</i>	<i>yeweviʔ-che-m</i> (3.111.0276)
h.	tall	<i>wavvowe-t</i>	<i>wavvoweʔ-te-m</i> (3.110.0583)
i.	planting	<i>wessa-t</i>	<i>wessaʔ-te-m</i> (3.111.0236)
j.	wild goose	<i>karuu-t</i>	<i>karuuʔ-te-m</i> (3.108.0082)
k.	magician	<i>\$aave-t</i>	<i>\$aʔveʔ-te-m</i> (3.113.0615)
l.	loose	<i>chuviwén-t</i>	<i>chuviwénʔ-te-m</i> (3.110.0676)
m.	cottonwood	<i>lavvolvant</i>	<i>lavvolvanʔ-te-m</i> (3.107.0173)

Since CA has several contexts in which glottal stops are lost, it would seem that the basic rule for CA, as it is for CU, is that the glottal stop is part of the underlying form of morphemes that sometimes show glottal stops and sometimes not. The challenge is work out rules of deletion (and retention), not rules of insertion.

One particularly clear case of a glottal stop from something underlying that is not a glottal stop is found where a glottal stop precedes *m*, where underlyingly there is a sequence *m-m*, as in (8). This rule of *m-m* > *ʔ-m* is also found in CU (see 4.5.4).

(7) CA *hem-mingkim* > *heʔmingkim* ‘their relatives’ (Seiler 1977:53)

CA has a restriction on this process not seen in CU. In combinations of prefixes such as that in (8), in which the onset of the second prefix is obliterated, the sequence *mm* reduces to the single consonant *m*. Since the obliteration of the syllable coda occurs only with the plural *-hem-*, there is no loss of information from the reduction of the consonant cluster *-mm-*.

(8)	CA	underlying	<i>pe-hem-meka-n-ve</i>
		<i>h</i> loss	<i>pe-em-meka-n-ve</i>
		double consonant reduction	<i>peemeknive</i> ‘their killing of him’

The reduction of *mm* to *m* in (8) is part of a more general process whereby two identical consonants, across a morpheme boundary, are reduced to one, again as in CU. Other examples are seen in (9).

(9) CA a. *tuq-qal* > *tuqal* ‘the light went out’
 b. *hem-teew-wen* > *hemteewen* ‘they are seeing’

Two processes, mentioned above, serve to bleed the process of double consonant reduction, once again as in CU: (a) *ch* lenition, whereby *ch* lenites to *sh* in a syllable coda,⁶⁹ and (b) the change of *mm* to *ʔm*. The derivation in (10) shows the ordered nature of the processes. It also reveals a constraint on the *ʔm* rule. Since the *ʔm* rule bleeds double consonant reduction, it must not make the wrong change. Apparently the *ʔm* rule operates only on a short syllable. This then leaves the *m* after the derived double vowel in *peem-meknive* to be removed by double consonant reduction.

⁶⁹ The only CA example with *shch* that has been found is *hiishche*, a reduplicated form of *hichi* ‘go on foot’. The reduplicative pattern involved suggests that the *-sh-* here represents an assimilated form of *h* rather than lenited *ch*. Cf. the CU example of *shch* mentioned earlier in this chapter: *wih* ‘two’ + *-chi-m* ‘ABS-PL’ > *wishchim* ‘the two of them’.

(10)	CA	<i>he- -me mingki -me</i>	<i>pe- he- -me meka -n -ivè</i>	<i>he- -me teew -wene</i>
		[Ø-PL-relative-PL]	[3SG-Ø-PL-die-CAUS-REAL]	[Ø-PL-see-NPST.PL]
	apocope	<i>he-me-míngki -m</i>	–	<i>he-me-teew-wen</i>
	stress	<i>he-me-míngki-m</i>	<i>pe-he-me-méka-n-vè</i>	<i>he-me téew-wen</i>
	syncope (1)	<i>he-m-míngki-m</i>	<i>pe-he-m-méka-n-vè</i>	<i>he-m-téew-wen</i>
	syncope (2)	–	<i>pe-he-m-mék-n-vè</i>	–
	<i>h</i> loss	–	<i>pe-e-m-mék-n-vè</i>	–
	<i>mm</i> > <i>7m</i>	<i>he-7-míngki-m</i>	–	–
	reduction	–	<i>pe-e-mék -n -vè</i>	<i>he-m-tée-wen</i>
		<i>he7mingkim</i>	<i>peemeknive</i>	<i>hemteewen</i>
		‘their relatives’	‘their killing of him’	‘they are seeing’

4.6.7. EXPRESSIVE GEMINATION AND LENGTHENING. CA permits a different kind of geminate consonant. Geminate consonants within a morpheme have an expressive function, indicating intensification, as in (1) (examples from Seiler 1977:58). This is not found in CU.

- (1) CA a. *welnet* ‘mean one’ *wellnet* ‘very mean one’
 b. *chexiwen* ‘it is clear’ *chexxiwen* ‘it is very clear’

Expressive vowel lengthening is also attested.

- (2) CA a. *nemi-* ‘chase’ *neemi-* ‘chase away’
 b. *wilja7a* ‘straight line’ *wiiljaxwen* ‘be narrow and long (of a road)’
 c. *wewa7* ‘having a downward spot (of a road)’ *weewa7* ‘bumpy (of a road)’

4.6.8 VOWEL REPLACEMENT. The process of vowel replacement, $V > \emptyset / _ -V$, whereby a suffix-initial vowel replaces the preceding vowel is attested widely in Uto-Aztecan. However, this process seems to have lost much of its importance in Inland Cupan, where a major stem restructuring has resulted in the reanalysis of many of the roots as consonant-final. The Serran languages also have a series of consonant-final verb roots but they are restricted to the *k*-class. That restriction seems not to apply in Inland Cupan where there are some verb roots that must be analyzed as vowel final. These stem-final vowels in CA seem to provide exceptions to the vowel replacement rule in that they

displace the suffix-initial vowel rather than the other way around. Examples are given in (1). Unfortunately, with verb stems ending in *i* and *e* we often cannot determine exactly what is going on.⁷⁰

- | | | | | |
|-----|----|----|---|---|
| (1) | CA | a. | <i>-májlju-i-sh</i>
[give.birth-NMLZ-ABS] | <i>majlush</i> ‘one who gave birth, parent’ |
| | | b. | <i>-chachawa-i-sh</i>
[have.tuberculosis-NMLZ-ABS] | <i>chachawash</i> ‘a tuberculosis patient’ |
| | | c. | <i>-ika-i-sh</i>
[get.skinny-NMLZ-ABS] | <i>ikash</i> ‘skinny person’ |
| | | d. | <i>-kija-i-sh</i>
[stay.behind-NMLZ-ABS] | <i>kijash</i> ‘one who stays behind’ |

However, while we see replacement of the suffix vowel with the *-i-sh* nominalization, the vowel of the *-aʔ-t* nominalization is not replaced, e.g. *majljuʔ-a-t* ‘baby’, *iʔisne-at* ‘painting’ (the latter given without a glottal stop by Seiler and Hioki (1979)). These constructions are like most CU instances of vowel-initial suffixes.

It may be preferable to say that exceptions to vowel replacement have arisen rather than abandon the basic vowel replacement rule. If certain elements are exceptional to vowel replacement, how they came to be so is an interesting diachronic question. Treating such items as exceptions to replacement means having to posit an additional rule to reduce vowel-vowel sequences to a single vowel. This new rule, a rule of contraction, will apply only to input that arises from exceptionality. It is not a global shift away from the norm of Uto-Aztecan morphophonology.

One consequence of reframing the rule is that the stem forms for verbs as listed in Seiler and Hioki (1979) needs reconsideration. It would not be surprising to find that many or even most of them are underlyingly vowel-final, in line with the vast majority of morphemes in Takiic.

With the nominalizer *-i-lj*, as with *-aʔ-t*, exceptional roots show a glottal stop. This glottal stop may reflect the feature, whatever it was, that gave rise to their synchronic

⁷⁰ Seiler and Hioki (1979) often write *e* for etymological unstressed final *i* in DCA. Harrington sometimes also records this realization in his MCA field notes.

exceptionality. It is difficult to say whether synchronically the verbs of this sort involve glottal stop insertion or deletion though we lean toward treating it as deletion.

(2)	CA	S&H root	revised root	derived noun
	a.	-7ámu-	7amu7	amu7-i-lj ‘hunting’
	b.	-chéngen-	chenge7en	chenge7n-i-lj ‘dance’
	c.	-7é7nan-	7e7nan	e7nan-i-lj ‘knowledge’
	d.	-tuvxá7-	tuvxá7	tuvxá7-i-lj ‘work, job’

The root 7e7nan (3c) is in origin a reduplicated form (syncopated from *7e-7enan-). The unreduplicated form seems no longer to exist in CA.

4.6.9. REDUPLICATION AND SYNCOPE. Reduplication and duplication are well represented in CA. Reduplication serves in a number-marking capacity in nouns and, along with duplication, in several aspect-marking functions in verbs. What is of morphophonemic interest in reduplication is that syncope may apply within the root under reduplication (see 4.6.5 (2) above). Otherwise root-initial syllables are not subject to syncope.

A few animate nouns have reduplicated plurals. They are suffixed for plural as well. (1c) is remarkably irregular.

(1)	CA		singular	plural
	a.	dog	awa-l	a~7wa-le-m
	b.	man	naxani-sh	na~nxa-che-m
	c.	woman	ñichi-lj	ñi~ngkiche-m
	d.	old man	naxaluve-l	na~nxaluve-le-m
	e.	old woman	nishljuve-l	ni~nishljuve-le-m (S&E 777)
	f.	ceremonial leader	ne-t	nee~n-te-m
	g.	one who is pregnant	nii-t	nii~n-te-m

Some insect/arthropod words show reduplication (2a-c) or duplication (2d,e) in the singular. Compare un(re)duplicated (2f-i). Unfortunately there are very few CA words attested for arthropods.

- (2) CA reduplicated/duplicated
- a. fly *a~7awa-t* (S&M) or *a~7awe-t* (S&H)
 - b. horsefly *pi7~pi-sh* (S&H)
 - c. wild bee *sa~sang* (S&M)
 - d. butterfly *ma-l~ma-l* (S&H)
 - e. spider *xwa-l~xwa-l* (S&H/S&M)
- un(re)duplicated
- f. grasshopper *wi7i-t* (S&H)
 - g. big ant *ane-t* (S&H)
 - h. small ant *kuvishni-lj* (S&H)
 - i. scorpion *suji-lj* (S&H/S&M);
manisa-l (S&H)

The word for ‘crickets’ (the singular is unattested) is either *se7ljam* or, more commonly, duplicated, complete with the repeated plural suffix: *se7lja-m~sélja-m*.

Some inanimate nouns show a difference between a plural (suffixed with *-m*) and a distributive (reduplicated with no suffix), as in (3). Example (3c) shows a different pattern, with reduplication in both the plural and distributive, and the distributive form getting the plural suffix *-m*. All such distributives show syncope.

(3)	CA	singular	plural	distributive
a.	pot	<i>kava7-ma-l</i>	<i>kava7-ma-le-m</i>	<i>ka~kva7-ma-l</i>
b.	flat basket	<i>chipat-ma-l</i>	<i>chipat-ma-le-m</i>	<i>chi~shpat-ma-l</i>
c.	s.th. slim	<i>samatneki-sh</i>	<i>sa~smatneki-sh</i>	<i>sa~smatneki-che-m</i>
		(< <i>sama-t</i> ‘grass’)		

Verb reduplication and duplication is a matter more of verb derivational morphology than of morphophonology and is discussed in 11.6.

4.6.10. INTERVOCALIC LOSS OF H AND NG. The back consonants *h* and *ng* have been found to be subject to deletion under reduplication, as in (1), where the loss of the underlyingly intervocalic consonant results in a superficial double vowel.

- (1) CA
- | | | | |
|----|---------------|--|--------------------------------|
| a. | <i>hal</i> | <i>ha~al</i> (< <i>ha~hal</i>) | 'look for, search' |
| b. | <i>huv</i> | <i>hu~uv</i> (< <i>hu~huv</i>) | 'smell (intr.)' |
| c. | <i>ngang</i> | <i>nga~ang</i> (< <i>nga~ngang</i>) | 'cry' |
| d. | <i>ngavaj</i> | <i>nga~avaj</i> (< <i>nga~ngavaj</i>) | 'sharpen a knife or hoe, file' |

CHAPTER 5

NOUNS AND CASES

5.0. INTRODUCTION. In contrast to the diverse inflectional patterns in verbal predicates (cf. chapters 8, 10, 11, 12, 13), the inflectional morphology of Takic nouns is quite similar across all of the languages. An exception to this similarity is that the Serran languages (SE and KI) have three syntactic cases, nominative, accusative, and genitive, while TV and the Cupan languages have but two, nominative and accusative. The accusative usually serves in genitive function in TV but only rarely in Cupan. Nouns in the genitive function in Cupan are nearly always unmarked, the same as the nominative. Another important difference is in the treatment of the absolutive (non-possessed) suffix on nouns. In TV and Cupan it appears in both singulars and plurals. In Serran it appears only with singulars. It is absent before the plural suffix.

The adverbial cases (5.4.5) differ in many details across the languages. They appear as noun suffixes or as components of inflected postpositions (5.4.5.3).

Possessed nouns (5.5) differ from non-possessed nouns mainly by having a pronominal prefix indicating the possessor (5.2.2). Some possessed nouns are also marked by a suffix indicating that the noun is in the possessed state.

Also covered in this chapter are “relational nouns” (5.6), which do not serve as subjects or objects. Relational nouns often appear in adverbial functions, serving to elaborate spatial and temporal meanings. Relational nouns can be in possessed form and can be inflected for adverbial case, but they are not marked for syntactic case.

5.1. NON-POSSESSION: THE ABSOLUTIVE SUFFIX. The first major morphosyntactic distinction is that between nouns in the non-possessed and possessed states. Both states are marked. Non-possessed nouns exhibit an “absolutive” suffix (ABS). The earliest use we have found of the term “absolutive” for the suffix was by Edward Sapir (1930:111) and the term has now become traditional in Uto-Aztecan studies (e.g. Langacker 1977:77).

The Uto-Aztecan absolutive is not a case suffix. This traditional term “absolutive” can easily be confused with the more recent and now better-known use of “absolutive” in the context of case marking in ergative languages. This potential confusion causes

awkwardness for discussions of CU, which has developed an “absolute” versus ergative case distinction in the system of second-position pronominals (Hill 2005). For this reason, in discussing CU, we use the term “absolute” (AB) in reference to the syntactic case.

In all the Takic languages, there are some nouns that show no overt absolute suffix when in the non-possessed state. These are zero-class (\emptyset -class) nouns. Figuring prominently among \emptyset -class nouns are recent loan words and the names of a number of small animals, especially insects and lizards. While most of the \emptyset -class nouns are consonant-final, in some of the languages consonant-final nouns also figure among those that take the overt absolute suffixes. For convenience, we sometimes treat \emptyset -class nouns as having a zero absolute suffix.

The absolute suffixes appear in several variants, as shown in (1). The diachronic consonantal developments are discussed in 5.1.1.2.

(1)	TV	-t	-r	-j	- \emptyset
	SE	-t	-tʂ	-ch	- \emptyset
	KI	-t	-tʂ	-ts	- \emptyset
	LU	-t/-ta	-l/-la	-sh/-cha	- \emptyset
	AC	-t	-l	-ch	- \emptyset
	CU	-t	-l -lj	-sh	- \emptyset
	CA	-t	-l -lj	-sh	- \emptyset

The suffixes in (1) are shown as they appear in word-final position. However, absolute suffixes are all underlyingly of the shape -CV, with the underlying final vowel appearing under certain phonological conditions, or in LU, appearing (or not) under grammatical conditions of case marking for certain nouns. These vowels, which are lost in citation forms, are introduced and discussed in 5.1.1.1.

5.1.1. ORIGIN AND DEVELOPMENT OF THE ABSOLUTE SUFFIX. The same formal and functional developments of absolute suffixes appear in all the Takic languages, where their role is to mark non-possession. This function is probably not primordial, but instead develops from an earlier, more complicated functional situation involving two suffixes: *-ta, a case marker, and *-ty, a plural number marker (not simply an absolute as

suggested by Langacker 1977:77). The Takic evidence supports a hypothesis that both of these may have been sensitive to non-possession in Proto-Uto-Aztecan.

5.1.1.1. ABSOLUTE SUFFIX VOCALISM. In many UA languages, reflexes of PUA **-ta* appear as case markers. For instance, in Cahita *-ta* seems to be restricted to a case-marking role (Collard & Collard 1962:201-202). Among the Northern Uto-Aztecan languages, Hopi offers a more complex situation which hints at what Takic may have evolved from (see below).

Examples of the Takic reflexes of **-ta* are given in (1). The full form, complete with final vowel appears in the singular only in LU only and in the plurals in (1). The singulars in (1) also show reflexes of **-ta*, but they lose their word-final short vowels by apocope. (Word-internal ~ marks reduplication.)

(1)	plural with <i>*-ta</i>		singular	plural
a.	TV	woman	<i>tokoo-r</i>	<i>to~took-ra-m</i> (3.104.0335)
b.	TV	jackrabbit	<i>\$o7ii-t</i>	<i>\$o7ii-ta-m</i> (3.104.0067)
c.	TV	hummingbird	<i>piino-r</i>	<i>pe~piino-ra-m</i> (3.105.0012)
d.	LU	star	<i>\$u7-la</i>	<i>\$u7-la-m</i> (K&G 88)
e.	LU	house	<i>kii-cha</i>	<i>kii-cha-m</i> (K&G 88)
f.	CU	fly	<i>ku7a-l</i>	<i>ku7-la-m</i>
g.	CU	jackrabbit	<i>su7i-sh</i>	<i>su7-cha-m</i>
h.	CU	lineage chief	<i>ny-t</i>	<i>ny~n-ta-m</i>
i.	DCA	rattlesnake	<i>sewe-t</i>	<i>sew-ta-m</i> (S&H 183)
j.	CA	deer	<i>suka-t</i>	<i>suk-ta-m</i> (S&H 188, S&M 301)
k.	DCA	skunk	<i>tekwe-l</i>	<i>tekw-la-m</i> (S&H 206)
l.	MCA	skunk	<i>teqwe-l</i>	<i>teqw-la-m</i> (S&M 302)
m.	MCA	tick	<i>machi-lj</i>	<i>mash-lja-m</i> (S&M 295)
n.	MCA	wildcat	<i>tuku-t</i>	<i>tuk-ta-m</i> (S&M 303)

Sauvel and Munro's (1981) use of <qw> as in (1l) may be motivated at least in part by their use of <kw> for the *k* followed by *w* sequence as in (2m) below. Seiler uses only <kw> for DCA. Elliott's transcription (in Sauvel & Elliott 2004) uses both <kw> and <qw>, with <qw> found only in <qwa>.

A second form of the absolutive suffix in Takic is from **-ty*. This second form contributes allomorphs that are encountered only in the plural. The plurals of (2) show reflexes of **-ty*. Some stems are found with both sorts of plural, as with TV ‘woman’ (1a) and (2a) and LU ‘house’ (1e) and (2g). CU forms show *i* (2i-k), not the usual reflex of **y*, but the distinction between **-ta* and **-ty* is maintained.

(2)	plural with <i>*-ty</i>		singular	plural
a.	TV	woman	<i>tokoo-r</i>	<i>to~tooko-ro-m</i> (3.105.0444)
b.	LU	ant	<i>aana-t</i>	<i>an-tu-m</i> (Elliott 1999:95)
c.	LU	jackrabbit	<i>\$u7i-sh</i>	<i>\$u7ii-chu-m</i> (Elliott 1999:878)
d.	LU	fly	<i>ku7aa-l</i>	<i>ku7aa-lu-m</i> (Elliott 1999:405)
e.	LU	woman	<i>\$ungaa-l</i>	<i>\$u~\$nga-lu-m</i> (Elliott 1999:884)
f.	LU	stone	<i>too-ta</i>	<i>too-tu-m</i> (K&G 89)
g.	LU	house	<i>kii-cha</i>	<i>kii-chu-m</i> (K&G 88)
h.	LU	arrow	<i>huu-la</i>	<i>huu-lu-m</i> (K&G 89)
i.	CU	gopher	<i>myy-t</i>	<i>myy-ti-m</i>
j.	CU	dog	<i>awá-l</i>	<i>awá-li-m</i>
k.	CU	fox	<i>kawísi-sh</i>	<i>kawísi-chi-m</i>
l.	DCA	flea	<i>muka-sh</i>	<i>muka-che-m</i> (S&H 113)
m.	CA	mountain lion	<i>tuk-we-t</i>	<i>tuk-we-te-m</i> (S&H 220; S&M 303)
			-we- is the augmentative suffix; (m) is the augmentative of (n).	
n.	DCA	wildcat	<i>tuku-t</i>	<i>tuk-te-m</i> (S&H 219)
o.	DCA	mountain sheep	<i>pa7a-t</i>	<i>pa7-te-m</i> (S&H 145)
p.	MCA	jackrabbit	<i>su7i-sh</i>	<i>su7-che-m</i> (S&N 301)

The Serran word for ‘person’, SE *taaq-t(a-m)*, KI *taaka-t(a-m)*, is an exception in its retention of the absolutive before the plural suffix. Other Serran nouns, like the examples in (3), replace the absolutive suffix by the plural suffix *-m* such that the reflexes of **-ta* function not just as markers of non-possession but also of singular number.

(3)			singular	plural
a.	SE/KI	wildcat	<i>tuku-t</i>	<i>tuku-m</i> (3.99.0358)
b.	SE/KI	jackrabbit	<i>hwii7-t</i>	<i>hwii7-m</i> (3.98.0104)
c.	SE/KI	bee, yellowjacket	<i>haanga-t\$</i>	<i>haanga-m</i> (3.98.0134)
d.	SE	star	<i>huu7-t\$</i>	<i>huu7-m</i>

e.	KI	star	<i>huu7-t\$</i>	<i>huh~hu7-m</i> (3.98.0061)
f.	SE	boy	<i>chichin-t</i>	<i>chichina-m</i>
g.	KI	boy	<i>titini-t</i>	<i>titini-m</i> (3.98.0087)
h.	SE	sack	<i>tanga(t)-t</i>	<i>tangata-m</i>
i.	KI	sack, box	<i>tangata-t</i>	<i>tah~tangata-t</i> (3.98.0380)
j.	SE/KI	my sack	<i>ni-tangat</i> (3.98.0380)	
k.	SE	turtle	<i>qo^Rpo^Rt(a)-t</i>	<i>qo^Rpo^Rta-m</i>
l.	KI	turtle	<i>kopota-t</i>	<i>kopota-m</i> (3.98.0117)

The SE example (3h) shows the result of syncope with consequent cluster simplification (*tanagtat* > *tangatt* > *tangat*). This results in an absolutive form that is homophonous with the possessed form (3j). An exception to this cluster reduction is provided by SE *qo^Rpo^Rtt* ‘tortoise’ (3k), with a sequence of two released *t*’s in word-final position. This occurred once in a recording; subsequently the speaker would give only unsyncoated *qo^Rpo^Rtat*. The exceptional treatment of SE ‘turtle’ may be to maintain a distinction between ‘turtle’ and *qo^Rpo^Rt* ‘a round kind of basket’, pl. *qo^Rpo^Rm* (but also *qo^Rpo^Rtam*, the same plural as ‘turtles’). KI keeps the final stem vowel in ‘turtle’ (3l); the KI rule of syncope is different from that of SE.

In AC, the plural form is always *-ta-m*, *-cha-m*, *-la-m*. Some examples may represent original **-ty*, which would develop as **-to* in AC, but since AC **o* in unstressed position merges with **a*, the distinction between **-ta* and **-ty* has been lost.

In the other non-Serran languages, the form of the plural is a lexical property of the noun.

In CU (Hill 2005:34ff) and CA, especially MCA (Sauvel & Munro 1981:35-36), the choice of ending has been restructured such that the forms of the plural are phonologically largely predictable. If the vowel preceding the absolutive suffix deletes (via syncope), then the plural is in *a* (1h-n); if the vowel remains, then the plural is in **y* (CU *i*, CA *e*) (2i-n). This generalization covers the plurals that have *a* except for a few irregular forms, as seen in (4). Examples (4a,b) show irregular stems with phonologically exceptional *a* in the plural, though both have also been recorded with *i*. The first plural of (4c) is exceptional in having *a*, but it is a contraction of the second plural, for which *a* is expected. The plural of example (4d) shows the expected ending in *i* though there is

irregularity in the stem. (4e) shows no exceptionality. The diminutive suffix *-ma-* occurs only in the singular of (4a) but in both the singular and plural of (4b).

(4) CU		singular	plural
a.	boy	<i>kii-ma-l</i>	<i>ki~ki-ta-m</i>
b.	girl	<i>nawísh-ma-l</i>	<i>nish-ma-la-m</i> (also <i>nish-ma-li-m</i>)
c.	woman	<i>nawíky-t</i>	(1) <i>na~nwi-ta-m</i> (also <i>na~nwi-ti-m</i>) (2) <i>na~nwik-ta-m</i>
d.	man	<i>naxáni-sh</i>	<i>na~nxa-chi-m</i>
e.	old woman	<i>nishljuvy-l</i>	<i>ni~nishljuvy-li-m</i>

Other CU exceptions frequently encountered are derivations in *-wyny-t*, pl. *-wyn-ti-m*, as in *xwajax-wyny-t* ‘white one’, pl. *xwajax-wyn-ti-m*.

A few exceptions remain in MCA, such as (2p) *su7i-sh* ‘jackrabbit’, pl. *su7-che-m*, but many more remain in DCA. *Tuku-t* ‘wildcat’ is attested in MCA with the *a* plural, *tuk-ta-m* (1n), while in DCA it shows the **y* plural, *tuk-te-m* (2o).

In the CU plurals of (2) and (4d,e), instead of expected *y*, the vowel that appears is raised and fronted to *i*. This could possibly be accounted for as part of a chain shift within a morphologically restricted environment: unstressed **a* > [ə], **y* > *i*. Another possibility, noted in 4.5.5.4, is that the shift to *i* is motivated by avoidance of confusion with the mirative clitic = *am*.

To understand the plurals in *-*ty*, we turn to the Hopi evidence. Hopi has two plural suffixes for nouns, *-m(y-)* and *-t(y-)*. *-m(y-)* is the only plural marker used with possessed nouns. Among non-possessed nouns *-m(y-)* marks an animate plural. *-t(y-)* is used for both animates and inanimates, but, like the accusative – or more accurately, oblique – case suffix from *-*ta*, it is used only for non-possessed nouns. The plural suffixes, besides their use in the plural, are also used in the formation of the dual. Consequently, within Hopi grammar, it is better to refer to these endings as “non-singular” (NSG) suffixes instead of as “plural” suffixes.

The dual may be an internal development in Hopi but its morphology informs our understanding of *-*ty* in Takic. The Hopi dual form normally consists of the simple form of a noun, i.e., the form used in the singular, plus a non-singular suffix, most commonly, the suffix *-t(y-)*. The plural form, when it is differentiated from the dual, entails some

modification of the noun stem, usually reduplication, and animate plurals take a non-singular suffix as well, as illustrated with *taaqa* ‘man’ in (5). (Hopi spellings are normalized to be compatible with our normalized Takic transcription. The grave accent indicates Third Mesa Hopi falling tone.)

(5) Hopi nominative	singular	dual	plural
	<i>taaqa</i>	<i>taaqa-t(y)</i>	<i>tàa~taq-t(y)</i>
	man	man-NSG	PL~man-NSG

Hopi also has two accusative case suffixes, *-j(y-)* and *-t(a-)*, mentioned earlier. The accusative case forms of the noun in (5) are given in (6).

(6) Hopi accusative	singular	dual	plural
	<i>taaqa-t(a-)</i>	<i>taaqa-ty-j(y-)</i>	<i>tàa~taq-ty-j(y-)</i>
	man-ACC	man-NSG-ACC	PL~man-NSG-ACC

The nominative dual and the accusative singular of ‘man’ are both *taaqaat*, though in combination or in “pausalization” the difference is revealed: *taaqaaty* vs. *taaqaata*. (The pausal form results from a special grammatical process that preserves and often elaborates normally-deleted word-final short vowels [Whorf 1946:165]; i.e., pausalization may suspend apocope, often with added *-7V*.)

We suggest that a similar homophony or near homophony of inflected forms has led to the development such that **-ty* could be understood to be part of the absolutive suffix system in Takic. A plural form in **-t(y)* sounds dangerously similar to a singular form in **-t(a)*; with apocope they are identical. To clarify the situation, the plural form adds the disambiguating second plural suffix, **-my*, assuring that there was no confusion. Such double marking of the plural is not uncommon in Uto-Aztecan languages.

The combination **-ty-my* also underlies the Nahuatl plural suffix *-tin*, illustrated in (7), which is also restricted to non-possessed nouns. The plural suffix **-my* occurs also alone, as *-mê*, in some non-possessed nouns. (Possessed nouns take a plural suffix *-huān* [-wa:n], which is from **-wa* ‘possessed’ + **-my* ‘plural’.) Nahuatl forms in (7) are given in the conventional spelling.

(7) Nahuatl plurals of the second declension (Carochi 1645:4v-5 [2001:33])

	singular	plural
a. hen	<i>tōtol-in</i>	<i>tōtol-tin</i> (or <i>tōtol-mê</i>)
b. student	<i>tlamachtīl-li</i>	<i>tlamachtīl-tin</i> (or <i>tlamachtīl-mê</i>)
c. hunchback	<i>tepotzò-tli</i>	<i>tepotzò-tin</i> (or <i>tepotzò-mê</i>)
d. male person	<i>oquich-tli</i>	<i>oquich-tin</i> (or <i>oquich-mê</i>)
e. hare [jackrabbit]	<i>cì-tli</i>	<i>cì-tin</i> or <i>cī~cì-tin</i>
f. nobleman	<i>pīl-li</i>	<i>pī~pīl-tin</i>
g. lion [mountain lion]	<i>miz-tli</i>	<i>mī~miz-tin</i>
h. rabbit	<i>tōch-tli</i>	<i>tō~tōch-tin</i>
i. wolf	<i>cuetlāch-tli</i>	<i>cuē~cuetlāch-tin</i>
j. youth	<i>tēl-pōch-tli</i>	<i>tēl-pō~pōch-tin</i>

Huichol *-te* ‘plural’ and Cora *-tje* ‘plural’ are similarly restricted (Casad 1984:233-4). A more detailed exploration of this link with non-possessed number marking would be useful in clarifying the history of Uto-Aztecan absolutes. It is clear however, that complexities in noun plural formation are a recurrent typological feature within Uto-Aztecan. Rather than wondering why most plurals show reflexes of **-ty* ‘plural’, perhaps we should ask instead why some of the plurals show reflexes of **-ta* ‘absolute singular’.

A possible alternative synchronic analysis could hold that the variable vowel before the plural ending should instead be assigned to the plural ending itself, with the absolute suffixes as consisting only of their consonant. This is the option chosen by Anderton (1988:81), Kroeber and Grace (1960:87), and Seiler (1977:78). But this just transfers the vowel selection problem from the absolute suffixes to the plural suffixes. It also creates the problem of how to distinguish the behavior of the absolute suffixes from genuinely consonant-final forms that take no absolute suffix, the zero class. In CA, Seiler’s plural suffix allomorph *-em*, does allow a seemingly straightforward treatment for consonant-final Spanish loans, e.g. *melóon* ‘cantaloupe’, pl. *melóon-em*, *kalaváas* ‘pumpkin’, pl. *kalaváas-em* (< Sp. *melón*, *calabaza*) (Seiler 1977:79). The *-e-* of CA *melóon-e-m*, *kalaváas-e-m*, as well as the *-i-* found in Ø-class CU forms such as *kaxóon* ‘box’, pl. *kaxóon-i-m* (< Sp. *cajón*), however, probably should be understood within the larger Takic framework as a stem augment (AUG), a phenomenon similar to Serran *-ja-*, characteristic of plurals formed from Ø-class nouns, as exemplified in (8).

		singular	plural	
(8)				
a.	coyote	SE <i>wahi7</i>	<i>wahi7-ja-m</i>	
		KI <i>wahi7</i>	<i>wahi7-ja-m</i> (3.98.0096)	
b.	lamb, sheep	SE <i>vareewa7</i>	<i>vareewa7-ja-m</i>	< Sp. <i>borrego</i>
		KI <i>vureewy7</i>	<i>vureewy7-ja-m</i> (3.99.0367)	
c.	donkey	SE <i>vuurus</i>	<i>vuurus-ja-m</i>	< Sp. <i>burros</i>
d.	liar	SE <i>po^Rq^Ravis</i>	<i>po^Rh~pq^Ravis-ja-m</i>	
e.	sea lion	KI <i>ku7mu\$</i>	<i>ku7mu\$-ja-m</i> (3.98.0101)	
f.	Kitanemuk	KI <i>akikitam</i>	<i>akikitam-ja-m</i> (3.98.0065)	

Consideration of the zero class nouns brings us to the fact that **-ta* survives in Takic, or more precisely, in Serran, as a case marker, where it is used in combination with **-jy* (< PUA **-cy*) to mark accusative case for nouns that take no absolutive suffix. The combination **-ta-jy* usually contracts to *-ti* in SE (9a) but it retains the vowel *a* in KI (9b). The double marking of case in **-ta-jy* parallels the double marking of plural in **-ty-my*, discussed above.

(9) a. SE *Iip qaj jyyngy7k = kwyny maamt\$ Wahi7-ti.*
 here not be.much.later = QUOT.3PL > 3SG hear Coyote-ACC
 ‘Here not much later, they heard Coyote.’

b. KI *Wahi7-taj a-woohyk kutsi7-t.*
 coyote-ACC 3SG-bark dog-GEN¹
 ‘The dog is barking at the coyote.’ (3.100.0700)

¹ Postposed KI subject nouns, as in this example, appear in the genitive case. Maybe they are governed by the personal prefix on the verb. The reverse is true of postposed KI possessor nouns, which are unmarked: *a-mukpi7 wahi7* ‘coyote’s nose’ (3.100.0067); compare the genitive form *wahi7-t* in normal order *wahi7-t a-tuhtua7* ‘coyote[’s] dance’ (3.99.0652).

The Serran accusative from **-ta-jy* is also found with a number of possessed nouns, further demonstrating the survival of **-ta* as a case marker.⁷¹ Typical examples of possessed nouns with **-ta-jy* are given in (10). Serran plurals in **-my* are only rarely marked for accusative.

⁷¹ Anderton 1988:177 refers to the *-t* component of this suffix complex as the “constituency absolutive”. She cites an unpublished manuscript by Donald Crook, who called it a “constituency suffix”.

- (10)
- | | singular | plural | accusative singular |
|-------|---|--------------------------|---|
| a. SE | <i>my-chuuri7</i> | <i>my-chuuri7-ja-m</i> | <i>my-chuuri7-ti</i> |
| KI | <i>my-tsuuri7</i> | <i>my-tsuuri7-ja-m</i> | <i>my-tsuuri7-taj</i> (3.98.0365) |
| | 'your maternal grandmother(s)' | | |
| b. SE | <i>ny-havy7</i> | <i>ny-havy-m</i> | <i>ny-hav-t\$<i>i</i></i> |
| KI | <i>ni-havy7</i> | <i>my-ha~havy7y</i> | <i>ni-havy-t\$aj</i> 'my clothes' (3.99.0437) |
| | 'my clothes' | 'your clothes' | (pl. <i>ni-ha~havy7-t\$aj</i> (3.98.0094)) |
| | (3.98.0055) | (3.98.0094) ¹ | |
| | 'my blanket, clothing' (cf. <i>havy-t</i> 'blanket, article of clothing') | | |
| | ¹ KI 'my clothes' is not attested in the nominative plural. | | |

Other Serran possessed nouns show no **-ta* in the accusative, only **-jy*, as seen in (11). The stem variants found before suffixes in (11c-h) are not part of the inflectional process.

- (11)
- | SE | nominative | accusative | plural |
|----------------------|----------------------------|------------------------------|---------------------------------|
| a. my heart | <i>ny-huun</i> | <i>ny-huun-i</i> | – |
| b. my fur, body hair | <i>ny-po^{Rh}</i> | <i>ny-po^{Rh}-i</i> | – |
| c. my hand, forearm | <i>ny-ma</i> | <i>ny-maa-j</i> | – |
| d. my mother | <i>ni-jy7</i> | <i>ni-jyk-i</i> | <i>ni-jyky-m</i> |
| e. my father | <i>ni-na7</i> | <i>ni-na7n-i</i> | <i>ni-na7na-m</i> |
| f. my older brother | <i>ny-paar</i> | <i>ny-paah-i</i> | <i>ny-paaha-m</i> |
| g. my older sister | <i>ny-qoo^{Rr}</i> | <i>ny-qoo^{Rh}-i</i> | <i>ny-qoo^{Rh}-ha-m</i> |
| h. my animal | <i>ny7-aachi7</i> | <i>ny7-aasht-i</i> | <i>ny7-aashta-m</i> |

In summary, **-ta* and **-ty* are reconstructed as non-possessed noun suffixes. In most Tadic languages, **-ta* has lost its case-marking feature and, as an absolutive suffix, has crept into plural formation, joining the non-possessed plural **-ty* in that role in an irregular way. In CU and MCA, the distinction between **-ta* and **-ty* has restructured such that it is largely predictable from the phonological configuration of the plural stem. In Serran, **-ta* has split, becoming (a) a suffix marking non-possessed singular and (b) an oblique case marker for singular nouns that take no absolutive suffix, including some possessed nouns, and the non-possessed plural suffix **-ty* has been lost.

5.1.1.2. ABSOLUTIVE SUFFIX CONSONANTISM. The consonantism of the absolute suffix, which was discussed briefly in 3.5.1, will now be reviewed. We deal directly with the forms from **-ta* though the developments of the consonants apply equally to the forms from **-ty*.

A reconstruction of their historical origin is quite straightforward, though it must be noted that the overall pattern presented in (1) omits many important secondary developments.

(1) Diachronic origin of the forms of the absolute suffix **-ta*

preceding sound	<i>*i</i>	<i>*a, *u, *y</i>	<i>*o</i>	<i>*C</i>
TV	<i>-j</i>	<i>-r</i>		<i>-t</i>
SE	<i>-ch</i>	<i>-t\$</i>		<i>-t</i>
KI	<i>-ts</i>	<i>-t\$</i>		<i>-t</i>
LU	<i>-sh/-cha</i>	<i>-l/-la</i>		<i>-t/-ta</i>
AC	<i>-ch</i>	<i>-l</i>		<i>-t</i>
CU/CA	<i>-sh</i>	<i>-l</i>	<i>-lj</i>	<i>-t</i>

Various phonological developments have obscured much of the diachronic basis for the differences. This has led to a partial morphologization of the differences among the forms of the suffix and sometimes a given form of the suffix is associated with a noun stem in a way that is at odds with the diachronic development. That is, some nouns now take a form of the suffix that cannot be accounted for by reference to phonology. Thus synchronically it is necessary to recognize several noun classes, one for each suffix type (*ch*-class, *L*-class, *t*-class, \emptyset -class).⁷² (The development of the long and short forms of the LU absolute is an independent and still unresolved question.)

The overall picture then, in brief, is that intervocalic **t* lenites to **L*; post-consonantal **t* does not. Lenited **t* (**L*) palatalizes to **ch* after **i* and elsewhere it develops variously, to *t\$* in Serran and to a liquid in the other languages, *r* in TV, *l* in Coastal Cupan, and *l* ~ *lj* in Inland Cupan. We propose that the *t\$* sound found in Serran may represent a stage through which **L* of the other Takic languages passed on its way to becoming a liquid.

⁷² The label “*L*-class” refers to those nouns that show reflexes of PTak **L* other than **ch*.

The palatalization of **L* to **ch* must have taken place rather early. Such palatalization can easily affect a sound like *tʃ*, the version of unpalatalized lenited **t* still found in Serran, for it is unlikely for a liquid to change directly into an affricate. Later, **ch* depalatalizes to *ts* in KI and lenites further to *j* in TV. Its syllable-coda development to *sh* in most Cupan languages is also a further lenition (cf. 4.4.9, 4.5.4.7, 4.6.3).

Two important developments obscure the historic origins of these forms: (1) The reconstructed Uto-Aztecan stem-final consonants have nearly all been lost, though for most examples the unlenited *-t* forms of the absolutive suffix remain. (2) The two vowels **i* and **o* have merged in Inland Cupan, where they are both synchronic *i*. One result of this is the contrast of *-lj* and *-sh*, both of which are now found after the same vowel, *i*. Together, these changes have resulted in a decoupling of the forms of the suffix from the phonological form of the stem. Further phonological developments, such as the syncope of the conditioning vowel as in SE, seem to have had little effect on the selection of the form of the absolutive suffix. New vocabulary with stem-final consonants has developed and has been assigned to the zero class.

It is remarkably difficult to find uncomplicated examples of absolutives in all of the five languages for all the correspondences. However, (2) provides such for all the languages except TV and AC. No word for ‘mesquite’ is attested for TV or AC. The TV word for ‘thief’, *pokii-j*, is non-correspondent, and no word for ‘thief’ was apparently ever recorded for AC. Some of the consonant-final roots may have had vowel-final variants already within Proto-Takic to account for the different shapes of the absolutive suffix found in examples like (2f,j). The symbol **C* represents the presence a consonant which has been lost in all the languages and whose nature has yet to be identified.

(2)	a.	b.	c.	d.	e.	f.
	house	water	thief	fish	mesquite	fat
PTak	<i>*kii-La</i>	<i>*paa-La</i>	<i>*yjyC-ta</i>	<i>*kijuu-La</i>	<i>*oo-La</i>	<i>*wip-ta</i> ~ <i>*wi-La</i>
TV	<i>kii-j</i>	<i>paa-r</i>	–	<i>keuu-r</i>	–	<i>we-taa</i>
SE	<i>kii-ch</i>	<i>paa-tʃ</i>	<i>yjy-t</i>	<i>kihUU-tʃ</i>	<i>oo^R-tʃ</i>	<i>wip-t</i>
KI	<i>kii-ts</i>	<i>paa-tʃ</i>	<i>yjy-t</i>	<i>kihUU-tʃ</i>	<i>oo-tʃ</i>	<i>wip-t</i>
LU	<i>kii-cha</i>	<i>paa-la</i>	<i>ojó-t</i>	<i>kujuu-l</i>	<i>ee-la</i>	<i>-wiʔ</i> (poss.)
AC	<i>kii-ch</i>	<i>paa-l</i>	–	<i>kajuu-l</i>	–	<i>-wiʔ</i> (poss.)
CU	<i>ki-sh</i>	<i>pa-l</i>	<i>yjy-t</i>	<i>qyjú-l</i>	<i>i-lj</i>	<i>wi-lj</i>

	CA	<i>ki-sh</i>	<i>pa-l</i>	<i>eje-t</i>	<i>kiju-l</i>	<i>i-lj</i>	<i>wi-lj</i>
		g.	h.	i.		j.	
		fire(wood)	road	deer		jackrabbit	
PTak		* <i>kut-ta</i>	<i>pok-ta</i>	* <i>sukah-ta</i>		* <i>su7iC-ta</i> ~ * <i>su7i-La</i>	
TV		<i>ko-taa</i>	<i>pe-t</i> ~ <i>pee-t</i>	* <i>okaa-t</i> ~ * <i>uuka-t</i>		* <i>o7ii-t</i>	
SE		<i>ku-t</i>	<i>po^Rq-t</i>	<i>hukah-t</i>		<i>hwii7-t</i>	
KI		<i>ku-t</i>	<i>pok-t</i>	<i>hukah-t</i>		<i>hwii7-t</i>	
LU		<i>ku-t</i>	<i>pe-t</i>	* <i>uuka-t</i>		* <i>u7i-sh</i>	
AC		<i>ku-t</i>	<i>pe-t</i>	* <i>uuk-t</i>		* <i>u7i-ch</i>	
CU		<i>ku-t</i>	<i>pi-t</i>	<i>suqa-t</i>		<i>su7i-sh</i>	
CA		<i>ku-t</i>	<i>pi-t</i>	<i>suka-t</i>		<i>su7i-sh</i>	

Examples (2f-j) show that the loss of root-final consonants must have taken place in various stages. Since the Cupan examples in (2j) have *-sh*, the postulated root-final consonant, whatever it was – it has been lost even in Serran⁷³ – must have been lost in Cupan while the sound change **t > ch* after *i* was still productive, i.e., when it was still an allophonic process. The root-final **p*, in (2f), apparently remained until later, when the **t* to *ch* sound change was no longer in allophonic effect, and with the disappearance of stem-final **p*, the absolutive suffix, now being intervocalic, lenited from **-ta* to **-la*. Subsequently **-la* palatalized, being after the front vowel *i*, and with the loss of the word-final short vowel, the present-day Inland Cupan form is *-lj*. The expected LU form would be **wi-l*, but this item is documented in LU only in forms that lack the absolutive: possessed *-wi7* and adjectival *wii-maw-i-sh* ‘fat, fatty’.

Alternatively, the Inland Cupan absolutive forms may not reflect an original **wip-ta* at all but might instead be secondary absolutives, formed at a later time from possessed forms. If this is what happened, they may not belong in (2) at all. The complex history is also reflected in the denominal verb base ‘become fat’. In LU and CU it is *wi-tú7*, reflecting a non-leniting environment, but in CA it is *wi-lju*, with lenition. The stem-final **k* of (2h) lasted a bit longer, along with the other consonants, **h* in (2i) and **t* in (2g), leaving the consonant of the ending unchanged. In (2g) the stem-final *-t* has been elided before the homorganic suffix in Serran, but the effect of the underlying final *-t* for the

⁷³ And in Tübatulabal, which also often preserves root-final consonants.

root for ‘fire’ remains and can be internally reconstructed for this root: it shows contemporary combining forms in *kut\$-* and *kul-* (as in SE *kut\$-aa-t*, Lu *kul-aawu-t*, CU *kyl-áwy-t* ‘firewood’).⁷⁴

5.1.2. A QUANTITATIVE PERSPECTIVE ON THE ABSOLUTIVE SUFFIXES. There are three sets of absolutive suffixes (four sets if the zero suffix is counted). The first division is between the lenited forms, which developed after vowel-final stems, and the unlenited forms which developed after consonant final stems. The unlenited forms retain the original **t* unchanged (the *t*-class). The lenited forms are then divisible between the forms that represent an early palatalization of lenited **t*, i.e., a palatalization to **ch* after **i* (the *ch*-class) and an unpalatalized form which developed after vowels other than *i*, as reviewed above.

There is great variety in the unpalatalized, lenited **t*. In Serran this remains an obstruent *t\$*, while elsewhere in Takic it develops into liquids, *r* in TV, laterals in the Cupan languages. There is secondary palatalization of the lateral (to *lj*) in Inland Cupan. This class of suffix will be referred to the *L*-class, where “*L*” can be understood as referring to lenited, liquid, lateral, or even to the *l* itself as found in Cupan.

Our analysis above, that the lenited forms reflect a historic final CV syllable in the noun root or base, while the forms with the stop reflect a historic final CVC syllable, follows the conclusions of Manaster Ramer (1993). Mamet (2010:251) suggests that some of these syllable-final consonants were not PUA consonants, but were glottal stops inserted by rule following stressed open syllables to prevent lenition of the suffix. Whatever their source, since the syllable-final consonants have largely been lost, except for a few remnants in Serran, the conditioning factor is no longer evident and the suffixes must be listed in the lexicon together with their noun roots and bases. There is some limited conditioning of suffix forms. The variation in Cupan (except for AC) for the **-ch* suffix is that *-sh* appears before consonants or word-finally, *-ch* before vowels. In Inland Cupan, a variant *-lj* from *-l* appears following *i* (and elsewhere, but rarely). The fact that an *l*-class suffix can follow the vowel *i* is because Inland Cupan *i* is not just from **i* but

⁷⁴ There is a similar but strikingly different development of the absolutive suffix in Tübatulabal (Voegelin 1935). Tübatulabal maintains the difference between the unlenited, originally postconsonantal absolutives in *-t* and the lenited, originally intervocalic absolutives, but in all instances, lenited **t* produces the liquid *l*. In Tübatulabal there is no sign of the palatalization **it* > **ich* found in Takic.

also from *o. This has created a new dynamic within the vowel system. In LU, variants of the absolutive suffixes with the form -CV in final position appear mainly with roots that have only one long syllable (either CVV or CVC), perhaps reflecting a restriction against trimoraic syllables (Mamet 2010:255).

The *t*-class suffixes are more frequent than those of the *ch*-class. Anderton (1988:84) states that nouns of the *t*-class are the most frequent in KI, and we find that this is also the case in TV (1a). Kroeber and Grace's (1960) enumeration of the distribution of the suffixes for 566 noun roots in LU (1b), shows that suffixes in -*t* are not significantly more common than those of the *ch*-class in that language. However, they apparently included all derived nouns, and -*i* + -*sh*/-*cha* is a very productive nominalizing suffix. In contrast, our count (1a) of all nouns in the TV corpus that are not obviously derived shows a sizeable majority for nouns in the *t*-class. Note that the TV Ø-class includes all Spanish loans, as well as some loans from other indigenous California languages, which inflates the size of this class.

(1)		Absolutive suffixes in TV and LU									
		total	* <i>t</i>		* <i>ch</i>		* <i>L</i>		Ø		
a.	TV	280	102	36%	23	8%	87	31%	68	24%	
b.	LU	566	181	33%	178	31%	156	28%	51	9%	

Restricting the count to non-derived nouns is important, because derived nouns in their non-possessed state take absolutive suffixes whose form is determined by the derivational suffix, as shown for two TV roots in (2).

(2)	TV		<i>tʃe7ee7a-x</i> (3.103.0421)	<i>kwa7aa-x</i> 'be eating'
			~ <i>tʃe7eena-x</i> 'be singing' (3.104.0093)	(3.104.0105)
a.	- <i>i</i> 'resultative' + - <i>j</i>	<i>tʃe7ee7-e-j</i> 'song' (3.102.0880)	<i>kwa7-ii-j</i> 'food' (3.104.0212)	
b.	- <i>i7a</i> 'agentive' + - <i>r</i>	<i>tʃe7een-7a-r</i> 'singer' (3.102.0880)	<i>kwa7-ii7a-r</i> 'big eater' (3.104.0529)	
c.	- <i>vi</i> 'location' + - <i>t</i>	<i>tʃe7ee-ve-t</i> 'house for singing' (3.104.0151)	<i>kwa7-ii-ve-t</i> 'food' (also 'food place?') (3.105.0407)	

We can see that in TV, there might be many derived nouns in *-e/-ii + -j*, which should all count as only a single example of the *-j* suffix combination, rather than as the sum of the individual derived nouns. Since Kroeber and Grace (1960) did not include a lexicon, we cannot re-count their sample to control for derivation, although they point out (1960:70) that their sample of LU nouns in *-sh/-cha* may be inflated by a high count of words for ‘artifacts’, which are very likely to be deverbal constructions. We suspect that results for a count of LU nouns that do not obviously result from deverbal derivation would be similar to those for the TV sample.

In the Numic languages there is some evidence for a classificatory function for absolutive suffixes (for instance, a root for a plant name with one suffix will refer to the plant itself, while the same root with another suffix will refer to the fruit of the plant). Such a classificatory function has not been demonstrated for Takic, with the partial exception of the \emptyset -class (but see Malécot (1963) for a contrary opinion regarding LU, where Kroeber and Grace (1960:70) found no semantic correlation with absolutive suffix class). We illustrate the semantically random nature of absolutive-suffix assignment in (3) for two of the absolutive classes, *ch*-class (with TV *-j*) and the zero class with non-derived nouns in TV. We have selected the small TV *ch*-class to save space. For the \emptyset -class, also in order to save space, we have not included place names and the many loans from Spanish, although loans from other languages are present. We have separated out from the \emptyset -class list the nouns in *-t\$* (4), some of which may be nonce borrowings from Serran on the part of a multilingual consultant and others may have been “foreignized” (see below) so that they look like borrowings. (But see 14.10 for a discussion of possible Uto-Aztecan sources of some TV nouns in *-t\$*.) The illustration in (3a) shows that semantic membership of nouns in the *ch*-class cannot be predicted; its miscellaneous nature should be obvious. The much larger *t*- and *L*-classes are similarly random. This is also the case for all the other Takic languages. However, in all the languages, the \emptyset -class is different, in that its members include many labels (although by no means all such) for small animals, especially insects and reptiles, and birds. Nonetheless, the TV \emptyset -class includes many other kinds of nouns as well.

- (3) TV a. nouns with *-j* (*ch*-class)
eese-j ‘soapstone’ (3.102.0598)
kehaa-j ‘iglesia, fiesta (church, feast)’ (3.103.0303) (< *kehaaj-j*)

possessed *pomoo-kehaj* ‘their fiesta’ (3.105.0108), dative *kehaaj-ng7aro* ‘to the fiesta’ (3.103.0462)

kii-j ‘house’ (3.103.0391)

ko\$ii-j ‘ceniza (ashes)’ (3.103.0763)

kuu-j ‘person invited to a fiesta’, pl. *kuuj-ja-m* (3.103.0355) (< *kuuj-j*)

maat\$e-j ‘faja (belt)’ (3.103.0424)

mopii-j ‘a cold in the head’ (3.102.0559)

motuut\$e-j ‘flea’ (3.103.0402)

ngaawre-j ‘hole in the ground’ (3.105.0148)

(possibly deverbial but no corresponding verb attested)

novee7e-j ‘pinole (gruel) of chía ground with corn or wheat’ (3.104.0332)

pa\$ii-j ‘chía, *Salvia columbariae*’ (3.103.0101)

perii-j ‘pinole (a kind of gruel)’ (3.104.0585)

pokii-j ‘thief’

\$e7ii-j ‘tule redondo (round reed, cattail?)’ (3.103.0422)

\$et\$üino-j ‘polliwogs’ (3.102.0539)

\$ii7e-j ‘urine’ (3.105.0373)

\$uuke-j ‘tobacco’ (3.103.0123)

also *\$uuke* (3.103.0731), *\$uuke-t* (3.104.0326) (< Yokuts *sòkon*, Kroeber 1907a:244)

taare-j ‘vulva, vagina; clam’ (3.104.0115)

taxaa-j ‘baby, little girl’ (3.103.0727)

toove-j ‘white clay’ (3.103.0158)

toroo\$e-j ‘poppy’ (3.104.0483)

tovuu\$e-j ‘chichiquelite (a plant)’ (3.104.0334)

t\$aame-j ‘chokecherry, islay’ (3.103.0234)

t\$e7ii-j ‘duck’ (3.103.0024) ~ *\$a7ii-j* (3.103.0055) ~ *\$e7ii-j* (3.103.0670)

t\$enuu-j ‘child, boy’ (3.102.0409)

wii-j ‘acorn gruel’ (3.104.0584)

xaa-j ‘mountain, mountain range’ (3.102.0474) < *xaaj-j*

also recorded as *xaaj-t* (3.102.0337); ablative *xaaj-ve* (3.104.0334)

b. TV Ø-class nouns

aapo7 ‘abalone’ (3.104.0369)

aatava7 ‘chapule (grasshopper)’ (3.105.0012)

eraaxpo7 ‘old man’ (3.104.0066)

ongaa7to7 ‘madre del agua (mother of the water)’ (3.105.0148)

“dicen que es mujer, llora de noche (they say it’s a woman, she cries in the night)”

- hanaaxoot\$e7* ‘tick’ (3.104.0421)
- kaweeea\$* ‘zorro (fox)’ (3.103.0022) (cf. SE *qoo^Rt\$a-t\$*, LU *qiweewi-sh*)
- kokuu7*, ‘owl sp.’ (3.105.0496)
- komii7* ‘basket tray’ (3.102.0512)
- konaa\$* ‘cemetery’ (3.103.0303)
 attested only in local case form, e.g. *konaa\$-nga* ‘allá en el cementerio (there in the cemetery)’
- koojme7* ‘referee in peon game’ (3.105.0054)
- kovaat\$e7* ‘young man, 16-20 years old’ (3.103.0147)
- kwaa7ro7* ‘frog’ (3.103.0056)
- kwaviina7* ‘lagañas (blearedness of the eye)’ (3.104.0557)
- kwaxooxa7a* ‘big red snake’ (3.103.0056)
- kwe7tii7* ‘boy’ (3.102.0519)
- maakeka7* ‘cricket’ (3.105.0535)
- makaaho7* ‘dove’ (3.103.0419)
- moaaxko* ‘gray hair, white hair’ (3.103.0580)
- mohii* ‘pinole’ (3.103.0596)
 explicitly not **mohii-j*
- mojuu7ena* ‘musical instrument’ (3.103.0703)
- muune\$* ‘comelón (big eater)’ (3.104.0529)
- naawt\$oro* ‘bird (of any kind?)’ (3.105.0158)
- nat\$aakea7* ‘candle, lamp’ (3.105.0048)
- nakaarakara* ‘a kind of lizard’ (3.102.0431)
- noox* ‘tule boat (?)’ (3.105.0414, 0446)
- ojii7* ‘red paint, ocher’ (3.103.0275)
- pa7aa\$* ‘[a kind of] mouse’ (3.102.0614)
 cf. *pa7ii-t* ‘mouse’ pl. *pa7ii-to-m* (Harrington says pl. is not **pa7iim*) (3.103.0477)
- paaka7* ‘coin’ (3.102.0646) ~ *poonko7* (3.103.0052)
- paam7o\$* ‘bald eagle’ (3.105.0587)
- paamamkal* ‘mole’ (3.103.0022) (< LU?)
- panaaxara* ‘dove’ (3.103.0020)
- paxaa7* ‘ceremonial officer’ (3.104.0332)
- paxiino7o* ‘blackbird’ (3.102.0622)
- paxuu\$e7* ‘bone whistle’ (3.104.0332), *paxuut\$e7* (3.104.0015)
 poss. *ne-paaxo\$e7* ‘my whistle’ (3.104.0015), *ne-paaxot\$e7* (3.105.0508)
- poniivo7* ‘skunk’ (3.103.0262)
- raawro7* ‘white one’ (3.103.0747)

- \$ajaako* ‘4 reales (50-cent coin)’ (3.103.0043) ~ *t\$ajaakewe7* (3.103.0184)
\$etuu7 ‘crazy person, shady person’ (3.103.0707)
\$iio7 ‘king snake’ (3.105.0150)
\$ii\$o7 ‘devil’ (3.104.0346)
\$okaa7a ‘wasp’ (3.103.0014)
\$uuke ‘tobacco’ (3.103.0731)
 also *\$uuke-j* (3.103.0123), *\$uuke-t* (3.104.0326) (< Yokuts *sòkon*, Kroeber 1907a:244)
taaxkwa7 ‘fire-tender, religious officer’ (3.103.0051)
tapii7ro7 ‘body louse’ (3.103.0195)
taraajna ‘sewn-plank canoe’ (3.104.0326)
 also called *te7aat* (3.103.0013)
tat\$aanke ‘a game’ (3.103.0189)
to7iiroro7 ‘bird sp.’ (3.105.0158) (= *to7iit\$*)
to7iit\$ ‘bird sp.’ (3.105.0158) (= *to7iiroro7*)
tokwii\$ ‘mortar’ (3.103.0075)
 or *tokwii\$a-r* (3.104.0102)
tomuuxa7 ‘type of basket’ (3.102.0513)
tookt\$ep ‘arrowhead’ (3.103.0145)
toraare7 ‘peso (“round thing”)’ (3.103.0184)
 perhaps from Sp. *dólar*
toxuu7 ‘old woman’ (3.102.0446)
t\$aakwejo7 ‘red-winged blackbird’ (3.104.0381), ‘small bird’ (3.104.0067)
t\$akwii7ro ‘a yellow bird’ (3.104.0381)
t\$aat\$akla ‘chícharo (pea)’ (3.104.0381)
 < LU *chaachak-la* ‘cicada?’ (“vaguely heard of” [Elliott 1999:232])
t\$eruuko7 ‘lizard sp.’ (3.103.0406)
t\$et\$iinavro7 ‘White person’ (3.104.0348)
t\$eveeve7e ‘gopher snake; spotted’ (3.102.0624)
t\$ewiit\$ewe7 ‘deerhoof rattle’ (3.105.0511)
 (< Chumash, cf. Ineseño Chumash *c’iwis* ‘rattle’ [Santa Ynez Band of Chumash Indians 2003:104])
t\$iiwaje ‘a coin worth 5 cents’ (3.103.0731) (= *t\$iiwehe7*)
t\$iiwehe7 ‘a coin worth 5 cents’ (3.103.0184) (= *t\$iiwaje*)
t\$o7aaka7 ‘type of large basket’ (3.102.0511)
veetkala ‘turtle’ (3.103.0056)
waajnok ‘seal, sea-lion’ (3.102.0608)

This may be a verb meaning ‘it swims’; cf. CU *waj*, LU *waaj* ‘swim’.

wii7\$o7 ‘aura (vulture)’ (3.103.0209)

(< Yokuts; see 3.5.2 (12))

wo\$ii7 ‘dog’ (3.102.0533)

Cf. Serran *wahi7* ‘coyote’.

xavoove ‘bag of any kind’ (3.103.0190)

TV shows a small number of examples of *-t\$* as an absolutive suffix, as in (4). These have been separated out from the \emptyset -class list above. They are no more semantically cohesive than either of the classes of (3).

- (4) TV
- a. *akaawko-t\$* ‘crow’ (3.103.0714)
also recorded as *aawko-t* (3.102.0023) and, probably, *aawkot\$*. *Aawkot\$* was given by one speaker for ‘aura (vulture)’ (3.104.042), but a later speaker said it “sounds more like a word for crow than anything” (3.104.0459). Cf. SE *a^Rt\$aw-t* ‘crow’, KI *at\$awa-t* ‘raven’ (3.99.0349), ‘big crow’ (3.98.0020).
 - b. *kaavango-t\$* ‘a mythical language’ (3.103.0114)
 - c. *moriive-t\$* ‘poor one, orphan’ (3.103.0769)
also recorded as *moriive\$* (3.105.0021); cf. adj. *moriivko* ‘sad, poor’ (3.103.0114)
 - d. *nenooone-t\$* ‘con que anda (with which he walks [a cane?])’ (3.103.0632)
 - e. *paaw7ravo-t\$* ‘tray for toasting seeds’ (3.105.0478)
One speaker said this was from SE. But another speaker observed that the SE word was *chipatat* (which corresponds to *chipat*, the form recorded for SE in the 1960s).
 - f. *pieev-t\$* ‘little basket’ (3.102.0716)
 - g. *\$ewiirone-t\$* ‘bone whistle’ (3.103.0700)
 - h. *toovaxopeta-t\$* ‘clay pot’ (3.105.0530)
 - i. *toove-t\$* ‘a dance’ (3.104.0558)
 - j. *Tooj-t\$* ‘the devil woman who is there at El Rincon’ (3.105.0412)
cf. Serran *tyyjt* ‘spirit, devil’
 - k. *xaaj-t\$* ~ *xaaj-t* ‘blood’

While some examples of *-t\$* in TV reflect old consonant clusters (see 14.10.1) those in (4) do not have good etymologies and may be loan words. But with (4e), the foreign original did not have *-t\$* but rather *-t*, which is perfectly normal as a TV absolutive suffix. If (4a) is a Serran loan word, a bit garbled to be sure, the Serran original again has an absolutive in *-t*, not *-t\$*. (But the Serran words themselves look somewhat un-Serran – having medial *-w-* is suspicious – and they may all be *Wanderwörter*, loans from some

other, unknown language.) Further, the relationship in (4c) between a noun in *-t\$* and an adjective is puzzling; is the verb formed from the “foreign” noun?

Other than in these rare TV examples, absolutive *-t\$* is found only in Serran; it is the *L*-class Serran cognate of TV *-r*. The explanation for the absolutives in *-t\$* as in (4) may lie in their foreignness itself. The remark at (4e) may be revealing; the word was thought to be SE even though a more knowledgeable speaker was able to deny that it was. The use of *-t\$* might be motivated by the foreign flavor of the ending. Analogous processes of “foreignization” are found in English, the most conspicuous of which is the substitution of [ʒ] for [dʒ] in place names like *Taj Mahal*, *Beijing*, *Azerbaijan* (earlier spelled *Azerbaidzhan*, with *dzh* – for the Cyrillic *дж* – explicitly representing [dʒ]).⁷⁵

TV ‘blood’, repeated from (4k) in (5), is an example of a word with an affricate treated as an absolutive suffix. In spite of the Serrano-like *-t\$* absolutive, it is not from SE ‘blood’, which is *y^rt\$t\$-t\$*, a word with many UA cognates. No other Takic language shares the TV ‘blood’ word, and no cognate is found anywhere else in Uto-Aztecan. Nor does the word resemble any form for ‘blood’ that we have been able to find in any non-UA language of southern California.

- (5) TV *xaaj-t\$* ‘blood’, *a-xaaj-n* ‘3SG’s blood’ (3.103.0187)
 blood-ABS 3SG-blood-PSD

Xaajt\$ was also provided with an example of usage, in (6).

- (6) TV *A-taatax xaaj-t\$ jaawjoʔ*.
 3SG-body blood-ABS nothing.but
 ‘He his body is pura sangre (nothing but blood).’ (3.103.0187)

If *xaajt\$* is not a Uto-Aztecan etymon, how did the final consonant come to be reanalyzed as an absolutive suffix? The answer probably lies in the multilingualism of

⁷⁵ Another example of foreignization is found in the recasting of various consonant-final Spanish-language names to have final stress and sometimes to have [ʃ] instead of [tʃ]. We often hear *Chávez* pronounced [ʃə've:z], or *Martínez* as [martɪ'nɛ:z]. An extreme example of foreignization is found with the word *lingerie* (French [lɛ̃ʒri]), often heard with “foreignized” vowels as [lan(d)ʒə'reɪ] (Upton et al. 2001:593). Foreignization is also found in Spanish. Teaching a university class in Mexico, K. Hill was “corrected” to pronounce the name of the computer key as *cóntrol*. Computer vocabulary is English, and *contról* did not sound English enough.

the region. Most of Harrington’s consultants for TV knew other Takic languages, with varying degrees of fluency. If a TV speaker was presented with an item with a final fricative or affricate, the knowledge of one of the neighboring languages could be brought into play in a reanalysis, and, as we have seen, *-tʃ* is the common, *L*-class absolutive suffix in Serran. A reanalysis might be especially likely if the vocabulary item in question referred to an everyday concept such as ‘blood’.

Whatever the story of *-tʃ* in ‘blood’ may be, *xaajtʃ* was not the only form recorded. Elsewhere we find ‘blood’ given as *xaajt*, with a normal *-t* absolutive suffix (cf. the two forms *aawko-tʃ* and *aawko-t* for ‘crow/vulture’ in (4a)). It would seem that the unusual suffix *-tʃ* was unstable, subject to being regularized. When the example in (6) was re-elicited, the “*xaajt*” speaker produced (7).

- (7) TV *Xaaj-t* *jaawjoʔ* *a-taaxa-w*.
 blood-ABS nothing.but 3SG-body-PSD
 ‘He has a lot of blood on his body, lit. puro sangre en su cuerpo (nothing but
 blood on his body).’ (3.103.0607)

When words complete with their absolutive suffix are borrowed within Takic, things can get complicated. For instance, the SE word for ‘mouse’ is *paʔish* (cf. also TV *paʔaaʃ* ‘[a kind of] mouse’ (3.102.0614) and *paʔiit* ‘mouse [of a different kind]’ given in (3)). *Paʔish* is a SE loan word from unattested CA *paʔi-sh** [mouse-ABS]. (The nearest attested CA word is the augmentative form *paʔi-we-t* ‘field mouse’ [mouse-AUGM-ABS].) The forms of SE *paʔish* are interesting. The plural of *paʔi-sh* [mouse-ABS(?)] is *paʔi-m* [mouse-PL], with regular replacement of an absolutive suffix by the plural suffix. But SE accusative formation treats *paʔish* as consonant-final. The accusative singular is *paʔish-ti*, with *-ti*, the form of the SE accusative suffix used with \emptyset -class stems. The difficulties involved with trying to treat borrowed *-sh* as an absolutive suffix in accusative formation in SE are daunting. Even with the slightest knowledge of CA, one would know that **paʔi-sh-i* was wrong. It does not “sound Cahuilla”: CA normally doesn’t have syllables beginning in *sh*. But to make an accusative form that “sounds Cahuilla” (no matter what the real CA form might be), i.e., to make an accusative form such as perhaps **paʔichi*, one would also have to know to defricativize *sh* back to its underlying affricate. There is no such process in either CA or SE. The process works only one way: given an affricate, in an

appropriate position it will lenite to the corresponding fricative. Never in the other direction; a fricative is never “fortified” and replaced by the corresponding affricate.

5.2. POSSESSED NOUNS. Nouns in the possessed state are prefixed for person and number of the possessor. The absolutive suffix, the marker of the non-possessed state, does not occur, as in (1).

(1)		absolutive		possessed
	a.	SE	<i>raakw-t\$</i> ‘food’	<i>a-raakw</i> ‘her food’
	b.	AC	<i>maacha-t</i> ‘back’ (3.124.0356)	<i>a-maacha</i> ‘your back’ (3.121.0486)
	c.	CA	<i>te7i-lj</i> ‘bone’	<i>ne-te7i</i> ‘my bone’

For some nouns a “possessed” suffix may be required, as in (2).

(2)	a.	TV	<i>ee\$e-j</i> ‘painting’ (3.105.0298)	<i>ne-7ee\$e-n</i> ‘my body painting’ (3.105.0298)
	b.	LU	<i>paa-la</i> ‘water’	<i>no-paa-w</i> ‘my water’
	c.	CA	<i>awa-l</i> ‘horn’	<i>ne-7aw-7a</i> ‘my horn’
	d.	CA	<i>kaama7</i> ‘bed’ (< Sp. <i>cama</i>)	<i>ne-kaama-ki</i> ‘my bed’

For yet others there may be some phonological changes between the unpossessed and possessed forms, as illustrated for SE in (3).

(3)	SE	a.	<i>paa-t\$</i> ‘water’	<i>ny-pa</i> ‘my water’
		b.	<i>ku-t</i> ‘fire’	<i>ny-ku7</i> ‘my fire’
		c.	<i>po^Rqt</i> ‘road’	<i>a-po^R7</i> ‘its road’
		d.	<i>kut\$aa-t</i> ~ <i>kut\$ay-t</i> ‘firewood’	<i>ny-kut\$a7</i> ‘my firewood’
		e.	<i>majh-t\$</i> ‘child’	<i>ny-majr</i> ‘my son, boy child’
		f.	<i>waqaa-t\$</i> ‘feast’	<i>cha-waaq</i> ‘our feast’
		g.	<i>qavaa^R-ch</i> ‘leaf, ear’	<i>a-qaa^Rv</i> ‘its leaf, ear’
		h.	<i>\$umaan-t</i> ‘bow and arrow’	<i>ny-\$uuman</i> ‘my bow and arrow’
		i.	<i>ho^Rrupii7vy-t\$</i> ‘deep basket’	<i>ny-hoo^Rhpi7v</i> ‘my deep basket’
		j.	<i>pakyy-t</i> ‘shirt’	<i>ny-paaky7</i> ‘my shirt’

Some nouns are never encountered with absolutive suffixes but are attested only in the possessed form. These “inalienable” nouns include most kin terms and body parts, as

well as some others. This pattern appears to be largely due to cultural and discourse constraints rather than to lexical properties of these nouns. A useful example, from elsewhere within Uto-Aztecan, of a grammatical change occasioned by a cultural change is the development of an absolutive form of ‘father’ in Nahuatl, *tà-tli*, from a previously inalienable form, e.g. *no-tà* ‘my father’, when a non-kin use of the term developed with the coming of the institutions of the Catholic Church.⁷⁶

Also absolutive forms for nouns that are normally assigned to the “inalienable” class are sometimes attested in cases where the element can be construed as non-possessed, such as when, in a CU example, birds find a bit of hair, usually possessed but in this case belonging to nobody, on the ground for their nests, and the hair is absolutive *ju-l*, not possessed *pú-ju* (Hill 2005:168).

5.2.1. POSSESSIVE PREFIXES. The possessive prefixes appear on nouns and, except for CA (see 11.6.1.1, 11.6.1.2), on certain subordinate verbs that are treated as gerundials, where these prefixes encode the subject. These are discussed in chapters 12 and 13. In KI and CU, the possessive prefixes are identical to the subject prefixes in main verb constructions (see chapter 11). However, these prefixes are not identical to the pronominal stems that appear with inflected postpositions (5.4.5.3).

The possessive prefixes of TV are shown in (1).

(1) TV possessive prefixes

	singular	plural
person	1 <i>ne-</i>	<i>eyoo-</i> ~ <i>eyoom-</i>
	2 <i>mo-</i>	<i>omoo-</i> ~ <i>omoom-</i>
	3 <i>a-</i>	<i>pomoo-</i>

The SE possessive prefixes appear in (2). The differences in usage for Sarah Martin (SM) and Dorothy Ramón (DR) probably represent regional differences in the language.

⁷⁶ The same cultural change has accomplished a different but similarly interesting linguistic change in Cupeño. As mentioned in 4.5.1, a Catholic priest is addressed as *nyná*, while as a kinship term ‘my father’ is *nýna*. The root as a kin term is stressless while the non-kin ‘father’ is stressed.

(2) SE possessive prefixes

		singular	plural
person	1	<i>ni-</i> ~ <i>ny-</i> (SM) / <i>ny-</i> (DR)	<i>cha-</i> (SM) / <i>chyy-</i> (DR) ¹
	2	<i>my-</i>	<i>yy-</i>
	3	<i>a-</i>	<i>pyy-</i> ~ <i>puu-</i> ~ <i>pyy^R-</i>

¹ DR regarded SM's *cha-* as "archaic" (Ramón & Elliott 2000:390)

In Sarah Martin's usage, the SE 1SG prefix is *ni-* or *ny-* depending on the initial consonant of the stem. The front vowel (acute) form *ni-* is found before most acute consonants (in the sense of Jakobson et al. 1963); the back vowel (grave) form, *ny-*, is found elsewhere. This is reviewed in 4.2.9. Dorothy Ramón (in Ramón & Elliott 2000), uses *ny-* throughout.

The 1PL prefix is *cha-* for Sarah Martin. This aligns with the independent pronoun *acham* 'we'. The prefix is *chyy-* for Dorothy Ramón, aligning with the vowels of the other plural prefixes. Mrs. Ramón's independent pronoun for 'we' is *icham*.

The forms of the 3PL prefix depend on the vocalism of the stem-initial syllable. If the vowel of that syllable is *u* (short or long), the prefix is *puu-*; if it is a rhotic vowel, i.e., *a^R*, *y^R* or *o^R*, then the prefix also has a rhotic vowel: *pyy^R-*; elsewhere the prefix is *pyy-*.

The long vowels in the prefixes *chyy-* 'our', *yy-* 'your (pl.)', *pyy-* 'their' result from the diachronic loss of plural **-m-*, which is retained in, for example, CU *chym-*, *ym-*, *pym-* (see (5) below).

KI possessive prefixes are seen in (3). They are identical to the subject prefixes on KI verbs. We assume that the plural prefixes all have long vowels, aligning with the corresponding prefixes in SE (above). While Harrington normally did not mark vowel length on the prefixes, he commented (once) of a 3PL prefix that it was long "as usual" (3.98.0282).

(3) KI possessive prefixes

		singular	plural
person	1	<i>ni-</i>	<i>tsyy-</i>
	2	<i>my-</i>	<i>yy-</i>
	3	<i>a-</i>	<i>pyy-</i>

The possessive prefixes of LU are seen in (4), and of AC in (5). We usually write the vowel of the LU prefixes as unreduced *o*, although field workers sometimes represent it as reduced *u*. Our orthographic choice is discussed in 4.4.3.

(4) LU possessive prefixes

	singular	plural
person	1 <i>no-</i> ~ <i>nu-</i>	<i>cham-</i>
	2 <i>o-</i> ~ <i>u-</i>	<i>om-</i> ~ <i>um-</i>
	3 <i>po-</i> ~ <i>pu-</i>	<i>pom-</i> ~ <i>pum-</i>

(5) AC possessive prefixes

	singular	plural
person	1 <i>na-</i> ~ <i>no-</i> ~ <i>ne-</i> ¹	<i>cham7-</i> ~ <i>chom7-</i>
	2 <i>a-</i> ~ <i>o-</i>	<i>om-</i> ²
	3 <i>pa-</i> ~ <i>po-</i>	<i>pom7-</i>

¹ The *ne-* variant of the 1SG prefix occurs often before nouns with initial stressed *e*. There are several examples of *pa-* ‘3SG’ before such nouns, but no example has been found with *pe-**.

² There were probably *a* variants of *om-* and *pom-*, but the few attestations do not include these.

The CU possessive prefixes are shown in (6).

(6) CU possessive prefixes

	singular	plural
person	1 <i>ny-</i>	<i>chym-</i>
	2 <i>y-</i>	<i>ym-</i>
	3 <i>py-</i>	<i>pym-</i>

The CA possessive prefixes appear in (7). The 3SG prefix *he-* appears only before monosyllabic noun roots with short vowels, in which case it is stressed, as in *hé-ki* ‘his house’. In our view, *he-* is not technically a 3SG prefix. Instead, it is an empty element inserted to receive the stress that cannot be placed on the stressless root *ki*. In the plural, the component *he-* serves to fill out the requirement the 3PL prefix *m-* should occur in a viable syllable.

(7) CA possessive prefixes

		singular	plural
person	1	<i>ne-</i>	<i>chem-</i>
	2	<i>e-</i>	<i>em-</i>
	3	\emptyset ~ <i>he-</i>	<i>hem-</i>

5.2.2. POSSESSED-NOUN SUFFIXES. The suffixes that appear on some possessed nouns are shown in (1). No possessed suffixes have been identified for KI.

(1)	*-ny	*-7a	*-kii	*-7ii	*-wi
TV	-n(o) ¹	-7			- ²
SE		-7			- ²
LU			-ki		-w
AC			-ka		-v
CU		-7a	-ki	-7i	-w(i) ³
CA		-7a	-ki		-w ⁴

¹ TV -n(o) is -n in the nominative, -no in the accusative.

² *-wi is lost through regular phonological change in TV and Serran.

³ CU -w(i) is -w after a vowel, -wi after a consonant.

⁴ CA -w has been restructured as a verb suffix.

No discernable pattern among the possessed noun suffixes in TV has yet emerged. The TV possessed suffix -n may be found after a vowel (2a) or a glide (2b) but not after a non-glide consonant (2c). Examples (2d-f) show three nouns, each with a different root-final vowel, that appear either with no suffix (and the vowel apocopated) or with the suffix -n (preceded by the underlying root-final vowel). (2g) shows two possible possessed forms of *maat\$ey* ‘belt’, one with -n and the other with -7. (2h) shows the same variability and also shows a reduplicated plural form with the possessed suffix -7. (2i) has been found only with -7. (2b) and (2i) show that stems similar in meaning can differ in possessed suffix: (2b) has -n and (2i) has -7. This probably means there is no semantic significance in the selection of possessed suffix. Examples (2i,j) show that nominalizing -e (< unstressed *-i) selects the -n form of the possessed suffix.

(2)	TV	<i>ne-</i> ‘my’, <i>mo-</i> ‘your’, <i>a-</i> ‘his/her’, <i>pomoo-</i> ‘their’
	a.	hand <i>ne-maa-n</i> , pl. <i>ne-maa~ma-n</i> (3.102.0635)

- b. stone pipe *ne-too\$aw-n*; abs *to\$aaw-t* (3.104.0525)
- c. leg, foot *ne-neev*, pl. *ne-nee~nev* (3.103.0620)
- d. penis *ne-poot* (3.104.0015), *ne-poota-n* (3.104.0140); abs *potaa-r* (3.104.0091)
- e. shoulder blade *ne-\$ook* (3.103.0618), *a-\$ooke-n* (3.105.0394)
- f. nail, claw *ne-t\$uur* (3.103.0627), pl. *ne-t\$uu~t\$or* (3.103.0120), *a-t\$uuro-n* (3.104.0338)
- g. belt *ne-maat\$e-n* ~ *ne-maat\$e-7*; abs. *maat\$e-j* (3.103.0424)
- h. trastes (dishes) *mo-kuume-n* ~ *ne-kuume-7*, pl. *ne-kuu~kme-7*; abs. pl. *ko~kuume* (3.103.0127)
- i. pipe *ne-wiiko-7* (3.104.0525); abs *wiiko-t* (3.103.0288)
- i. language *pomoo-\$eraw7-e-n* (3.105.0046), *eyoo-\$eraaw-e* (acc.) (3.102.0018); loc. *\$eraaw-nga* ‘in a language’ (3.103.0332); verb *\$eraawa-x* ‘speak, talk’ (3.102.0018)
- j. planted field *ne-puuhav-e-n* (3.103.0476); verb *pohaawva-x* ‘plant a field’ (3.103.0476)

The possessed suffix *-ki* in the Cupan languages derives a possessed state noun from an absolutive base. The suffix *-ki* is used with nouns whose referents are apparently regarded as not usually possessed by a person. (For some reason several words for types of baskets fall in this category.) Many nouns that can appear with *-ki* can also appear in the absolutive form with the classifier for “possession” (LU *-mix*, AC *-miix*, Inland Cupan *-mixan*; see 5.2.3 below), which is prefixed for possessor. In all the languages *-ki* is used to derive the possessed forms of Spanish loan words, regardless of their meaning. The suffix *-ki* appears as *-ka* in AC, where unstressed *i* becomes *a*.

The forms suffixed with *-ki* fall in two groups. The first group retains the absolutive suffix before *-ki*, in (3). These forms, then, are marked for both non-possession and possession, a strange combination. However, it may be noticed that the examples in (3) involve what could be considered “secondary” possession. For example, CA *ne-se7i-sh-ki* ‘my flower’ (3g) necessarily refers to a flower which is not part of me, while the unmarked possessed form, CA *se7i* ‘its flower, its blossom’ (Seiler 1977:72), is, we presume, the way of speaking about a plant and its flowers. A problem with this analysis is that in the material available to us, this matter is not addressed.

(3)			'my -'	absolute
a.	LU	grinding stone	<i>no-7uruu\$a-t-ki</i>	<i>uruu\$a-t</i>
b.	LU	cedar tree	<i>no-tuvó-t-ki</i>	<i>tuvó-t</i>
c.	AC	greens	<i>na-qee-t-ka</i> (3.121.488)	<i>qee-t</i> (3.121.0484) ¹
d.	CU	bark	<i>ny-chalá-l-ki</i>	<i>chalá-l</i>
e.	CU	palm tree	<i>ny-maawa-l-ki</i>	<i>maawa-l</i>
f.	CU	beer	<i>ny-syrveesa-ki</i>	<i>syrveesa</i> < Sp. <i>cerveza</i>
g.	CA	flower	<i>ne-se7i-sh-ki</i>	<i>se7i-sh</i>
h.	MCA	apple	<i>ne-mansaana-ki</i>	<i>mansaana</i> < Sp. <i>manzana</i>

¹ Harrington wrote this with a short vowel, but four pages later, he collected the possessed form and wrote "of vowel, long, impt." Harrington's comment probably was meant to apply to the absolute form as well.

In the second group, in (4), *-ki* directly attaches to the noun stem. In this group, when the possessed suffix *-ki* is added to the noun stem in CU or in MCA, an additional possessed suffix, *-7a* is applied, as seen in (4h,i,k). This double marking for "possessed" may seem strange, but it is in accord with the double marking of accusative case and of plurality that has been documented earlier in this section. The \emptyset -class nouns with *-ki* belong in first group, above, and not this second one, since in CU (3f) and MCA (3h), they show only single marking, not double marking of the possessed state.

(4)			'my -'	absolute
a.	LU	prickly pear	<i>no-nav-ki</i>	<i>naavu-t</i>
b.		grass	<i>no-\$am-ki</i>	<i>\$aamu-t</i>
c.		small nettle	<i>no-\$akísh-may-ki</i>	<i>\$akísh-ma-l</i>
d.		white clay	<i>no-tov-ki</i>	<i>toovi-sh</i>
e.		yucca	<i>no-hunuuva-ki</i>	<i>hunuuva-t</i>
f.		car	<i>no-maakina-ki</i>	<i>maakina</i> (Sp. <i>máquina</i>)
g.	AC	money	<i>na-sinva-ka</i>	<i>sinva-l</i> (3.121.0756)
h.		axe	<i>na-7aacha7-ka</i>	<i>aacha7</i> (3.123.0468) (Sp. <i>hacha</i>)
i.	CU	grinding stone	<i>ny-malá-ki-7a</i>	<i>malá-l</i>
j.		tules	<i>ny-si7í-ki-7a</i>	<i>si7í-sh</i>
k.	DCA	little basket	<i>ne-tevingi-ki</i>	<i>tevingi-lj</i>
l.	MCA	money	<i>ne-qish-ki-7a</i>	<i>qichi-lj</i>

The Inland Cupan possessed suffix *-7a* has a complex derivational history. Most possessed nouns with final *-7a* relate to deverbal nouns with *-a-t* from **-a7-tV* (see 14.2). Their possessed forms have no possessed suffix, since this final *-7a* is apparently simply the result of the loss of the absolutive with metathesis of a glottal stop in the unstressed final syllable. However, Hill (2005) and Seiler (1977) both regarded *-7a* as a possessed suffix, and in fact in both CU and CA *-7a* does appear on some nouns that are not attested with the absolutive in *-a-t*. This may have resulted from reanalysis of the original nominalizer *-7a* as a possessed suffix. Examples appear in (6).⁷⁷

(5)		possessed	absolutive
CU	a. spines, thorns	<i>-7iwja-7a</i>	<i>iwja-l</i>
	b. spear	<i>-waq-7a</i>	<i>waqa-l</i>
	c. pipe	<i>-ish-7a</i>	<i>ichi-sh</i>
CA	d. horn (of animal)	<i>-aw-7a</i>	<i>awa-l</i>
	e. rib	<i>-chaw-7a</i>	<i>chawa7a-l</i>
	f. ear	<i>-naq-7a</i>	<i>naqa-l</i>

In some items, as with (6d,e) and in similar LU examples, *-ki* is almost certainly the suffix regularly added to the base for plant and fruit names to form verbs meaning ‘harvest, gather, search for’ (see 14.15.2).

(6)		possessed	absolutive
CU	a. metate, grinding stone	<i>-malá-ki-7a</i>	<i>malá-l</i>
	b. land	<i>-tymá-ki-7a</i>	<i>temá-l</i>
	c. tules	<i>-si7í-ki-7a</i>	<i>si7í-sh</i>
	d. basket grass species	<i>-syqypí-ki-7a</i>	<i>syqypi-sh</i>
	e. money	<i>-qish-ki-7a</i>	<i>qichi-lj</i>
MCA	f. money	<i>-qish-ki-7a</i>	<i>qichi-lj</i>

The suffix *-7a* may relate to the **-a7-tV* nominalization, but this analysis would not make sense for examples (6a,b). Inland Cupan ‘money’ (6e,f), however, is cognate with LU *qesh-la* ‘shell’. Thus *-qish-ki-7a* in (6e,f) probably refers to “gathered” shells that have

⁷⁷ In many examples throughout this study, final *-7a* in possessed nouns remains glossed as PSD. We have not managed to update them all to accord with our new understanding of its derivational status.

been carved into shell money beads. The MCA example (6f) may be a CU loan; no other example of this construction in CA has been found. The reason may be that in CA, there is an elaborate set of classifiers for gathered plants, with the classifier based on the verb for the kind of gathering that is involved. Thus a possessed plant would be referred to with an expression using a possessive classifier such as *-7aj7a* ‘something gathered by picking from trees’ (cf. 5.2.3 (5b)) plus the plant name in its absolutive form.

Notably, in all of the CU examples cited in Hill (2005:175) the stress on the noun base falls immediately before the *-ki* suffix. In some cases, as with (6a-d) the noun exhibits this stress position in all environments. However, with (6e), the stress on the absolutive noun is stem-initial: *sýqypi-sh*. Thus in CU, *-ki* appears to be a stress-shifting suffix.

CU has a few possessed nouns with an apparent possessed suffix *-7i*, e.g. *-wik-7i*, *wikí-lj* ‘flight feather’. The source of these constructions is obscure.

Finally, we turn to a few fossilized possessed suffixes which are of interest for comparative Uto-Aztecan. Of special interest here are the possessed forms in *-w* shown in (7), especially those in reflexes of **paa-La* ‘water’. (For KI, the expression for possessed water uses the absolutive noun and an inflected possessive classifier.)

(7)	TV	a.	<i>paa-r</i>	<i>-paa-ne-n</i>	‘possessed water’ (3.102.0567)
		b.		<i>-paa-j-ro-7</i>	‘liquor’ (3.104.0406)
	SE	c.	<i>paa-t\$</i>	<i>-paa-7</i>	‘possessed water’
	LU	d.	<i>paa-la</i>	<i>-paa-w</i>	‘juice, possessed water, e.g. pond’
		e.		<i>-taaxa-w</i>	‘entire body’
	AC	f.	<i>paa-l</i>	<i>-paa-v</i>	‘possessed water’, e.g. <i>\$aqá7 po-paa-w</i> ‘honey (bee’s water)’ (Kroeber 1909:250)
				<i>-taaxa-w</i>	<i>na-taaxa-w</i> ‘mi cuerpo (my body)’ (3.123.0376)
	CU	g.	<i>pa-l</i>	<i>-pa-w</i>	‘water, juice’
		h.		<i>-pa-w-vi</i>	‘spring’
		i.		<i>-tax-wi</i>	‘body’
		j.		<i>-xu-tax-wi</i>	‘back’
	CA	k.	<i>pa-l</i>	<i>-pa-7</i>	‘possessed water’
		l.		<i>-pa-w-7a</i>	‘owned water’ (from <i>paw</i> ‘get water’)

Both the TV possessed forms for ‘water’ are irregular; the derivation for ‘liquor’ (6b) includes the characterizing suffix *-ro*, which appears with nouns (cf. 14.5), along with the possessive suffix *-7*, but the *-j-* suffix is unexplained. SE (6c) and CA (6j) both have constructions with *-7*, probably from **-7a* (whose full form is retained in (6k)).

LU (7d,e), CU (7g-j), and CA (7k) have a possessed suffix *-w(i)*, *-w* after vowels, *-wi* after consonants (attested only in CU). AC shows *-v* for what seems to be the same suffix (7f). There appears to have been some reanalysis in CA, which has a derived verb *pa-w* ‘get water’ (LU has *paa-w* in the same meaning), and a secondary possessed form (7l) from deverbal *pa-w-a-t* ‘water that has been fetched’.

The suffix *-w(i)* is probably of Uto-Aztecan age. While only remnants are found in Tactic, it is quite productive in Nahuatl, as in (8) (*-uh* = [-w], *-hui* = [-wi]); examples from Launey 1992:91-92). Nahuatl shows the same distribution of allomorphs as CU.

(8)	Nahuatl	possessed	absolute
	man	<i>no-tlāca-uh</i>	<i>tlāca-tl</i>
	work	<i>no-tequi-uh</i>	<i>tequi-tl</i>
	road	<i>n-ò-hui</i>	<i>ò-tli</i>
	thread	<i>n-ich-hui</i>	<i>ich-tli</i>

5.2.3. CLASSIFIER NOUNS. Some nouns cannot be directly possessed, but must appear in the absolute state modified by a classifier noun. The classifier noun is marked by the possessive prefix (and sometimes by a possessive suffix). Except for CA, which has a more elaborate set of possessive classifiers, the languages have two such items, one for animals (including birds) or “pets” and one for everything else. These possessive classifiers are shown in (1).

(1)		animal	general
a.	TV	<i>-7aat\$e-n</i>	<i>-hii-n</i>
b.	SE	<i>-aachi7</i>	<i>-ñu(u-)</i>
c.	KI	<i>-7atsit</i>	<i>-niw</i>
d.	LU	<i>-7aash</i>	<i>-mix</i>
e.	AC	<i>-7aach</i>	<i>-miix</i> ¹
f.	CU	<i>-7ash</i>	<i>-mixan</i>
g.	CA	<i>-7ash</i>	<i>-mixan</i>

¹ There is only one example of this item in the AC data, and unfortunately it was collected by Harrington's nephew Arthur E. Harrington, doing his best, but both over- and under-hearing details in the language. He wrote <no-miix'q> 'my property'. J. P. Harrington corrects it to <namíix> (3.124.0182).

Examples from SE in (2) illustrate the use of these classifiers. Example (2c) shows *-ñu* used with an animate noun, *paxaa7* 'ceremonial clown'.

- (2) SE a. *Ny7-aachi7 kuchi7 ami7 kiri7 qat\$.*
 1SG-animal dog and cat be
 'I have a dog and a cat.'
- b. *Ni-ñuu-j = n hiraa-t\$-i num-ia7n.*
 1SG-possession-ACC = 1SG knife-ABS-ACC break-CAUS
 'I broke my knife.'
- c. *Ama7 puu-ñu paxaa7 wii7n.*
 DIST 3PL-possession clown shout
 'Their [ceremonial] clown shouted.'

For some nouns that are directly possessable, the alternative is available to use the classifier construction, as in (3).

- (3) SE *ny-hoo^Rhpi7v* or *ni-ñu ho^Rrupii7vy-t\$*
 1SG-deep-basket 1SG-possession deep-basket-ABS
 'my tall basket'

-aachi7 and *-ñu* are not restricted to the classifier function. When not modifying something else, *-aachi7* means 'horse' (4a) and *-ñu* means 'possession(s), things' (4b).

- (4) SE a. *Ama7 pun-uk mi-j cha7-aachi7.*
 DIST 3SG-EMPH go-IND 1PL-animal
 'Our horse went on by itself.'
- b. *Cha-ñuu-j = ch kii-jka7 churup-k-in.*
 1PL-possession-ACC = 1PL house-DAT enter-K-CAUS

‘We took our things into the house.’

The system has been elaborated in CA also to include the classifiers seen in (5), from Seiler (1977:300-306). To these there can be added other “meat” classifiers depending on preparation method.

- (5) CA
- | | | |
|----|----------|--|
| a. | -wes7a | ‘(cultivated) crop’ (including maize, melons, beans; also <i>mawul</i> ‘fan palm’ and <i>navet</i> ‘prickly pear fruit’) |
| b. | -7aj7a | ‘fruits and nuts collected from trees’ |
| c. | -chi7a | ‘fruits, seeds, or nuts collected from the ground’ |
| d. | -ki7iw7a | used for some other important species of wild plants (instead of -7aj7a or -chi7a) |
| e. | -kiljiw | ‘partner’, used with the name of one’s moiety animal, either <i>tukut</i> ‘wildcat’ or <i>isilj</i> ‘coyote’ |
| f. | -sex7a | ‘cooked food’ |
| g. | -wa7 | ‘roasted meat of (animal)’, e.g. -wa7 <i>sukat</i> ‘roast venison’ |

5.3. NOUNS AND NUMBER. In Takic there are two morphological devices for noun pluralization, reduplication and suffixation in *-m* (reflexes of **-my*).

Nouns in the \emptyset -class (that is, nouns that take no absolutive suffix) may exhibit a stem augment before the plural suffix. The Serran augment is *-ja-*. The TV *-a-* probably also represents **-ja-*, **j* being typically lost in TV inflections, cf. its loss in accusative formation (see 5.4.2.1). The augment for Cupan is from **-y-*. The Cupan augment **-y-* appears in LU as *-u-* (*u* being the unstressed reflex of **y* in LU), in AC as *-a-* (again, the expected unstressed reflex of **y* in AC), in CA as *-e-* (the regular reflex of **y*), and in CU as *-i-* (one of the reflexes of **y*; cf. the CU plural absolutive *-ti-* < **-ty* discussed in 5.1.1.1). Though they serve the same function, it seems unlikely that the Cupan augment **-y-* and the TV and Serran augment *-ja-* derive from a common phonological source.

(1) \emptyset -class plurals

	augment	singular	plural
a.	TV <i>-a-</i>	<i>wo\$ii7</i> ‘dog’	<i>wo~woo\$e7-a-m</i> (3.103.0166)
b.	SE <i>-ja-</i>	<i>vuurus</i> ‘donkey’	<i>vuurus-ja-m</i>
c.		<i>wa7uuravi7</i> ‘horse’	<i>wa7uuravi7-ja-m</i>

d.		(pl. used as sg.)	<i>juaaka-ja-m</i> ‘Chemehuevi’
e.	KI	-ja-	<i>ku7mu\$</i> ‘sea lion’ <i>ku7mu\$-ja-m</i> (3.98.0101)
f.	LU	-u-	<i>ataax</i> ‘person’ <i>ataax-u-m</i> ‘people’
g.			<i>ehengmaj</i> ‘bird’ <i>ehengmaj-u-m</i>
h.	AC	-a-	<i>ataax</i> ‘person’ <i>ataax-a-m</i> ‘people’ (3.121.0783)
i.			<i>koo7mas</i> ‘cowry shell’ <i>koo7mas-a-m</i> (3.123.0545)
j.	CU	-i-	<i>tenydhóor</i> ‘fork’ <i>tenydhóor-i-m</i>
k.	CA	-e-	<i>kalaváas</i> ‘pumpkin’ <i>kalaváas-e-m</i>

Animate nouns whose plural is formed solely by reduplication are found almost exclusively in TV, as in (2). Many of these are recorded both with and without the plural suffix *-m*. There are often several variants recorded of TV reduplicated plurals.

(2)	TV	singular	plural
	a.	<i>taaxa-t</i> ‘person’	<i>ta~raaxa-t</i> (3.104.0014) (also <i>ta~raaxa-to-m</i> (3.105.0132))
	b.	<i>huuna-r</i> ‘bear’	<i>ho~huuna-r</i> (3.104.0350) (also <i>ho~huuna-ra-m</i> / <i>ho~huund-ra-m</i> (3.104.0058))
	c.	<i>kii-j</i> ‘house’	<i>ke~kii-j</i> (3.102.0016)
	d.	<i>pekwaar</i> ‘berry’	<i>pe~piikwa-r</i> (3.104.0069)
	e.	<i>t\$akwjuu7</i> ‘songbird sp.’	<i>t\$a~t\$aakwjo7</i> (3.104.0067)
	f.	<i>jaaj-t</i> ‘one who is living’	<i>ja~jaaj-t</i> (3.103.0152) (also <i>ja~jaaj-to-m</i> (3.103.0769))

A single CU example of an animate noun with a plural marked solely by reduplication has been found: *\$a~\$ávi-t*, a plural of *\$av-it* ‘Mexican’; the alternative plural, *\$avi-ti-m*, is unremarkable. Further examples of non-reduplicated plurals, ones formed just by suffixation, appear in (3).

(3)		singular	plural
	a.	TV <i>a\$aaw-t</i> ‘eagle’	<i>a\$aaw-to-m</i>
	b.	SE <i>huuna-t</i> ‘bear’	<i>huuna-m</i>
	c.	SE <i>wama(t)-t</i> ‘cottonwood’	<i>wamata-m</i> (cf. loc <i>wamata-v</i> or <i>wama-pa7</i>)
	d.	KI <i>at\$awa-t</i> ‘raven’	<i>at\$awa-m</i> (3.98.0108)
	e.	LU <i>\$u7i-sh</i> ‘jackrabbit’	<i>\$u7ii-chu-m</i>

- | | | | |
|----|----|-----------------------------|--------------------------------|
| f. | AC | <i>we7e-t</i> ‘grasshopper’ | <i>we7ee-ta-m</i> (3.116.0139) |
| g. | CU | <i>su7i-sh</i> ‘jackrabbit’ | <i>su7-cha-m</i> |
| h. | CA | <i>ku7a-l</i> ‘louse’ | <i>ku7a-le-m</i> |

The Serran languages, cf. 5.1, do not use the absolutive suffix before the plural suffix, as in (3b-d). There are examples like (3c), which look like they do, but such examples involve syncope and consequent contraction of theoretical word-final *tt*. They often show various irregularities as in the different locatives for (3c).

The reverse is true of TV, which generally retains the absolutive before the plural suffix but, much more rarely, does not, as in (4). These may represent interference from SE in the speech of Harrington’s multilingual consultant Jesús Jauro, although *worooram* ‘men’ (4i) was also recorded from José de los Santos Juncos, who was not identified by Harrington as bilingual. De los Santos was also the source of *wereet\$am* ‘spiders’ (4h). As shown, a few of these occur in other plural forms as well.

- | | | | |
|-----|----|--|---|
| (4) | TV | singular | plural |
| | a. | <i>a-heooro-t</i> ‘wise person’ | <i>a-hii~hero-m</i> (3.105.0371) |
| | b. | <i>havaav7e-t</i> ‘fast being’ | <i>havaav7e-m</i> (3.104.0564) |
| | c. | <i>joxaa-r</i> ‘black ant’ | <i>jo~jooxa-m</i> (3.103.0195) |
| | d. | <i>kiijo-t</i> ‘dweller’ | <i>ke~kiijo-m</i> (3.103.0577) |
| | e. | <i>paa7a-t</i> ‘mountain sheep’ | <i>paa7a-m</i> (3.104.0162)
(also <i>paa7a-to-m</i> (3.104.0573)) |
| | f. | <i>\$ahoove-t</i> ‘sacred being’ | <i>\$a~\$aahve-m</i>
(also <i>\$a-\$aahve-ta-m</i> (3.103.0723)) |
| | g. | <i>t\$oi-t</i> ‘lazy person’ | <i>t\$o~t\$oi-m</i> (3.104.0459) |
| | h. | <i>wereet\$e-j</i> ‘spider’
(sic with <i>e</i> in sg. and <i>a</i> in pl.; misrecording?) | <i>wereet\$a-m</i> (3.103.0413) |
| | i. | <i>worooj-t</i> ‘man’ | <i>woroo~ro-m</i> (3.104.0065)
(also <i>woroo~ro-ta-m</i> (3.104.0094), <i>worooj-ta-m</i> (3.104.0356)) |

Some animate nouns showing plural reduplication may be doubly marked by also taking the *-m* suffix (5). This pattern is uncommon other than in TV. Many of the apparent irregularities are occasioned by the process of syncope, discussed in chapter 4.

(5)	singular	plural
a. TV	<i>taaxa-t</i> ‘person’	<i>ta~raaxa-to-m</i> (3.105.0129) (also <i>ta~raaxa-t</i> (2))
b. TV	<i>tomjaa-r</i> ‘captain, chief’	<i>to~toomja-m</i> (3.104.0109), <i>to~toomja-ro-m</i> (3.103.0727) (also <i>to~toomja-r</i> (3.103.0164), <i>tomjaa-ra-m</i> (3.105.0091))
c. TV	<i>pokii-j</i> ‘thief’	<i>po~vuuk-ja-m</i> (3.104.0399)
d. TV	<i>\$uuka-t</i> ‘deer’	<i>\$o~\$uuka-ta-m</i> (3.104.0066)
e. SE	<i>naash-t</i> ‘girl’	<i>na~naacha-m</i>
f. SE	<i>hoo^Rm-ch</i> ‘shaman’	<i>ho^R~ho^Rmi-m</i>
g. SE	<i>wyt\$ⁱ7vy^R-t\$</i> ‘old man’	<i>wyh~wt\$ⁱ7vy^R-m</i>
h. KI	<i>kwiihak</i> ‘woman’	<i>kwi~kwiihaka-m</i> (3.99.0554)
i. LU	<i>\$ungaa-l</i> ‘woman’	<i>\$u~\$nga-lu-m</i>
j. AC	<i>naxanma-l</i> ‘old man’	<i>na~nxama-la-m</i> (3.122.0020)
k. CU	<i>yjy-t</i> ‘thief’	<i>y~7jy-ti-m</i>
l. CU	<i>nit</i> ‘pregnant woman’	<i>ni~n-ta-m</i>
m. CA	<i>naxaluve-l</i> ‘old man’	<i>na~naxaluve-le-m</i>

The examples in (6) show some arbitrary differences between the singular stem and its plural counterpart.

(6)	singular	plural
a. TV	<i>eraaxpo7</i> ‘old man’	<i>er~eerx-a-m</i> (3.103.0680) (also regular <i>eraaxpo7-a-m</i> (3.104.0066))
b. LU	<i>nawít-ma-l</i> ‘girl’	<i>na~nat-ma-lu-m</i>
c. AC	<i>amaaja7-ma-l</i> ‘little boy’	<i>amaaja-m</i> (3.123.0282)
d. CU	<i>kii-ma-l</i> ‘boy’ [boy-DIM-ABS]	<i>ki~ki-ta-m</i> [PL~boy-ABS-PL]
e. CU	<i>naxáni-sh</i> ‘man’	<i>na~nxa-chi-m</i>
f. CA	<i>ñichi-lj</i> ‘woman’	<i>ñi~ngki-che-m</i>

In (6a), the element *-po7* may be dropped in the plural. In (6b), the plural shows no trace of the syllable *-wi-* seen in the singular. There is no known LU phonological rule that

might account for this. In (6c,d), the diminutive suffix *-ma* is not used in the plural. The AC example, (6c), shows diminutive vowel shortening plus a mysterious glottal stop in the singular. In (6d) the plural has the *-t* form of the absolutive suffix, governed by the stem *ki*, rather than the *-l* form of the singular governed by *-ma*. The singular of (6d) also shows the reverse of diminutive shortening, with long *kii-* before *-ma*. (6e) shows arbitrary loss of *-ni-* in the plural. The form in (6f) provides the only attestation of nasal assimilation in CA. Further, the singular stem *ñichi-* and the plural stem *-ngki-* govern different choices of absolutive suffix.

The irregularities in the LU examples seen in (7) are minor and reside mainly in the singular forms.

(7)	LU	singular	plural	expected singular
	a.	<i>nawii-l</i> ‘young woman’	<i>na~nwija-m</i>	* <i>nawiija-l</i>
	b.	<i>ja7á-sh</i> ‘man’	<i>ja7á~j-chu-m</i>	* <i>ja7áj-sh</i>
	c.	<i>ne-t</i> ‘pregnant woman’	<i>nee~ni-tu-m</i>	* <i>nee-t</i>

In (7a), the plural is compatible with a singular form with underlying *-iija-* instead of *-ii-* (the singular may have been contracted) and the unexpected absence of *-l-* in the plural remains to be explained. (7b) shows the simplification of the syllable-final cluster *-y- + -sh*. This seems to be an instance of a more general process (see chapter 4). (7b) is discussed in more detail in 4.4.3.(12, 13). AC also has the corresponding pair *je7í-ch* ‘man’, pl. *jaa~jaj-cho-m* (3.122.0151), which looks even more irregular. (7c) shows a diachronically shortened vowel in the singular form, cf. the SE cognate *noo^Rqt* ‘pregnant woman’, with a long vowel. The LU plural *neenitum* retains evidence of the underlying long vowel in its resistance to syncope.

In some of the languages reduplicated inanimate nouns tend to have a distributive sense, such as “different kinds of X”, or “many instances of X here and there.” This is well-attested for the word for ‘house’ but, as seen for SE in (6b-d), the construction applies to many other inanimate nouns as well. In fact, it is likely that many of the reduplicated inanimates labeled as “plural” in the sources should really be construed as distributives. We regard distributive formation as more of a derivational process than inflectional.

- (8) a. SE *kii~ki-ch* ‘lots of houses all over the place’
 b. SE *po^R~po^Rq-t* ‘roads all over the place’
 c. SE *taa~tanga(t)-t* ‘sacks in various places’
 d. SE *qa~qaii-ch* ‘lots of mountains’
 e. AC *\$u~\$pé-la-m* ‘(for) each one’ (cf. *sapul* ‘one’) (3.124.0123)
 f. CU *ki~ki-7aw* ‘from house to house’
 g. CA *ki~ki-sh, ki~ki-che-m* ‘houses (usually empty) here and there’

Though Takic languages for the most part do not suffix inanimates for plural, a few examples of inanimate plurals in *-m* are found, as in (9). This kind of plural seems much more common in Serran than in the other languages. However, both Seiler and Hioki (1979) for DCA, and Harrington, working on MCA in the 1930s and 1950s, collected many examples. Some examples of inanimates with plural suffixes involve belief in the creation-time animacy of beings that are today inanimate. For instance, Elliott (1999: 1063) observes that plural forms of *wixe7tut* ‘sugar pine’, refers to the time when these trees were human beings. Similarly, ‘star’ can be pluralized in all the languages, and ‘mountain’ in many of them, as these are regarded as persons in the spiritual realm.

- | (9) | singular | plural |
|-----|---|--|
| a. | SE <i>juhaa-t\$</i> ‘pine tree’ | <i>juhaa-m</i> |
| b. | SE <i>chipo^R(t)-t</i> ‘small round basket’ | <i>chipo^Rta-m</i> |
| c. | SE <i>tanga(t)-t</i> ‘sack’ | <i>tangata-m</i> |
| d. | SE <i>lameesa7</i> ‘table’ (< Sp. <i>la mesa</i>) | <i>lameesa7-ja-m</i> |
| e. | SE <i>ny-paaky7</i> ‘my shirt’ | <i>ny-paaky-m</i> |
| f. | SE <i>ny-ma(a-)</i> ‘my hand, finger, forearm’ | <i>ny-maa-m</i> ‘my fingers’ |
| g. | SE <i>a-paa^Rn</i> ‘its egg’ | <i>a-paa^Rno^R-m</i> |
| h. | CA <i>chaja-l</i> ‘mistletoe’ | <i>chaja-le-m</i> |
| i. | CA <i>kupa-sh</i> ‘barrel cactus’ | <i>kupa-che-m</i> |
| j. | CA <i>mawu-l ~ mau-l</i> ‘palm tree’ | <i>mawu-le-m ~ mau-le-m</i> |
| k. | CA <i>sandíja</i> ‘watermelon’ (< Sp. <i>sandía</i>) | <i>sandíja-m</i> |
| l. | CA <i>tama-l</i> ‘tooth’ | <i>tama-le-m</i> |
| m. | DCA <i>samma-t</i> ‘grass’ | <i>samma-te-m</i> ‘various plants of grass’ (3.108.0786) |
| n. | DCA <i>taxmowel</i> ‘song’ | <i>taxmowe-le-m</i> (3.107.0197) |

Inanimate nouns can often be understood as having singular or plural reference by other elements in the clause, such as the use of a verb that conveys information regarding number, as in (10).

- (10) SE a. *A-mukpi7 wisip-y7-k.*
 3SG-nose pointed-RES-K
 ‘His nose is pointed.’
- b. *Puu-mukpi7 wis~is-y7-k.*
 3PL-nose pointed~PL-RES-K
 ‘Their noses are pointed.’
- c. *A-waaqa7 wis~is-y7-k.*
 3SG-shoe pointed~PL-RES-K
 ‘His shoes are pointed.’

A sentence like *A-waaqa7 wisipy7k** would refer to a property of a single shoe. Though nouns like *a-mukpi7*, *a-waaqa7* collocate with the zero (3SG) form of the clause-level pronominal, their sense as singular or plural is understood from the words they collocate with. This may also be true of most inanimate nouns.

CU has a special plural, *-ni-m*, which is sporadically attested in other languages as well. The origin of the component *-ni-* is unknown, although the LU and CA forms in (11) suggest that its shape was **ny*. Examples are shown in (11).

- | | | | |
|------|----|---|---|
| (11) | | singular | plural |
| | CU | a. <i>ny-na7akwa</i> ‘my child, family’ | <i>ny-na7akwa-ni-m</i> |
| | | b. <i>ny-pa\$ma</i> ‘my older brother’ | <i>ny-pa\$ma-ni-m</i> |
| | | c. <i>pyta7ama</i> ‘all’ | <i>pyta7a-ni-m ~ pyta7ama-ni-m</i> |
| | | d. <i>awisma</i> ‘a little’ | <i>awisma-ni-m</i> |
| | | e. <i>pyyxwyn</i> | <i>pyyxwy-ni-m</i> ‘just, nothing but’ ¹ |
| | LU | f. <i>poo-xa</i> ‘3SG-only/just’ | <i>poo-xa-nu-m</i> ‘they alone’ |
| | AC | g. <i>poo-xa</i> ‘3SG-only/just’ | <i>poo-xo-ne-m</i> ‘true, real’ (Kroeber 1909:250) ² |
| | KI | h. <i>ky\$a7</i> ‘bad’ | <i>kyh~ky\$a7 ~ kyh~ky\$a7-ni-m</i>
(3.98.0538, 3.98.0457) |

- CA i. *-kihma* ‘father’s son’ *-ki~kihma-ñe-m*
 j. *-sungama* ‘woman’s daughter’ *-su~smanga-ñe-m*

¹ Reanalysis in CU has resulted in the singular of this item being back-formed from the plural. CU lacks the **-xa* ‘just, only’ inflected postposition set, with only *-qi* attested in this meaning. The CU ‘nothing but’ forms must reflect the third person inflection with **-xa*.

² The context for the AC form is Kroeber’s <pò´xo-ne-m atāxem> ‘puros Indios, true Indians’ (1909:250).

SE shows forms ending in *-nam* that are phonetically similar to CU *-ni-m*. They appear in the plurals of two kin terms, shown in (12).

(12)	SE	singular	plural
	a.	<i>a-na7</i> ‘his father’	<i>a-na7na-m</i> ‘his fathers (Fa and FaBr)’
	b.	<i>ny7-aqa7</i> ‘my (man’s) older parallel nephew, niece’	<i>ny7-aqa7na-m</i>

The SE forms, though, rather than demonstrating a special plural, are examples of the difference between suffixed allomorphs; cf. accusative *a-na7n-i*, genitive *a-na7n(y-)*. This difference between non-suffixed and suffixed allomorphs is irregular and takes many forms among SE kin terms. It does not relate just to plural formation. A sample is given in (13). The nominative column shows the unsuffixed allomorph; the plural column shows the full form of the suffixed allomorph. The genitive suffix is covert in (13a,d,e), having been lost by apocope.

(13)	SE	nominative	accusative	genitive	plural	
	a.	my father	<i>ni-na7</i>	<i>ni-na7n-i</i>	<i>ni-na7n</i>	<i>ni-na7na-m</i>
	b.	my older sister	<i>ny-qoo^{Rr}</i>	<i>ny-qoo^{Rh}-i</i>	<i>ny-qoo^{Rh}-y7</i>	<i>ny-qoo^{Rh}ha-m</i>
	c.	my older brother	<i>ny-paar</i>	<i>ny-paah-i</i>	<i>ny-paah-y7</i>	<i>ny-paaha-m</i>
	d.	my mother	<i>ni-jy7</i>	<i>ni-jyk-i</i>	<i>ni-jyk</i>	<i>ni-jyky-m</i>
	e.	my paternal grandrelative	<i>ny-ka7</i>	<i>ny-kak-i</i>	<i>ny-kak</i>	<i>ny-kaky-m</i>

5.4. CASES. Case is marked by suffixation. We distinguish two kinds of cases: syntactic cases and adverbial cases. They can be regarded alternatively as structural cases and lexical cases. The syntactic cases are nominative, accusative and for Serran, genitive. TV has a combined genitive/accusative oblique case. Nominative case is unmarked. While

CU exhibits ergative/absolute case alignment in non-past sentences, these cases are marked only on pronominals in the auxiliary complex, not on lexical nouns or pronouns, which are unmarked (nominative) or suffixed for accusative. The adverbial cases include locative, dative, ablative, comitative, instrumental, and a few others. The adverbial cases are sometimes called postpositional cases.

The syntactic cases are structurally determined by their relationship with pronominal arguments. Within a clause, the unmarked case form (nominative) relates to the first-position pronominal argument (the subject position), accusative to the arguments of any later position (object, direct or indirect). Within a phrase, genitive forms relate to phrase-internal pronominal arguments. Certain imperatives show unmarked (nominative) objects. With these, the subject position seems to have been vacated leaving the object argument in first position (5.4.2).

Just as the pronominal markers are not governed by the subject and object nouns of a clause but in fact just the reverse, here the pronominal prefixes (even the zero of the third person singular in CA) found on possessed nouns are also pronominal arguments. The possessor noun is structurally adjoined to the pronominal prefix. The pronominal element governs the noun. Possession counts in Uto-Aztecan grammar as a basic syntactic relationship and is exuberantly marked. When syntactic clauses are expressed as nominalizations, i.e., derived noun phrases (discussed in detail in chapters 12 and 13), the subject of the dependent clause appears, not surprisingly, in the form of a pronominal “possessive” prefix on the nominalization. The possessive prefixes are the arguments inside the noun phrase.

The adverbial cases express notions that add information; they do not represent points of syntactic structure. They usually translate as prepositional phrases into English, conveying information such as “to, from, at, in, with.” They are formed by suffixing an appropriate case marker to an inanimate noun or to an appropriate pronominal stem. To highlight their similarity to and difference from the English PREpositions, the adverbial suffixes are also referred to as POSTpositions.

Adverbial cases involving animate nouns (e.g. ‘to my mother’) are expressed periphrastically, by having the noun in the genitive case (if distinct from the nominative) followed by an “inflected postposition” (5.4.5.3), i.e., a complex of pronominal stem + adverbial case suffix, as in (1).

- (1) SE *ni-jyk* *py-jykja7*
 1SG-mother.GEN 3SG-DAT
 ‘to my mother’

In example (1), *ni-jyk* is the genitive form of ‘my mother’; the nominative is *ni-jy7* and the accusative is *ni-jyk-i*. The genitive form *ni-jyk* is governed by the 3SG argument that appears as the pronominal stem *py-* in the following inflected postposition.

Most SE nouns with the comitative postposition, *pymia7* ‘with it, with her, etc.’ are in their expected genitive form, as in (2). Note that the 3SG pronominal with *-mia7*, as with other postpositions, is not possessive *a-*, but instead the pronominal stem, *py-*.

- (2) SE a. *Nyy7=n* *pajykja7* *qat\$* *tyyj-t* *py-mia7*.
 1SG.PRO = 1SG over.there dwell spirit-ABS.GEN 3SG-COM
 ‘I live over there with Spirit.’
- b. *\$aaw-t-i=ny-7* *kwa7-i* *wii-ch* *py-mia7*.
 bread-ABS-ACC = 1SG > 3SG-PST eat-IND acorn.mush-ABS.GEN 3SG-COM
 ‘I ate bread and acorn mush.’

However, some nouns with *pymia7* occur in the accusative, as in (3). It seems as if *pymia7* allows for an additional object to be expressed. In (3a) the baby gets flown away. (The transitive equivalent of the verb *hiiñi7k* ‘fly’ is *hiiñi7kin* ‘cause to fly’; the baby does no flying.) In (3b), when the speaker (Coyote) gets cremated, the house will also burn. In (3c) the beads also go inside but they are not made to enter as if under their own power. How to model this understanding has remained elusive. It should also be noted that within Takic two accusative objects (otherwise unmarked) within a single predication are vanishingly rare. This technique using *pymia7* may represent a strategy around this restriction.

- (3) SE a. *Ama-j* *añii7chi-ti=kwyn* *py-mia7* *hiiñi7-k*.
 DIST-ACC baby-ACC = QUOT.3SG 3SG-COM fly-K
 ‘She flew off with the baby.’

- b. *Ta = mynyt\$ maahwa7n-iv kii-ch-i py-mia7.*
 IRR = 2PL > 1SG burn(tr)-FUT house-ABS-ACC 3SG-COM
 ‘You should cremate me with the house.’
- c. *Ami7 = kwyny puu-ñu-j ama-j ngyt\$ka-ti py-mia7*
 and = QUOT.3PL 3PL-possession-ACC DIST-ACC beads-ACC 3SG-COM
aa-p kii-v churup-k-t\$u7.
 DIST-LOC house-LOC enter-K-MOT
 ‘And they entered the house with their beads.’

There is a recurrent exception across the Takic languages regarding animacy and adverbial case suffixation: the use of local forms of the various words for ‘horse’, often in the sense ‘on horseback’, as in (4). Example (4h) shows an unusual locative of a plural, CU *kaváaju7-my-nga* ‘on [their] horses’.

- (4) a. SE *Aa-my = m pyy7-ashta-va7 kim.*
 DIST-PL = 3PL 3PL-animal-LOC come
 ‘They came on horseback.’
- b. SE *Wyt\$y^Rha-m kjavaaju7-pa = m hwa^Rt\$~hwa^Rt\$-ky-j = m.*
 man-PL horse-LOC = 3PL DISTR~climb-K-IND = 3PL
 ‘The men climbed on horseback.’ [Topicalization plus two clauses: ‘As for the men, they were on horseback (and) they climbed in various places.’]
- c. SE *Wa7uuravi7-p, kima-j = m aa-piu7.*
 horse-LOC come-IND = 3PL DIST-ABL
 ‘On horseback they came from there.’
- d. SE *Aa-pia = ny-7 huch-k-t\$u7o-w kavaaju7-nu7 ...*
 DIST-LOC = 1SG-PST fall-K-MOT-DS horse-ABL
 ‘After I fell off the horse ...’
 <‘Apya’nu’ huchku’ow kavaayu’nu’ ... > (R&E 204)

- e. KI *-7atsita-va*
 -animal-LOC
 ‘on horseback’ (3.98.0271; Anderton 1988:618)
- f. LU *Choo7unu = m pom-7aash-nga lim-uk.*
 all = 3PL 3PL-animal-LOC be.on.top(intr.)-USIT
 ‘They all rode on their horses.’ (H&E 24)
- g. AC *Noo = n xiiw-a-q kalaw-t na-7ach-nga.*
 1SG.PRO = 1SG drag-TR-PRS.SG firewood-ABS 1SG-animal-LOC
 ‘I am dragging firewood on my horse.’ (3.123.0523)
- h. CU *My a-ngax aja atáx7a-m naq = pym-jax-wyn*
 and DIST-ABL then person-PL descend = 3PL-INTR-PST.IPFV.PL
kaváaju7-my-nga.
 horse-PL-LOC
 ‘And then the people came down on horseback.’ (H&N 29[58] 20)
- i. CA *kaváaju-nga*
 horse-LOC
 ‘on horseback’ (S&H 72)

A similarly strange locative form is SE *taaqtav* ‘in Indian’, found in (5). Here the animate noun *taaqt* ‘person’, is used in a secondary sense, ‘Indian’, referring to an indigenous person, and then made locative in reference to the language ‘in Indian’, probably as a calque on English. The word *taaqtav* is also unusual in the retention of the absolutive suffix *-ta* before the locative suffix, just as it does in the plural: *taaqt-ta-m* (cf. 4.3.1 (2)).

- (5) SE *Puju ajaypa-t ty~tywan-i-ch qa~qt\$ taaq-ta-v.*
 all various.kinds-ABS DISTR~name-NMLZ-ABS DISTR~be person-ABS-LOC
 ‘There are Indian names (names in Indian) for all the particular places.’
 <Puuyu’ayeewpat tetewanich qaqc Taaqtav.> (R&E 100)

Kroeber and Grace (1960:91-92) mention a number of animate nouns in LU as taking local case suffixes, but no contexts are provided, so it is unknown how they would be used. MCA examples appear in (6). The geminate consonants may reflect LU influence in the speech of this multilingual consultant, Adán Castillo. The instrumental suffix *-l* on *meññeke-sh* ‘mesquite beans’ in (6a) is probably also due to interference from LU.

- (6) DCA a. *Hem-qal meññeke-cha-l ... pen tav-te-m-ax.*
 3PL-live mesquite.beans-ABS-INS and brush.rabbit-ABS-PL-ABL
 ‘They live on mesquite beans ... and cottontails.’ (3.113.0287)
- b. *Pe-7e7nan-qa pish nemme-ve i-ppa7*
 CF-know-PRS COMP walk.around-REAL.SUB PROX-LOC
taxlos-t-m-ma7.
 person-ABS-PL-among
 ‘He knows how to wander here among (many) peoples.’ (3.113.0072.20)

5.4.1 CASE MARKING. The major cases in the Takic languages are marked as shown in (1).

- (1) a. syntactic cases
- | | | |
|--------|---|--------------------------------------|
| | accusative | genitive |
| TV | final vowel retention (-a, -o) | (= acc.) |
| SE | -i, -jy-, -ti(y-), -t\$í, -chi | -(y-), -y7, -t(y-), -t\$(y-) -ch(y-) |
| KI | -j, -taj, -t\$aj, -tsaj | -t, -ts |
| LU | -i, -j; truncation of long
absolutive suffix | (= nom./acc.) |
| AC | -a, -j | (= nom./acc.) |
| CU, CA | -i, -j | (= nom./acc.) |
- b. adverbial cases
- | | | | | | | |
|----|-----------------|-----------|-----------------------|-----------------------|----------|------------|
| | instrumental | dative | locative ₁ | locative ₂ | ablative | comitative |
| TV | -tar, -rar | -nga7ro | -p, -pe, -ve | -nga | -ve | -t\$ooova |
| SE | -n(y-) | -jka7 | -p, -v | – | -nu7 | -mia7 |
| KI | -ny | -jyk | -pea, -vea | – | -nu7 | -mea7 |
| LU | -tal, -chal, -t | -jk, -juk | – | -nga | -ngaj | -man |
| AC | -tal | -k ~ -jk | – | -nga | -ngaj | (?) |

CU	- <i>chi</i>	- <i>ika</i>	–	- <i>nga</i>	- <i>ngax</i>	- <i>man</i>
DCA	- <i>sh</i>	-(<i>i</i>) <i>ka</i> , - <i>jk</i>	–	- <i>nga</i>	-(<i>ng</i>) <i>ax</i>	- <i>man</i> , - <i>new</i>
MCA	- <i>sh</i>	-(<i>i</i>) <i>ka</i> , - <i>jk</i>	- <i>pa7</i> ~ - <i>va7</i>	- <i>nga7</i>	- <i>ngax</i>	- <i>man</i> , - <i>new</i>

For the adverbial cases, only some of the allomorphs are included above, and several minor postpositional elements are not shown. For example, the locative suffixes of SE also have the longer forms *-pa7*, *-va7*. Demonstratives have special local case forms (see chapter 6).

The syntactic case suffixes appear with all nouns. As a general rule, the adverbial cases appear as suffixes only with inanimate nouns. With animate nouns, adverbial case is marked only by constructions with inflected postpositions. Further, the cases may have different senses with animate and inanimate, as with the dative, which tends to have mainly an allative sense (motion towards) with inanimates.

Both locative₁ and locative₂ exist in other languages than those shown but with very limited distribution. KI has the *-nga* suffix in words for ‘right’ and ‘left’ and in some place names (these *-nga* place names may be in Tataviam, not KI). The Cupan languages have the locative₁ *-pa* ~ *-va* suffixes in many place names and in names for seasons of the year, such as CU *tash-pa* ‘spring’, *taw-pa* ‘summer’. MCA has *-pa7*, *-pax* as synonyms of *-nga*, *-ngax* (S&M 112).

CU and MCA have larger set of locatives than the other languages. CU divides among three suffixes the semantic territory covered by a single suffix in the other languages. The CU locatives are shown in (2), with locative₂ repeated from (1). Locative₁ of (1) is not found in CU, nor in LU, AC, DCA.

(2) Additional CU locative suffixes

- a. locative₂ *-nga* ‘in, inside’
- b. locative₃ *-7aw* ‘at, in’
- c. locative₄ *-nga7aw* ‘on’ (e.g. *py-xál-nga7aw* ‘on his cradleboard’)

MCA locatives in addition to *-pa7* and *-nga7* in (1b) appear in (3).

(3) Additional MCA locative suffixes

- a. locative₂ *-ma7* ‘among’
- b. locative₃ *-max* ‘to one side’

- c. locative₄ *-ta7* ‘on, over, nearby’
- d. ablative *-pax ~ -vax* ‘from’

MCA has examples like CU *-nga7aw*, which looks like a compound of two postpositions, as in (4).

(4) MCA locative suffix sequences

- a. *-max-ngax* ‘off to one side’, e.g. *qawi-sh-ma-ngax* ‘off to one side of the rock’
(3.110.0264)
- b. *-max-nga7* ‘at the side’, e.g. *ki-sh-ma-nga7* ‘at the side of the house’ (3.110.0262),
- c. *-ma-ngax* *qaw-che-ma-ngax* ‘among the rocks’ (3.110.0264)

The glosses given in the tables above are rough and ready summaries. Additional research is required to refine our understanding of the exact semantic developments of the postpositions in the various languages. For instance, they are extended freely from literal spatial meanings to metaphorical meanings, as with Inland Cupan ablative *-ngax*, which can mean ‘from’ or ‘because of, due to.’

In LU the adverbial case suffixes appear directly attached to nouns only very seldom; the preferred construction with inanimate nouns is to use the noun followed by a particle *a\$ún-*, to which the adverbial case markers are suffixed.

Most of the adverbial case suffixes in (1, 2) and (3) can also appear in inflected postpositions, that is, as suffixes on pronominal elements. Also, for some of the languages, certain adverbial case suffixes, such as the comitatives, and the CA instrumental *-sh*, occur only or nearly only in inflected postpositions.

Many of the adverbial relations expressed with a suffix, an inflected postposition, or a relational noun in one language will appear as particles in another. In others they may appear as relational noun constructions, noun-like forms that can take prefixes and are inflected with case suffixes. For example, while TV and SE use a relational noun construction for ‘on top of’, cf. SE *a-kupia ~ a-kupiaa-va7* ‘on top of it’, the other languages have particles: KI *pa7pi* (3.100.0755), LU *pa7aq*, AC *pa7aqw* (3.123.0554), CU *pa7axwi-*, DCA *awsun*, MCA *pa7akwe(n)*. CA can also use *pe-ta7*, an inflected postposition. And there are, of course, other ways to express this idea, as with the CU verb *ngaq-jax* which often means ‘sit, perch on top of’.

TV, LU, and AC have particles for ‘under’: TV *toongko* ~ *tongooko*, LU *toongax*, AC *toox* (3.123.0557), but the other languages have an inflected postposition: SE *pu-htk*, KI *py-htuk* (3.98.0076), CA *pé-tuk*, and CU *pý-tyngax* ‘under it’, the last being cognate with the TV, LU, and AC particles but with 3SG inflection.

5.4.2. ACCUSATIVE CASE. The Takic accusative case suffixes always appear in last position within the word, following the absolutive suffixes of non-possessed nouns, following the possessive suffix, if there is one, of a possessed noun, and following the plural suffix.

Except in TV and AC, the accusative suffix generally is *-i* after consonants, *-j* after vowels. However, there are a number of complications.

5.4.2.1. ACCUSATIVES IN TONGVA. The accusative suffix **-jy* has undergone serious phonological erosion in TV and this has resulted in a more complex range of accusative constructions than those found in the other Takic languages. There are two classes of stems for accusative formation, one a minor class of short roots and the other, the major class, all the rest.

In the accusative, the minor class takes a suffix *-ra* while the major class is marked by the retention of the word-final vowel that would otherwise be lost to apocope. The class of short roots consists of forms like those seen in (1).

(1) TV	nominative	accusative	root
a. tree, stick, firewood	<i>ko-taa</i>	<i>ko-taa-ra</i> (3.103.0322)	<i>ku</i>
b. oar	<i>kwe-taa</i>	<i>kwe-taa-ra</i>	<i>kwi</i>
c. stone	<i>to-taa</i>	<i>to-taa-ra</i> (3.102.0888)	<i>to</i>
d. fat, fat one	<i>we-taa</i>	<i>we-taa-ra</i>	<i>wi</i>
e. what, something	<i>he-taa</i>	<i>he-taa-ra</i> (3.103.0052)	<i>hi</i>

These roots consist of a single short syllable which governs the selection of the *-t* form of the absolutive suffix, underlying *-ta*, which is stressed and consequently lengthened.⁷⁸

⁷⁸ The lengthened absolutive suffix of *kotaa*, *wetaa*, *hetaa*, etc., may also be unusual in sometimes remaining long even when unstressed. For *wewiitam* ‘fat ones’ (3.103.0171), the plural of (3d), Harrington once wrote <wiwítām> (3.102.0738) (= *wewiitaam*). Here the reduplicative pattern has placed the stress on the “stressless” vowel, which then

In their absolutive forms these short roots seem to figure as “stressless” roots, much like the much larger class of stressless roots found in CU. The nominative forms show the stress displaced away from the root to the ending. The absolutive suffix, now stressed, lengthens and does not undergo apocope. Since this suffix is already protected from apocope, the accusative cannot be marked the same way that it is for the other class, namely by the suspension of apocope (see below), so some other device has to be used to mark the case. Thus a second suffix is added which allows for the regular marking of the accusative by the suspension of the apocope rule that would otherwise apply.

Under possession, as in *ne-hii-n* ‘mine, my thing’, a short root does not exhibit this exceptional behavior. In *nehiin*, the stress is not placed on the ending, and the short root undergoes regular, expected lengthening under stress.

The suffix *-ra* is a lenited form of an underlying *-ta*. Since it is well established that the PUA accusative was **-ta*, it might be attractive to think of these constructions as not showing a second absolutive suffix in order to implement the accusative, but rather as reflecting a PUA form, with a sequence of absolutive and accusative suffixes. Such a view would support the idea that PUA had both absolutive **-ta* and accusative **-ta*.

However, the ending *-ra* in (1) is itself marked for case, the mark for accusative here, as elsewhere in TV, being the non-apocoped final vowel. Thus the addition of *-ra* offers no support for the reconstruction of any more than one **-ta* for Proto-Uto-Aztec. (However for simplicity in our practical glossing, we label the sequence *-taa-ra* as [-ABS-ACC].)

We understand this exceptionality to apocope as the diachronic result of the erosion of the accusative suffix **-jy*. **-ta + -jy* apocopates to **-ta-j*, which then undergoes the loss of **j*, resulting in word-final *-ta*. (Later a new *j < *ch* enters the picture.) The same process yields the plural accusatives seen in (2), *-mo* from **-my* ‘plural’, with exceptionality to apocope, and the accusatives of possessed nouns in *-no* in (2g, h). This could be modeled synchronically by positing that the accusative feature lengthens the preceding vowel in underlying form. A similar phenomenon is found in Numic languages, where the final vowel of a noun construction is voiceless in the nominative, but voiced

undergoes regular lengthening. Whether the unstressed long *aa* in *wewiitaam* represents an analogic transcriptional mistake or is a more accurate representation of *wewitam* is not known.

in the accusative (Givón 2011:94). Givón (2011:106-107) proposes much the same diachronic account of the loss of *-jy for Southern Ute.

The accusatives of the major class are formed by the retention of the word-final vowel with no complication involving a second absolutive suffix. Examples are given in (2).

(2) TV		nominative	accusative
a.	house	<i>kii-j</i>	<i>kii-ja</i> (3.103.0381)
b.	captain	<i>tomjaa-r</i>	<i>tomjaa-ra</i> (3.105.0481)
c.	woman	<i>tokoo-r</i>	<i>tokoo-ra</i> (3.104.0065)
d.	women	<i>tooko-ro-m</i>	<i>to~tooko-ra-mo</i> (3.104.0357) / <i>to~tooko-mo</i> (3.104.0095)
e.	man	<i>worooj-t</i>	<i>worooj-ta</i> (3.104.0057)
f.	people	<i>ta-raaxa-ta-m</i> ~ <i>ta-raaxa-to-m</i>	<i>ta~raaxa-t-mo</i> (3.105.0353)
g.	my blanket	<i>ne-haavo-n</i>	<i>ne-haavo-no</i> (3.103.0304)
h.	your hand	<i>mo-maa-n</i>	<i>mo-maa-no</i> (3.103.0511)
i.	dog	<i>wo\$ii7</i>	<i>wo\$ii7a</i> (3.103.0166)
j.	dogs	<i>wo-woo\$e7a-m</i>	<i>wo~woo\$e7-mo</i> (3.103.0166)
k.	chicken	<i>kajiina7</i>	<i>kajiina7a</i> (3.104.0062)
l.	my father	<i>ne-naak</i>	<i>ne-naako</i> (3.104.0112)

Note that the *-to* allomorph of the absolutive suffix (cf. 5.1.1) is found only with a following plural suffix, as in the nominative of (2d) and in one of the nominatives of (2f); the *-ta* allomorph is always the one that figures in the accusative. The second plural accusative of (2d) is possibly a mistranscription; one would expect *to-tooko-r-mo**, parallel to the plural of (2g). The accusative of (2g) shows non-syncope of the second-syllable root vowel presumably because the underlying root has a long vowel in that position: *havoo*, with secondary lengthening of the first vowel and shortening, but not syncope, of the second. Examples (2i-k) show the treatment of a Ø-class noun. The *a* in the accusative of (2i,k) and in the nominative of (2j) seems to be part of the root. If this is so, it shows that the TV Ø-class is not phonologically definable in that it is not restricted to roots that are underlyingly consonant final.

5.4.2.2. ACCUSATIVES IN SERRANO. In SE, underlying **-ta-jy* and plural **-my-jy* contract to *-t-i* and *-m-i* respectively, as in the examples in (1).

(1)	SE	nominative	accusative	
	a.	boy	<i>chichin-t</i>	<i>chichin-t-i</i> [boy-ABS-ACC]
	b.	down	<i>piih-ch</i>	<i>piih-ch-i</i> [down-ABS-ACC]
	c.	man	<i>wyt\$y^R-t\$</i>	<i>wyt\$y^R-t-\$-i</i> [man-ABS-ACC]
	d.	others	<i>huwa-m</i>	<i>huwa-m-i</i> [other-PL-ACC]
	e.	their horses	<i>pyy7-ashta-m</i>	<i>pyy7-ashta-m-i</i> [3PL-animal-PL-ACC]

Examples of the accusative plural are rare; a plural object tends to be marked for accusative only when subject is also plural.

Homophonous endings in *-Ci* mark the accusative of \emptyset -class absolute forms, as in (2).

(2)	SE	nominative	accusative	
	a.	axe	<i>aacha7</i>	<i>aacha7-ti</i>
	b.	quail	<i>kakaata7</i>	<i>kakaata7-ti</i>
	c.	horse	<i>wa7uuravi7</i>	<i>wa7uuravi7-ti</i>
	d.	beans	<i>rihool</i>	<i>rihool-ti</i> (< Sp. <i>frijol</i>)
	e.	mouse	<i>pa7ish</i>	<i>pa7ish-ti</i>
	f.	something circular	<i>puahka7</i>	<i>puahka-ti</i>
	g.	something white	<i>jaraa7nka7</i>	<i>jaraa7nka-ti</i>
	h.	small one	<i>añii7chi7</i>	<i>añii7chi-ti</i> ~ <i>añii7ch-ti</i>
	i.	older one	<i>atuchini7</i>	<i>atuchini-chi</i>

The same markers are also found with most possessed nouns, as in (3).

(3)	SE	nominative	accusative
	a.	my late older sister	<i>ny-qoo^Rhchui7v</i> <i>ny-qoo^Rhchui7v-ti</i>
	b.	her husband	<i>a-wy^Rt\$yhav</i> <i>awy^Rt\$yhav-ti</i>
	c.	my back	<i>ni-tyhpi7</i> <i>ni-tyhpi-chi</i>
	d.	her daughter	<i>a-pulin</i> <i>a-pulin-chi</i>
	e.	our knives	<i>cha-hiira7</i> <i>cha-hiira-t\$i</i>
	f.	his wife	<i>a-hiintu7a7</i> <i>a-hiintua7-t\$i</i>

g.	her deep basket	<i>a-hoo^Rhpi7v</i>	<i>a-hoo^Rhpi7vy-t\$ⁱ</i>
h.	my dress	<i>ni-naawa7</i>	<i>ni-naaw-t\$ⁱ</i>
i.	their clothes	<i>pyy-havy7</i>	<i>pyy-hav-t\$ⁱ</i>

Since nouns of the \emptyset -class (2) take no absolutive suffix and because possessed nouns (3) are by definition not absolutive, it follows that the *-t/-ch/-t\$-* found before the accusative *-i* in (2) and (3) cannot be the absolutive suffix. However, this suffix and the absolutive are etymological “sisters.” PUA **-ta*, if we are to accept the *-t(a)* suffix of Hopi (cf. 5.1.1.1) as semantically conservative, represented the combination of absolutive and oblique case marking. Serran seems to have separated these functions such that reflexes of **-ta* have split, into the absolutive suffix and an oblique case marker. Interestingly, these two, now distinct reflexes of **-ta* never cooccur in the same word.

In addition to **-ta*, there was another PUA suffix, **-cy* (> NUA **-jy*), that marked oblique case. This is retained in Hopi (see 5.1.1.1 (6)) and Tactic. Both **-ta* and **-jy* (< PUA **-cy*) survive as case markers in Serran, with synchronic *-jy* now restricted to the accusative sense. The element from **-ta* in the oblique case sense is found only in combination with another, more specific case morpheme, either accusative *-jy* or genitive *-y* (5.4.3). Because of this, it is usually convenient to regard the Serran combination of non-absolutive **-ta* + **-jy* or **-ta* + *-y* as units and to treat *-ti*, *-chi*, *-t\$ⁱ* as forms of the accusative suffix, and *-t(y)*, *-ch(y)*, *-t\$(y)* as forms of the genitive.

Even so, sometimes it may be useful to present these suffixes in an analytic form, as in (4), in which the elements of the ending *-ti* are glossed separately, i.e., as the oblique case suffix *-t* followed by the simple form of the accusative, *-i*, to make explicit the difference in the morphology of the accusative forms of the t-class *ahy^Rngt* ‘eagle’ and the \emptyset -class *jaraa7nka7* ‘white one’.

(4)	SE	<i>Ahy^Rng-t-i = kwyny = my-7</i>	<i>chyyva7</i>	<i>jaraa7nka7-t-i.</i>
		eagle-ABS-ACC = QUOT = 3PL > 3SG-PST	follow	white.one-OBL-ACC
		‘They followed a white eagle.’		

Example (5) shows that adding *-ti* is productive with new vocabulary.

(5)	SE	<i>Qaj = m</i>	<i>my^Rny^R7-av</i>	<i>pills-ti.</i>
		not = 3PL	swallow-CONT	pills-ACC

‘They did not swallow pills.’

<Qaym merner’af *pillsti*’.> (R&E 812)

The simple form of the accusative suffix *-j* after vowels, *-i* after consonants, appears not only with the absolutive and plural suffixes but also with a number of pronouns, demonstratives and possessed nouns, many of which occur only in possessed form. A few examples with various stem shapes are given in (6). There are several stem irregularities.

(6) SE	nominative	accusative
a. that	<i>amaʔ</i>	<i>ama-j</i>
b. I, me	<i>nyyʔ</i>	<i>nyy-j</i>
c. his daughter	<i>a-\$uung</i>	<i>a-\$uunga-j</i>
d. its seeds	<i>a-puuch</i>	<i>a-puuch-i</i>
e. my skin	<i>ny-qo^Rch</i>	<i>ny-qo^Rch-i</i>
f. their food	<i>pyy-rakw</i>	<i>pyy-rakw-i</i>
g. my older brother	<i>ny-paar</i>	<i>ny-paah-i</i>
h. their fire	<i>puu-kuʔ</i>	<i>puu-ku-j</i>
i. my father	<i>ni-naʔ</i>	<i>ni-naʔn-i</i>
j. my mother	<i>ni-jyʔ</i>	<i>ni-jyk-i</i>

It is unknown why ‘man’s daughter’ (6c) retains its stem-final vowel in the accusative, *a-\$uunga-y*, while the other examples show contraction. Perhaps the retention of the *a* in *-\$uunga-j* relates to the fact that it is etymologically long; cf. cognate forms such as LU *\$ungaa-l* ‘woman’, CU *-\$ungáma* ‘man’s daughter’ (also Nahuatl *cihuā-tl*). SE *-pulin* ‘woman’s daughter’ (3d) is of the other pattern and takes the consonantal accusative suffix: *-pulin-chi*.

5.4.2.3. ACCUSATIVES IN KITANEMUK. Accusative formation in KI is the most phonologically transparent of all of Takic. It consists in the suffixation of *-y*. This *-j* is from **-jy* and it is presumably underlyingly also underlyingly *-jy* in KI, with regular apocope. However, the suffixation of *-j* in KI entails no contraction process, neither the contraction of *V+j* to *-i* as seen in SE and Cupan nor the contraction to simply word-final *V* as in TV. Some KI examples are given in (1).

(1)	KI	nominative	accusative
	a. stick	<i>kut\$aa-t</i> [stick-ABS]	<i>kut\$aa-ta-j</i> (3.98.0385) [stick-ABS-ACC]
	b. jackrabbit	<i>hwii7-t</i> [jackrabbit-ABS]	<i>hwii7-ta-j</i> (3.98.0456) [jackrabbit-ABS-ACC]
	c. tooth	<i>tamaa-ts</i> [tooth-ABS]	<i>tamaa-tsa-j</i> (3.98.0356) [tooth-ABS-ACC]
	d. healer, shaman	<i>tsaa-t\$</i> [healer-ABS]	<i>tsaa-t\$a-j</i> (3.98.0367) [healer-ABS-ACC]

Accusatives of Ø-class nouns are formed as in SE, but with uncontracted oblique-case *-ta*. The double nature of the marking of the KI accusatives is shown in (2).

(2)	KI	nominative	accusative
	a. ceremonial clown	<i>pakaa7</i>	<i>pakaa7-ta-j</i> (3.98.0364) [clown-OBL-ACC]
	b. beans	<i>rihyyr</i>	<i>rihyyr-ta-j</i> (3.98.0229) [beans-OBL-ACC]
	c. man	<i>paat\$uk</i>	<i>paat\$ukah-ta-j</i> (3.98.0270) [man-OBL-ACC]

The *h* in the accusative of (2c) is an unexplained irregularity. If the *h* was part of the underlying form, it would be expected to block apocope in the singular.

This same type of double accusative sequence appears with many possessed nouns, again as in SE. Several of these have a final glottal stop in the nominative, as in (3). In these cases, the final consonant is sometimes not found before the *-ta/-t\$a/-tsa* suffix, as in (3d). For such examples it is unclear whether the glottal stop in the unsuffixed form is underlying or phonologically inserted.

(3)	KI	nominative	accusative
	a. my maternal grandfather	<i>ni-kwaari7</i>	<i>ni-kwaari7-ta-j</i> (3.98.0365)
	b. my knee	<i>ni-tamo7</i>	<i>ni-tamo7-t\$a-j</i> (3.98.0361)
	c. my head	<i>ni-pi\$a7</i>	<i>ni-pi\$a7-t\$a-j</i> ~ <i>ni-pi\$a-t\$a-j</i> (3.98.0236)
	d. my skirt	<i>ni-naawa7</i>	<i>ni-naawa-tsa-j</i> (3.98.0403)

Anderton (1988:177) refers to these suffixes with \emptyset -class and possessed nouns as “constituency absolutes.” Since we can identify the *-ta/-t\$a/-tsa* suffix with the Uto-Aztecan oblique-case suffix **-ta*, as we have shown above for SE, we treat this the same way, namely as an oblique-case anchor for a following accusative or genitive suffix. As in SE, the genitive-case morpheme usually apocopates, leaving the oblique case element phonetically in word-final position (see 5.4.3).

The oblique case marker (< **-ta*) is restricted to the singular; it is not present in the plural. The accusative plurals \emptyset -class nouns are inflected as in (4), with an augment *-ja-* before the plural ending. There is no contraction of *-my + -jy* to *-mi*, as seen in SE.

(4)	KI		nominative	accusative
	a.	clowns	<i>paka7-ja-m</i>	<i>paka7-ja-my-j</i> (3.98.0364) [clown-AUG-PL-ACC]
	b.	cats	<i>ngaaty7-ja-m</i>	<i>ngaaty7-ja-my-j</i> (3.100.0548) [cat-AUG-PL-ACC]

A number of vowel-final possessed nouns take the simple accusative suffix *-j*, as in (5).

(5)	KI		nominative	accusative
	a.	his tooth	<i>a-tama</i>	<i>a-tama-j</i> (3.98.0382) [3SG-tooth-ACC]
	b.	my hand	<i>my-maa</i>	<i>my-maa-j</i> (3.98.0361) [2SG-hand-ACC]
	c.	its bark	<i>a-kotso</i>	<i>a-kotso-j</i> (3.98.0469) [3SG-bark-ACC]

5.4.2.4. ACCUSATIVES IN LUISEÑO. The major, productive pattern for accusative formation in LU is to suffix *-i* after a consonant, *-j* after a vowel, as illustrated in (1).

(1)	LU		nominative	accusative	
	a.	residence	<i>aawla-sh</i>	<i>aawla-ch-i</i>	[residence-ABS-ACC]
	b.	arrows	<i>huu-la-m</i>	<i>huu-l-m-i</i>	[arrow-ABS-PL-ACC]
	c.	my arrow	<i>no-huu</i>	<i>no-huu-j</i>	[1SG-arrow-ACC]

d. arrow *no-huu-m* *no-huu-m-i* [1SG-arrow-PL-ACC]

There is a second class of nouns which shows a remarkable marking reversal. For this class, the nominative, with a “long absolutive,” is the marked form and the corresponding accusative is unmarked. The accusatives of this class are of the same form as the nominatives of the rest of the nouns, and, for that matter, the same as the nominatives found in the rest of Takic. No satisfactory diachronic account for the development of the long absolutive class of LU has yet been advanced.

The accusatives of the long absolutives look like they are formed by truncation, not suffixation. The vowel of the long absolutive, present in the nominative, is absent in the accusative case. This class might be better described as marked for nominative case (by the lengthened absolutive) and unmarked for accusative (with normal length absolutive suffix), with appropriate differences in syncope, etc. in accord with the differences in underlying forms; we show this idea in (2). In LU examples elsewhere, however, we gloss forms like *kii-sh* as [house-ABS.ACC], to avoid confusion.

(2) LU	nominative		accusative	
a.	<i>kii-cha</i>	[house-ABS.NOM]	<i>kii-sh</i>	[house-ABS]
b.	<i>huu-la</i>	[arrow-ABS.NOM]	<i>huu-l</i>	[arrow-ABS]
b.	<i>paa-la</i>	[water-ABS.NOM]	<i>paa-l</i>	[water-ABS]
c.	<i>too-ta</i>	[stone-ABS.NOM]	<i>too-t</i>	[stone-ABS]
d.	<i>qawii-cha</i>	[mountain-ABS.NOM]	<i>qawii-sh</i>	[mountain-ABS]
e.	<i>\$ivee-la</i>	[sycamore-ABS.NOM]	<i>\$ivee-l</i>	[sycamore-ABS]
f.	<i>eng-la</i>	[salt-ABS.NOM]	<i>eengi-l</i>	[salt-ABS]
g.	<i>push-la</i>	[eye-ABS.NOM]	<i>puuchi-l</i>	[eye-ABS]
h.	<i>\$akish-la</i>	[nettle-ABS.NOM]	<i>\$akiichi-l</i>	[nettle-ABS]
i.	<i>\$u7-la</i>	[star-ABS.NOM]	<i>\$uu7u-l</i>	[star-ABS]
j.	<i>ton-la</i>	[antelope-ABS.NOM]	<i>toona-l</i>	[antelope-ABS]

The long absolutives are a LU-internal development; they are not found in closely related AC (below), cf. AC *kii-ch* ‘house’ (3.123.0380), AC *paa-l* ‘water’ (3.121.0749).

5.4.2.5. ACCUSATIVES IN ACJACHEMEM. The accusative suffix in AC is *-a* following consonants and *-j* following vowels, as seen in (1). This pairing results from the AC

development of *a* from unstressed *i*. The possessive suffix *-ka* in (1d) corresponds to *-ki* elsewhere in Cupan.

(1) AC		nominative	accusative
a.	old woman	<i>nechma-l</i> (3.122.0048)	<i>nechma-l-a</i> (3.123.0300) [old.woman-ABS-ACC]
b.	women	<i>\$u~\$nga-la-m</i> (3.121.0763) [PL~woman-ABS-PL]	<i>\$u~\$nga-l-m-a</i> (3.123.0622) [PL~woman-ABS-PL-ACC]
c.	my hand	<i>na-maa</i> (3.123.0577)	<i>na-maa-j</i> (3.123.0477) [1SG-hand-ACC]
d.	my money	<i>na-sinva-ka</i> (3.123.0590) [1SG-money-PSD]	<i>na-sinva-ka-j</i> (3.123.0565) [1SG-money-PSD-ACC]

5.4.2.6. ACCUSATIVES IN CUPEÑO. The accusative suffix in CU is *-i* (or *-íj*) following a consonant and *-j* following a vowel, as illustrated in (1) (with stress indicated for all examples).

(1) CU		nominative	accusative
a.	ant	<i>ány-t</i>	<i>ány-t-i</i>
b.	ants	<i>án-ti-m</i>	<i>án-ti-m-i</i>
c.	my father's parent	<i>ný-qa</i>	<i>ny-qá-j</i>
d.	my father's parents	<i>ny-qá-m</i>	<i>ny-qá-m-i</i>
e.	his chest	<i>pý-taw</i>	<i>py-taw-íj</i>
f.	pipe	<i>íchi-sh</i>	<i>íchi-ch-i</i>
g.	his pipe	<i>py-7ísh-7a</i> [3SG-pipe-PSD]	<i>py-7ích-a-j</i> [3SG-pipe-PSD-ACC]
h.	my possessions	<i>ny-míxana-m</i>	<i>ny-míxan-m-i</i>
i.	her hat	<i>py-júma7a</i>	<i>py-júma7a-j</i>

As in SE and LU, the underlying vowel of the absolutive, which can be seen in the plural, as in (1b), is replaced by the *-i* of the accusative for singular nouns. With a stressless stem, the stress is attracted to the syllable containing the accusative suffix (1c). With a consonant-final stressless stem, the accusative suffix is *-íj* (1e). A minor complication in CU is that the possessed suffix *-7a* (see discussion in 5.2.3) loses its glottal

stop after consonants before the accusative suffix, as in (1g). In contrast, the final *ʔa* in (1i) is part of the root, cf. absolutive *júmaʔa-t*. Also, the accusative suffix creates the condition for syncope of a preceding non-stem vowel, as in (1h) while a stem vowel, as in (1a), does not undergo syncope in that position, that is, before the syllable containing the accusative suffix. The situation may be that while plurals (such as *ny-míxana-m-i* (1h)) show syncope in the accusative (*ny-míxan-m-i*), singulars (like *ány-t-i* (1a)) do not (i.e., it is not **án-t-i* even though its nominative plural is syncopeated *an-ti-m*).

5.4.2.7. ACCUSATIVES IN CAHUILLA. CA (both Desert and Mountain varieties) has suffixes *-i ~ -j*, following consonants and vowels respectively, as in (1).

(1)	CA	nominative	accusative	
a.	dog	<i>awa-l</i>	<i>awa-ʔl-i</i>	[dog-ABS-ACC]
b.	dogs	<i>a~ʔwa-le-m</i>	<i>a~ʔwa-l-m-i</i>	[PL~dog-ABS-PL-ACC]
c.	star	<i>suʔwe-t</i>	<i>suʔwe-ʔt-i</i>	[star-ABS-ACC]
d.	our pet	<i>chém-ʔash</i>	<i>chém-ʔach-i</i>	[1PL-pet-ACC]
e.	our pets	<i>chém-ʔache-m</i>	<i>chém-ʔash-m-i</i>	[1PL-pet-PL-ACC]
f.	my dress	<i>ne-ʔel-ʔa</i>	<i>ne-ʔel-a-j</i>	[1SG-dress-PSD-ACC]
g.	our song	<i>chem-taxmu-ʔa</i>	<i>chem-taxmu-ʔa-j</i>	[1PL-song-PSD-ACC]

A special complication is that CA has an intrusive glottal stop before the absolutive suffix in the accusative singular, as in (1a,c). This intrusive glottal stop blocks syncope of the preceding vowel. This glottalization seems to correlate with the observation above (5.4.2.6) that the CU stem vowel in that position is strangely resistant to syncope. Like CU, CA loses the *ʔ* of the possessed suffix following a consonant (1f) but not after a vowel (1g).

5.4.2.8. INANIMATE OBJECTS. In the Cupan languages (LU, AC, CU, CA), accusative case marking is optional with inanimate nouns, appearing on such nouns only to give heightened discourse prominence (Hill 2005:330). Accusative marking on inanimates also appears to be optional in TV, but the data are inadequate to determine the conditions under which it is present or absent.

5.4.2.9. PLURAL ACCUSATIVE. The plural accusative is marked in KI (1a) but in SE the plural may be marked for accusative only if the subject is also 3PL (1b). Compare (1c), which has an unmarked plural object of a singular subject.

(1) a. KI *Ni-hiu ki~kika-my-j.*
 1SG-see PL~chief-PL-ACC
 ‘I saw the capitanes (lineage chiefs).’ (3.98.0364; Anderton 1988:189)

b. SE *Ajay7=kwyny=my kuuhan aa-m huwa-m-i*
 then=QUOT=3PL>3PL call;invite DIST-PL other-PL-ACC
taaqa-ta-m-i.
 person-ABS-PL-ACC
 ‘Then they invited other people.’

c. SE *Na~naacha-m houpy7jam=ny¹ jaanyam a-kupia.*
 PL~girl-PL little.children=1SG>3PL have 3SG-up
 ‘I had the little girls up on top here.’
¹ *Houpy7jam* ‘little children’ occurs only in the plural.

5.4.2.10. ACCUSATIVE CASE MARKING WITH IMPERATIVES. In the Serran languages, and in CU, lexical nouns that are objects in positive imperatives are not marked for accusative case, even when animate, as seen in (1a-c). However, Coastal Cupan constructions with such marking are attested, and they appear as well in TV and are attested in the Harrington MCA data, although Sauvel and Munro (1980) rule them out. (See examples below in (9, 10, 11, 12).) Unfortunately, information on imperative syntax is spotty, since there appears to be a strong preference to use other construction types, especially futures, for directives. Accusatives appear freely in directives of this type. In addition, accusatives appear freely in prohibitive sentences.

(1) a. SE *Akaj=my-ny-t\$ ny-majr.¹*
 give.IMP=2PL>1SG+3SG 1SG-child
 ‘Give me my son!’

¹ The accusative of *ny-majr* is *ny-majh-i*; see 4.2.5 for the SE *r* and *h* alternation.

b. KI *Kwea7-k-i* *ivi7* *muukuk.*
 lay.out-K-CAUS.IMP PROX dead.person
 ‘Lay out this dead person!’ (3.98.0234)

c. CU *Ixani* *y-7ash* *hunwy-t.*
 bring.out.IMP 2SG-pet bear-ABS
 ‘Bring out your bear!’

d. CA *Kaxóon* *kukul.*
 box make.IMP
 ‘Make a box!’ (S&M 89)

The explanation for this, in pronominal argument terms, may be that such imperatives are subjectless, with the first argument (subject) position empty and the object argument in first position. Thus the object noun, no longer relating to the second position argument, would not be marked for accusative. However, imperatives, in this model, would have to somehow be distinguished from impersonals which equally well have no subject argument. Impersonal verbs are not found in Takic but they occur elsewhere in Uto-Aztecan, notably in our experience, in Hopi and in Nahuatl.

The one-fewer-argument model seems to apply rather well in CU, where the object is expressed as a clause-level pronominal only in imperatives, as in (2).

(2) CU *Yla-na = n.*
 wait.for-TR = 1SG.AB
 ‘Wait for me!’ (Hill 2005:82)

There seems to be but one pronominal place within the CU auxiliary complex. Once that place is emptied of the subject element, as is done with the imperatives, there is now a place for the object to be expressed.

The examples in (3) involve ditransitive verbs with 1SG as one of the objects. Though the other objects, as in the examples above in (1), are unmarked for accusative, there is morphological reference to the underlying second person subject. In the singular imperative (3a) the AUX pronominal *chi7* marks the combination of 2SG subject, 1SG

object. In the plural imperative (3b) (repeated from (1a)), 2PL subject and 1SG object are expressed in *mynyt\$*.

- (3) SE a. “*Hat\$ik paa-t\$ = chi7 ich-ichun,*” *ky-j = kwyn.*
 go.get.IMP water-ABS = 2SG > 1SG dip-BEN say-IND = QUOT.3SG
 ‘ “Go get it, dip some water for me,” he said.’
- b. “*Akaj = mynyt\$ ny-majr,*” *ky-j = kwyn.*
 give.IMP = 2PL > 1SG + 3SG 1SG-son say-IND = QUOT.3SG
 ‘ “Give me my son,” she said.’ [= (1a)]

Similarly, in DCA, when there is an object prefix in an imperative verb, the second person subject is marked as well, albeit by just a glottal stop (i.e., what remains after syncope of the formative-initial vowel of underlying *e-*), as in (4a), though in the MCA imperative the subject remains unmarked, as in (4b).

- (4) a. DCA *Cheme-7-tee7.*
 1PL.OBJ-2-see.IMP
 ‘See us!’ (Seiler 1977:136 (157) (ii))
- b. MCA *Cheme-ha~al-am.*
 1PL.OBJ-IPFV~look.for-IMP.PL
 ‘Look for us!’ (S&M 88)

An explanation for the use of pronominals that include reference to subjects, as in (3) and (4a), could be that an imperative in SE and CA that must have the object expressed pronominally, does so by inserting a pronominal form taken from the indicative set, there being no available form in the imperative set to do this.

The one-fewer-argument explanation has a problem, though, in that singular and plural imperatives are distinct, and in this respect the subject is referenced. Further, singular versus plural imperatives are not a simple morphosyntactic phenomenon, they are also sociolinguistically salient, as will be seen, briefly, for SE below.

Singular and plural SE imperatives are given in (5).

- (5) SE a. *Pit-kj* *pa-t* *pahaa-t* *paa-n.*
 fill-K.CAUS.IMP PROX2-ABS bottle-ABS water-INS
 ‘Fill that bottle with water!’
- b. “*Muu = t\$*,” *ky-j = kwyn.*
 shoot.IMP = 2 > 3SG.IMP say-IND = QUOT.3SG
 ‘“Shoot it!” he said.’
- c. *Kwa7 = t\$* *pa-t.*
 eat = 2 > 3SG.IMP PROX2-ABS
 ‘Eat that!’

Example (5a), with no pronominal, is unambiguously singular. (5b) is definitely plural: Coyote is telling two boys to shoot a deer. Example (5c) is ambiguous. While the pronominal *-t\$* prototypically marks 2PL subject, in imperatives it is most often used for the singular, perhaps as an expression of politeness. In elicitation of paired examples, as in (6), *-t\$* is revealed as plural.

- (6) SE a. *Oo^R\$an.*
 write
 ‘Write!’
- b. *Oo^R\$an = t\$.*
 write = 2.IMP
 ‘Write (you pl.)!’

Unambiguously plural directives in SE are usually expressed with future morphology, as in (7), clearly a less direct, more polite way of making a request. (In (5b) above Coyote is definitely not trying to be polite.)

- (7) SE *Ta = mt\$* *kut\$ia7n-iv* *ami7 = kwyny = mynyt\$* *tymy-t-i*
 IRR = 2PL > 3SG build.fire-FUT and = QUOT = 2PL > 1SG + 3SG rock-ABS-ACC
atiy^R7a-t\$-i *tav-iv.*
 big-ABS-ACC put-FUT
 ‘You (pl.) should build a fire and you are to put a big rock in it for me.’

While the difference between singular and plural imperatives is nothing unusual, the problem is to align this fact with the pronominal argument model for imperatives proposed above. One possible solution might be that number specification is derivationally prior to imperative formation. This would involve a dynamic treatment of the underlying argument structure. The first argument (the subject) determines the number; then it is deleted as part of the process of imperative formation it is no longer there when it is time for accusative case specification. The usual pronominal-argument-language model may have trouble with this, but it already has enough trouble with accusative-case-marking languages like Takic that a little more might not hurt.

There remain instances of accusative case in imperatives that need attention.

The example in (8) has the accusative-marked demonstrative *pataj* ‘that one (near you)’.

- (8) SE *Akaj=chi7* *pa-ta-j* *kwa7-qa-j=n*.
 give.IMP = 2SG > 1SG PROX2-ABS-ACC eat-IFUT-IND = 1SG > 3PL
 ‘Just give me something to eat (Give that to me for me to eat it).’

In (8), the embedded *kwa7qaj=n* ‘I’m going to eat it’ is initial in its clause. This is demonstrated by the second-position placement of the pronominal *n*. Consequently, *pataj* has to be understood as a clausemate of *akaj* ‘give!’. The explanation for the exceptional accusative form of *pataj* seems to be that while it is underlyingly the object of the embedded indicative verb, it has been raised into the imperative clause, taking its accusative marking with it. Limited data do not allow further pursuit of this idea.

In LU, pronouns and demonstratives that are imperative objects are marked for accusative case, as in (9), and, as in (9d), accusative marking on animate objects of an imperative verb is attested. LU does not mark object on the verb and there are no object pronominals in the auxiliary complex, so objects must be encoded on independently, whether as demonstratives, independent pronouns, or lexical items.

- (9) LU a. *Samsa po-j*.
 buy.IMP 3SG.PRO-ACC
 ‘Buy it!’ (K&G 153)

- b. *Pi7 kwaavichu chaam-i alaaxwi-ngaj.*
 but take.care.of.IMP 1PL.PRO-ACC evil-ABL
 ‘But deliver us from evil.’ (Elliott 1999:432)
- c. *Toow ivii-m-i.*
 see.IMP DIST-PL-ACC
 ‘See these!’ (K&G 201.1)
- d. *Toow ivi-m-i na~nxa-l-m-i ne~nishlo-m-i.*
 see.IMP PROX-PL-ACC PL~old.man-ABS-PL-ACC pl~old.woman-PL-ACC
 ‘See these old men, old women!’ (K&G206:15)

Nominal objects of imperatives are often accusative in AC, as in (10).

- (10) AC a. *Ni-jk ngavva7 na-kchiijo7-ka-j.*
 1SG-DAT sharpen.IMP 1SG-knife-POSS-ACC
 ‘Grind my knife sharp for me!’ (3.123.0316) [cf. Sp. *cuchillo*]
- b. *Maxanna7 sopul pun7xan7-t-a kwamoo-l-a.*¹
 give.IMP one peso-ABS-ACC fisherman-ABS-ACC
 ‘¡Dale un peso al pescador! (Give one peso to the fisherman!)’ (3.123.0482)
¹ Of *kwamoola*, Harrington remarks “takes objv., not illative”, suggesting that he double-checked this point. The verb ‘give’ is ditransitive and takes two accusative-case objects. This contrasts with dative *nijk* in (10a) for a benefactive object of a transitive verb that can take only one accusative object.
- c. *Mujje7k-m-a chape77a.*
 many-PL-ACC stick.together.IMP
 ‘¡Pega muchos! (Stick many things together!)’ (3.123.0443)

In CU there are examples of accusative-marked demonstratives with imperatives, as in (11).

- (11) CU *Axwých-i amáj tyv-ý-lu-w-am pym-kwal-ngax.*
 DIST-ACC now put.down-ABLAUT-GOPR-AUG-PL.IMP 3PL-side-ABL
 ‘Now go lay that one out alongside the others!’

Harrington’s MCA text collection includes examples with lexical nouns marked for accusatives, including inanimate nouns, as in (12). See also 5.5.3 (1f).

- (12) MCA *We~wkan-am kweero7-m-e pen uwi-7chi ku~kul-am.*
 IMPV~cut-IMP.PL hide-PL-ACC and rope-ABS.ACC IMPV~make-IMP.PL
 ‘Cut the hides and make a rope!’ (3.112.0227)

Harrington notes of this example that nominative *uwi-sh* ‘rope’ would also be acceptable. He notes the same optionality for other examples, so he was clearly double-checking this point.

According to Munro (2000:187), the TV object noun generally is in the accusative form in imperatives that contain an expressed subject pronominal argument, as seen in (13a-c), where imperatives are optionally marked with pronominal clitics for subject > object. However, we find accusative case on animate objects, as in (13d), even where there is no pronominal clitic. Inanimate objects, however, are not necessarily marked, as in (13e).

- (13) TV a. *Kwaj=7aa mo-kii-no.*
 clean.IMP = 2SG > 3SG 2SG-house-PSD.ACC
 ‘¡Barre tu casa! (Sweep your house!)’ (3.105.0047)
- b. *Meaa, uu=7aa to-taa-ra.*
 go.IMP get.IMP = 2SG > 3SG rock-ABS-ACC
 ‘Go get the rock!’ (3.104.0333)
- c. *Na7uu=7aa mejaa tokoo-ra.*
 marry.IMP = 2SG > 3SG PROX.ACC woman-ABS.ACC
 ‘Marry this woman!’ (3.103.0357)

- d. *Huuto7 aawko-ta.*
 look.at.IMP crow-ABS.ACC
 ‘Look at the crow!’ (3.104.0357)
- e. *Huuto7 a-wiwe-n.*
 look.at.IMP 3SG-root-PSD
 ‘Look at the root!’ (3.104.0332)

We do not know to what extent the evidence of (9)-(13) threatens the pronominal-argument account of imperative formation advanced above. Presently we have no model that accommodates all the data.

The object is in the accusative in prohibitives in all the languages when such objects are attested, as seen in (14a) for SE, which can be contrasted with (14b), repeated from (5c). The SE prohibitive *qaj7* ‘don’t!’ is distinct from the indicative negative *qaj* ‘not’. With *qaj7*, the verb is in the form used in imperatives, usually simply the unmarked form. In the example, *kwa7* ‘eat it’ corresponds to indicative *kwa7-i*.

- (14) SE a. *Qaj7 = t\$ kwa7 ama-j mo^Rch.*
 PROH = 2 > 3SG.IMP eat DIST-ACC again
 ‘Don’t eat that anymore!’ (Crybaby)
- b. *Kwa7 = t\$ pa-t.*
 eat = 2 > 3SG.IMP PROX2-ABS
 ‘Eat that!’

While subject > object clitics are also present in the KI prohibitive (15), overt nominal objects remain unattested. It seems likely that an adjunct nominal would be marked for accusative, as in parallel constructions in SE (13). An imperative verb in KI has no subject pronoun.

- (15) KI a. *Kaj = vym hii.*
 PROH = 2 > 3 see;look.IMP
 ‘Don’t look at them!’ (3.98.0351)

- b. *Kaj=vym=yt\$* *hiu*
 PROH = 2 > 3 = PL.SUBJ see;look.IMP
 ‘Don’t you all look at them!’ (3.98.0351)

5.4.3. GENITIVE CASE. The genitive is the case governed by the pronominal arguments of noun phrases and adverbial phrases. Within a noun phrase the governing pronoun is a possessive prefix. In an adverbial phrase it is the pronominal stem of the inflected postposition. In most Takic languages the genitive case function, when marked, uses accusative morphology. In Serran, the genitive case is marked differently from the accusative, but it most commonly it looks superficially the same as the nominative, a result of the pervasive process of word-final vowel reduction.

5.4.3.1. GENITIVE CASE IN TONGVA. TV optionally marks nominals in a genitive case function. The genitive case has the same morphology as the accusative, i.e., the retention of the final vowel of the word final morpheme, as discussed in 5.4.2.1. The attested examples show the genitive only with absolutive- or plural-suffixed nouns. A TV genitive case noun can either precede (1a-d) or follow (1e,f) the possessed noun. Example (1g) shows no case marking on a possessed noun in genitive function.

- (1) TV a. *xongii-ta* *a-kii-n* (also *xongii-t a-kii-n* (3.104.0386))
 squirrel-ABS.GEN 3SG-house-PSD
 ‘squirrel’s burrow’ (3.104.0357)
- b. *maane-ta* *a-wiiwe-n*
 datura-ABS.GEN 3SG-root-PSD
 ‘the root of the toloache (datura)’ (3.104.0068)
- c. *to~tookora-mo* *po-moo-ke-n*
 PL~woman-PL.GEN 3-PL-house-PSD
 ‘the women’s house’ (3.104.0357)
- d. *yovaa-ra* *a-\$uun-nga*
 church-ABS.GEN 3SG-heart;inside-LOC
 ‘into (in) the church’ (3.105.0467)

- e. *a-huun*¹ *tokoo-ra*
 3SG-heart woman-ABS.GEN
 ‘the woman’s heart’ (3.104.0332)
¹ Instead of expected *a-\$uun* (cf. (1d)), probably reflecting Serran interference.
- f. *po-moo-ke-n* *ta-raax-mo*
 3-PL-house-PSD PL~person-PL.GEN
 ‘the Indians’ house’ (3.102.0016)
- g. *ne-tookwe\$a-7* *a-maa-n*
 1SG-mortar-PSD 3SG-hand-PSD
 ‘la mano de mi mortero (the pestle of my mortar)’ (3.104.0102)

5.4.3.2. GENITIVE CASE IN SERRAN. In both Serran languages nominals that have a genitive case function also have a morphologically distinct genitive case form. With nouns that take absolutive suffixes, the genitive is superficially just like the nominative because the genitive case vowel suffix *-y* is subject to word-final short vowel deletion, as in (1).

- (1) a. SE *tuku-t-∅* *a-wat\$*
 wildcat-ABS-GEN 3SG-claw
 ‘wildcat’s claws’
- b. SE *Xajku7-ja-m-∅* *pyy-vyrav-k-t\$i=n*
 White.person-AUG-PL-GEN 3PL-speak-K.NMLZ-ACC = 1SG > 3SG
vyraa~vyra-7n.
 ST~speak-ST
 ‘I speak English (the White people’s language).’
- c. KI *kopota-t-∅* *a-ki*
 turtle-ABS-GEN 3SG-house
 ‘turtle’s house’ (3.98.0145)

In SE, sometimes the genitive vowel *-y* occurs undeleted with a reinforcement from the insertion of a following glottal stop, as in (2). This glottal stop is of unknown origin.

- (2) SE a. *nyy^Rh-t-y7* *a-jy7*
 woman-ABS-GEN 3SG-mother
 ‘the woman’s mother’
- b. *Kwyn* *chaat\$u7* *a-majha-m-y7* *py-my-kja7*.
 QUOT.3SG sing 3SG-child-PL-GEN 3-PL-DAT
 ‘She sang to her children.’
- c. *aa-m-y7* *na~naa^R-m-y7* *py-my-v*
 DIST-PL-GEN PL~young.woman-PL-GEN 3-PL-LOC
 ‘at those young women’s place’

Since the final vowel of the plural suffix (-*my*) is already *y*, when the genitive case-marker vowel *y* replaces this vowel, there is no phonological consequence. For the plural, then, it can be in a genitive syntactic role, but there is no phonetically distinct plural genitive form unless the word-final glottal stop mentioned above is employed, as in (2b,c).

Examples of the SE consonantal genitive case suffix are given in (3). Genitives of Ø-class nouns (3a,c) and possessed nouns (3b), like accusatives, have a consonantal form of the genitive case suffix, -*t(y-)* (3a), -*t\$(y-)* (3b), or -*ch(y-)* (3c), depending on the underlying stem-final sound. This represents another instance of the PUA case marker *-*ta* but with added -*y*, though the genitive element -*y* is of unknown origin. Until there is evidence other than in Serran for a genitive in *-*y*, any reconstruction of a corresponding Proto-Takic (or PUA) genitive case marker is premature.

- (3) SE a. *Ama7=vy-7* *Wili* *Paavlu7-ty7* *a-majr*.
 DIST = 3SG-PST Willy Pablo-GEN 3SG-son
 ‘He was Willy Pablo’s son.’
- b. *Kwyny=vy-7* *uviht* *qat\$* *Wahi7* *a-hiintu7a-t\$* *py-mia7*.
 QUOT = 3SG-PST long.ago dwell Coyote 3SG-wife-GEN 3SG-COM
 ‘Long ago Coyote was living with his wife.’

- c. *ny-qoo^Rr* *a-tuchin-i-ch* *pu-nu7*
 1SG-OLsS ADJZ-older.one-ADJZ-GEN 3SG-ABL
 ‘my next-to-oldest sister’

An important small paradigm exists for the genitive case of the demonstratives, in (4). Their genitive singular is marked by the suffix SE *-ch(y-)*, KI *-ts(y-)*. But unlike other genitives in *-ch* or *-ts*, this selection is not phonologically constrained by an underlying stem-final *i*, as shown by SE *ama-ch*, KI *ama-ts*, the genitive of *ama7* ‘that’. Nor does this suffix correspond to an accusative in *-chi* (SE) or *-tsay* (KI) as is found with nouns or adjectives. Compare the forms for the SE adjective/noun *atuchini7* ‘older, older one’ (cf. (3c)) and the SE demonstratives *ama7* ‘that’, *ivi7* ‘this’, *hami7* ‘who, someone’ shown in (4). Note that all these show a derivationally introduced glottal stop in the nominative singular. Also shown in (4) is the plural, which has special root forms among the demonstratives.

(4) SE		that	this	who/someone	what/s.th	older one
	nominative	<i>ama7</i>	<i>ivi7</i>	<i>hami7</i>	<i>hii-t</i>	<i>atuchini7</i>
	accusative	<i>ama-j</i>	<i>ivi-j</i>	<i>hami-j</i>	<i>hii-t-i</i>	<i>atuchini-chi</i>
	genitive	<i>ama-ch</i>	<i>ivi-ch</i>	<i>hami-ch</i>	<i>hii-ch</i>	<i>atuchini-ch</i>
	plural	<i>aa-m</i>	<i>ii-m</i>	<i>hii-m</i>	<i>hii-m</i>	<i>atuh~chini-m</i>

The example SE *atuchini7* is complicated by a number of factors: the morphological presence of the adjectivalizing prefix *a-* (see 14.14.2), the stem reduplication *tuh~* which is in stem- but not word-initial position in the plural, the reduction of the derived consonant cluster *-tch-* after the reduplication, and the presence of the inserted word-final glottal stop in the nominative singular, occasioned by the exceptionality of the final vowel to apocope.

Examples showing usage of the genitive forms of the demonstratives are given in (5).

- (5) a. SE *ama-ch* *a-paar*
 DIST-GEN 3SG-OLBr
 ‘that one’s older brother’ (Badger Children)
- b. SE *Ama7* *kuchi7* *kiti* *ati^R7a7* *ivi-ch* *py-hpa7*.

DIST dog a.little big PROX-GEN 3SG-LOC
 ‘That dog is a little bigger than this one.’

- c. SE *Hami-ch=t* *a-kii-j* *hii~hi-j*.
 INDF-GEN = IRR.3SG > 3SG 3SG-house-ACC DUR~see-IND
 ‘Whose house does he see?’
- d. KI *ama-ts* *a-ki*
 DIST-GEN 3SG-house
 ‘that one’s house’ (3.100.0555)
- e. KI *ivi-ts* *a-kii-vea* *kwiihaka-t*
 PROX-GEN 3SG-house-LOC woman-GEN
 ‘in this woman’s house’ (3.100.0760; Anderton 1988:331)
- f. KI *Naw=mat* *hami-ts* *a-7yn*.
 NEG = FUT INDF(HUMAN)-GEN 3SG-know
 ‘No one will know.’ (3.100.0539; Anderton 1988:301)

Some roots have different shapes depending whether they are suffixed or not. The root for ‘mother’, *-jy7*, is one. Its suffixed allomorph is *-jyk(y-)*, cf. the plural *-jyky-m*, accusative SE *-jyk-i*, KI *-jyky-j*. Since the nominative case is unsuffixed, the nominative form of ‘my mother’ is *ni-jy7*. The genitive form is suffixed. Even if the genitive suffix is lost via the final vowel reduction rule, it still counts as a suffix in allomorph selection. Thus the genitive of ‘my mother’ (6) is usually heard as *ni-jyk* (6a), though the reinforced genitive suffix *-y7* remains an option (6b).

- (6) SE a. *a-jyk-Ø* *a-huun*
 b. *a-jyk-y7* *a-huun*
 3SG-mother-GEN 3SG-heart
 ‘his mother’s heart’

There are other roots of this sort. They are especially well represented among kin terms. Examples with *-na7 ~ -na7n(a-)* ‘father’ are given in (7).

- (7) SE a. *Ama-j jangk = kwyn my^Rny^R7-k-in ama-j*
 DIST-ACC but = QUOT.3SG > 3SG swallow-K-CAUS DIST-ACC
a-na7n-Ø a-huun-i.
 3SG-father-GEN 3SG-heart-ACC
 ‘But he swallowed it, his father’s heart.’
- b. *Toq^Rpi7a-j = kwyny ama-ch a-na7na-m-Ø pyy^R7-o^R-n.*
 gamble-IND = QUOT.3PL DIST-GEN 3SG-father-PL-GEN 3PL-bone-INS
 ‘They gambled using his fathers’ bones (the bones of his father and of his father’s brother).’

Example (8) includes the noun *-ka7* ‘paternal grandrelative’. Its genitive form is *-kak*, but that form is not used in the example. It seems likely that in a series of nouns such as the one in (8), ‘paternal grandrelative + old man’, only the noun closest to the governing pronominal, the prefix *a-* in the example, will be marked for genitive.

- (8) SE *Ama7 = vy-7 ny-ka7 wyt*i*7vy^R-t^Ø a-hiintu7a7 qat^Ø.*
 DIST = 3SG-PST 1SG-PatGRel old.man-ABS-GEN 3SG-wife be
 ‘My old grandfather had a wife (My paternal grandrelative old-man’s wife existed).’

For nouns that do not take absolute suffixes, the \emptyset -class, the consonantal genitive form is used, as shown in (8). In KI the genitive-case noun can precede or follow the possessed noun. The order possessed noun followed by possessor noun is also found in TV, but it is extremely rare or nonexistent in the other Takic languages. KI *ngaaty7* ‘cat’ (< Sp. *gato*) is a \emptyset -class noun.

- (8) KI *ngaaty7-t a-ki = a-ki ngaaty7-t*
 cat-GEN 3SG-house 3SG-house cat-GEN
 ‘the cat’s house’ (3.100.0555; Anderton 1988:178)

An interesting use of genitive case marking is found in KI when a subject noun follows the object noun. When this happens, the subject noun is marked for genitive case, as seen in (9). This is quite literally a marked order, with the subject noun being overtly marked

as in agreement with the personal prefix on the verb. Both nouns in (9) are of the \emptyset -class: *wahi7* ‘coyote’, *kutsi7* ‘dog’.

- (9) KI *Wahi7-taj a-woh-yk kutsi7-t.*
 coyote-ACC 3SG-bark-K.INTR dog-GEN
 ‘The dog is barking at the coyote.’ (3.98.0319; Anderton 1988:179)

The pair of KI sentences in (10) suggest a possible meaning difference. While the difference between the verbs *-pir* (from *pihy*) and *-tsuung*, both of which mean ‘suck’, is probably inconsequential, the difference between the unmarked order in (10a) and the marked order in (10b) may be between a more general statement and a more focused, more specific action. Note that despite Harrington’s gloss, there is no explicit word ‘this’ in the KI of (10b).

- (10) KI a. *A-tsuung pituuru7 a-\$yy-j.*
 3sg-suck hummingbird 3SG-flower-ACC
 ‘The hummingbird is sucking flowers.’ (3.98.0390; Anderton 1988:180)
- b. *A-piir a-\$yy-j pituuru7-t.*
 3SG-suck;suckle 3SG-flower-ACC hummingbird-GEN
 ‘The hummingbird sucks this flower’ (3.98.0228; Anderton 1988:180)

It is rare to find a genitive-case noun following its object in SE. One such example is given in (11), where genitive *taaqtamy7* discontinuously follows the inflected postposition *pymykja7*.

- (11) SE *Kwyn py-my-kja7 ky-j taaq-ta-m-y7 “Akaj = mynyt\$*
 QUOT.3SG 3-PL-DAT say-IND person-ABS-PL-GEN give.IMP = 2PL > 1SG
ny-majr” ky-j = kwyn.
 1SG-son say-IND = QUOT.3SG
 ‘She said to the people, “Give me my son!” she said.’

5.4.3.3. THE CUPAN LANGUAGES: NO GENITIVE CASE. The Cupan languages have no morphological genitive case in possessive syntactic structures, as in (1). A zero (\emptyset) marks

the position that corresponds to that of genitive case marking in the other languages. The LU word *qawii-cha* ‘mountain’ in (1a) is a long-absolutive nominative case form (its accusative, seen above in 5.4.2.4, is *qawii-sh*). Since the nominative is regarded as the structurally unmarked form, this provides strong evidence against the idea that there might be a covert marking of genitive case in Cupan. For the examples in (1) the zero and gloss “GEN” are parenthesized to emphasize that genitive case marking, covert or otherwise, is truly not used. The possessive pronoun, covert or not, is a pronominal argument and it controls the noun, but for the Cupan noun there is no morphological consequence of this syntactic relationship.

- (1) a. LU *qawii-cha(-∅)* *po-towla-nga*
 mountain-ABS(-GEN) 3SG-base-LOC
 ‘at the base of the mountain’ (H&E 436)
- b. AC *qeeng-ch(-∅)* *po-ki7*
 ground.squirrel-ABS(-GEN) 3SG-house
 ‘a ground squirrel’s hole’ (3.116.0466)
- c. CU *tymá-l(-∅)* *py-xutaxw-ika*
 earth-ABS(-GEN) 3SG-behind-DAT
 ‘to the end of the world’ (H&N 14-15[28-30]110)
- d. CA *ne-ljiinu7ku7(-∅)* *hé-ki-7a7*
 1SG-godfather(-GEN) 3SG-house-PSD
 ‘my godfather’s house’ (S&E 746)
- e. CA *tuchi-lj(-∅)* *∅-chungva7*
 hummingbird-ABS(-GEN) 3SG-kiss
 ‘hummingbird’s kiss’ (S&E 804)

Example (1e) shows two kinds of linguistic zero. The first is an expository zero, which marks an absence. It indicates that something under discussion is not there: There is no genitive case marking in CA. The second kind of zero we can call a paradigmatic zero. It is used to indicate a member of a paradigmatic set that happens to have no phonological

marking: CA has possessive prefixes for all the other persons and numbers, but the third person singular has no overt prefix.⁷⁹

5.4.4. THE CUPEÑO INCREMENT IN *-T(I)-*. CU also shows what may be a remnant of an ancient case suffix in **-ti*. There is an increment in *-t(i)-* found in the formation of local cases of nouns with stem-final stress as seen in (1) (from Hill 2005:187-46).⁸⁰

(1)	CU	nominative	adverbial
	a.	<i>savá-l</i> ‘grass’	<i>savá-t-7aw</i> ‘on the grass’
	b.	<i>tymá-l</i> ‘land’	<i>tymá-t-ika</i> ‘to the land’
	c.	<i>qawí-sh</i> ‘rock’	<i>qawí-t-7aw</i> ‘on the rock’
	d.	<i>py7áw7a</i> ‘mountain’	<i>py7áw-ti-7aw</i> ‘on the mountain’

The unsyncoated form *-ti-* as seen in (1d) suggests a possible connection with the *-ti-* form of the absolutive suffix often found in noun plurals. This CU increment does not participate in the lenition seen in the absolutive suffixes. Perhaps the CU lenitions (**t > l, ch/sh*) are too far along in the direction of morphologization to affect the increment.

The root *qawí-*,⁸¹ seen in (1c), when used in the sense ‘west’, shows different behavior: *qawíka* ‘to the west’, *qawíngax* ‘from the west’, *qawínga* ‘in the west’ (Hill 2005:187).⁸²

5.4.5. ADVERBIAL CASES. The adverbial cases are not adjoined to any pronominal argument. Among the adverbial cases it is useful to distinguish between the instrumental case and the “local” cases. The instrumental case involves a “peripheral argument” (cf. Dixon 2010:98) while the local cases, such as locative, dative, ablative, comitative, express spatial and temporal meanings and are marked by local case suffixes which may be used in periphrastic constructions in what we call inflected postpositions. While the

⁷⁹ Except in the case of monosyllabic nouns like *ki-* in (1d), which have the special prefix *he-*. When the prosodic pattern of a word requires something to be in the prefix position, an empty element *he-* is inserted. For expository convenience in the glossing of items like (1d) we label this element as 3SG, but that is technically a misidentification.

⁸⁰ In Hill 2005:341 (20) the *-t-* is treated as an internal accusative: *temá-t-7aw* [ground-ACC-LOC].

⁸¹ Corrected, upon rehearing, from earlier representations in *k* as in Hill & Nolasquez (1973[2005]) and Hill (2005).

⁸² This CU increment may be the same as the “connective” (Andrews 1975:327) *-ti-* of Nahuatl, as in the place name *Tenoch-ti-tlan*.

suffixes for the syntactic cases, accusative and genitive, follow the absolutive suffix, the absolutive is usually lost with the adverbial cases.

For many nouns a periphrastic construction is an alternative to suffixation. Other nouns, including virtually all animate nouns (with the intriguing “on horseback” exception of 5.4 (4)), cannot be directly suffixed with a local case suffix. For them a periphrastic construction is the only choice. The periphrastic construction involves a noun in construction with an inflected postposition (5.4.5.3). The noun in this construction is in the genitive case in TV and Serran, while it remains unmarked for case in Cupan, in which nouns have no distinct genitive forms, though sometimes an accusative is used in the genitive function.

5.4.5.1. INSTRUMENTAL CASE. The instrumental case is used to mark a noun for the sense ‘by means of, with, using’. Instrumental case suffixes have additional uses, such as ‘about’, in the various languages the instrumental marks a noun as something that participates in accomplishing the action of the verb but the noun so marked is not adjoined to any clause-level pronominal argument. CU uses the instrumental suffix only with possessed nouns or in a periphrastic construction. CA uses only the periphrastic construction.

The absolutive suffix does not occur before the instrumental case suffix, as in (1).

(1)		nominative		instrumental	
a.	TV	<i>ohee-t</i>	[sand-ABS]	<i>ohee-tar</i>	(3.105.0376) [sand-INS]
b.	SE	<i>kut\$aa-t</i>	[stick-ABS]	<i>kut\$aa-n</i>	[stick-INS]
c.	SE	<i>paa-t\$</i>	[water-ABS]	<i>paa-n</i>	[water-INS]
d.	KI	<i>hana-t</i>	[tar-ABS]	<i>hana-ny</i>	(3.98.0275) [tar-INS]
e.	LU	<i>huu-la</i>	[arrow-ABS]	<i>huu-tal</i>	[arrow-INS]
f.	LU	<i>too-ta</i>	[stone-ABS]	<i>too-tal</i>	[stone-INS]
g.	AC	<i>kalaw-t</i>	[stick-ABS]	<i>kalaw-tal</i>	(3.123.0483) [stick-INS]

Two short-vowel nouns in TV and one such noun in SE plus the SE demonstrative retain the absolutive suffix before the instrumental case suffix as seen in (2). These items also have exceptional patterns of accusative case formation (cf. 5.4.2.1), also shown in (2).

(2)			nominative	instrumental	accusative
a.	TV	stone	<i>to-taa</i>	<i>to-taa-rar</i> ‘with a stone’ (3.104.0061)	<i>to-taa-ra</i>
			[stone.ABS]	[stone-ABS-INS]	[stone-ABS-ACC]
b.	TV	stick	<i>ko-taa</i>	<i>ko-taa-rar</i> ‘with a stick’ (3.105.0049)	<i>ko-taa-ra</i>
			[stick.ABS]	[stick-ABS-INS]	[stick.ABS-ACC]
c.	SE	fire	<i>ku-t</i>	<i>ku-ta-n</i> ‘using fire’	<i>ku-ta-j</i>
			[fire-ABS]	[fire-ABS-INS]	[fire-ABS-ACC]
d.	SE	that one	<i>pa-t</i>	<i>pa-ta-n</i> ‘using that’	<i>pa-ta-j</i>
			[PROX2-ABS]	[PROX2-ABS-INS]	[PROX2-ABS-ACC]

Examples of instrumental case usage in Serran are given in (3).

- (3) a. SE *Qaj = kwyny = vy* *a-maa-n* *ngidhi7-k-in* *ama7*
 NEG = QUOT = 3SG > 3PL 3SG-hand-INS touch-K-CAUS DIST
kut\$aa-n = kwyny = vy *ikal-av.*
 stick-INS = QUOT = 3SG > 3PL hook-CONT
 ‘She didn’t touch them with her hands but hooked them with a stick.’
- b. SE *Pit-kj* *pa-t* *pahaa-t* *paa-n.*
 fill-K:CAUS.IMP PROX2-ABS bottle-ABS water-INS
 ‘Fill that bottle with water!’
- c. KI *Ni-kwara7* *haana-ny.*
 1SG-smear tar-INS
 ‘I smeared it with tar.’ (3.100.0400; Anderton 1988:86)
- d. KI *Ni7-uujhuun* *ni-huuna-ny.*
 1SG-want 1SG-heart-INS
 ‘I want it with all my heart’ (3.98.0498)

In CU, the instrumental suffix *-chi* is attested only with possessed nouns (4a,b) or demonstratives (4c).

- (4) CU a. *ny-ma-chi* [1SG-hand-INS] ‘with my hand’
 b. *ny-tamá-chi* [1SG-tooth/teeth-INS] ‘with my teeth’
 c. *iví-chi* [PROX-INS] ‘with this’

With non-possessed nouns, the instrumental suffix appears only in a periphrastic construction, as an inflected postposition, as in (5a). The periphrastic construction can appear with possessed nouns as well, as in (5d), where the noun has an accusative suffix. The postposition *-chi* is attested only with the third-singular prefix.

- (5) CU a. *kyláwy-t py-chi* [stick-ABS 3SG-INS] ‘with a stick’
 b. *pym-pa-wa-j py-chi* [3PL-water-PSD-ACC 3SG-INS] ‘with their water’

In CA, the instrumental appears only a periphrastic structure, with inflected postpositions *pi-sh* and *mi-sh*. Sauvel and Munro (1982:112) treat *pish* as a suffix. It does always follow the noun, but the noun does not lose its absolutive suffix, as shown in (6). However, Seiler and Hioki (1979:155) treat it as an inflected postposition, in accord with our analysis (see Table 5.4.5.3 (6)).

- (6) DCA a. *qawi-sh pi-sh* [stone-ABS 3SG-INS] ‘with a stone’
 b. *kelawa-t pi-sh* [stick-ABS 3SG-INS] ‘with a stick’
 c. *tese-l pi-sh* [white.clay-ABS 3SG-INS] ‘with white clay’
 MCA d. *juj-a-t pi-sh* [cold-NMLZ-ABS 3SG-INS] ‘due to cold’ (3.113.0457)
 e. *ngachi-sh pi-sh* [sand-ABS 3SG-INS] ‘with sand’ (3.112.0439)

Before *pi-sh*, CA possessed nouns often exhibit the accusative suffix (7a,b,d). This accusative is also attested with the 3SG independent pronoun (7c). Example (7e) shows the accusative form of an unpossessed noun with *mi-sh*, showing the 3PL form of the pronominal stem. Note that while *qawish* ‘mountain’ is not marked for number, it can have a singular or plural sense. The collocation with *mi-sh* in (7e) forces the understanding that *qawi-sh* (acc. *qawi-ch-i*) is being used in its plural sense.

- (7) DCA a. *Ø-hujanaxa-j pi-sh* ‘with his staff’
 b. *Ø-salu-j pi-sh* ‘with its claws’

- c. *pe7i-j pi-sh* 'with it'
 MCA d. *Ø-tama-j pi-sh* 'by means of teeth' (3.110.0333)
 e. *qawi-ch-i mi-sh* '(formed) by mountains' (3.113.0510)

Both CU *py-chi* and CA *pi-sh* have a wide range of senses beyond instrumental. Seiler and Hioki (1979:155) gloss *pi-sh* as 'around, about, by means of, on account of, at (temporal)', and these senses are also found in CU.

In Harrington's notes on MCA, *-sh* appears with pronominal stems encoding discourse participants, in the sense 'with, by' with verbs meaning 'stay, live', as seen in (8).

- (8) DCA a. *ni-sh hiw-qa*
 1SG-INS stay-PRS
 'He is staying with me' (3.108.0316)
- b. *i-sh hiw-qa*
 2SG-INS stay-PRS
 'He is staying with you' (3.108.0316)
- c. *E-te-m kile7 taxlos-te-m mi-sh*
 PROX2-ABS-PL NEG person-ABS-PL 3PL-INS
e-hiw-qal-i-ve e-te-m tewlave-le-m.
 2PL-stay-PST-ABLAUT-REAL.SUB PROX2-ABS-PL devil-ABS-PL
 'Those with whom you are staying are not people, they are devils.'
 (3.112.0133)

The full set of MCA forms is given in (9).

- (9) MCA singular plural
- | | | | | |
|---|--------------|-----------|------------------------------------|-----------|
| 1 | <i>ni-sh</i> | [1SG-INS] | <i>chemi-sh</i> | [1PL-INS] |
| 2 | <i>i-sh</i> | [2SG-INS] | <i>emi-sh</i> | [2PL-INS] |
| 3 | <i>pi-sh</i> | [3SG-INS] | <i>hemi-sh ~ pe7emi-sh ~ mi-sh</i> | [3PL-INS] |

Ni-sh has been translated as 'for me, for my sake' (Seiler 1977:106 (106ii)). While the gloss does not align exactly, it seems clear that this is the same morpheme as the instrumental, with an extended sense similar to case-syncretic "with" in English.

An MCA construction with an accusative-case independent pronoun and *pi-sh* also occurs, as in (10). (All are attested at 3.110.0344.)

- (10) MCA
- | | | | |
|----|----------------------|-----------------------|----------------------------|
| a. | <i>neʒe-j pi-sh</i> | [1SG.PRO-ACC 3SG-INS] | ‘by me’ |
| b. | <i>eʒe-j pi-sh</i> | [2SG.PRO-ACC 3SG-INS] | ‘by you’ |
| c. | <i>cheme-j pi-sh</i> | [1PL.PRO-ACC 3SG-INS] | ‘by us’ |
| d. | <i>peʒe-j pi-sh</i> | [3PL.PRO-ACC 3SG-INS] | ‘por eso, for that reason’ |

Of special interest, both CU *py-chi* and CA *pi-sh* can be used to introduce complement clauses, as in (11) (see also 13.3.2-3).

- (11) a. CU *Ú-mu mijax-wy py-chi y-hywvaʒ-pi.*
 2SG-nose be-ST.PRS 3SG-INS 2SG-smell-IRR.SUB
 ‘Your nose is to smell with.’ (H&N 86[172] ix.10)
- b. CA *Hi-jeʒ naʒani-qal pa-ʒl-i paʒ*
 3SG-mother light.fire-NFUT.SG water-ABS-ACC there
pij__siw-ni-ka pi-sh aʒas-ka-te-m.
 3SG.OBJ__heat-CAUS-IFUT 3SG-INS bathe-IFUT-ABS-PL
 ‘His mother made fire to heat water so they could bathe.’ (Seiler 1977:247
 (70))

5.4.5.2. LOCAL CASES. All of the languages exhibit constructions with local case suffixes where the absolutive is lost, as seen in (1). As with the instrumental, certain short-root nouns in TV and SE behave exceptionally. Such words in TV do not lose the absolutive before other suffixes (see *totaa* in (1c)). The SE word *ku-t* ‘fire’ has a special locative form which is used as a postpositional base to which local case suffixes can be added, even an apparently redundant second locative suffix, such that *ku-pia*, *ku-piaa-v*, *ku-piaa-vaʒ* all are said to mean the same thing, ‘at, in, on the fire’; see (1o-r). The cognates of these roots in the other languages show no special peculiarities. The local cases illustrated in (1) are locative (LOC) ‘in, on, at’, dative (DAT) ‘to, towards’, ablative (ABL) ‘from’, comitative (COM) ‘with, accompanied by’.

(1)	absolutive	local case
a.	TV <i>jovaa-r</i> (3.102.0653) [church-ABS]	<i>jovaa-nga</i> (3.103.0052) [church-LOC]
b.	TV <i>moomo-t</i> (3.102.0501) [ocean-ABS]	<i>moom-nga</i> (3.103.0363) [ocean-LOC]
c.	TV <i>to-taa</i> (3.103.0025) [stone-ABS]	<i>to-taa-nga</i> (3.105.0103) [stone-ABS-LOC]
d.	TV <i>horii-t</i> (3.104.0358) [ravine-ABS]	<i>horii-ng7aro</i> (3.104.0111) [ravine-DAT]
e.	TV <i>kii-j</i> (3.103.0391) [house-ABS]	<i>kii-ng7aro</i> (3.105.0375j) [house-DAT]
f.	TV <i>tokuupa-r</i> (3.103.0048) [sky-ABS]	<i>tokuup-ve</i> (3.103.0307) [sky-ABL]
g.	SE <i>tiy^Rva-t\$</i> [earth-ABS]	<i>tiy^Rva-v</i> [earth-LOC]
h.	SE	<i>tiy^Rva-jka7</i> [earth-DAT]
i.	SE	<i>tiy^Rva-nu7</i> [earth-ABL]
j.	SE <i>kii-ch</i> [house-ABS]	<i>kii-v</i> [house-LOC]
k.	SE	<i>kii-jka7</i> [house-DAT]
l.	SE	<i>kii-nu7</i> [house-ABL]
m.	SE <i>po^Rq-t</i> [road-ABS]	<i>po^Rq-p</i> [road-LOC]
n.	SE	<i>po^Rq-nu7</i> [road-ABL]
o.	SE <i>ku-t</i> [fire-ABS]	<i>ku-pia</i> [fire-LOC]
p.	SE	<i>ku-piaa-v(a7)</i> [fire-LOC-LOC]
q.	SE	<i>ku-piaa-jka7</i> [fire-LOC-DAT]
r.	SE	<i>ku-piaa-nu7</i> [fire-LOC-ABL]
s.	SE <i>a-kut\$a7</i> [3SG-firewood]	<i>a-kut\$a-mia7</i> [3SG-firewood-COM]
t.	KI <i>kii-ts</i> (3.109.0016) [house-ABS]	<i>kii-vea</i> (3.100.0514) [house-LOC]
u.	KI	<i>kii-nu7</i> (3.100.0633) [house-ABL]
v.	KI <i>ku-t</i> (3.98.0080) [fire-ABS]	<i>ku-pea</i> (3.98.0480) [fire-LOC]
w.	KI <i>tymy-t</i> (3.98.0079) [stone-ABS]	<i>tymy-mea7</i> (3.98.0212) [stone-COM]
x.	LU <i>too-ta</i> [stone-ABS]	<i>too-nga</i> [stone-LOC]
y.	LU	<i>too-jk</i> [stone-DAT]
z.	LU <i>wanii-cha</i> [river-ABS]	<i>wanii-jk</i> [river-DAT]
aa.	LU	<i>wanii-ngaj</i> [river-ABL]
bb.	AC <i>kii-ch</i> (3.123.0380) [house-ABS]	<i>kii-nga</i> (3.123.0309) [house-LOC]
cc.	AC <i>moom-t</i> (3.124.0208) [ocean-ABS]	<i>moom-nga</i> (3.123.0423) [ocean-LOC]
dd.	AC <i>exxa-l</i> (3.121.0766) [ground-ABS]	<i>ex-nga</i> (3.123.0268) [ground-LOC]
ee.	AC	<i>exxa-k</i> (3.123.0640) [ground-DAT]
ff.	AC <i>paa-l</i> (3.121.0694) [water-ABS]	<i>paa-ngaj</i> (3.123.0422) [water-ABL]
gg.	CU <i>ki-sh</i> [house-ABS]	<i>ki-nga</i> [house-LOC]
hh.	CU	<i>ki-jka</i> [house-DAT]
ii.	CU	<i>ki-ngax</i> [house-ABL]

jj.	CU	<i>tymá-l</i> [earth-ABS]	<i>tymá-nga</i> [earth-LOC]
kk.	CU	<i>wani-sh</i> [river-ABS]	<i>wani-ngax</i> [river-ABL]
ll.	DCA	<i>ki-sh</i> [house-ABS]	<i>ki-nga</i> [house-LOC]
mm.	DCA		<i>ki-jka</i> [house-DAT]
nn.	DCA	<i>qawi-sh</i> [mountain-ABS]	<i>qawi-ngax</i> [mountain-ABL] ‘from the west’
oo.	MCA	<i>ki-sh</i> [house-ABS]	<i>ki-nga7</i> [house-LOC] (3.112.0057)
pp.	MCA	<i>pa-l</i> [water-ABS]	<i>pa-jka</i> [water-DAT] (3.112.0110)
qq.	MCA	<i>teki-sh</i> [cave-ABS]	<i>teki-ngax</i> [cave-ABL] (3.112.0261)

In TV and the Cupan languages, there are forms in which an absolutive suffix may occur before a local case suffix, as seen in (2). It is possible that this element might be the increment *-t(i)-* seen above (5.4.4) in CU, but this seems unlikely since the increment has only unlenited *-t-* and never *-l-*.

(2)		absolutive	with local case suffix	absolutive + local case suffix
a.	TV	<i>t\$aavo-t</i>	<i>t\$aav-nga</i> (3.103.0322) [fire-LOC]	<i>t\$aavo-t-nga</i> (3.104.0357) [fire-ABS-LOC]
b.	TV	<i>\$aana-t</i>	<i>\$aan-nga</i> (3.104.0034) [tar-LOC]	<i>\$aana-t-nga</i> (3.104.0069) [tar-ABS-LOC]
c.	TV	<i>pee-t</i>	<i>pee-nga</i> (3.105.0335) [road-LOC]	<i>pee-t-nga</i> (3.104.0334) [road-ABS-LOC]
d.	LU	<i>qaxaa-l</i>	<i>qaxaa-jk</i> [quail-DAT]	<i>qaxaa-l-uk</i> (K&G 92) [quail-ABS-DAT]
e.	AC	<i>uunva-t</i>	<i>uunva-nga</i> (3.122.0209) [cholla-LOC]	<i>uunva-t-nga</i> (3.122.0209) [cholla-ABS-LOC]
f.	AC	<i>malá-l</i>	<i>malaa-nga</i> (3.121.0709) [metate-LOC]	<i>mala-l-nga</i> (3.121.0709) [metate-ABS-LOC]
g.	CU	<i>navy-t</i>	<i>navy-nga</i> [prickly.pear-LOC]	<i>navy-t-ika</i> [prickly.pear-ABS-DAT]
h.	CU	<i>siqá-l</i>	<i>siqá-nga</i> [clover-LOC]	<i>siqá-l-ika</i> [clover-ABS-DAT]
i.	CU	<i>ti7i-ly</i>	<i>ti7i-nga</i> [bone-LOC]	<i>ti7i-lj-ika</i> [bone-ABS-DAT]
j.	DCA	<i>tema-l</i>	<i>tema-nga</i> [earth-LOC]	<i>tema-l-nga</i> [earth-ABS-LOC]
k.	MCA	<i>wewene-t</i>	<i>wewene-nga</i> [arroyo-LOC] ‘in the arroyo’	<i>wewene-t-ngax</i> [arroyo-ABS-ABL] ‘because of the arroyo’

Example (2d) is unusual. It is an example of an animate noun with a local case suffix rather than the usual construction “noun *po(m)*-postposition” (as in 5.4.5 (5) below). The example without the absolutive means ‘to the quail area’, not ‘to the quail’ (Elliott 1999:798). The absolutive form in (2d) is discussed below. Of the pair of AC forms in (2e), Harrington observes that his consultant said “confusedly” that *unva-nga* was “singular” while *unva-t-nga* was “plural.” We speculate that she was trying to suggest that *unva-t-nga* meant ‘among the chollas’, while *unva-nga* meant ‘on a cholla’. Data from CU, where greater contextual materials are available, suggest that the presence of the absolutive before the case suffix implies a background of presupposition. In CU, if the construction refers to a prototypical scene, the local case suffix attaches directly to the base. As an example, referring to acorn flour in a basket (nom. *chajma-l*), the expression is *chajma-nga* [basket-LOC]. But if the scene is not prototypical, if, say, a live rat is found in the basket with the acorn flour, where no rat should be, the expression is *chajma-l-nga* [basket-ABS-LOC]. Other differences apparently can also be expressed by this distinction, as in (2c). Speakers may, however, reject isolated examples with the internal absolutive when no context is provided. For instance, Harrington’s TV notes report a reaction to “*oxoornga*, en la tierra” (‘on the ground’), a form which had been collected years earlier from “K”:⁸³ “K’s form is wrong. *ooxnga*, en la tierra” (3.104.0356). K’s absolutive form “*ooxor*, la tierra” (‘the ground’) is also provided in the notes but with no comment; apparently *ooxor* was acceptable to both speakers.

The LU example (2d) with dative and absolutive is from Kroeber and Grace (1960: 92), who note that the absolutive is usually retained with the names of animals, and that deverbal agentives in *-ka-t*, *-wu-t* also retain the final *-t* before adverbial case suffixes.

In CU, a few nouns show the increment (5.4.4) elaborated with a glottal stop in the local cases. The main examples are *savá-l* ‘grass’ and *tymá-l* ‘land, earth’, which have postpositional bases *savá-tʔ-* and *tymá-tʔ-* respectively.

In MCA, Sauvel and Munro (1981) find that there are three types of “relational endings.” First, the locative (*-nga*, Harrington’s *-ngaʔ*) and ablative (*-ngax*) suffixes appear both with and without absolutives, sometimes with slight differences in meaning.

⁸³ “K” is one of Harrington’s abbreviations for his informant José de los Santos Juncos. He was nicknamed “Kuhn” (often written “Kewen”) after a well-known local lawyer, because he was considered to be very intelligent (3.104.0054).

For instance, for (2d), they state that *tema-nga* means ‘on the ground’, while *tema-l-nga* means ‘on the earth’ (S&M 110). Second, unlike in CU, the directional suffix *-jka* ~ *-ika* never appears with the absolutive. Finally, locative *pa7* (contraction of *penga* – cf. Table 5.4.5.3 (6)), ablative *pax* (< *pengax*), and instrumental *pish* always appear with the absolutive (S&M 112). We prefer to treat this third group as separate words but the question is not completely clear in the case of *pa7* and *pax*, each of which has an allomorph with initial *-v*. Such an alternation would normally be conditioned by phonological environment, with *-va7*, *-vax* appearing following a vowel. There is no evidence that this process in CA includes “external sandhi” across word boundaries. Examples illustrating the problem appear in (3). Most examples of *va7* may be non-absolutive forms corresponding to the derivational suffix complex *-va7a-l* ‘place for doing’. However, such an assignment of *-va7* to a different suffix would not account for the examples in (3b). Furthermore, *-vax* definitely seems to be a suffixal variant of the ablative particle *pax*. *Vax* is sometimes attested after a consonant, as in *tamjat vax* (3d.i). It’s as though these reduced forms of inflected postpositions (5.4.5.3) are on their way to becoming clitics.

(3)	MCA	i. relational as separate word	ii. suffixed
	a.	<i>tema-l pa7</i> [earth-ABS LOC] ‘on earth’	<i>ne-paw-va7</i> [1SG-get.water-LOC] ‘where I got water’ (3.108.0250)
	b.	<i>wi-sh pa7</i> [two-ABS LOC] ‘in two places’ (3.110.0713)	<i>suple-va7</i> [one-LOC] ‘in one place’ (3.110.0713)
	c.	<i>qawi-sh pax</i> [mountain-ABS ABL] ‘from the hills’ (3.113.0123)	<i>ne-mu7ukn-i-vax</i> [1SG-sickness-?-ABL] ‘from my sicknesses’ (3.113.0582)
	d.	<i>tamja-t vax</i> [sun-ABS ABL] ‘on the sunny side’ (3.110.0303)	<i>kis7i-vax</i> [shade-ABL] ‘on the shady side’ (3.110.0303)

For the local case forms of demonstratives, see section 6.1.

5.4.5.3. INFLECTED POSTPOSITIONS. The inflected postpositions allow for the expression of local case relations with animates. Animate nouns, as mentioned earlier, are almost never inflected for local case. The inflected postpositions may also be used with inanimates. They have the structure pronominal stem + postposition. They can occur by themselves

or as heads of periphrastic constructions. The forms of the pronominal stems found in the inflected postpositions show some overlap with those of the possessive prefixes and of the independent pronouns and the postpositional component is often of the same form as the corresponding local case suffix. What may appear to be an independent pronoun inflected for local case is an instance of an inflected postposition.

The postpositions are always short, usually of just one syllable, and are never stressed. Word stress on an inflected postposition necessarily falls on the pronominal component. As is common with small, closed morphological sets, the inflected postpositions show various irregularities.

By comparison, relational nouns (see 5.6) are an open set, with lexical content. They are characteristically more phonologically robust and may contain stress or a long vowel and be of more than one syllable. Many relational nouns are inflected for local case.

Unfortunately, due to the paucity of data, only two inflected postpositions have so far been identified for TV. One is dative *noojok* ‘to me, for me’, in (1).

- (1) TV *Noo-jok hii7ke.*
 1SG-DAT bring.to.life(?).IMP
 ‘[En]ciéndamelo, light my cigar for me!’ (3.105.0300)

TV *noojok* ‘to me, for me’ is cognate with the dative inflected postpositions in the other Takic languages, with its most similar correspondents being KI *nyyjyk* and CU *nyjik*. The others are SE *nyyjka7*, LU *nejk*, AC *nijk*, CA *nijik* ~ *nijk*. The dative suffix on TV nouns is the unrelated *-ng7aro*.

The other inflected postposition is locative *-paa* (2), which shows the singular forms of the pronominal stems.

- (2) TV 1SG *ne-paa* (3.105.0351)
 2SG *mo-paa* (3.105.0476)
 3SG *a-paa* (3.103.0242)

The SE pronominals are given in (3). SE forms separated by a slash, /, differ between speakers, Sarah Martin’s being first, other speakers’, mainly Dorothy Ramón’s, next. The

second person pronominal stems are the same for singular and plural though they differ in the selection of certain adverbial case suffixes; see Table 5.4.5.3 (1) below.

(3)	SE	pronominal stems	pronominal prefixes	independent pronouns
	1SG	<i>nyy-</i>	<i>ni-</i> ~ <i>ny-</i> / <i>ny-</i>	<i>nyy7</i>
	1PL	<i>achamy-</i> / <i>ichamy-</i>	<i>cha-</i> / <i>chyy-</i>	<i>acham</i> / <i>icham</i>
	2SG	<i>ymy-</i> ~ <i>ymyy-</i>	<i>my-</i>	<i>ymi7</i>
	2PL	(same as sg.)	<i>yy-</i>	<i>yym</i>
	3SG	<i>py-</i> ~ <i>py^R-</i> ~ <i>pu-</i> ~ <i>pyn-</i>	<i>a-</i>	<i>ama7</i>
	3PL	<i>pymy-</i>	<i>pyy-</i> ~ <i>pyy^R-</i> ~ <i>puu-</i>	<i>aam</i>

KI pronominals are much same as SE but with fewer complications.

(4)	KI	pronominal stems	pronominal prefixes	independent pronouns
	1SG	<i>ny-</i>	<i>ni-</i>	<i>ny7</i>
	1PL	<i>itsamy-</i>	<i>tsyy-</i>	<i>itsat\$</i>
	2SG	<i>ymy-</i> ~ <i>y(m)-</i>	<i>my-</i>	<i>ymy7</i>
	2PL	<i>ymy-</i>	<i>yy-</i>	<i>ymy7y</i>
	3SG	<i>py-</i>	<i>a-</i>	<i>ama7</i>
	3PL	<i>pymy-</i>	<i>pyy-</i>	<i>aam</i>

The LU pronominals are given in (5).

(5)	LU	pronominal stems	pronominal prefixes	independent pronouns
	1SG	<i>noo-</i>	<i>no-</i> ~ <i>nu-</i>	<i>noo</i>
	1PL	<i>chaamu-</i>	<i>cham-</i>	<i>chaam</i>
	2SG	<i>oo-</i> ~ <i>o-</i> ~ <i>u-</i>	<i>o-</i> ~ <i>u-</i>	<i>om</i>
	2PL	<i>oomu-</i> ~ <i>oom-</i>	<i>om-</i> ~ <i>um-</i>	<i>umóm</i>
	3SG	<i>poo-</i> ~ <i>po-</i> ~ <i>pu-</i>	<i>po-</i> ~ <i>pu-</i>	<i>po7</i>
	3PL	<i>poomu-</i> ~ <i>poom-</i>	<i>pom-</i> ~ <i>pum-</i>	<i>pumóm</i>

AC, in (6), shows a systematic difference between the long-vowel pronominal stems of the inflected postpositions and the short-vowel possessive prefixes on nouns.

(6)	AC	inflected postpositions	possessed nouns
	a.	<i>chaam-ta</i> ‘with us’ (3.123.0421)	f. <i>cham7-na7</i> ‘our father’ (3.123.0421)
	b.	<i>poom-ak</i> ‘for them’ (3.123.0454)	g. <i>pom7-\$aama-j</i> ‘their hay (acc.)’ (3.122.0205)
	c.	<i>poo-ta</i> ‘with her’ (3.123.0503)	h. <i>pa-pulla-m</i> ‘his face’ (3.123.0386)
	d.	<i>noo-xa</i> ‘just me, me alone’ (3.123.0418)	i. <i>na-\$uun</i> ‘my heart’ (3.123.0273)
	e.	<i>oo-xa</i> ‘just you (sg.)’ (3.123.0418)	j. <i>a-\$uun</i> ‘your heart’ (3.122.0175)

The long-vowel pronominals in (6) lack the glottal stop characteristic of AC plural possessive prefixes. The length does not seem to be conditioned by the stress, since Harrington also recorded securely *nó-pal* ‘my right hand’, *ó-pal* ‘your (sg.) right hand’, *pó-pal* ‘his right hand’, with short vowels in the possessive prefixes (3.123.0480). The length remains in forms derived from inflected postpositions, as in *poo-ngaw7-ch* ‘the one that is after it’, said to be from *poo-ngay* ‘from it, after it’ (3.123.0521).

In Inland Cupan the difference between the pronominal stems and possessive prefixes is somewhat subtle. While in the Cupan languages there is a good deal of overlap, these stems may be quite distinct from the possessive pronominal prefixes and also from the independent pronouns. The pronominals for CU appear in (7). The pronominal stems differ from the prefixes only in the plural.

(7)	CU	pronominal stems	pronominal prefixes	independent pronouns
	1SG	<i>ny-</i>	<i>ny-</i>	<i>ny7</i>
	1PL	<i>chymy-</i>	<i>chym-</i>	<i>chym</i>
	2SG	<i>y-</i>	<i>y-</i>	<i>y7</i>
	2PL	<i>ymy-</i>	<i>ym-</i>	<i>ym</i>
	3SG	<i>py-</i>	<i>py-</i>	<i>py7</i>
	3PL	<i>pymy-</i>	<i>pym-</i>	<i>pym</i>

The CA paradigms appear in (8). The possessive 3SG is zero (or the empty prothetic *he-* inserted to absorb the stress with stressless roots). Occasionally apparent postpositional constructions appear with zero third person, e.g. *qawchi mangax* ‘among the rocks’ (3.110.0262); such examples are probably best regarded as belonging among

the relational nouns (5.6). The third person plural pronominal stem is similarly interesting. The element *mi-* in *mijk* ~ *mijik* ~ *miik* ‘to them’ in (9g) below is the same in origin as the plural suffix **-my* and appears to be the remaining second half of **py-my-* [3-PL] ‘their’, though with *i* rather than expected *e*; cf. the CU form *pymy-*. Both *heme-* and *pe7em-* are also attested with postpositionals, the latter only in MCA. with the ordinary third plural pronominal prefix, appears as an alternative form. The object prefixes, included for completeness, are a subset of the pronominal stems.

(8)	CA	pronominal stems	possessive prefixes	subject prefixes	object prefixes	independent pronouns
	1SG	<i>ne-</i> ~ <i>ni-</i>	<i>ne-</i>	<i>hen-</i> ~ <i>-n-</i>	<i>ne-</i>	<i>ne7</i>
	1PL	<i>cheme-</i> ~ <i>chem-</i>	<i>chem-</i>	<i>hish-</i> ~ <i>ish-</i> ~ <i>-sh-</i>	<i>cheme-</i>	<i>chem</i> ~ <i>chemem</i>
	2SG	<i>e-</i>	<i>e-</i>		<i>e-</i>	<i>e7</i>
	2PL	<i>eme-</i> ~ <i>emi-</i> ~ <i>em-</i>	<i>em-</i>	<i>eme-</i>	<i>eme-</i>	<i>em</i> ~ <i>emem</i>
	3SG	<i>pe-</i> ~ <i>pi-</i>	∅ ~ <i>he-</i>	∅	<i>pe-</i>	<i>pe7</i>
	3PL	<i>me-</i> ~ <i>mi-</i> ~ <i>heme-</i> ~ <i>pe7em-</i>	<i>hem-</i>	<i>hem-</i> ~ <i>-m-</i>	<i>me-</i>	<i>pe7em</i>

In previous work on CU (Hill 2005) and CA (Seiler 1977), some inflected postpositions were analyzed as having special plural allomorphs with a suffix-initial vowel, *y* in CU, *e* in CA. The comparative perspective gained here assigns those vowels to the pronominal stem, thus aligning Inland Cupan with LU and Serran in having a special set of pronominal stems, distinct from the prefixes and the independent pronouns, in the inflected postpositions. This seems to be a general Takic pattern, but information on this point is missing in the data on TV and AC.

Examples of inflected postpositions are given in (9).

(9)	a.	TV	<i>noo-jok</i>	[1SG-DAT]	‘to me, for me’ (3.105.0300)
	b.	SE	<i>ymy-mia7</i>	[2PL-COM]	‘with you (sg./pl.)’
	c.	KI	<i>ichamy-mea7</i>	[1PL-COM]	‘with us’ (3.100.0748)
	d.	LU	<i>noo-ngaj</i>	[1SG-ABL]	‘from me’
	e.	AC	<i>poo-ngaj</i>	[3SG-ABL]	‘from it, after it’ (3.123.0501)
	f.	CU	<i>ymy-jik</i>	[2PL-DAT]	‘toward you (pl.)’

- g. DCA *mi-jk ~ mi-jik ~ miik* [3PL-DAT] ‘to them’
 h. MCA *cheme-jik* [1PL-DAT] ‘to us’ (3.113.0076)

The MCA examples in (10) can help clarify the difference between inflected postpositions and independent pronouns in the accusative.

- (10) MCA a. “...,” *hem-jax-we7 ni-jik.*
 3PL-say-PST.PL 1SG-DAT
 ‘“...,” they told me.’ (S&E 806)
- b. “*Tum mexenuk pe7i-j ne7i-j ni-jik achama7,*”
 truly thus 3SG.PRO-ACC 1SG.PRO-ACC 1SG-DAT good
 ja-qa.
 say-PRS.SG
 ‘“Either way is all right with me,” she said.’ (S&E 696)

Example (10a) contains just the inflected postposition *nijik*. Example (9b) adds independent pronoun *ne7* for emphasis. *Ne7* is in its accusative form *ne7ij* because it is in construction with the *ni-* prefix of *nijik*. If *nijik* was regarded as already containing the independent pronoun, then *ne7ij nijik* in (4b) would be inexplicably redundant and the accusative usage would have no structural explanation.

Animate nouns almost never take suffixed local case markers but instead require the use of periphrastic expressions. The periphrastic structure consists of a genitive noun with an inflected postposition. Examples of inflected postpositions in periphrastic expressions are given in (11). Plural nouns are unmarked for genitive case (11k,p). For singulars, there are various patterns of marking. In Serran, the governed noun (or demonstrative) may be genitive (11a,b,d) or accusative (11c,e). In Coastal Cupan (11f,g,h,i) the noun is unmarked. It can be marked accusative in Inland Cupan (11l,o) or remain unmarked (11j,m,n).

- (11) a. SE *pyy-jyk py-jykja7* ‘to their mother’
 3PL-mother.GEN 3SG-DAT
- b. SE *Tyyj-t py-mia7* ‘with (in the company of) Spirit’
 Spirit-ABS.GEN 3SG-COM

c.	SE	<i>ngyt\$ka-t-i</i>	<i>py-mia7</i>	‘with (having) the beads’
		beads-ABS-ACC	3SG-COM	
d.	KI	<i>py-jyk</i>	<i>a-hintoa-t\$</i>	‘con su pariente (to her relative)’ (3.99.0544)
		3SG-DAT	3SG-relative-GEN	
e.	KI	<i>wi7ah-ta-j</i>	<i>py-tuk</i>	‘under the oak tree’ (3.99.0233)
		oak.sp-ABS-ACC	3SG-under	
f.	LU	<i>hunwu-t</i>	<i>po-jk</i>	‘to the bear’
		bear-ABS	3SG-DAT	
g.	LU	<i>ja7á-sh</i>	<i>poo-tu</i>	‘with the man’
		man-ABS	3SG-COM	
h.	LU	<i>tukwu-t</i>	<i>poo-ngaj</i>	‘from the mountain lion’
		mountain.lion-ABS	3SG-ABL	
i.	AC	<i>na-\$waam</i>	<i>poo-ta</i>	‘with my daughter’ (3.123.0503)
		1sg-daughter	3SG-LOC	
j.	CU	<i>pý-jy</i>	<i>py-jik</i>	‘to his mother’
		3SG-mother	3SG-DAT	
k.	CU	<i>py-na7akwa-nim</i>	<i>py-my-jik</i>	‘to his children’
		3SG-child-PL	3-PL-DAT	
l.	CU	<i>naxáni-ch-i</i>	<i>py-ngax</i>	‘from the man’
		man-ABS-ACC	3SG-ABL	
m.	CU	<i>awá-l</i>	<i>py-va7aw</i>	‘above the dog’
		dog-ABS	3SG-over	
n.	DCA	<i>Lola</i>	<i>pi-jik</i>	‘to Lola’
		Lola	3SG-DAT	
o.	DCA	<i>ventána7-i</i>	<i>pi-jik</i>	‘toward the window’
		window-ACC	3SG-DAT	
p.	DCA	<i>ne-malju7a-m</i>	<i>Ø-mi-jik</i>	‘to my children’
		1SG-child-PL	3-PL-DAT	
q.	MCA	<i>taxlos-te-m</i>	<i>heme-ta7</i>	‘among the people’ (3.112.0308)
		person-ABS-PL	3PL-LOC	

The fact that in SE the comitative (COM) may take the accusative (11c) is exceptional to the pattern of the accusative case being determined by adjunction to a particular clause-level pronominal argument. Other occurrences of accusative marking in (11) may

present the same analytic question. See the examples in 5.4 (2), above, and related discussion, where it is suggested that this may have to do with differences of agency.

Several of the languages have two comitatives. In LU, the inanimate form *-man* (12a,b) is a suffix, but the animate *-7eesh* (12c) is a relational noun.

- (12) LU
- | | | | |
|----|-------------------------|----------------------|-------------------------|
| a. | <i>sijja-man</i> | | ‘along with a saddle’ |
| | saddle-COM ₂ | | |
| b. | <i>choo7un-man</i> | | ‘along with everything’ |
| | all-COM ₂ | | |
| c. | <i>archaeologists</i> | <i>pom-7eesh</i> | ‘with archaeologists’ |
| | archaeologists | 3PL-COM ₁ | |
| d. | <i>no-7eesh</i> | <i>uwo7ikat</i> | ‘my co-worker’ |
| | 1SG-COM ₁ | worker | |

In CU, there are two inflected comitative postpositions. There is considerable overlap, as in the examples given, which both involve people manipulating inanimate objects at ceremonies. In (13a), the Spanish loan *xudiiju7* (< *judío* ‘Jew’) refers to the image of Judas that is burned on the Saturday of Holy Week (Easter). The *nang7awyt* is the image of the deceased that is burned at the anniversary of the year’s deaths. The postposition *-man*, (13b) can be used for involuntary accompaniment.

- (13) CU
- | | | | |
|----|---------------------|----------------------|-------------------|
| a. | <i>xudiiju7-i</i> | <i>py-man</i> | ‘with the Judas’ |
| | Judas-ACC | 3SG-COM ₁ | |
| b. | <i>nang7aw-ti-m</i> | <i>pymy-nyw</i> | ‘with the images’ |
| | image-ABS-PL | 3PL-COM ₂ | |

The MCA forms in (14) are similar, with *-man* referring to an involuntary accompaniment and *-new* to a voluntary one.

- (14) MCA
- | | | | |
|----|----------------------|----------------------|------------------------------------|
| a. | <i>ku-7t-i</i> | <i>pe-man</i> | ‘along with the fire’ (3.110.0262) |
| | fire-ABS-ACC | 3SG-COM ₁ | |
| b. | <i>ni~ngki-che-m</i> | <i>heme-new</i> | ‘with the girls’ (3.113.0363) |
| | PL~girl-ABS-PL | 3PL-COM ₂ | |

The inflected postpositions of the several languages (less TV) are displayed in Tables 5.4.5.3 (1-6), to the extent that the information is available. The gaps in the tables reflect lack of examples found; it is unknown which if any of the missing forms truly do not exist. The Cupan languages treat the instrumental periphrastically using an instrumental form of the inflected postposition. In Serran, as mentioned above, the instrumental *-n(y)* attaches directly to the noun stem. In some languages there are inflected postpositions in addition to the ones that appear in the tables.

Several of the SE inflected postpositions show differences between the singular and plural forms of the postpositional component. This permits a contrast between singular and plural second person forms for those items. For others, whether the second person form is to be understood as singular or plural must be determined from the larger context.

Table 5.4.5.3 (1). Serrano inflected postpositions

SE	locative	dative	ablative
1SG	<i>nyhpa7</i>	<i>nyyja7</i>	<i>nyynu7</i>
1PL	<i>achamyv(a7) / ichamyv(a7)</i>	<i>achamykja7 / ichamykja7</i>	<i>achamynu7 / ichamynu7</i>
2SG	<i>ymyhpa7</i>	<i>ymyyja7</i>	<i>ymyynu7</i>
2PL	<i>ymyv(a7)</i>	<i>ymykja7</i>	
3SG	<i>pyhpa7</i>	<i>pyyja7</i>	<i>punu7</i>
3PL	<i>pymyv(a7)</i>	<i>pymyja7</i>	<i>pymynu7</i>
SE	comitative	‘like, similar to’	‘only, alone, by oneself’ ¹
1SG	<i>nyymia7</i>	<i>nyyn</i>	<i>nouk</i>
1PL	<i>achamymia7 / ichamymia7</i>	<i>achamyn / ichamyn</i>	<i>achamuk / ichamuk</i>
2	<i>ymyymia7 ~ ymymia7</i> ²	<i>ymyyn</i>	<i>ymuk</i>
3SG	<i>pymia7</i>	<i>py^Rna^R</i>	<i>pynuk</i>
3PL	<i>pymymia7</i>	<i>pymyyn</i>	<i>pymuk</i>

¹ *Nouk*, etc., are treated also as “emphatic pronouns” in 6.3.2.

² *Ymyymia7* and *ymymia7* ‘with you’ look like singular and plural forms respectively, but Mrs. Martin used them interchangeably.

The vowel of the SE third person prefix *py-* assimilates to the following vowel in rhoticity (before *a^R* in this table) or rounding (before *u*). This assimilation is also found with the related possessive prefix *pyy-* ‘their’ (see 5.2.1 (2)).

Table 5.4.5.3 (2). Kitanemuk inflected postpositions

KI	dative ¹	ablative	comitative (3.100.0634)	emphatic
1SG	<i>nyyjk</i>	<i>nyynu7</i>	<i>nymea7</i>	<i>nuk</i>
1PL	<i>itsamyjk</i> ~ <i>itsamyk</i>	<i>itsamynu7</i>	<i>itsamy7mea7</i> ²	<i>itsamuk</i>
2SG	<i>ymyjk</i>		<i>ymea7</i>	
2PL	<i>ymyk</i>	<i>ymyynu7</i>	<i>ymymea7</i>	<i>umuk</i>
3SG	<i>pyjk</i>			<i>punuk</i>
3PL	<i>pymyk</i>			<i>pumuk</i>

¹ The dative is also used in a comitative sense.

² The unexpected medial glottal stop in *itsamy7mea7* is Harrington's.

The paradigms for the Cupan languages below could perhaps be filled out further with an exhaustive survey of the available texts. Although the sparse AC data may be all that can be known, they are sufficient to allow the original system to be reconstructed with some confidence. However, confidence cannot be complete, since some of the gaps may be structural. For instance, CU *-chi* 'instrumental', can be used only with the 3SG pronominal stem. For CA, Seiler (1977:209) observes that he was unable to collect the third person plural with the locative postposition *-nga*; that form is attested only as contracted *ma*. Furthermore, the 3SG form *penga* is usually used in a special sense as a relative pronoun; otherwise the 3SG form is contracted *pa*.

The LU inflected postpositions are listed in Table 5.4.5.3 (3). They are based on Kroeber and Grace (1960:99) but with the addition of emphatic forms and those for 'alone', which have been found in texts in Hyde and Elliott (1994) and morphologically fit in the inflected postposition category. We speculate that the emphatic 'alone, on one's own' forms in *-xa*, which are peculiar to Coastal Cupan, may derive from **-taxa*, the same source as reflexive *-ta(a)x* (see 6.2.3). Emphatic *-xa* may be have arisen by syncope, > **-txa*, and consonant cluster reduction, **-txa* > *-xa*. It seems a small semantic step going from reflexive to emphatic.

Kroeber and Grace include a full set of inflected postpositions in *-tal* 'instrumental' from Sparkman's notes, but they were unable to verify them; Elliott's dictionary entry for *-tal* (1999:907) includes no instance of *-tal* attached to a pronominal base. The vowel length in the pronominal stems variable and we hope this feature is represented accurately in the table. The page number references given in the table are to Hyde and Elliott (1994), where a form has been verified in text. The benefactive examples are listed

in Elliott (1999:1135). The few AC forms that we have been able to identify are given in Table 5.4.5.3 (4).

Table 5.4.5.3 (3). Luiseno inflected postpositions

LU	locative	dative	ablative	comitative	benefactive
1SG	<i>nootu</i> (155)	<i>nejk</i> (128)	<i>noongaj</i> (535)	<i>nooman</i>	<i>nejmax</i>
1PL	<i>chaamutu</i> (15)	<i>chaamik</i> (2)	<i>chaamungaj</i> (158)	<i>chaamujman</i>	<i>chamujmax</i>
2SG	<i>ootu</i> (337)	<i>ojk</i> (47)	<i>oongaj</i>	<i>ooman</i>	<i>ojmax</i>
2PL	<i>oomutu</i>	<i>oomik</i> (172)	<i>omungaj</i>	<i>oomujman</i>	<i>omujmax</i>
3SG	<i>pootu</i> (62)	<i>pojck</i> (20)	<i>poongaj</i> (122)	<i>pooman</i>	<i>pojmax</i>
3PL	<i>poomutu</i> (20)	<i>poomik</i> (26)	<i>poomungaj</i> (219)	<i>poomujman</i>	<i>pomujmax</i>
LU	partitive	alone, on one's own		emphatic ¹	
1SG	<i>nongawish</i>	<i>nooxa</i> (107) ~ <i>nooxaj</i> (535)		<i>noota</i> (200)	
1PL	<i>chamungawish</i>			<i>chaamta</i> (212)	
2SG	<i>ongawish</i>	<i>ooxa</i> (213)			
2PL	<i>omungawish</i>				
3SG	<i>pongawish</i>	<i>pooxa</i> (36) ~ <i>pooxaj</i> (198) (anim.), <i>pooxun</i> (inan.) (748)			
3PL	<i>pomungawish</i>	<i>poomuxaj</i> (196) ~ <i>pooxanum</i> (746)			

¹ Other emphatic forms in LU are discussed in 6.3.3.

Table 5.4.5.3 (4). Acjachemem inflected postpositions

AC	locative	dative	ablative	alone, on one's own
1SG		<i>nijk</i> (3.123.0478)		<i>nooxa</i> (3.123.0418)
1PL	<i>chaamta</i> (3.123.0421)			<i>chamxa</i> (3.123.0418)
2SG		<i>ojk</i> (3.123.0469)		<i>ooxa</i> (3.123.0418)
2PL				<i>omxa</i> (3.123.0418)
3SG	<i>poota</i> (3.123.0504)		<i>poongaj</i> (3.123.0406)	<i>pooxa</i> (3.123.0418)
3PL				<i>pomxa</i> (3.123.0418)

The CU inflected positions were not systematically collected. The ones that have been identified appear in Table 5.4.5.3 (5). Note that the inflected postpositions are all stressed on the first syllable of the pronominal stem. The postpositional roots (as well as their cognate local-case noun suffixes) are apparently stressless.

Table 5.4.5.3 (5). Cupeño inflected postpositions

CU	dative	ablative	comitative ₁	comitative ₂	locative ‘over’
1SG	<i>nyjik</i>			<i>nynyw</i>	<i>nyva ~ nyva7aw</i>
1PL	<i>chymyjik</i>				
2SG	<i>yjik</i>				<i>yva ~ yva7aw</i>
2PL	<i>ymyjik</i>				
3SG	<i>pyjik</i>	<i>pyngax</i>	<i>pyman</i>	<i>pynyw</i>	<i>pyva ~ pyva7aw</i>
3PL	<i>pymyjik</i>		<i>pymyman</i>	<i>pymynyw</i>	<i>pymyva ~ pymyva7aw</i>

CU	locative ‘in’, ‘on’	instrumental, ‘around’	emphatic: ‘only’, ‘by oneself’
1SG			<i>niqi</i>
1PL			<i>chimiqi</i>
2SG			<i>iqi</i>
2PL			<i>imiqi</i>
3SG	<i>pyta</i>	<i>pychi</i>	<i>piqi</i>
3PL			<i>pimiqi</i>

In CA, there is considerable variation in the pronominal stems, especially in the plural forms. For instance, for comitative₂ *-new*, Seiler (1977:211) reports 3PL *heme-* while for comitative₁ *-man*, the short form *me-* is given. Also with comitative₁ *-man*, we find the shorter forms of the first and second person plurals, *chem-*, *em-*, rather than the longer *cheme-*, *eme-*, as with *-new*. The inflected postpositions are a small, closed set, so the presence of a certain number of unexplained irregularities is not surprising.

Table 5.4.5.3 (6). Cahuilla inflected postpositions

CA	locative ₁ ‘in’	locative ₂ ‘on’, ‘at the side’	dative	ablative
1SG	<i>nenga</i>	<i>nemangax</i>	<i>nijik ~ nijk</i>	
1PL	<i>chemenga</i>		<i>chemijik</i> (S&E 889)	
2SG	<i>enga</i>	<i>emangax</i>		<i>engax</i>
2PL	<i>emenga</i>		<i>emijik</i> (S&E 1135)	
3SG	<i>penga</i> ¹ ~ <i>pa</i>	<i>pemangax</i>	<i>pijik ~ pijk</i>	<i>pengax</i> ² ~ <i>pax</i>
3PL	<i>ma</i>		<i>hemijk ~ mijik ~ mijk</i>	

¹ *Penga* means ‘then’, not ‘on it.’

² *Pengax* also functions as a discourse marker.

CA	locative ₃ ‘among’, ‘by’ ‘on top of’	comitative ₁	comitative ₂	instrumental	emphatic
1SG		<i>neman</i>	<i>nenew</i> (S&E 902)	<i>nish</i>	<i>neqi</i>
1PL	<i>chemeta7</i>	<i>che7man</i>	<i>chemenew</i>	<i>chemish</i>	<i>chemeqi</i>
2SG		<i>eman</i>	<i>enew</i>	<i>ish</i>	<i>eqi</i>
2PL	<i>emeta7</i>	<i>e7man</i>	<i>emenew</i>	<i>emish</i>	
3SG	<i>peta7</i>	<i>peman</i>	<i>penew</i>	<i>pish</i>	<i>peqi</i>
3PL	<i>hemeta7</i>	<i>meman</i>	<i>hemenew</i>	<i>mish</i>	<i>hemeqi</i>

5.4.5.4. DEMONSTRATIVES AND ADVERBIAL CASES. Two different syntactic strategies are attested in Takic for demonstratives in combination with the adverbial cases.

The Serran languages have no adverbial case forms of the demonstratives. Instead, the demonstratives exhibit a periphrastic construction in which the demonstrative is governed by an inflected postposition, as in (1a,b,c). In KI, when the normal order of object followed by inflected postposition is reversed, then the object does not receive the genitive case marking and appears in the nominative; compare (1c) and (1d).

- (1) a. SE *ivi-ch* *py-hpa7* ‘on this one, more than this’
 PROX-GEN 3SG-LOC
- b. KI *ivi-ts* *py-jyk* ‘con éste (to this one)’ (3.98.0279)
 PROX-GEN 3SG-DAT
- c. KI *pa-t\$* *py-jyk* ‘con ése (to that one)’ (3.98.0279)
 PROX2-GEN 3SG-DAT
- d. KI *py-jyk* *pa-ta7* ‘to that one’ (3.100.0749)
 3SG-DAT PROX2-ABS

This is seemingly the reverse of what was seen above, where a KI subject, when moved to follow an object, receives a genitive suffix *-t*. Thus the (unmarked) subject when moved gains a mark; the (marked) object of an inflected postposition when moved loses a mark.

By comparison, in the Cupan languages, demonstratives may take the local case suffixes directly without the need for a periphrastic construction, as in (2-5).

- (2) LU a. *wuní-jk* [DIST-DAT] ‘to that’
 b. *iví-jk* [PROX-DAT] ‘to this’
 c. *ivii-ngaj* [PROX-ABL] ‘from this’
 d. *a\$ún-tal* [3-INS] ‘with it/them (inanimate)’
- (3) AC a. *woni-jk* [DIST-DAT] ‘to that’ (3.123.0489)
 b. *evi-jk* [PROX-DAT] ‘to this’ (3.123.0409)

In CU, the stems of the distal demonstratives take special forms with local case suffixes, and there is even a distal demonstrative stem, *a-*, that appears only with local case postpositions and which is used in place of the usual distal demonstrative stem *axwá-* with the dative directional *-jka*. The allomorph *-jik* does not appear with demonstratives; that allomorph is restricted to the inflected postpositions.

- (4) CU a. *axwá-nga* [DIST-LOC] ‘at/in that, ‘there’
 b. *a-jka* [DIST-DAT] ‘to there’
 c. *yvy-7aw* [PROX2-LOC] ‘on it (where you are)’
 d. *iví-ngax* [PROX-ABL] ‘from this’
 e. *iví-chi* [PROX-INS] ‘with this’

With the exception of a single form, CA has only a two-way demonstrative contrast, *i-* ‘proximal’ and, only with local case postpositions, *pe-* ‘distal’. The exception is *e-nga* ‘that (PROX2)’ (2f), which seems to be the locative of *e-t* ‘that one (near you)’. *Penga* and *pengax* often appear as discourse particles meaning something like ‘then, thereupon.’

- (5) CA a. *i-ka* [PROX-DAT] ‘to here’
 b. *pi-ka* [DIST-DAT] ‘that way, far’
 c. *i-pax* [PROX-ABL] ‘from here’
 d. *pe-ngax* [DIST-ABL] ‘from over there’
 e. *i-pa* [PROX-LOC] ‘here’ (S&H 65)
 f. *e-nga* [PROX2-LOC] ‘there’ (S&H 65)
 g. *pe-nga* [DIST-LOC] ‘there’ (S&H 65)

More detail on demonstratives is found in 6.1.

5.5. THE POSSESSIVE PHRASE. Having considered both the genitive case of TV and the Serran languages and the periphrastic representation of adverbial cases with inflected postpositions, we shift our attention to the possessive phrase, which has a structure that is somewhat similar to that seen with inflected postpositions on the one hand, and on the other, with the relational noun constructions discussed in 5.6 below.

In possessive phrases (and relational noun constructions), a possessive prefix appears on the head word of the phrase. This prefix is in the pronominal argument set, a different (although with some overlap in some of the languages) set of pronominals from those used in the inflected postpositional constructions reviewed in the previous section. They are also different from the independent pronouns and from the person markers that appear within the auxiliary complex. In CA, the 3SG possessive prefix is zero. This same category has a zero representation in the clause-level subject pronominal system. Since the possessor noun is adjunct to the possessive prefix, the two agree in person and number.

5.5.1. ORDER OF ELEMENTS WITHIN THE POSSESSIVE PHRASE. For all the Takic languages, the object of the phrase-level pronoun typically precedes the head word: the order of elements is possessor + possessive prefix + possessed noun, as in (1).

(1) a. TV *tokoo-ra* *a-maaka*
 woman-ABS.GEN 3SG-basket.hat
 ‘the woman’s [basket] hat’ (3.104.0101)

b. SE *taa-q-ta-m* *pyy-rakw*
 person-ABS-PL.GEN 3PL-food
 ‘the people’s food’

c. KI *ny7* *ni-havy7*
 1SG.PRO 1SG-blanket
 ‘my blanket’ (3.98.0055)

d. AC *paa-l* *pa-muuxsala*
 water-ABS 3SG-foam

'the water's foam' (3.123.0294)

- e. AC *ano7 pa-\$i77a*
 coyote 3SG-urine
 'coyote piss (a kind of plant)' (3.121.0477)
- f. AC *pa\$ka-la-m pom7-to7*
 sea.lion-ABS-PL 3PL-rock
 'sea lions' rocks' (3.121.0786)
- g. CU *pym pym-ny7y*
 3PL.PRO 3PL-relative
 'their relatives'
- h. CA *Lola hé-ki*
 Lola 3SG-house
 'Lola's house'

Possessor nouns can be possessed nouns, as in (2). The LU examples (1c,d) are offered in Hyde's (1971) textbook to illustrate the importance of ordering.

- (2) a. SE *a-na7n a-huun*
 3SG-father.GEN 3SG-heart
 'his father's heart'
- b. SE *ny-kak a-na7*
 1SG-paternal.grandrelative.GEN 3SG-father
 'my paternal grandchild's father'
- c. LU *po-kajtu po-na7*
 3SG-enemy 3SG-father
 'his enemy's father' (Hyde 1971:51)
- d. LU *po-na7 po-kajtu*
 3SG-father 3SG-enemy

'his father's enemy' (Hyde 1971:51)

- e. LU *\$ungaa-l po-kaamay po-kaytu*
 woman-ABS 3SG-son 3SG-enemy
 'the woman's son's enemy' (Hyde 1971:51)
- f. CA *né-na7 Ø-liivru7-ki*
 1SG-father 3SG-book-PSD
 'my father's book'

Only in TV and KI are departures from this basic order attested, as in (3), where a non-possessed genitive-case form may follow the possessed noun. SE also has genitive-case morphology, but no SE example of a postposed genitive case form has been found.

- (3) a. TV *a-kii-n worooj-t = worooj-t a-kii-n*
 3SG-house-PSD man-ABS man-ABS 3SG-house-PSD
 'the man's house' (3.103.0166)
- b. TV *menee7 a-kii-n paara = menee7 paara a-kii-n*
 PROX 3SG-house-PSD PROX2.GEN PROX PROX2.GEN 3SG-house-PSD
 'this house of that one' (3.104.0130, 3.104.0080)
- c. KI *a-jyva jyvar-t = jyvar-t a-jyva*
 3SG-door church-GEN church-GEN 3SG-door
 'la puerta de la iglesia (the door of the church)' (3.98.0082)

5.5.2. CASE MARKING OF THE POSSESSIVE PHRASE. Inflection for accusative or local case is marked on the head word (and its modifiers) in possessive phrases, as in (1).

- (1) a. SE *Ama-j jangk my^Rny^R7-k-in ama-j a-na7n*
 DIST-ACC but swallow-K-CAUS DIST-ACC 3SG-father.GEN
a-huun-i
 3SG-heart-ACC
 'But he swallowed it, his father's heart.'

- b. SE *ama-ch a-na7na-m-Ø pyy^{R7}-ö^R-n*
 DIST-GEN 3SG-father-PL-GEN 3PL-bone-INS
 ‘with that one’s fathers’ bones (the bones of his father and of his paternal uncle)’
 (cf. 5.4.3.2(7b))
- c. CU *nyt(-i) py-ki-jka*
 chief(-ACC) 3SG-house-DAT
 ‘to the chief’s house’

5.5.3. SUFFIXAUFNAHME IN POSSESSIVE PHRASES. We sometimes encounter double marking of the type that Plank (1995) has called *Suffixaufnahme* (“suffix absorption”). In this type of construction, when the possessed noun appears in a given case, such as the accusative, the possessor noun may have the same case suffix as well, as seen in (1). In effect, *Suffixaufnahme* treats the possessor noun as though it figures among the modifiers. In (1a), for example, accusative *kwijit\$-i* appears instead of grammatically expected *kwijit\$-Ø* [black.oak-ABS-GEN]. (1e) shows *Suffixaufnahme* in a discontinuous constituent.

- (1) a. SE *Kwijit\$-i a-wiuh-i kwe-i7v.*
 black.oak-ABS-ACC 3SG-acorn.mush-ACC eat-FUT
 ‘I’ll eat black oak acorn mush.’
- b. SE *Qaj-m7 ynan, ja7ki7, nyy7=n ymy-j*
 NEG-2SG know TAG.Q 1SG.PRO = 1SG > 3SG 2SG.PRO-ACC
my-vyravk-t\$i ynan.
 2SG-language-ACC know
 ‘You didn’t know, did you, that I could speak your language.’

- c. SE *Ama7 ni=n ama-tunga7 wyra-7n-ivan*¹ [*ama-j*
 DIST COMP = 1SG > 3SG DIST-INS talk-ST-INS.CAUS that-ACC
kihúu-t\$-i a-qat\$-ivan-i].
 fish-ABS-ACC 3SG-be.there;live;dwel-NFUT.SUB-ACC
 ‘It’s that I talk about where that fish lives using it (the name *Malki*).’
 (discussion of a sacred fish and of the propriety of changing the name *Malki* to
Morongo for the Reservation)
 <‘Ama’ nin ‘amatunga’ werra’nivan ‘amay kihúuchi’ ‘aqacivini’.> ‘I am speaking about where
 that fish is.’ (R&E 763)
¹ Dorothy Ramón’s *wyra-* corresponds to Sarah Martin’s *vyra-*.
- d. KI *Ni-puk = mat a-kotso-j naranha7-taj*.
 1SG-take.off = FUT 3SG-peel-ACC orange-ACC
 ‘I am going to peel the orange.’ (3.98.0469; Anderton 1988:184)
- e. CU *Py-wikí-j = ny tyw-qa mukíkma-l-i*.
 3SG-feather-ACC = 1SG.ERG see-PRS.SG bird-ABS-ACC
 ‘I see the bird’s feather.’
- f. CU *axwý-ch-i naxáni-ch-i py-xuchi-j*
 DIST-ABS-ACC man-ABS-ACC 3SG-foot-ACC
 ‘that man’s foot (acc.)’
- g. MCA *Ne-maxeko ne-qala-j juluka-j*.
 1PL.OBJ-GIVE.IMP 1SG-nephew-ACC head-ACC
 ‘Give me my nephew’s skull!’¹ (3.112.0407)
¹ According to Gifford (1922:56), *-qala* <kala> is ‘son’s child, man’s brother’s son’s child,
 woman’s sister’s son’s child’.

Suffixaufnahme appears only occasionally; KI examples without *Suffixaufnahme* are shown in (2). Anderton (1988:184) states that these are examples of a “detached body part,” a context that never appears with double accusative marking.

- (2) KI a. *Ni-hiu hukah-t a-7atsa-j*.
 1SG-see deer-ABS.GEN 3SG-horn;antler-ACC
 ‘I saw a deer-horn (antler).’ (3.98.0350; Anderton 1988:184)

- b. *Ni-hiu a-povo-j vaaka-t.*
 1SG-see 3SG-kidney-ACC COW-GEN
 ‘I saw the cow kidneys.’ (3.98.0349; Anderton 1988:184)

5.6. RELATIONAL NOUNS. A formation similar to the possessive phrase is used to express a range of spatial and temporal relations such as ‘before’, ‘above’ and the like. The head element in such expressions is a “relational noun.” Many relational nouns behave morphologically like possessed nouns though semantically they are adverbial or adjectival. The relational noun can stand alone or may have a dependent noun. Relational nouns, like inflected postpositions, do a good deal of adverbial work in the Takic languages.

Most relational nouns have no corresponding absolutive. For the few that do, the related absolutive noun has a different, but related meaning. For example, the SE root *huuna* as a relational noun means ‘inside’ or ‘middle’, as in *a-huuna-v* ‘inside it, in the middle of it’. When used in the sense ‘heart’, it corresponds to the absolutive form *huunch*, with the corresponding possessed form *ny-huun* ‘my heart’. CU *tami* occurs in the absolutive noun *tami-t* ‘sun’, but as a relational noun root it means ‘east’.

Relational nouns are morphologically and structurally quite distinct from the inflected postpositions. Morphologically, they differ in their bound pronouns. When the relational nouns are prefixed, the prefix is of the same form as the possessive prefix found on possessed nouns, while, as we have seen, inflected postpositions have their own special set of pronominal stems. Structurally, a relational noun consists of a lexical stem and, in distinction from the inflected postpositions, many such stems may take additional suffixes, including plural and/or a local case suffix. Many of these lexical stems require a pronominal prefix; some disallow a pronominal prefix. Some relational nouns have no internal structure, being neither prefixed nor suffixed, such as SE *wachkich(a-)* ‘beside’ in example 5.7.2 (2) below. An inflected postposition, by comparison, contains no lexical material; it consists of a pronominal followed by an adverbial case suffix. Finally, relational nouns can have primary stress within the clause.

An important category of relational nouns includes reflexive/reciprocal and emphatic forms, discussed in 5.6.5 and in 6.2, 6.3.

5.6.1. RELATIONAL NOUNS AND CASE. In the relational constructions where there is a pronominal prefix on the relational noun, the nominal governed by that prefix may be in the genitive case in Serran, as in (1).

- (1) a. SE *puahka-t a-huuna-v*
 circle-GEN 3SG-inside-LOC
 ‘inside the circle’ (cf. nominative *puahka7*)
- b. KI *Ni-mii=mat a-tsyyva7 ama-ts.*
 1SG-go-FUT 3SG-with DIST-GEN
 ‘I’m going to go with that one.’ (3.100.0507; Anderton 1988:289)

Example (2) at first looks like an example with unexpected accusative marking on the noun dependent on the relational noun *-tsyyva7* ‘with’. However, it may be better understood as a serial verb construction (cf. 12.3.1) with intransitive *mii* ‘go’ followed by transitive *tsyyva7* ‘follow, go with’, both prefixed for subject. The relational noun and the verb are homophonous in both KI and SE (cf. SE *chyyva7*).

- (2) KI *A-mii a-tsyyva7 Manweel-taj.*
 3SG-go 3SG-go.with Manuel-ACC
 ‘Fue con Manuel. (She went with Manuel [She went, she went with Manuel].)’
 (3.98.0348)

An analytic problem for KI is that the same pronominal prefixes are found on verbs and nouns, including the prefixed relational nouns. With different pronominal prefixes, as in (3), there is no structural ambiguity.

- (3) KI *Ni-mii my-tsyyva7.*
 1SG-go 2SG-with
 ‘Voy contigo. (I’m going with you.)’ (3.100.0506)

The relational noun *wachkich(a-)* ‘beside’ in (4) takes no governing pronominal prefix. Thus the dependent noun phrase, *kut apo^R7* ‘railroad track’, in the absence of a governing pronominal, remains in the nominative case. The embedded *kut* ‘fire, train’, though, is in

the genitive (though underlying *-y* is apocoped), being in possessive construction with the pronominal prefix in *a-po^{R7}* ‘its road’.

- (4) SE *Ku-t-Ø* *a-po^{R7}* *wachkicha=m* *pyn-k*.
 fire;train-ABS-GEN 3SG-road beside=3PL pass-K
 ‘They passed by the railroad tracks.’

Dependent nouns in SE that are in construction with a possessive prefix are normally in the genitive case, but surprisingly, most SE relational noun constructions with pronominal prefixes are more like (4) than like (1). When there is a possible overtly marked genitive form of the element that is governed by the pronominal prefix on the relational noun, we find the nominative, as in (5). The example cited in (1), with overt genitive marking, in fact, is unique; it is the only one found so far.

- (5) SE a. *ni-to^{R7}* *a-huuna-v*
 1SG-stomach 3SG-inside-LOC
 ‘in my stomach’
- b. *my-tahtqa7* *a7-ajy-nu7*
 2SG-body 3SG-right.side-ABL
 ‘on your right side’
- c. *Jaamava7* *kim* *too^Rngava7* *a-paamkw*
 spring come summer 3SG-in.front
 ‘Spring comes before summer.’

In light of the examples in (5), it seems prudent to mark SE dependent nouns in relational noun constructions only in terms of overt morphology, i.e., with no zero-marking of genitive case. In the relational construction in (6a) we use the simple gloss [-ABS] while we use [-ABS-GEN] in the possessive construction in (6b).

- (6) SE a. *kii-ch* *a-paamkw*
 house-ABS 3SG-in.front
 ‘in front of the house’

- b. *ama7 huu7-t\$-Ø a-tywan*
 DIST star-ABS-GEN 3SG-name
 ‘the name of a star’
 <‘ama’ huu’ch ‘atewan > (R&E 400)

In (6b), *ama7* ‘the’ is in the nominative and modifies *atywan* ‘its name’. If the sense were ‘the star’s name’ the form would be *amach huu7t\$ atywan**.

5.6.2. EXEMPLIFICATION OF RELATIONAL NOUNS. Examples showing relational nouns are given in (1-9), with the relational noun constructions bolded. Many of these examples show case suffixes on the relational noun.

- (1) TV a. *Na7uu=7aa mejaa tokoo-ra a-kuuk-7aro.*
 marry = IMP.SG PROX.ACC woman-ABS.ACC 3SG-with-DAT
 ‘¡Cásate con esta mujer! (Marry this woman!’ (3.103.0557)
- b. ***Maraa a-kwaan = ne maj-no-k a-noovo-n.***
 DIST.ACC 3SG-for = 1SG > 3SG make-NO-NFUT 3SG-basket.tray-PSD
 ‘Estoy haciendo para el \$owoo7ish su batea. (I am making a tray of offerings for that being.)’ [from a song] (3.105.0471)
\$owoo7ish is said (3.103.0320) to be the LU equivalent of TV *\$ahoovet* and SE *paa^Rhavit*, a supernaturally powerful being.
- c. *Noo = n = e7 meaa-ro a-t\$oova menee7 worooj-t.*
 1SG.PRO = 1SG = IND go-FUT 3SG-with PROX man-ABS
 ‘Yo voy junto con este hombre. (I’m going with together with this man.)’
 (3.103.0321)
- (2) SE a. *Huwa-t\$ wyt\$ⁱvy^R-t\$ = vy-7 cha-chyyva7 mi-j.*
 other-ABS old.man-ABS = 3SG-PST 1PL-with;following go-IND
 ‘Another old man went with us.’

- b. **Ny-paamkw** = vy-7 *mi-j*.
 1SG-before = 3SG-PST go-IND
 ‘He walked in front of me.’
- c. *Ani = kwyny* *pajykja7* *pichuu-t\$u7* **qaii-ch**
 and.then = QUOT.3PL over.there arrive-MOT mountain-ABS
a-huuna-v.
 3SG-middle-LOC
 ‘And then they arrived far off in the mountains.’
- d. *Ta = ch* *hio^Rch-k-iv* **qaii-ch** **a-kupiaa-jka7**.
 IRR = 1PL climb-K-FUT mountain-ABS 3SG-on.top.of-DAT
 ‘Let’s go up above the mountains.’
- e. *li-m* *Maarynga7-ja-m = kwyny = my-7* *kim*, **kwiimk-nu7**.
 PROX-PL Morongo-AUG-PL = QUOT = 3PL-PST come north-ABL
 ‘These Morongos came from the north.’
- f. **Myym-t** **a-hyyvi-jka7** = kwyny *pichuu-t\$u7*.
 ocean-ABS 3SG-EDGE-DAT = QUOT.3PL arrive-MOT
 ‘They got to the seashore (the edge of the ocean).’
- g. *Ani = kwyny* **jyyvu-kja7** *puka-j*.
 and.then = QUOT.3PL > 3SG outside-DAT throw-IND
 ‘And then they threw him out.’
- (3) KI a. **Huuna-vea** *ni-kat\$*.
 middle-LOC 1SG-sit
 ‘I am sitting in the middle.’ (3.98.0288)
- b. *Ni-hiu = nehe* **jyyvan** *venta7-nu7*.
 1sg-see = NEHE outside window-ABL
 ‘I looked out through the window.’ (3.98.0236; Anderton 1988:590)

- (4) LU *Po7 wunáx po-maacha-nga qawii-cha po7 kari7-ja.*
 3SG.PRO DIST.ABL 3SG-back-LOC hill-ABS.NOM FOC rise-PST.INTR
 ‘It went up the other side of the hill.’ (H&E 675)
- (5) AC *Pe7=kon=a awoo je7i-ch pe-7eech ngee~nga.*
 and = QUOT = DPST.INDF other man-ABS 3SG-with PFV~go.away
 ‘And she went off with another man.’ (3.123.0407)
- (6) CU a. *py7áw7a py-wylá-7aw*
 mountain 3SG-base-LOC
 ‘at the foot of the mountain’ (H&N 168[254])
- b. *Navy-t=ku7ut iví-j pytá7am-i py-7a7chiwi-qal*
 prickly.pear-ABS = QUOT this-ACC all-ACC 3SG-make-PST.IPFV.SG
py-kwaani atáx-m-i py-chixyn-pi.
 3SG-for person-PL-ACC 3SG-kill-IRR.SUB
 ‘They say he made all this prickly pear cactus in order to kill people.’ (H&N 4[8] 11)
- (7) DCA *Temam-ka Ø-puchi-wen.*
 north-DAT 3SG-turn.towards;face-ST
 ‘It is facing north.’ (S&H 207)
- (8) MCA *Tame-t nawxa-nga.*
 day-ABS middle-LOC
 ‘at noon’ (3.112.0201)
- (9) MCA *Pe-chem-7amin-ne chem-hunga-jka.*
 3SG.OBJ-1PL-throw-FUT 1PL-back-DAT
 ‘We will throw him behind us.’ (3.112.0394)

5.6.3. SUFFIXAUFNAHME WITH RELATIONAL NOUNS. Relational noun constructions can show *Suffixaufnahme*, whereby when the possessed noun appears in a given case, the possessor

noun may have the same case suffix as well (cf. 5.5.3 above). Example (1a) shows locative case *Suffixaufnahme* while (1b) shows dative case *Suffixaufnahme*.

- (1) a. AC *Po-\$un-nga nave7-q kun-nga.*
 3SG-inside-LOC be.in-NFUT sack-LOC
 ‘(El gato) está adentro del saco. (It [the cat] is inside the sack.)’ (3.123.0325)
- b. CU *Ajy=kwy=l mana-li-m \$y-wy yv7-ika tami-ka*
 now = POT = 3PL.AB beavertail-ABS-PL bloom-ST PROX2-DAT east-DAT
py7 a-jka py7aw-t-ika py-wylá-jka.
 FOC DIST-DAT mountain-LIG-DAT 3SG-base-DAT
 ‘Now the beavertails are blooming over there to the east at the foot of the mountain (to the east over toward the foot of the mountain).’ (H&N 55[110] xviii.1)

5.6.4. ‘BOTH’. The only clear evidence showing SE genitive case with a relational noun head with no governing possessive prefix is with *wo^Rha^Rn* ‘both’, as shown in (1). However, the syntax of *wo^Rha^Rn* is unique. *Wo^Rha^Rn* is a way of expressing a compound subject. Its object, though in the genitive case, is part of what is governed by a plural pronominal argument pronoun. This is unlike any other relational noun structure. Perhaps the difference between a “both” phrase and other relational noun structures is that a “both” phrase participates in the subject category while the others relate adverbially to the predicate.

- (1) SE a. *Chymy-7 mi-j ni-jyk wo^Rha^Rn.*
 1PL-PST go-IND 1SG-mother.GEN both
 ‘My mother and I both went.’
- b. *A-nan-chui7v-t wo^Rha^Rna=m wyn pa-pia.*
 3SG-father-DEC-GEN both = 3PL lie PROX2-LOC
 ‘Both she and her dead father lay there.’

The examples in (1) illustrate what has been called “kintax” (cf. Evans 2003:23), where a kin term followed by *wo^Rha^Rn* can be understood as including some appropriate

other relative. Often a parent is named and the understood referent is a child who has been mentioned earlier in the text. In (1b) the daughter is dead as well.

Similar structures with ‘both’ are found in the other languages but the examples found so far provide no evidence regarding genitive case. A CU example is given in (2), but CU lacks a morphological genitive.

- (2) CU *Mu=ku7ut* *pym* *pý-jy* **wiw** *myn=pym-ji-ngij*.
 and = QUOT 3.PL.PRO 3SG-mother both turn.back = 3PL-INTR-GOING
 ‘And it is said that he and his mother returned.’ (H&N 14[28] 206)

Some SE examples in Dorothy Ramón’s usage show instrumental case suffixation on animate nouns, as in (3), where the instrumental of *ny-qoo^Rr* ‘my older sister’ is used with a comitative sense. We first took this to be an anglicism based on the fact that English “with” has both a comitative and instrumental sense. However, since this example also involves “kintax” – the pronominal = *ch* ‘we’ covers the older sister plus the speaker – it suggests an understanding of the structure of *wo^Rha^Rn* that we had not thought of before: *wo^Rha^Rn* is the instrumental of *wo^Rh* ‘two’; and the instrumental case has this special, extra kintax sense. The example (3) also has an interesting structure wherein all but the first word is a relative-clause predicate complement.

- (3) SE *Aa-m* *ani=ch* *wyh~wyv* *aa-p* *huwa-t\$* *ny-qoo^Rha-n*
 DIST-PL COMP = 1PL > 3SG REP~dodge DIST-LOC other-ABS 1SG-Older-INS
ama7 \emptyset .
 DIST be
 ‘My other older sister and I were dodging (the rotten fruit) (They [the rotten
 fruits] were what my other older sister and I were dodging).’
 <‘Am ‘anich wehwev ‘ap huwac neqeerhan ‘ama’.> (R&E 185)

5.6.5. REFLEXIVES AND RECIPROCALLS AS RELATIONAL NOUNS. We defer the discussion of reflexives and reciprocals to section 6.2. However, it is worth pointing out here that reflexives and reciprocals in all of the languages are expressed by an element from **taaqa* ‘person’, and that all of the languages except CA they are expressed by relational nouns. In CA the reflexive or reciprocal is expressed by a proclitic *tax*_{__} in the verbal construction. The reflexive/reciprocal relational noun appears as *-taq(a)* in SE, *-tak* in KI,

-ta(a)x in TV, LU, and AC, and *-taxwi* in CU. As relational nouns, these are not inflected for syntactic case. They can, however, appear with local-case suffixes, Reflexives, in effect, reduce the clause-level pronominal arguments by one and a transitive verb in a reflexive sentence relates to the pronominal arguments as though it was intransitive.

CHAPTER 6

PRONOUNS AND DEMONSTRATIVES, WITH REFLEXIVES AND EMPHATICS

6.0. INTRODUCTION. All the Takic languages have independent pronouns (this chapter) and two sets of bound pronouns – the possessive prefixes (5.2.2) and the pronominal stems used with inflected postpositions (5.4.5.3). All the languages except CA also have a set of auxiliary complex pronominals, found mainly in second-position clitics, reviewed in chapter 8.

KI expresses subject as a prefix on the verb and has overt auxiliary pronominals only for transitive constructions. The KI subject prefixes (11.3.1) are identical to the possessive prefixes on nouns.

CU has, in addition, a set of subject prefixes, used in past-tense verb constructions, and a set of object proclitics, used with verbs of whatever tense. See 11.5.

For CA, which lacks the auxiliary complex, several additional sets of pronominals have developed: subject prefixes, used on verbs; subject proclitics, used with verbless predications and dependent clause nominalizations; and object prefixes, which precede the subject prefix or proclitic. Further, MCA has a set of object proclitics which are used with nominalizations. See 11.6.1.1 and 11.6.2.1.

Most of these pronominal elements are expressions of underlying arguments. The auxiliary complex pronominals express the clause-level arguments, the possessive prefixes express the noun-phrase arguments, and the pronominal stems express the adverbial-phrase arguments. The pronominal markings on verbs in KI, CU, and CA also express clause-level arguments, as do the CA proclitics mentioned above.

In contrast, the independent pronouns and demonstratives have no direct connection with the argument structure in any the languages except probably for LU where object arguments are encoded by accusative marked pronouns, demonstratives, or nouns. Except for this LU case, the independent pronouns are used for focus and emphasis. While they must be compatible in person and number with the pronominal arguments, and are usually marked for accusative case when they are adjunct to object arguments, they do not directly participate in the argument structure. When they are NOT present, which is

most of the time (again, with the exception of LU objects), their absence is not a result of “pro-drop”: nothing has been dropped. It is simply that an emphatic form has not been added.

Demonstratives in Takic may fill the third-person slots in the paradigms of independent pronominals and are used in anaphora. They may also be adjoined to nouns. Demonstratives can agree with this noun in number and case, but often case is marked only on the demonstrative and not on the noun (see chapter 7). Independent pronouns referring to discourse participants (first and second person) behave like nouns, except that no demonstratives can be adjoined to them.

The Takic demonstratives show three degrees of deixis. The deixis, however, is often more rhetorical than spatial. It is convenient to compare the Takic demonstratives to those of Spanish, especially since they are often glossed in that language in the Harrington notes. Furthermore, they seem to share, at least loosely, the semantics of the Spanish demonstratives: *este* (within the purview of the speaker), *ese* (within the purview of the addressee but not the speaker), and *aquel* (outside the immediate purview of both speaker and addressee). A confusing detail is that demonstratives used in anaphora may be bleached of any locational deixis; this property caused confusion in Harrington’s work on TV, KI, and MCA. Our terminological solution for glossing is to treat the *este* and *ese* categories as two shades of “proximal” and the *aquel* category as “distal” [DIST]. We gloss the two proximals as “proximal” [PROX] and “proximal-2” [PROX2] (“second person proximal”: within the purview of the addressee). This third category is Anderton’s (1988: 108) “that, those (proximal).” These distinctions, though, capture only certain aspects of the usage of these demonstratives. A number of examples of “proximal-2” usage seem well outside the purview of the addressee and further study of the semantics of the demonstratives is needed, to the degree that this can be recovered from the sparse data. Unfortunately there is no easy solution that applies to the English translations, which have to remain vague on the difference between proximal-2 and distal, both of which are rendered by English *that*.

Example (1) shows the three degrees of deixis used with clearly spatial distinctions. The Colorado River, referenced with *amaj* ‘that (acc.)’ is farthest away; the Morongo Reservation, referenced with *iingkwa7* ‘to here’, is where the speaker was; and Twentynine Palms, referenced by *pataj* ‘that (acc.)’, is halfway between. Proximate-2

pataj clearly does not have to do with where the listener was but rather an intermediate distance.

- (1) SE *Paa-t\$-i* *ama-j* *\$yrii-7n-ka7-ti=tqa* *pyn-k-in*
 water-ABS-ACC DIST-ACC red-ST-CHAR-ACC = INFR.3PL > 3SG pass-K-CAUS
pa-ta-j *Maara7-ti* *ii-ngkwa7* *Maarynga7-ja-m*
 PROX2-ABS-ACC Twentynine.Palms-ACC PROX-DAT Morongo-AUG-PL
Maarynga-j7ka7.
 Morongo-DAT

‘The Morongos must have passed the Colorado River and Twentynine Palms on the way here to Morongo (the Morongo Reservation).’

6.1. INDEPENDENT PRONOUNS AND DEMONSTRATIVES. The suites of independent pronouns are illustrated below. In most of the languages the third person independent pronouns are transparently related to the demonstratives, so the demonstratives are introduced here as well. As mentioned above, the independent pronouns are never grammatically required, except in LU where they encode the accusative case with discourse participants. Thus when they do appear, they are nearly always emphatic or contrastive. Demonstratives can fulfil these pragmatic functions, but they also appear in anaphoric function.

It is useful to distinguish the first and second person independent pronouns from the third person pronouns and demonstratives. The first and second person pronouns may show only nominative and accusative case forms; the third person pronouns (except those of CU) and demonstratives show a fuller range of combinations, with genitive forms in TV and Serran, and local case inflections, where they sometimes have special stems.

6.1.1. TONGVA INDEPENDENT PRONOUNS AND DEMONSTRATIVES. The TV independent pronouns for first and second person are given in (1).

- | | | | |
|--------|----------------|------------|-----------------|
| (1) TV | | singular | plural |
| | a. short forms | | |
| | first person | <i>noo</i> | <i>ejoom(o)</i> |
| | second person | <i>oo</i> | <i>omoom(o)</i> |

b. long forms

first person	<i>noo = m(a7)</i>	<i>ejoomo = m(a7)</i>
second person	<i>oo = m(a7)</i>	<i>omoo = m(a7)</i>

The long form augment =*m(a7)*, in (1b), may be the same element as the syllable *-ma7* seen in the Serran demonstrative *ama7* ‘that’. It is also found with TV demonstratives and locatives, such as *ekwaa/ekwaa = m(a7)* ‘here’, as well as with the temporal expression *metee7/metee = ma7* ‘now, then’. Sometimes in position before AUX clitics, a long form can be represented by the corresponding short form but with the augment =*ma7*, in its reduced form, =*m*, delayed until after the AUX clitics, as in (2).

- (2) TV a. *Noo = n = 7e = m* *menaapkoma-ro.*
 1SG.PRO = 1SG = IND = AUG turn.around-FUT
 ‘Me voy voltear. (I’ll turn around as I stand.)’ (3.105.0152)
- b. *Noo = n = e7 = m* *jakeena-x.*
 1SG.PRO = 1SG = IND = AUG dance-NFUT
 ‘Estoy bailando. (I am dancing.)’ (3.104.0090)

While this behavior demonstrates the clitic status of =*ma7*, it adds to the mystery of what its significance may be.

An adverbial variant =*mo* is found with the adverb *heaa7* ‘now’, as in (3).

- (3) TV *Heaa7 = mo* *pe7ee = m* *jakeena-x.*
 now = AUG PROX2 = AUG dance-NFUT
 ‘Ya está ése bailando. (Now that one is dancing.)’ (3.104.0147)

The syntactic distinction between short and long forms will be discussed below. Examples of the short forms are given in (4).

- (4) TV a. *Noo = n = 7e7* *jakeena-x.*
 1SG.PRO = 1SG = IND dance-NFUT
 ‘Estoy bailando. (I’m dancing.)’ (3.104.0137)

- b. *Moom-nga noo jakeena-x.*
 ocean-LOC 1SG.PRO dance-NFUT
 ‘En el mar yo estoy bailando. (I’m dancing on the beach.)’ (in a song)
 (3.105.0461)
- c. *Oo = 7a jakeena-x.*
 2SG.PRO = 2SG dance-NFUT
 ‘Tú estás bailando. (You sg. are dancing.)’ (3.104.0137)
- d. *Heaa7 = mo = re7 ejoom jakeena-x.*
 now = AUG = 1PL 1PL.PRO dance-NFUT
 ‘We already danced.’ (3.104.0093)
- e. *Heaa7 = mo = 7av = 7e oomoom jakeena-x.*
 now = AUG = 2PL = IND 2PL.PRO dance-NFUT
 ‘Uds. ya bailaron. (You pl. already danced.)’ (3.104.0093)
- c. *Oomoom = 7av = e7 heaa jakeena-x?*
 2PL.PRO = 2PL = IND now dance-NFUT
 ‘¿Ya están bailando ustedes? (Are you pl. dancing now?)’ (3.104.0147)

Although the independent pronouns have accusative forms in the other Tadic languages, these are not attested in TV. The sentences in (5) show 1PL pronouns in an object function, but they are not case-marked. The object status of the pronoun is indicated only in the choice of the phrase-level pronominal. Note the order object-subject in the phrase-level pronominals.

- (5) TV a. *Ejoomo = mb = re = 7ave mokaa-ro.*
 1PL.PRO = AUG = 1PL = 2PL kill-FUT
 ‘You (pl.) are going to kill us.’ (3.104.0098)
- b. *Pe7ee = j, worooj-t = me = Ø = j mokaa-ro oomoo = ma7.*
 PROX2 = ABS man-ABS = 2OBJ = 3SG = IND kill-FUT 2PL.PRO = AUG
 ‘Aquel hombre los va a matar a Uds. (That man is going to kill you pl.)’
 (3.105.0150)

- c. *Muuro = re = Ø = j wakoo-k ejoomo = ma7.*
 there = 1PL = 3SG = IND rain-NFUT 1PL.PRO = AUG
 ‘Allá nos llovió. (It rained on us there.)’ (3.104.0366)

The TV third-person pronominal and demonstrative series are seen in the summary chart in (6), along with the locatives, which have similar short-long form distinctions. A few unattested forms are included; these are marked with a following asterisk (*). These are offered in the spirit of Munro’s attempts to fill out paradigms for eventual use by the heritage community (e.g. Munro 2000:195).

(6) TV Third Person Pronouns/Demonstratives

	distal	proximal-2	proximal	indefinite	
a. short forms				–human	+ human
singular	‘that (3)’	‘that (2)’	‘this’	‘what, something’	‘who, someone’
nom.	<i>manee7</i>	<i>pee7 ~ pe7ee(y)</i>	<i>menee7</i>	<i>hetaa</i>	<i>hakai ~ hakaake7</i>
acc./gen.	<i>maraa</i>	<i>paraa ~ paara</i>	<i>mejaa</i>	<i>hetaara</i>	<i>hakiija</i>
ins.	(?)	(?)	(?)	<i>hetaarar</i>	–
plural					
nom.	<i>mamoo ~ momoo</i>	<i>pe7eemo ~ paamo</i>	<i>memoo</i>	–	<i>hakaakem</i>
acc./gen.	<i>maraamo*</i>	<i>paraamo</i>	<i>mejaamo*</i>	–	<i>hakaakemo</i>
locative	<i>muuro</i>	<i>paamo</i>	<i>ekwaa</i>	<i>hamiinga</i>	–
dative	(?)	(?)	<i>ekwaaro</i>	<i>hamiiro</i>	–
ablative	(?)	(?)	(?)	<i>hamiipa</i>	–
b. long forms (with augment = <i>ma(a)7 ~ =m</i>)					
singular					
nom	<i>maneema7 ~ manee7m</i>	<i>pe7eema7 ~ pema7</i>	<i>meneema7</i>	<i>hetaama7 ~ hetaam</i>	<i>hakiima7</i>
acc./gen.	<i>maraama7 ~ maraam</i>	<i>paraama7 ~ paarama7 ~ paraam</i>	<i>mejaama7*</i>	<i>hetaarama7*</i>	<i>hakiijama7*</i>

plural					
nom.	<i>mamooma7</i> ~ <i>momooma7</i>	<i>pe7eemoma7</i> ~ <i>paamom</i>	<i>memooma7*</i> ~ <i>memoom*</i>	–	<i>hakaakema7*</i>
locative	<i>muuroma7</i>	<i>paamoma7</i>	<i>ekwaama7</i>	(?)	–
dative	(?)	(?)	<i>ekwaaroma7</i>	(?)	–

The demonstratives have the same structures in both accusative and genitive. Among the proximal-2 demonstratives, forms with *pa* appear only in the plural and in the accusative, while the stem for nominatives is *pe* (somewhat mysteriously, since elsewhere in Takic the third person has reflexes of **py*, so we expect TV **po*). The distinction between the two forms in the nominative plural is obscure. The final glottal stop of the long forms is often dropped. The glosses ‘that’, ‘this’, ‘what’, ‘who’ in (6) are intended only as suggestive; they do not cover the full sense of the category. There is one example of a long form contracting: *pe7ee = ma7* ‘that one (nearer to you)’ contracts to *pemaa7*, such that the stress/length falls on the normally cliticized *=ma7* (clitics are supposed to be unstressable).

The locatives are complicated by the fact that in addition to the proximal, proximal-2, and distal forms, there is also an ‘out of sight’, ‘far distal’, ‘remote’ form *matuu* or *matoo*, which does not fit into the chart in (6). The long form, *matuuma7* or *matooma7*, has a temporal sense, ‘two days away’, i.e., ‘the day before yesterday’ or ‘the day after tomorrow’. Examples are given in (7).

- (7) TV a. *matuu a-t\$aaX-ve kii-ja*
yonder 3SG-back-ABL house-ABS.ACC
‘allá al otro lado de la casa (there behind the house)’ (3.103.0381)
- b. *matuu xaaJ-nga*
yonder mountain-LOC
‘otro lado de la sierra (beyond the mountains)’ (3.105.0149)
- c. *Matoo = ne kii Jaa-ve.*
yonder = 1SG come Los.Angeles-ABL
‘Vengo de L.A. (I come from Los Angeles [over there].)’ (3.103.0725)

- d. *Xaaj, matuu = ma7 = ne peoo-k.*
 NEG two.days.away = AUG = 1SG arrive-NFUT
 ‘No, I arrived anteyer (the day before yesterday).’ (3.104.0363)
- e. *Matoo = ma = ne neemkomo-k.*
 two.days.away = AUG = 1SG return-NFUT
 ‘Anteyer volví. (I came back the day before yesterday).’ (3.103.0725)

In (8), we show the variability of Harrington’s Spanish glosses with the demonstratives. Harrington was quite consistent in glossing the *me-* (< *mi-*) forms with *este* (and its various inflected forms). He used *aquel* for both *m* proximal demonstratives and *p* proximal-2 demonstratives. He frequently glossed *p* demonstratives with *ese* (although *aquel* is much more common with the *p* forms as well), but used *ese* only once among many attestations of the *m* demonstrative. (Unfortunately, English has only a two-way contrast, with “that” covering both distal and proximal-2.)

(8)	TV	distal	proximal-2	proximal
	TV base	<i>ma-</i>	<i>pe- ~ pa-</i>	<i>me-</i>
	Spanish gloss	‘aquel’	‘aquel’, ‘ese’	‘este’
	English gloss	‘that’	‘that’	‘this’

One of the problems with the Harrington materials is that the usages illustrated there are, with very few exceptions, not part of contextualized, socially-occurring speech except insofar as they illustrate usage within the frame of linguistic elicitation. Also with very rare exceptions, we have no information about the scene: how speakers were located, what they could see, etc. However, there is one example that does shed a bit of light on Harrington’s (and probably his consultant’s) use of *ese* to translate the *p* forms. A statement by Harrington’s consultant Jesús Jauro suggests that in his usage *ese* does not depart greatly from standard Spanish. In explaining the meaning of the word *muune\$*, glossed as *comelón* ‘big eater’, Jauro said (9), where the imagined speakers are apparently drawing the attention of addressees to the spectacle of appetite.

- (9) TV Cuando uno come mucho y entonces lo están mirando: “¡Oh, ése es *muune\$!*” (When someone is eating a lot and then they are looking at him, [they say] “Oh, that guy (*ése*) is *muune\$!*”) (3.104.0529)

In another example, a use of the *p* demonstrative appears with the note “two blocks away” in (10), suggesting that it can refer to a referent at some distance. It seems likely, therefore, that the distinction between the *m* and *p* demonstratives is, as we have suggested, a matter of deictic orientation within the discourse, and not a matter of absolute distance from a single deictic center, the speaker.

- (10) TV *paamo totookorom* ‘aquellas mujeres (“those women”)’ (2 blocks away) (3.105.0344)

No refining notes appear with examples of the *m* proximal demonstrative, suggesting that it may be a more neutral proximal usage.

The short form/long form distinction in pronouns, demonstratives, and locatives appears to have some syntactic functions. In the limited TV corpus we find the short forms precede the cliticized auxiliary complex, and almost never appear in any other position. The short forms of the demonstratives can also appear when they modify nouns. Long forms appear there as well, but Harrington gives at least one example where a speaker rejects a long form in that environment. Examples of short forms before the auxiliary complex, and long forms elsewhere, appear in (11). Of (11e), Harrington comments specifically that one “cannot say *paarama7* here.” (11f) seems to be some sort of a request but not strictly an imperative; it contains the indicative morpheme =*j*.

- (11) TV a. **Noo** = *n = 7e* *t\$e7ee-na-x*.
 1SG.PRO = 1SG = IND sing-CAUS-NFUT
 ‘I am singing.’ (3.104.0411)
- b. *T\$e7eena-x* = *n = 7e* **noo** = **ma7**.
 sing-NFUT = 1SG = IND 1SG.PRO = AUG
 ‘I am singing.’ (3.104.0411)

- c. **Omo** = 7av *jakee7e-ro*.
 2PL.PRO = 2PL dance-FUT
 ‘You (pl.) are going to dance’ (3.104.0137)
- d. *Jakee* = 7avo **omoo** = *ma7*.
 dance = IMP.PL 2PL.PRO = AUG
 ‘Dance! (pl.)’ (3.104.0137)
- e. *Noo* = *ne* *wo\$aa7a-x* **paa-ra** *worooj-ta*.
 1SG.PRO = 1SG > 3SG look.at-NFUT PROX2-ABS.ACC man-ABS.ACC
 ‘I am looking at that man.’ (3.103.0069)
- f. *Maxaa* = *ne=j* **paa-ra-ma**.
 give = 3SG > 1SG = IND PROX2-ACC-AUG
 ‘Dámelo aquél (aquella cosa). (Give me that [that thing].)’ [lit.: ‘3SG gives me that.’] (3.103.0689)

The use of the initial long form preceding a pronominal clitic appears in yes-no interrogative sentences, as shown in (12a-c). This construction, parallel with the initial-position question word constructions in (12e-g) seems to obviate the need for the clitic = *ha* which is otherwise expected in non-question-word questions with verbs; an example with = *ha* appears in (12d). It is also seen in the verbless clauses of (12g).

- (12) TV a. **Oo** = **ma** = 7a *xaa* *awee\$-ko?*
 2SG.PRO = AUG = 2SG be happy-ADV
 ‘¿Tú estás contento? (Are you sg. happy?)’ (3.103.0558)
- b. **Oo** = **ma7** = 7a *paara-r?*
 2SG.PRO = AUG = 2SG thirsty-ABS
 ‘¿Tú tienes sed? (Are you sg. thirsty?)’ (3.105.0345)
- c. **Omo** = **ma** = 7am *paara-ro-m?*
 2PL.PRO = AUG = 2PL thirsty-ABS-PL
 ‘¿Uds. tienen sed? (Are you pl. thirsty?)’ (3.105.0345)

- d. *Koviino-k = ha = 7a* *oo = ma7?*
 be.hungry-NFUT = Q = 2SG 2SG.PRO = AUG
 ‘¿Tienes hambre tú?’ (Are you sg. hungry?)’ (3.104.0090)
- e. *Hitaa7 = ma7 = Ø.*
 INDF = AUG = 3SG
 ‘¿Qué es? (What is that?)’ (3.104.0059)
- f. *Hakii = ma7 = Ø.*
 INDF.human = AUG = 3SG
 ‘¿Quién es? (Who is it?)’ (3.103.0135)
- g. *He-taa manee7 = m amooja7 Ø, tokoo-r = ha,*
 INDF-ABS DIST = AUG dead.person be woman-ABS = Q
worooj-t = ha, he-taa = ha?
 man-ABS = Q INDF-ABS = Q
 ‘¿Qué es el muerto, mujer o hombre? (What is that dead person, a woman,
 a man, or what?)’ (3.105.0094)

The long forms can also appear initially in verbless clauses (see chapter 9), as in (13), so long as no indicative clitic is present. Note that these sentences, unlike those in (13), do not have pronominal clitics, supporting the proposal that when long-form pronoun precedes a pronominal clitic, this serves to mark the interrogative.

- (13) TV a. *Ejoomo = ma7 mo~moohe-m Ø.*
 1PL.PRO = AUG PL~bad-PL be
 ‘Nosotros somos malos. (We are bad.)’ (3.103.0081)
- b. *Oo = ma7 hamaa \$ii\$o7 Ø.*
 2SG.PRO = AUG also devil be
 ‘Tú también eres diablo. (You are also a devil.)’ (3.104.0063)

Further examples with long forms of pronouns appear in (14). Note that examples (14b,d,e) do not appear to have the expected interrogative interpretation.

- (14) TV a. **Noo = ma7** *mii* *yovaa-ng7aro*.
 1SG.PRO = AUG go.NFUT church-DAT
 ‘I am going to the church.’ (3.102.0653)
- b. **Omoo = ma7 = am** *ey~eeyen-mo-k*.
 2PL.PRO = AUG = 2PL CONT~laugh-CONT-NFUT
 ‘Ye are laughing.’ (3.104.0414)
- c. **Noo = ma7** *oii\$me-no-k = re7*.
 1SG.PRO = AUG want-NO-NFUT = 1SG > 2SG
 ‘Yo te quiero (man to girl). (I love you sg.)’ (3.103.0051)
- d. **Oo = ma7 = a** *t\$aj-no-k*.
 2SG.PRO = AUG = 2SG be.sick-NO-NFUT
 ‘Tú [estás enfermo]. (You sg. are sick.)’ (3.104.0539)
- e. **Omoo = ma = ne = me7** *mokaa-ro*.
 2PL.PRO = AUG = 1SG = 2PL kill-FUT
 ‘Uds. van a matar a mí. (You pl. are going to kill me.)’ (3.105.0150)

It is striking that the augment =*m(a7)* of the long form seems to be separable in the instance of an independent pronoun or demonstrative in initial position, so far found with *noo = m* ‘I’ (15a,b,c) and *ekwaa = m* ‘here’ (15d). The augment, in reduced form, =*m*, is delayed and appended to the end of the string of auxiliary clitics.

- (15) TV a. **Noo = p = no = m** *kii*.
 1SG.PRO = IRR = 1SG = AUG come
 ‘Yo vendré. (I will [might] come.)’ (3.104.0117)
- b. **Noo = ne = m** *tokoo-r* \emptyset .
 1SG.PRO = 1SG = AUG woman-ABS be
 ‘Yo soy mujer. (I am a woman.)’ (3.102.0517)

- c. **Noo** = *n = 7e = m* *jaroor-e7* \emptyset .
 1SG.PRO = 1SG = IND = AUG thin-ADJZ be
 ‘Estoy flaco yo. (I am thin.)’ (3.104.0422)
- d. **Ekwaa** = *ne = 7 = m* *xaa*.
 here = 1SG = IND = AUG be.there
 ‘Aquí estoy. (Here I am.)’ (3.104.0065)

The separable augment may also be the mysterious clitic = *m* which has been found with *hamii* ‘where’, as in (16). It also appears with time words like *anaange* ‘still’, *heeamte* ‘tomorrow’, and *metee* ‘today.’

- (16) TV *Hamii-nga = m* *xaa* *mo-7eehja7?*
 INDF-LOC = AUG be.there 2SG-friend
 ‘¿Dónde está tu compañero? (Where is your friend?)’ (3.103.0638)

All of the demonstratives can be used with nouns in complex noun phrases (see chapter 7), as anaphora in discourse, or as independent third person pronouns.

6.1.2. SERRAN INDEPENDENT PRONOUNS AND DEMONSTRATIVES. The Serran languages are similar to one another in their independent pronouns and demonstratives, though much more is known about the SE forms than about those of KI.

The case forms of the first and second person independent pronouns are used quite faithfully, though their nominative and genitive forms are the same. This is somewhat different from Cupan, where case marking is used somewhat sporadically (in LU), and from TV, where no case marking at all is found on the independent first and second person pronouns.

6.1.2.1. SERRANO INDEPENDENT PRONOUNS AND DEMONSTRATIVES. The SE independent pronouns for the first and second person are given in (1).

- (1) SE nom. = gen. acc.
 1SG *nyy7* *nyyj*
 1PL *acham*¹ / *icham* *achami* / *ichami*

2SG	<i>y mi7</i>	<i>y myj</i>
2PL	<i>y ym</i>	<i>y my ~ y myy</i>

¹ Sarah Martin uses 1PL forms in *acham*; other speakers use *icham*.

As in TV, demonstratives serve as the third person independent pronouns. The SE forms of the demonstratives appear in (2). The distal demonstrative *ama7* is the most common form and is anaphoric in much of its usage.

(2)	SE	distal	proximal-2	proximal	indefinite	
	singular				-human	+ human
	nominative	<i>ama7</i>	<i>pat ~ pata7</i>	<i>ivi7</i>	<i>hiit</i>	<i>hami7</i>
	accusative	<i>amaj</i>	<i>pataj</i>	<i>ivij</i>	<i>hiiti</i>	<i>hamij</i>
	genitive	<i>amach</i>	<i>pach</i>	<i>ivich</i>	<i>hiich</i>	<i>hamich</i>
	instrumental	<i>amatunga7</i>	<i>patatunga7</i>	<i>ivitunga7</i>	(?)	–
	plural					
	nominative	<i>aam</i>	<i>pam</i>	<i>iim</i>	<i>hiñim</i>	<i>haiim</i>
	genitive	<i>aamy7</i>	(?)	<i>iimy7</i>	<i>hiñimy7</i>	(?)
	local					
	dative	<i>amajka7</i>	(?)	<i>ivijka7</i>	(?)	(?)

The only local case attested for demonstratives is the dative. Dative-case demonstratives are used only as dative-case-noun modifiers, as in (3).

(3)	SE	a.	<i>Kwyny = vy-7</i>	<i>hunukjch = vy</i>	<i>maaja7</i>	<i>taaqa-ta-m</i>	<i>mi = t</i>
			QUOT = 3SG-PST	also = 3SG > 3PL	ask	person-ABS-PL	DUB = IRR
			<i>kwy7 = my-7</i>	<i>hunu7-k</i>	<i>ii-ngkwa7</i>	<i>ama-jka7</i>	<i>ty^Rva-jka7</i>
			POT = 3PL-PST	move-K	PROX-DAT	DIST-DAT	land-DAT
			‘He – he also asked the people if they would move to the new land here.’				
			<Kwenevu’ hunukchvu’ maaya’ taaqtam mit kwa’mu’ hunuk ‘ingkwa’ ‘amayka’ tervayka’.> ‘He even asked the people whether they would move to the new planet.’ (R&E 7)				

- b. *Wary7 pa-pa7iu7 uviht ny-ñaa-m Maarynga7-ja-m ahkw*
 true PROX2-ABL long.ago 1SG-relative-PL Morongo-AUG-PL here:DAT
hunu7-ko-w ii-ngkwa7 pichy-j ivi-jka7 ty^Rva-jka7.
 move-K-SUB PROX-DAT arrive-IND PROX-DAT land-DAT
 ‘Okay, a long time ago my Morongo relatives arrived here to this land when
 they moved here from over there.’
 <Warre’: pa’pa’yu’ ‘uviht nenyam Maarrênga’yam ‘ahkw hunu’kow ‘ingkwa’ pichyi’ ‘ivihka’
 tervayka’.> ‘Alright: a long time ago my Serrano ancestors arrived here from somewhere else.’
 (R&E 88)

This usage is uncommon. Usually demonstratives occur with local-case nouns without case agreement, as in (4), where *ivi7 tiy^Rvajka7* ‘to this world’ shows the more common phrasal marking for the dative.

- (4) SE *Hooukp ama7 Kukiita-ch = kwyn uui7wyn taaq-ta-m*
 one DIST (prsn)-ABS = QUOT.3SG > 3SG want person-ABS-PL
pyy^R-q^R-i7va7, pyveipa7 = ta q^R-i7v ami7 = ta mo^Rch
 3PL-die(pl.)-NFUT.SUB if = IRR.3PL die(pl.)-FUT and = IRR.3PL again
mana7-k-t\$u-i7v ii-ngkwa7 ii-ngkwa7 ivi7 tiy^Rva-jka7.
 return-K-MOT-FUT PROX-DAT PROX-DAT PROX land-DAT
 ‘One (of the creator gods), Kukiitach, wanted the people, after they died, if they
 died, to come back here, back here to this world.’

The local case forms in (5) are adverbials. These correspond to the demonstratives but do not function as noun modifiers. For example, *aap* means ‘there, at that place’, not ‘at or on that one’. To express a concept like the latter, a periphrastic construction with an inflected postposition (5.4.5.3) is used: *ama-ch py-hpa7* [DIST-GEN 3SG-LOC].

- | | | | | |
|--------------|------------------|-----------------|-----------------|-------------------|
| (5) SE | distal | proximal-2 | proximal | indefinite |
| locative | <i>aap ~ oup</i> | <i>papia</i> | <i>iip</i> | <i>haiip</i> |
| loc.emphatic | <i>aapana7</i> | (?) | <i>iipana7</i> | (?) |
| dative | <i>aangkwa7</i> | <i>pajykja7</i> | <i>iingkwa7</i> | <i>haiingkwa7</i> |
| ablative | <i>aapiu7</i> | <i>papa7iu7</i> | <i>iipiu7</i> | <i>haiipiu7</i> |

The local case forms of the proximal-2 column often seem to have little to do with proximity to the listener. The dative form *pajykja7* also has a more diffusive meaning, often with the sense of ‘over there’ or ‘away’, as to or at a distant place, and it is not uncommon to find the locative form *papia* referring to a place remote from the speech event.

6.1.2.2. KITANEMUK INDEPENDENT PRONOUNS AND DEMONSTRATIVES. The KI independent pronouns and demonstratives, shown in (1) and (2), correspond fairly well to the SE equivalents but with several unfortunate gaps in the information available. Local cases are not marked on pronouns; instead, see 5.4.5.3, on inflected postpositions.

(1) KI independent pronouns

	1SG	1PL	2SG	2PL
nominative = genitive	<i>ny7</i>	<i>itsam ~ itsat\$</i>	<i>ymy7</i>	<i>ymy7y ~ ymy7y7</i>
accusative	<i>nyj</i>	<i>itsamyj</i>	<i>ymyj</i>	<i>ymymyj</i>

(2) KI third person pronouns/demonstratives

	distal	proximal-2	proximal	indefinite	
				-human	+ human
singular					
nominative	<i>ama7</i>	<i>pata7</i>	<i>ivi7</i>	<i>hiit ~ hiita</i>	<i>hami7</i>
accusative	<i>amaj</i>	<i>paj</i>	<i>ivij</i>	<i>hiitaj</i>	<i>hamij</i>
genitive	<i>amats</i>	<i>pats ~ pamats</i>	<i>ivits</i>	(?)	<i>hamits</i>
instrumental	<i>amatan</i>	(?)	(?)	(?)	–
plural					
nominative	<i>aam</i>	<i>pam</i>	<i>iim</i>	<i>hiinim</i>	<i>hajm</i>
accusative	<i>aamy(j)</i>	<i>pamy(j)</i>	<i>iimy(j)</i>	(?)	(?)
genitive	<i>aamy</i>	<i>pamy</i>	<i>iimy7</i>	(?)	(?)

As in SE, the local case forms in (2) are adverbials and not used as modifiers of local case nouns.

(3) KI	distal	proximal-2	proximal	indefinite
locative	<i>aap</i>	<i>pap</i>	<i>iip</i>	<i>hajpea ~ hajpa7j</i>
loc. emphatic	<i>aapan</i>	<i>papan</i>	<i>iipan</i>	(?)

dative	(?)	<i>pajyk</i>	<i>ivijyk</i>	(?)
ablative	<i>aapeaj</i>	<i>papeaj</i>	<i>iipeaj</i>	<i>hajpeaj</i>

Comitative forms of the demonstratives do not appear in (2). Apparently the consultant, Eugenia Méndez, was uncertain about them. This uncertainty may be what allowed Harrington to get comitative forms of plurals, including *imy7mea7* ‘with these’ and *aamea7* ‘with those’. The ungrammaticality or at least strangeness of the forms *iimy7mea7* and *aamea7* is attested to by the exchange in (4), suggesting that the constructions with a plural stem made the consultant uncomfortable.

- (4) KI *Ii-my7-mea7* *ni-kim*.
 PROX-PL.GEN-COM 1SG-come
 ‘[I came] con estos (with these).’
Aa-m-mea7 *ni-kim*. OK.
 DIST-PL-COM 1SG-come
 [‘I came with those.’] OK.
 But: *Ii-my7* *pyy-tsyva7* *ni-kim*.
 PROX-PL.GEN 3PL-COM 1SG-come
 [‘I came with these’] is the clear way to say it. (3.100.0634)

A reason to be suspicious of the local-case inflected demonstratives is that the sense of forms like *ivijyk* ‘to, with this one’, does not fit well with the overall Serran pattern according to which *ivijyk* should mean ‘to this’ and the like, but not ‘to here’, but the sense ‘to here’ is indeed attested in the KI data, as in (5).

- (5) KI *Ni-tuhtutu7-jhuun* *ivi-jyk*.
 1SG-play-DES PROX-DAT
 ‘I wanted to come to play here.’ (3.100.0548)
 Harrington’s gloss was ‘quiero ir a jugar allá (I want to go there to play)’. This was surely in error; we believe the translation we offer makes more sense.

In KI *ama7* ‘that, that one’ and *ivi7* ‘this, this one’ have absolutive counterparts, *ama-t\$* and *ivi-t\$*, seemingly with the same meaning. These absolutive forms are distinct from the similar genitive forms which end in *-ts*. Perhaps the problem with *ivijyk* mentioned

above would be resolved by considering it the dative of *ivit\$* rather than of *ivi7*, presuming that *ivit\$* and *ivi7* do not really mean exactly the same thing after all.

The locative emphatic forms mean ‘right there’, *aapan*, and ‘right here’, *iipan*. The SE parallels are *aapana7* ‘right there’, *iipana7* ‘right here’.

Examples of accusative forms of KI independent pronouns and demonstratives are given in (6).

- (6) KI a. **Ny-j**=yvyn a7-i7~ihama7.
 1SG.PRO-ACC = 3SG > 1SG 3SG-REP-tease
 ‘He is joshing me.’ (3.100.0750; Anderton 1988:109)
- b. *Ni-kwa7*=mat **ivi-j** atapa-j.
 1SG-eat = FUT PROX-ACC meat-ACC
 ‘I’ll eat this meat.’ (3.98.0287; Anderton 1988:111)
- c. *Ni-mii*=mat hi-ka-j **ama-j** pachukah-ta-j.
 1SG-go = FUT see-INF-ACC DIST-ACC man-ABS-ACC
 ‘I am going to visit that man.’ (3.98.0465; Anderton 1988:204, 311)

Examples with genitive case forms of demonstratives are given in (7). In (7a) *amats* ‘that one’s’ is postposed to the noun with the governing possessive prefix. In (7b) the genitive phrase is discontinuous; the demonstrative *ivits* ‘this one’s’ precedes the possessed locative noun *akivea* and the noun *kwhakat* ‘woman’s’ follows. In (7c) the genitive demonstrative *pats* ‘that one’s’ precedes the governing inflected postposition *pyjyk* ‘at, to, toward 3SG’.

- (7) KI a. *Ni-ja7*=mat a-pokuja-j **ama-ts**.
 1SG-carry = FUT 3SG-lunch-ACC DIST-GEN
 ‘I am going to carry [to that man] his lunch.’ (3.98.0482; Anderton 1988:195)
- b. **ivi-ts** a-ki-vea kwhaka-t
 PROX-GEN 3SG-house-LOC woman-GEN
 ‘in this woman’s house’ (3.100.0760; Anderton 1988:178)

- c. *Ni-nahnamu pa-ts py-jyk.*
 1SG-fight PROX2-GEN 3SG-DAT
 ‘Estoy peleando con ése. (I’m fighting with that one.)’ (3.98.0279;
 Anderton 1988:176)

6.1.3. CUPAN INDEPENDENT PRONOUNS AND DEMONSTRATIVES. In the Cupan languages LU, AC, CU, and CA, all of the independent pronouns have both nominative and accusative forms, with the latter being formed by adding the accusative suffix *-i ~ -j*. There are some minor irregularities with this formation in the individual languages, as seen below. Except in LU, the accusative forms seem to be used somewhat sporadically. In all the Cupan languages, there are three deictic demonstratives.

All the Cupan languages have a deictically neutral pronoun/demonstrative on the base **py*, realized as LU *po-* ~ *poo-* (unstressed *pu-*), AC *pa-* ~ *po-* ~ *poo-*, CU *py-*, and CA *pe-*. This element has been consistently misanalyzed as part of the deictic system, but it is not; it simply expresses third person. By itself it is [3SG]; the plural, based on **py-my-* is [3-PL-] or, with no internal hyphen [3PL-]. Forms based on **py* have proliferated in new functions, not only anaphoric as with other demonstratives, but as determiners and topicalization markers, making possible rather long sequences of such items, as seen in the LU sequence in (1), which conveys resignation and is also regarded as a “tongue-twister” (Elliott 1999:210).

- (1) LU *Oonu pi7 [[po7 po-7eek] po7] [po7 [po7 mij-qat.]]*
 PROX2 and 3SG.PRO 3SG-just FOC DET FOC be-RPST
 ‘What are ya gonna do?/It’s just what it is.’ (Elliott 1999:210)

6.1.3.1. LUISEÑO INDEPENDENT PRONOUNS AND DEMONSTRATIVES. The LU independent pronouns are in (1). The third person forms can also function as determiners.

- | | | | | | | |
|-----------------------|------------|---------------|-----------|---------------|----------------------|----------------|
| (1) LU | 1SG | 1PL | 2SG | 2PL | 3SG | 3PL |
| nominative = genitive | <i>noo</i> | <i>chaam</i> | <i>om</i> | <i>umoom</i> | <i>po7</i> | <i>pumóm</i> |
| accusative | <i>ney</i> | <i>chaami</i> | <i>oy</i> | <i>umoomi</i> | <i>poy ~ puneeyi</i> | <i>pumoomi</i> |
| acc.inanimate | | | | | <i>punéy</i> | |

LU demonstratives are seen in (2), mostly based on Kroeber and Grace (1960:102). By comparison with the demonstratives, the series with base *po-* ~ *poo-* ~ *pu-* is deictically neutral and is included with the independent pronouns in (1). *A\$ún-* appears only in adverbial cases. It is a sort of neutral locational specifier for inanimates. *A\$ún-* has no number marking; it is indifferently understood as singular or plural, as are most of the inanimate nouns with which it collocates.

(2) LU	distal	proximal-2	proximal	inanimate
demonstratives				
nominative ¹	<i>wuná-l</i>	<i>oonu</i>	<i>iví7</i>	–
accusative	<i>wunaa-l-i</i>	<i>oonu-m-i</i>	<i>iví-j</i>	–
anim. plural	<i>wunaa-lu-m</i>	<i>oonu-m(u-m)</i>	<i>iví-m</i>	–
anim. pl.acc	<i>wunaa-l-m-i</i>	<i>oonu-mu-m-i</i>	(?)	–
adverbials				
locative ₁ ²	<i>wun-á7</i>	<i>oonu-pa7</i>	<i>iv-á7</i>	–
locative ₂	<i>wunaa-nga</i>	<i>oonu-pa-nga</i>	<i>ivii-nga</i> ~ <i>iv-aa-nga</i> ³	<i>a\$ún-nga</i> ⁴
dative	<i>wuní-jk</i>	<i>oonu-p-ijk</i>	<i>iví-jk</i>	<i>a\$ún-ik</i>
ablative ₁	<i>wun-áj</i>	(?)	<i>iv-áj</i>	–
ablative ₂	<i>wunaa-ngaj</i>	(?)	<i>ivii-ngaj</i> ~ <i>iv-aa-ngaj</i>	<i>a\$ún-ngaj</i>
comitative	<i>wunaa-man</i>	<i>oonu-pa-man</i>	<i>ivii-man</i>	–
instrumental	<i>wunaa-tal</i>	<i>oonu-p-ichal</i>	<i>ivii-tal</i> ~ <i>iv-iichal</i>	<i>a\$ún-tal</i>
‘on this/that side’	<i>wun-áx</i>	(?)	<i>iv-áx</i>	–

¹ Nominative is also used for objects, esp. inanimates.

² Locative₁ is rather neutral ‘there’, ‘here’; locative₂ tends to mean ‘in’, but also ‘at’.

³ “Mrs. Hyde later preferred *iváanga* to *ivúnga* ‘in this’.” (Elliott 1999:194).

⁴ *A\$ún-* is used only with listed adverbial case suffixes.

Elliott (1999:170) observes that *eeva-t* ‘that, it’ is attested for LU, but is “an archaic word used only in set phrases”, with the demonstratives seen in (3) preferred in “current usage.” CU and CA both have cognates of *eeva-t* in productive use, as seen in (4) and (7).

6.1.3.2. ACJACHEMEM INDEPENDENT PRONOUNS AND DEMONSTRATIVES. While the AC materials do not provide full paradigms for the independent pronouns and demonstratives, they are sufficient to show that these are very similar, but not identical, to those of LU. Some of the differences are strictly phonological, resulting from AC-

specific vowel neutralization and shortening. As seen in (1), there appears to be no animate vs. inanimate distinction in the third person accusative forms, in contrast to the more elaborate paradigm in LU.

- (1) AC a. *Ji77a po-j.*
 leave.IMP 3SG-ACC
 ‘¡Déjalo ése! (Leave that [ink bottle] alone!)’ (3.123.0631)
- b. *Tushxa matta po-j.*
 PROH knock.down.IMP 3SG-ACC
 ‘¡No lo tumbes (el hombre)! (Don’t knock him [the man] down!)’ (3.123.0623)

This animate-inanimate distinction may also be absent for the adverbials; the demonstrative *a\$ún-* is attested only in time expressions, as in (2).

- (2) AC a. *a\$un-kavech* ‘from that time, then’ (3.123.0369)
 b. *a\$un-ngaj temee-ngaj* ‘since that day’ (3.123.0369) ¹

¹ This was apparently proposed by Harrington but “denied” by the language consultant.

The AC pronouns and demonstratives are given in (3) and (4). No comitative or instrumental forms have been found.

(3) AC independent pronouns

	1SG	1PL	2SG	2PL	3SG	3PL
nom. = gen.	<i>noo</i>	<i>chaa7am</i>	<i>om</i>	<i>amom</i>	<i>poo7</i>	<i>pomom</i>
accusative	<i>nij</i>	<i>chaama</i>	<i>oj</i>	(?)	<i>poj</i>	<i>pomooma</i>

(4) AC demonstratives

	distal ¹	proximal-2	proximal	inanimate
demonstratives				
nominative ²	<i>wana-l</i>	<i>oona7</i>	<i>avih ~ evih</i>	–
accusative	<i>wanaa-l-a</i>	<i>oona7p-a</i> ³	<i>avi-j ~ evi-j</i>	–
nom. plural	<i>wanaa-la-m</i>	<i>oona7po-m</i>	<i>avii-ma ~ evii-ma</i>	–
acc. plural	<i>wanaa-l-m-a</i>	<i>oona7p-m-a</i>	(?)	

adverbials

locative ₁	<i>wan-a7</i>	(?)	<i>av-a7</i> ~ <i>ev-a7</i>	
locative ₂	(?)	(?)	<i>avii-nga</i> ~ <i>evii-nga</i>	(?)
dative	<i>wani-jk</i> ~ <i>i-jk</i>	<i>oona-k</i>	<i>avi-jk</i> ~ <i>evi-jk</i>	<i>a\$un-ka</i> ⁴
ablative ₁	<i>wan-ej</i>	(?)	<i>av-ej</i> ~ <i>ev-ej</i>	(?)
ablative ₂	(?)	(?)	(?)	<i>a\$un-ngaj</i>
‘on this/that side’	<i>wonax</i>	(?)	<i>avax</i>	–

¹ Distal demonstratives sometimes begin in *wo* rather than *wa*.² Nominative is also used for objects, esp. inanimates.³ *Oona7p-a*, etc., are mysterious; they may be back-formed from *oona7=p* with the third person auxiliary pronominal =*p*.⁴ *A\$ún-* is used only with listed adverbial case suffixes.

The few attested AC indefinite demonstratives are given in (5).

(5) AC indefinite demonstratives

	-human	+ human	
		singular	plural
nominative	<i>hii-ch</i>	<i>hax</i>	<i>axi-m</i>
accusative	<i>hii-ch-a</i>		
ablative	<i>hii-ngaj</i>	‘why’	

To these might be added the indefinite quantifier *hikch* ‘how much’.

6.1.3.3. CUPEÑO INDEPENDENT PRONOUNS AND DEMONSTRATIVES. The CU forms appear in (1) and (2). In CU, the independent third person pronouns with base *py-* have no accusative forms. Instead, the demonstrative pronouns provide a base for accusative forms with independent pronominal readings. The base *py-*, which is deictically neutral, is also a base for determiners and focalizing particles, as in the other Cupan languages. Note that in CU, the third person forms are not used in the accusative.

(1) CU independent pronouns

	1SG	1PL	2SG	2PL	3SG	3PL
nominative	<i>ny7</i>	<i>chym</i>	<i>y7</i>	<i>ym</i>	<i>py7</i>	<i>pym</i>
accusative	<i>ny7yj</i>	<i>chymyj</i> ~ <i>chymi</i>	<i>y7yj</i>	<i>ymyj</i> ~ <i>ymi</i>	–	–

(2) CU demonstratives

	distal	proximal-2	proximal	indefinite		
singular				-human		+ human
nominative	<i>axwýsh</i>	<i>yt ~ yvyt</i>	<i>i7i</i>	<i>hish</i>	<i>mi7i</i>	<i>hax</i> ‘who’
				‘what’	‘which’	
accusative	<i>axwýchi</i>	<i>yti</i>	<i>ivíj</i>	(?)	<i>mivíj</i>	<i>haxíj</i>
plural						
nominative	<i>axwýchim</i>	<i>ytim ~ yvytim</i>	<i>ivím ~ i7im</i>	<i>hichim</i>		<i>haxim</i>
accusative	<i>axwýshmi</i>	<i>ytimi</i>	<i>ivími</i>	(?)		(?)
local cases						
locative ₁	<i>axwánga</i>	–	<i>ivínga</i>			–
locative ₂	<i>axwá7aw</i>	<i>yvy7aw ~ yvyt7aw</i>	<i>iví7aw</i>	(?)	<i>miví7aw</i>	–
					‘where’	
locative ₃		<i>yvy7pa</i>	<i>ivíta</i>			
dative	<i>ajka</i>	<i>yvyjka ~ yvyj7ka</i>	<i>ivíjka</i>	(?)	<i>mivíjka</i>	‘to – where’
ablative	<i>angax</i>	(?)	<i>ivíngax</i>	<i>hingax</i>	<i>mivíngax</i>	<i>haxíngax</i>
instrumental	–	–	<i>ivíchi</i>	‘why’	‘from where’	‘by whom’

6.1.3.4. CAHUILLA INDEPENDENT PRONOUNS AND DEMONSTRATIVES. The CA independent pronouns are shown in (1) and the demonstratives in (2). As in LU and CU, the *pe7* form is non-deictic, although Seiler (1977:116) treats it as a remote distal form. Seiler argues that *i7* is non-deictic, and therefore “can be combined with other pronouns, especially with the local-relative [Seiler’s term for the *pe7* series]” (Seiler 1977:116). This is exactly backwards. In the example given, *i7 pe7 menilj*, the *pe7* form is functioning as a definite article, an extension of the form found also in CU. CA has only a two-way distinction among the deictic demonstratives. *I7* is proximal. The proximal-2 *et ~ evat* forms are used when the reference is immediately accessible to the discourse participants in the course of face-to-face interaction (Seiler 1977:118), while the *pe7* forms are used to track reference in narrative. Thus *pe7* in CA overlaps in function with the distal demonstrative *axwý-* in CU. Note that *ivimi**, the presumed accusative form of the plural proximal demonstrative, is unattested (Seiler 1977:110); examples where one would expect this form in text all have *ivim*.

(1) CA independent pronouns

	1SG	1PL	2SG	2PL	3SG	3PL
nominative	<i>ne7</i>	<i>chem ~ chemem</i>	<i>e7</i>	<i>em ~ emem</i>	<i>pe7 ~ pej</i>	<i>pe7em ~ pevatem</i>
accusative	<i>ne7ij ~ ne7ej</i>	<i>chememi ~ chemey</i>	<i>e7ij ~ e7ej</i>	<i>ememi</i>	<i>pe7ij ~ pe7ej</i>	<i>pe7emi</i>

The demonstrative bases for locatives are *i-* and *pe-*; the proximal-2 *e-* forms, like the cognate *y-* forms in CU, do not appear with adverbial case suffixes. Nor do the first and second person pronouns appear with adverbial case suffixes. Adverbial cases for these pronouns must be periphrastic constructions, e.g., *ne7i-j ne-ngax* [1SG.PRO-ACC 1SG-ABL] ‘away from me’ (Seiler 1977:87).

The CA demonstratives are seen in (10). These are from both DCA and MCA materials.

(2) CA demonstratives

	distal ¹	proximal-2	proximal	indefinite	
singular				-human	+human
nominative	<i>pe7 ~ pej ~ pevat</i>	<i>et ~ evat</i>	<i>i ~ i7 ~ iv7i</i>	<i>hiche7a</i>	<i>hax7i</i>
accusative	(?)	<i>etij ~ evatij</i>	<i>ivij</i>	<i>hichaj</i>	<i>hax7ej</i>
plural					
nominative	<i>pe7em ~ pevatem</i>	<i>etem ~ evatem</i>	<i>ivim</i>	<i>hich7a</i>	<i>hax7im</i>
accusative	<i>pe7emi</i>	<i>etemi ~ evatemi</i>	<i>ivimi</i>	<i>hichami</i>	<i>hax7imi</i>
local cases					
locative	<i>penga</i>	<i>enga</i>	<i>ipa</i>	(?)	–
dative	<i>pijk ~ pijk</i>	(?)	<i>ipika ~ ika</i>	(?)	–
ablative	<i>pengax</i>	<i>engax</i>	<i>ipax</i>	(?)	–

¹ The CA distal series overlaps with the third person independent pronouns (above) and with inflected postpositions in Table 5.4.5.3 (6).

6.2. REFLEXIVE AND RECIPROCAL PRONOUNS. All of the languages except CA form pronominal reflexives and reciprocals by prefixing a root derived from **taaka* ‘person’ with a possessive prefix. The result is a relational noun construction (see 5.6.5). As a relational noun construction, it does not participate in the syntactic cases; that is to say,

the reflexive or reciprocal, though semantically an object, is not marked for accusative case. In CA, the reflexive/reciprocal proclitic *tax*_{__} (also from **taaka*) appears in the verb construction in object position, before the subject prefix. The reflexive and reciprocal, being morphologically identical, are both glossed [REFL].

Sproat (1981) has noted that the Takic reflexives and reciprocals are unique in Uto-Aztecan (cf. Numic and Hopi, which retain the PUA reflexive/reciprocal **na-*). Since in CU and LU the reflexive postposition is identical to forms meaning ‘body’, Sproat suggests that Takic languages acquired these reflexives by a loan translation from some Yuman language, where an element derived from ‘body’ can be reconstructed as the Proto-Yuman reflexive/reciprocal.

6.2.1. REFLEXIVE, RECIPROCAL IN TONGVA. The reflexive/reciprocal root in TV is *-taax* ~ *-tax*, illustrated in (1). Constructions with oblique case suffixes like (1b,c) are also found in SE.

- (1) TV a. *Hopeej=7a mo-taax.*
 paint = IMP 2SG-REFL
 ‘¡Píntate tú solo! (Paint yourself on your own! [only you, you alone, you yourself])’ (3.104.0336)
- b. *Mo-taax-tar=no=j epuija-ro.*
 2SG-REFL-INS = 1SG = IND be.ashamed-FUT
 ‘Voy a tener vergüenza por ti. (I’ll be ashamed for your own sake.)’
 (3.105.0094)
- c. *pomoo-tax-nga*
 3PL-REFL-LOC
 ‘entre ellos (among themselves)’ (3.104.0109)

This root is also used as the word for ‘body’ (2).

- (2) TV a. *ne-taax*
 1SG-REFL;body
 ‘mi cuerpo (my body)’ (3.104.0109)

- b. *Jaajto = 7aa mo-taax.*
 shake-IMP 2SG-REFL;body
 ‘¡Menéate, menea tu cuerpo! (Shake yourself, shake your body!) (the person addressed then moves his body and limbs about) (3.105.0083)
- c. *Ajoo7en a-taax-nga a-peeha-n.*
 much 3SG-REFL;body-LOC 3SG-down-PSD
 ‘[It] (owl) has lots of down on [its] body.’ (3.105.0409)

The examples in (3) come from a paradigm given by Harrington from José de los Santos Juncos, who used second person independent pronouns *oot\$* (sg.) and *omoot\$o* (pl.) instead of *oo* and *omoom*, recorded with other consultants.

- (3) TV a. *Oot\$ = 7a mokaana-x mo-taax.*
 2SG.PRO = 2SG kill-NFUT 2SG-self
 ‘You killed yourself.’ (3.105.0160)
- b. *Omoot\$o = 7av = 7e mokaana-x omoo-tax.*
 2PL.PRO = 2PL = IND kill-NFUT 2PL-self
 ‘You killed yourselves.’ (3.105.0160)
- c. *Wehee = ne = m = 7e mokaana-x pomoo-tax.*
 two = (?) = 3PL = IND kill-NFUT 3PL-self
 ‘Those two killed themselves.’ (3.105.0160)

6.2.2. REFLEXIVE, RECIPROCAL IN SERRAN. SE *-taq(a-)* and KI *-tak* appear in reflexive and reciprocal pronominal constructions. The two forms are essentially identical in that while SE distinguishes *k* and *q*, KI does not. This means that within our practical orthography SE *q* is the same cross-linguistic element as KI *k*. *-taq* and *-tak* also relate to the words for ‘body’, but ‘self’ and ‘body’ seem to be independently derived from the root **taaka* ‘person’. The Serran words for ‘body’ involve reduplication, but they are not synchronically segmentable, the etymological CVh- reduplication in SE *-tah~tqa7*, KI

-tah~taka7 having no identifiable semantic content here. The SE absolutive form for ‘body’ is *tahtqa-ch*. Examples with Serran ‘body’ are given in (1).

- (1) a. SE *Ajay7=kwyn Wahi7-t a-qa^Rv kwaara7-k, kwyn*
 then = QUOT.3SG Coyote-GEN 3SG-ear shake-K QUOT.3SG
a-tahtqa-7 kwaara7-k, puju a-tahtqa-7 kwaara7-k,
 3SG-body-PSD shake-K all 3SG-body-PSD 3SG-body-PSD
kwyn uvial hiik ama7.
 QUOT.3SG already come.to.life DIST
 ‘Then Coyote’s ear shook, his body shook, his whole body shook, and he came back to life.’
- b. KI *Puju ni-tahtaka-7 a-pakana7.*
 all 1SG-body-POSS 3SG-swell
 ‘All my body was swollen.’ (3.100.0486)
- c. KI *Ni-pikw-k ni-tahtaka-t\$aj.*
 1SG-wipe-K 1SG-body-ACC
 ‘I wipe my body (when bathing).’ (3.100.0486)

Examples of SE reflexives and reciprocals are given in (2).

- (2) SE a. *No-uk=ta=n ni-taq puhche-i7v.*
 1SG-EMPH = IRR = 1SG 1SG-REFL take.care.of-FUT
 ‘I can take care of myself.’
- b. *Vy-7 a-taq mu-j.*
 3SG-PST 3SG-REFL shoot-IND
 ‘He shot himself.’
- c. *Pyy-taq=tqa=my-7 myraq-av aa-piu7.*
 3PL-REFL = INFR = 3PL-PST untie-CONT DIST-ABL
 ‘They must have untied themselves from it.’

- d. *Kwyny pyy-taq piuha-7n.*
 QUOT.3PL 3PL-REFL sweet-ST
 ‘They loved each other.’
- e. *li-p = ta = ch cha-taq anga7-k-in-iv.*
 PROX-LOC = IRR = 1PL 1PL-REFL meet-K-CAUS-FUT
 ‘We’ll meet here (meet each other).’

In SE, such constructions can be suffixed with the dative suffix *-jka7*, as in (3).

- (3) SE a. *A-taqa-jka7 ty7wan.*
 3SG-REFL-DAT join(sg.obj)
 ‘Join them together (join it to itself).’
- b. *Kwyny = my-7 pyy-taqa-jka7 ynaat\$ vyraa~vyra-7n.*
 QUOT = 3PL-PST 3PL-REFL-DAT nicely DIST~talk-ST
 ‘They talked together (to each other) nicely.’

In Ramón and Elliott (2000), examples have been encountered with reflexive *-taq(a-)* marked for accusative case, as in (4). This syntactic case marking on the reflexive is unique in Tadic. Nowhere else is any relational noun inflected for syntactic case.

- (4) SE a. *Ani pyy-taqa-j = my7 uu7.*
 and.then 3PL-REFL-ACC = -3PL > 3SG.PST marry;take(sg.obj.)
 ‘Then they (my paternal grandparents) got married.’
 <‘Ani’ peetaqaymu’ ‘u’. (R&E 19)
- b. *Pyy-taqa-j = m jy\$ka7-nin taaq-ta-m uviht, kwyny.*
 3PL-REFL-ACC = 3PL > 3SG sweat-CAUS person-ABS-PL long.ago QUOT.3PL
 ‘Long ago, the Indians used to sweat themselves (they say).’
 <Peetaqaym yeshka’nin Taaqtam ‘uviht kwana’. > (R&E 875)

- c. *Pyy-taqa-j = m* *tiy^R7an* *taaqa-ta-m* *uviht.*
 3PL-REFL-ACC = 3PL > 3SG cure person-ABS-PL long.ago
 ‘The people used to cure one another long ago.’
 <Peetaqaym ter’ran taaqtam ‘uviht.> (R&E 548)

In KI, *-tak* is documented only in the reflexive sense. Examples are given in (5).

- (5) KI a. *A-myk* *a-tak.*
 3SG-kill 3SG-REFL
 ‘He killed himself.’ (3.100.0486; Anderton 1988:115)
- b. *Ni-hi~hiu* *ni-tak.*
 1SG-DUR-see 1SG-REFL
 ‘I’m looking at myself.’ (3.100.0357; Anderton 1988:115)
- c. *Pyy-py7-k* *pyy-tak.*
 3PL-fan-K:CAUS 3PL-REFL
 ‘They are fanning themselves.’ (3.98.0465; Anderton 1988:115)

6.2.3. REFLEXIVE, RECIPROCAL IN COASTAL CUPAN. LU *-taax* ~ *-tax* is both reflexive and reciprocal, as illustrated in (1).

- (1) LU a. *Pi7* *pumóm* *laach-uk* *pom-taax.*
 and 3PL.PRO argued-USIT 3PL.-REFL
 ‘And they argued among themselves.’ (Elliott 1999:898)
- b. *Chaam* *naaw-i-k* *cham-taax.*
 1PL.PRO write-TR-USIT 3PL.-REFL
 ‘We used to write to one another.’ (Elliott 1999:899)
- c. *Qay* *cham-tax* *cham-tiiw-i-Ø* *Ø* *waam.*
 NEG 1PL-self 1PL-see-TR-NMLZ be long.time
 ‘We haven’t seen each other for a long time’ (H&E 1067)

In AC, only the reflexive sense is attested, as in (2).

- (2) AC a. *Moor-a7-q po-taax.*
 kill-TR-IFUT.SG 3SG-REFL
 ‘He is killing himself.’ (3.124.0198)
- b. *Moor-a7 o-taax.*
 kill-TR.IMP 2SG-REFL
 ‘Kill thyself!’ (3.124.0198)
- c. *No-taax qwaavcho-q.*
 1SG-REFL take.care.of-IFUT.SG
 ‘Me estoy cuidando, I am taking good care of myself.’ (3.124.0083)

6.2.4. REFLEXIVE, RECIPROCAL IN CUPEÑO. The reflexive and reciprocal are marked in CU with *-taxwi*, as in (1).

- (1) CU a. *Py-taxwi su~súnv-ax-ni-qa.*
 3SG-REFL CONT~pathetic-VBLZ-CAUS-PRS.SG
 ‘He pities himself.’ (H&N 38[76] 9.56)
- b. *Amáy chymy iví-j tan-in-y-t tan-in-wy*
 today 1PL-PRO PROX-ACC dance-TR-NMLZ-ABS dance-TR-PRS.PL
pytá7ama-j chym-taxwi tuvuk-i-nuk.
 all-ACC 3PL-REFL cover-TR-SS
 ‘Today when we dance this dance we cover ourselves totally.’ (H&N 27[54] 15.9)
- c. *Py-m-taxwi py-7-mu~mh-áan.*
 3-PL-REFL 3PL-DISTR~shoot-AUG
 ‘They shot at one another.’ (H&N 2[4] 1.63)
- d. *Tysíw-am ym-taxwi mu~mh-an-am!*
 play-IMP.PL 2PL-REFL DISTR~shoot-AUG-IMP.PL
 ‘Play, shoot at one another.’ (H&N 2[4] 1.55)

- e. *Chy=py chym-taxwi tyw.*
 1PL=IRR 1PL-body see.FUT
 ‘We will see one another.’

The element *-wi* is in origin a possessed suffix (cf. 5.2.3). In non-reflexive use, CU *-taxwi* means ‘body’, e.g. *py-taxwi* ‘his body’.

Elsewhere in CU, the root **taaka* also appears in *atáx7a* ‘person’, a formation with the archaic third person possessive prefix *a-*, which is attested in CU only in a few fixed forms, and with the more usual possessive suffix *-7a*. Despite its morphology, *atáx7a* is not synchronically a possessed form.

Like SE, CU can use a dative form of the reflexive, as in (2).

- (2) CU *Anúk=7yp pa7an=chym-jax-wyn chym-taxwi-ka.*
 thus=REAL speak.Cupeño=1PL-INTR-PST.IPFV.PL 1PL-REFL-DAT
 ‘We spoke Cupeño like this among ourselves.’ (H&N 22[44] 58)

6.2.5. REFLEXIVE, RECIPROCAL IN CAHUILLA. CA does not have the relational noun construction with **taaka*. Instead, a reflex of this element appears as the proclitic *tax__* in object position, as in (1), to encode reflexive or reciprocal meaning.

- (1) CA a. *Tax__ting7aj.*
 REFL__cure.IMP
 ‘Cure yourself!’ (Fuchs 1970:18)
- b. *Tax__chem-teew-wen.*
 REFL__1PL-see-NFUT.PL
 ‘We see one another.’ (Seiler 1970:93 (6))

6.3. EMPHATIC PRONOUNS.

6.3.1. EMPHATIC PRONOUNS IN TONGVA. The emphatic pronouns in TV and the Serran languages are constructed with a postposition meaning ‘alone’, only, by oneself’. In TV the suffix is *-nuuno7* or *-nuuno*. The singular forms are the only attestations.

(1) TV emphatic pronoun constructions

- 1 *ne-nuuno(7)* ‘I alone, only me’
- 2 *mo-nuuno(7)* ‘you alone, only you’
- 3 *a-nuuno(7)* ‘3SG alone, only 3SG’

Examples of usage are provided in (2).

- (2) TV a. *Noo = n = 7e meaa-ro ne-nuuno7.*
 ISG.PRO = 1SG = IND go-FUT 1SG-EMPH
 ‘Yo voy ir solo. (I going to go alone.)’ (3.104.0414)
- b. *Meaa mo-nuuno7.*
 go.IMP 2SG-EMPH
 ‘Vete tú solo. (You go by yourself!)’ (3.104.0414)
- c. *A-nuuno = 7e xaa menee7 tokoo-r.*
 3SF-EMPH = IND be PROX woman-ABS
 ‘Está sola esta mujer. (This woman is alone.)’ (3.105.0018)
- d. *Poaa-ve pejoo-ro ne-kuu7 \$eraaw-e-j a-nuuno anaange*
 far-ABL arrive-FUT 1SG-with speak-NMLZ-ABS 3SG-EMPH still;yet
jaawke.
 night
 ‘De lejos va llegar conmigo la palabra solo tonight. (From far off the word
 will reach me tonight all by itself.)’ (3.105.0080)
- e. *Xaaj = e7 hakii toaajkomo-k, a-nuuno = 7e toaajkomo-k.*
 NEG = IND INDF.HUMAN break-NFUT 3SG-EMPH = IND break-NFUT
 ‘Naidien lo quebró, solo se quebró. (No one broke it, it broke all by itself.)’
 (3.105.0084)

6.3.2. EMPHATIC PRONOUNS IN SERRAN. The SE emphatic forms in (1) are nearly identical to those of KI in (2). These inflected postpositions tend to mean things like ‘oneself alone,

all by oneself, without help or interference from anyone else'. The second person forms are the same for both singular and plural.

(1) SE emphatic pronoun constructions

	singular	plural
1	<i>no-uk</i>	<i>acham-uk</i>
2	<i>ym-uk</i>	<i>ym-uk</i>
3	<i>pun-uk</i>	<i>pu-m-uk</i>

(2) KI emphatic pronoun constructions

	singular	plural
1	<i>n-uk</i>	<i>itsam-uk</i>
2	<i>um-uk</i>	<i>um-uk</i>
3	<i>pun-uk</i>	<i>pu-m-uk</i>

The examples in (3) show usage in SE.

- (3) SE a. **No-uk** = vy7 ny-ñā ama7 naash-t.
 1SG-EMPH = 3SG.PST 1SG-relative DIST girl-ABS
 'That girl was my own relative.'
 <Nowkvu' nenyah 'ama' naasht. > 'That girl was one of my relatives.' (R&E 113)
- b. *Kwyny* = vy *a-majha-m* **pun-uk** *havy7n*.
 QUOT = 3SG > 3PL 3SG-child-PL 3SG-EMPH clothe
 'He clothed his own children (and not the others).'
- c. *Kwyn*, "**No-uk** *ny-pulin*, **no-uk** *ny-pulin*,
 QUOT.3SG 1SG-only 1SG-baby 1SG-EMPH 1SG-baby
uaa7-qa-j = n," *ky-j = kwyn*.
 get;take(sg.obj)-IFUT-IND = 1SG say-ind = QUOT.3SG
 'She [said], "My own baby, my own baby, I'm going to get it," she said.'
- d. **No-uky** = n *qat\$*.
 1SG-EMPH = 1SG be
 'I'm all alone.'

- e. *Aa-p = kwyny* *qat\$* *na~naa^R-m* *pu-m-uk.*
 DIST-LOC = QUOT.3PL be PL~young.woman-PL 3-PL-EMPH
 ‘Those young women were there by themselves.’
- f. *No-uk = ta = n* *ni-taq* *puhche-i7v.*
 1SG-EMPH = IRR = 1SG 1SG-REFL take.care.of-FUT
 ‘I can take care of myself (I will take care of myself all by myself).’
- g. *Ama7* *pun-uk* *mi-j* *cha7-aachi7.*
 DIST 3SG-EMPH go-IND 1PL-animal
 ‘Our horse went on by itself (while we slept in the buggy, our horse proceeded along the road home without any guidance).’

6.3.3. EMPHATIC PRONOUNS IN LUISEÑO AND ACJACHEMEM. LU has several different emphatic pronouns in *-ta*, which occurs as the postpositional element in inflected postpositions which, so far, have been found only in the first person. Examples are provided in (1).

- (1) LU a. *Po7* *\$uwoo7-qa* *toomawu-t.* *Noo-ta* *qay.*
 3SG.PRO fear-PRS.SG thunder-ABS 1SG-EMPH NEG
 ‘She is afraid of thunder. I’m not (afraid). (H&E 200)
- b. *Chaam-ta* *pitoo* *hati7a-nik* *ku\$ánila-an* *choo7un* *hi-sh.*
 1PL-EMPH now go-SS.PRIOR take-FUT every thing-ABS.ACC
 ‘When we [in contrast to the old-timers] go now we take everything along.’
 (H&E 212)

The LU quantifier *-7eek(u-)* ‘only, just’, seen in (2), often has an emphatic sense. However, *-7eek* is attested only with the 3SG prefix *po-*. Since it has both a plural *po-7eeku-m* (2c) and an accusative *po-7eek-i* (2d), it is neither an inflected postposition nor a relational noun.

- (2) LU a. *naachaxan-man po-7eek*
 food-COM 3SG-only
 ‘only with the food’ (Elliott 1999:167)
- b. *ki-jk po-7eek*
 house-DAT 3SG-only
 ‘only to the house’ (Elliott 1999:167)
- c. *Kiika-tu-m amaaju-m po-7eeku-m*
 dweller-ABS-PL young.person-PL 3SG-only-PL
pu-m-wilaj-vuta-ma-an.
 3-PL-jump-POT-HAB-FUT
 ‘Only [the] little kids [that live there] can jump up there.’ (Elliott 1999:167)
- d. *Chaam teetila-wun puné-j po-7eek-i.*
 1PL.PRO talk-PRS.PL 3SG.INAN-ACC 3SG-only-ACC
 ‘All we do is talk about it.’ (Elliott 1999:167)

No comparable form appears in the AC corpus. However, AC has a particle *ijqal* ~ *ijk-ch* ‘just’ which has sentential scope, as seen in (3). This may be a cognate form.

- (3) AC a. *Ijqal tavann-a7!*
 just put-TR.IMP
 ‘¡Déjalo así! (Just put it down!)’ (3.123.0606)
- b. *Nge-lla-nga-q ijk-ch.*
 go.away-FREQ-GOING-PRS.SG just-ABS
 ‘Es andariego no más. (He just goes wandering around.)’ (3.116.0195)

Overlapping with *-eek* in meaning is a relational noun *-xa* ‘only, alone’, which also has an emphatic sense of ‘self’. Several examples are attested with a final *-j*. However, this is not the accusative case; as it happens, most examples of these forms in Elliott (1999) encode intransitive subjects, as in (4a). Examples are seen in (4). The inanimate third person form *pooxun* (see (4d)) also appears in CU as *pyyxwyn* ‘nothing but, only, just’. However, *-xa* is not attested in CU.

- (4) LU a. *Pa7 nawitma-l wuko7-ja wam poo-xaj.*
 then girl-ABS go-PST.INTR already 3SG-alone
 ‘Then the girl went already herself.’ (Elliott 1999:748)
- b. *Poom-teela-j poomo-xaj qaj o7na-wun.*
 3PL-language-ACC 3PL-alone NEG know-PRS.PL
 ‘They don’t know their own language.’ (Elliott 1999:746)
- c. *Po-j tiiw7-jax noo-xa.*
 3SG.PRO-ACC see-PST 1SG-alone
 ‘I saw him with my own eyes.’ (Elliott 1999:622)
- d. *Om poo-xun paa-l paa7-i-lut.*
 2SG.PRO 3SG-alone.INAN water-ABS.ACC drink-TR-IFUT
 ‘You are going to just drink water.’ (Elliott 1999:748)

Alongside the plural *poomoxa(y)*, as in (4b), is a plural with the rare suffix *-num* (from **-ny-m*, discussed in 5.3 (11)).

- (5) LU *Jumájk-ta oma-qu\$ xwaaja-t poo-xa-num Indio-m.*
 long.ago-EMPH be.absent-IPFV.PST white-ABS 3SG-alone-PL Indian-PL
 ‘Long ago there were no Whites, only Indians.’ (Elliott 1999:746)

The relational noun *-xa* appears as well in AC, seen in (6). Harrington (3.123.0418) collected a complete paradigm (see Table 5.4.5.3 (4)).

- (6) AC a. *Noo-xa = n7 = pa wona7 mom-nga aa7-ma.*
 1SG-alone = 1SG = IRR DIST:LOC ocean-LOC be.there-CFAC
 ‘Yo quisiera [estar solo] allá en la playa. (I would like to be by myself there on the beach.)’ (3.123.0543)
- b. *Noo = n o-j oo-xa kamí77-a-lat.*
 1SG.PRO = 1SG 2SG.PRO-ACC 2SG-alone leave-TR-IFUT
 ‘Yo te voy a dejar sola. (I am going to leave you alone.)’ (3.123.0631)

- c. *poo-xa-nem* *ataaxe-m*
 3SG-alone-PL person-PL
 ‘puros indios, true Indians’ (Kroeber 1909:250)

6.3.4. EMPHATIC PRONOUNS IN CUPEÑO. In CU, constructions with *-taxwi* can have an emphatic rather than a strictly reciprocal or reflexive object sense. Dixon (2012.3:169) regards “one’s own” as a kind of reflexive of the possessor, used in a situation of contrast. That perspective seems right for this Takic usage as well.

However, CU has an emphatic inflected postposition as well, *-qi*, which sometimes is used in a reflexive or reciprocal sense. This element, like the other postpositions, is unstressed, but the pronominal stems which occur with it show the same vocalism as the object proclitics. This is probably due to an assimilation to the vowel of *-qi* just as the object proclitics have absorbed the vowel quality of the accusative suffix.

- (1) CU a. *My=py* *pí-qi* *kwyl-ax.*
 and=IRR 3SG-EMPH get.up-INTR.FUT
 ‘And he will get up by himself.’ (H&N 2[4] 45)
- b. *My=l=py* *pí-mi-qi* *ngij.*
 and=3PL.AB=IRR 3-PL-EMPH go.away.FUT
 ‘And they will go away by themselves.’ (H&N 2[4] 84)
- c. *My=7yp* *tyw-qá7* *my=7y=py* *y7y* *í-qi.*
 and=2SG.ERG see-PRS.SG and=2SG=IRR 2SG.PRO 2SG-EMPH
 ‘And you have seen it yourself.’ (H&N 56[112] 6)
- d. *Í-mi-qi* *ymy* *ni=pi-wy.*
 2-PL-EMPH 2PL.PRO 1SG.OBJ=bewitch-PRS.PL
 ‘You yourselves are bewitching me.’ (H&N 3[6] 105)
- e. *ní-qi* *kuchiiju*
 1SG-EMPH knife
 ‘my own knife’

6.3.5. EMPHATIC PRONOUNS IN CAHUILLA. CA has the same emphatic form, the inflected postposition *-qi* (*-qi7* in Sauvel & Elliott 2004), seen in the examples in (1). It shows a wider range of usage than that attested for the CU cognate. The CA form has a reflexive translation, as in (1a,b), among a range of other emphatic translations, and in (1g) it cooccurs with a verb with the reflexive object proclitic *tax*_{__}.

- (1) CA a. ***pe-qi*** *naxa-sh*
 3SG-EMPH man-ABS
 ‘the man himself’ (Seiler 1970:69 44)
- b. *ni-ja-qa* ***ne-qi***
 1SG-say-IPFV.SG 1SG-EMPH
 ‘I said to myself’ (S&E 997)
- c. ***Pe-qi*** *ja-qa.*
 3SG-EMPH say-IPFV.SG
 ‘He just talks.’ (S&E 1067)
- d. ***Heme-qi*** *hem-taxmu-7a.*
 2PL-EMPH 3PL-song-POSS
 ‘It was their own song.’ (S&E 1039)
- e. *kupa-che-m* ***heme-qi***
 barrel.cactus-ABS-PL 3PL-EMPH
 ‘nothing but barrel cactuses’ (S&E 884)
- f. ***Pe-qi*** *chem-ngij-ljew-we* *ta7.*
 3SG-EMPH 1PL-go.back-GOPR-IPFV.PL EMPH
 ‘So we just went back.’ (S&E 904)
- g. *Tax*_{__} *chem-nu7in-we-7* ***cheme-qi*** *chem-ki-nga.*
 REFL_{__} 1PL-do-IPFV.PL-PST 1PL.EMPH 1PL-dwelling.place-LOC
 ‘We had our own customs here in our territory.’ (S&E 1067)

CHAPTER 7

NOUN PHRASES

7.0. INTRODUCTION. This chapter takes up agreement, ordering, and discontinuous constituency in noun phrases (other than possessive phrases, which are treated in section 5.6).

An especially interesting property of noun phrases in the Takic languages is the possibility of discontinuous constituency. In all of the Takic languages for which we have documentation, noun phrases can be discontinuous. All the languages permit case and number agreement in most types of noun phrases, with minor differences in which structural elements must exhibit agreement. In many cases agreement seems to be optional, expressing pragmatic and discourse-level meanings rather than syntactic structure, and which components of complex noun phrases must exhibit agreement is variable among the languages. The Cupan languages usually mark case only on modifiers in noun phrases where the head noun is inanimate, and phrasal marking is sometimes found with animate nouns as well. With phrasal marking it is somewhat misleading to say agreement is involved since the noun heading the phrase is unmarked and the modifier which expresses number or case has nothing to “agree” with. The case or number expressed on the modifier is a property of the noun phrase as a whole rather than a feature of the noun head.

A problem in typology presented by these languages, as with several other Uto-Aztec languages, is that while the languages are “head-marking”, with pronominal argument markers either on the verb construction (as in CA) or in an auxiliary complex (in TV, SE, LU), or on both, as in KI and CU, the languages also have morphological case, a feature associated with dependent marking. The presence of discontinuous constituents, a feature of adjuncts, not of arguments according to Mikkelsen (2014), is clearly related to this problem. If the discontinuity in free word order of noun phrases in the Takic languages means that these are adjuncts, why are they marked for case?

On the other hand, granted the discontinuity found in Takic noun phrases, within a functionalist perspective it is easy to appreciate the importance of case marking in associating the discontinuous parts of a noun phrase with each other.

Table 7 illustrates the case and number patterns with different modifying elements. The individual quantifiers, ‘all’, ‘many’, ‘few’, behave differently in the different languages, so these are shown. A plus sign means that a quantifier must be marked for case and number. A minus sign indicates that it is not marked. Variable marking is indicated by plus-or-minus (\pm).

Table 7. Case and number marking of modifiers in noun phrases

	‘all’	‘many’	‘few’	numeral	adjective	demonstrative
TV	–	\pm	(?) ¹	\pm	+	+
SE	–	\pm	–	– ²	\pm	+
KI	–	–	(?)	–	\pm	\pm
LU	+	+	+	+ (anim.)	+	+
AC	+	+	(?)	+ (anim.)	+	+
CU	+	+	+	+	+	+ ³
CA	–	+	(?)	– ²	\pm	\pm

¹ TV *miit\$e7* ‘a little, few’ is not attested in any diagnostic environment.

² The SE and CA numeral ‘one’ can show accusative-case agreement.

³ The CU determiner/demonstrative *py7*, pl. *pym(y)m* is not marked for case.

7.1. TONGVA NOUN PHRASES.

7.1.1. QUANTIFIERS IN TONGVA NOUN PHRASES. The TV quantifier *oee* ‘all’ does not appear with plural suffixes, as seen in the examples in (1). There is one example where *oee* modifies an accusative mass noun (1c), but *oee* is not marked for case.

- (1) TV
- a. *oee ta~raaxa-t* ‘all the people’ (3.104.0349)
all PL~person-ABS
 - b. *oee xa~xaa(j)-j* ‘all the mountains’ (3.103.0363)
all PL~mountain-ABS
 - c. *oee oox-ra* ‘all the world’ (3.103.0307)
all earth-ABS.ACC

The quantifier *ajoo7e ~ ajoo7en* ‘many’ is attested only in the nominative. *Ajoo7e* ‘many, much, a lot of’ usually agrees in number with plural nouns, as shown in (2a,b).

However, there are also examples like those in (2c). Note that while the form *ajoo7en* looks like it might have the structure *a-joo7e-n* [3SG-bigness-PSD], the fact that *ajoo7en* occurs with plurals shows that if the *a-* is separable, it is the adjectival prefix (cf. 14.14) and not the 3SG possessive prefix. With mass nouns, the construction is always *ajoo7en*, as in (2d).

- (2) TV a. *ajoo7e-m wo-woo*7*-a-m* 'many dogs' (3.104.0349)
 many-PL PL~dog-AUG-PL
 b. *ajoo7e-m tomoomxa7-a-m* 'many deaf people' (3.105.0090)
 many-PL deaf.person-AUG-PL
 c. *ajoo7en wo-woo*7*-a-m* 'many dogs' (3.103.0166)
 many PL~dog-AUG-PL
 d. *ajoo7en ohee-t* 'a lot of sand' (3.104.0334)
 much sand-ABS

No accusative form is attested. However, in the only examples where the form modifies an object, it appears as *ajoo7e*, as in (3).

- (3) TV *Anaange jaaw-ro ajoo7e toraana-t.*
 later grasp-FUT much money-ABS
 'Afterwards he will have lots of money.' (3.104.0169)

The quantifier *miit*7** 'few, a little' is attested only with mass nouns, as in (4).

- (4) TV *miit*7* paa-r*
 a.little water-ABS
 '[a] little water' (3.102.0357)

\$owoo 'another', in (5), probably belongs among the quantifiers. *\$owoo* is poorly attested.

- (5) TV *\$owoo worooj-t*
 another man-ABS
 'otro hombre (another man)' (3.102.0018)

Finally, the quantifier *jaawjo7* ‘just, entirely, nothing but, only’ is also poorly attested. Examples appear in (6).

- (6) TV a. *to~too-t* *jaawjo7*
 PL~rock-ABS nothing.but
 ‘puras piedras (nothing but rocks)’ (3.104.0545)
- b. *jaawjo7* *\$a~\$aaka-t*
 nothing.but PL~black.willow-ABS
 ‘puro sauzal hay (there’s nothing but willow)’ (3.104.0391)
- c. *xaaj-t\$* *jaawjo7*
 blood-ABS nothing.but
 ‘es pura sangre (it’s nothing but blood)’ (3.103.0187)

7.1.2. NUMERALS IN TONGVA NOUN PHRASES. TV numerals are attested with optional number agreement with nouns as shown in (1).

- (1) TV a. *wehee7-mo* *to~tooko-mo* ‘two women (acc.)’ (3.104.0167)
 two-PL.ACC PL~woman-PL.ACC
- b. *wehee7* *to~tooko-mo* ‘two women (acc.)’ (3.104.0095)
 two PL~woman-PL.ACC
- c. *wehee7-mo* *t\$aaj-ta-mo* ‘two sick people (acc.)’ (3.103.0166)
 two-PL.ACC sick.person-ABS-PL.ACC
- d. *wehee7* *t\$aaj-ta-mo* ‘two sick people (acc.)’ (3.104.0095)
 two sick.person-ABS-PL.ACC
- e. *paahi7-am* *wo\$ii7-a-m* ‘three dogs’ (3.104.0404)
 three-PL dog-AUG-PL
- f. *paahē7* *woroo~ro-t* ‘three men’ (3.104.0094)
 three man~PL-ABS

Agreement in number and syntactic case may be restricted to animate nouns. Harrington collected (2a) from José de los Santos Juncos. But, he reports, this was firmly

rejected by Felicitas Montaña, who gave (2b); Harrington noted “does not approve *-am* pl. at all.” (Harrington’s consultants also gave diverse forms for ‘star’ and its plurals.)

- (2) TV a. *wehee7-a-m* *\$e~\$eoo-ta-m* ‘two stars’ (3.104.0065)
 two-AUG-PL PL~star-ABS-PL
 b. *wehee7* *\$o~\$eoo-t* ‘two stars’ (3.104.0356)
 two PL~star-ABS

Agreement of numerals with adverbial cases on nouns is attested, as seen in (3).

- (3) TV a. *wehee7-nga* *ni-kwaa~kwa-nga* ‘under my two arms’ (3.104.0061)
 two-LOC 1SG-PL~armpit-LOC
 b. *paahe-nga* *\$eraaw-nga* ‘in three languages’ (3.103.0332)
 three-LOC language-LOC
 c. *wehee7-tar* *ne-maa~ma-tar* ‘with my two hands’ (3.104.0122)
 two-INS 1SG-PL~hand-INS

7.1.3. ADJECTIVES IN TONGVA NOUN PHRASES. TV adjectives can exhibit case and number agreement. Most examples are with animate nouns, but there are exceptions, as in (1e).

- (1) TV a. *kavaajo7-a* *raawro7-a* ‘white horse (acc.)’ (3.105.0105)
 horse-ACC white-ACC
 b. *t\$e~t\$iino7a-m* *kwa~kwaaro7-a-m* ‘little frogs’ (3.103.0397)
 PL~small-PL PL~frog-AUG-ABS
 c. *mo~mooha-m* *ep~iipja-ro-m* ‘bad shameless people’ (3.103.0784)
 PL~bad-PL PL~shameless.person-ABS-PL
 d. *te~riihve-m* *ta~raaxe-m* ‘good girls’ (3.103.0684)
 PL~good-PL PL~girl-PL
 e. *emuu-t-nga* *kii-nga* ‘new house’ (3.105.0148)
 new-ABS-LOC house-LOC

7.1.4. DEMONSTRATIVES IN TONGVA NOUN PHRASES. Demonstratives have case and number agreement with animate nouns.

- (1) TV a. *ejoomo = ma7 oee*
 1PL.PRO = AUG all
 ‘nosotros todos (all of us)’ (3.102.0548)
- b. *Oee = re = ve = 7 ejoom a-muu\$-ro-ta-m.*
 all = 1PL = (?) = IND 1PL.PRO ADJZ-beard-CHAR-ABS-PL
 ‘Todos nosotros somos barbones. (We are all bearded ones.)’ (3.104.0120)
- c. *T\$aavo-t = 7e wiitko-mo-ro tovaanga-r oee.*
 fire-ABS = IND end-CONT-FUT earth-ABS all
 ‘Se va a acabar el mundo (para?) lumbre. (The [whole] world will end with [for?] fire.)’ (3.104.0516)
 (Harrington was trying to collect an instrumental form of the word for ‘fire’.)

Noun-adjective and adjective-noun order both occur, as seen in (2).

- (2) TV a. *t\$enuuho7 taxaa-j* ‘muchacha chiquita (small girl)’ (3.104.0067)
 little girl-ABS
- b. *worooj-t t\$enuuho7* ‘hombre chapo (short man)’ (3.104.0357)
 man-ABS little
- c. *menee worooj-t eraaxpo7* ‘este viejo (this old man)’ (3.104.0067)
 PROX man-ABS old.man
- d. *xo7ooka7 worooj-t* ‘fuerte el hombre (strong man)’ (3.103.0680)
 strong man-ABS

7.1.6. DISCONTINUOUS NOUN PHRASES IN TONGVA. The corpus for TV contains only a hint of discontinuous constituency in noun phrases, as seen in (1). All the attestations involve quantifiers. However, it seems highly likely that TV was like the other Takic languages in this respect, permitting many kinds of discontinuity in noun phrases.

- (1) TV a. *Ajoo7en woo xa~xaaj-nga joaa-t.*
 much be.NFUT PL~mountain-LOC snow-ABS
 ‘There is a lot of snow in the mountains.’ (3.103.0622)

- b. *Ajoo7en ekwaa woo ke~keuu-r moom-nga.*
 many PROX be.NFUT PL~fish-ABS ocean-LOC
 ‘Hay muchos pescados aquí en el mar. (There are many fish in the sea here.)’
 (3.104.0083)
- c. *Oee = me wiitko-mo-k ta~raaxa-t.*
 all = 3PL end-CONT-NFUT PL~person-ABS
 ‘Toda la gente se acabaron. (All the people ended [died].)’ (3.103.0234)
- d. *Ma-moo = me7 t\$aaj-no-k oee.*
 DIST-PL = 3PL be.sick-NO-NFUT all
 ‘Aquéllos [están enfermos]. (They [all of them] are sick.)’ (3.104.0539)

7.2. SERRANO NOUN PHRASES.

7.2.1. QUANTIFIERS IN SERRANO NOUN PHRASES. Agreement in SE quantifiers depends on the item. *Puju* ‘all’, *kiti* ‘few’, *wyy^Rr* ‘much, many’ and *chikt\$* ‘nothing but, only’ are fixed forms that do not appear with case or number markers. These particles also serve as adverbs and at times it is an analytic challenge to determine if they are to be understood as being in construction with the noun or the verb. All of these can appear alone, constituting an entire noun phrase (as in (1g, 3e, 4i)). All of them are outer modifiers, which must be either first (or, if following the rest of the NP, last) in the noun phrase. All of them can be discontinuous with the remainder of the noun phrase.

We begin with *puju* ‘all’, in (1). It is final within the NP in (1a,b) and initial in (1c-f). The noun phrases in (1c,f) are discontinuous, with []_{NP(i)} ... []_{NP(ii)} indicating the separated parts. In (1g), *puju* is the only element in the noun phrase.

- (1) SE a. *Ajay7 uvia [ny-ñaa-m puju]_{NP} yym7-k-in yskweela7-p*
 then already 1SG-relative-PL all finish-K-CAUS school-LOC
man7~man7-k-t\$u7a-j = m.
 DISTR~go.home-K-MOT-IND = 3PL
 ‘Then when all my people got through at school they went home (to their respective homes).’

- b. *Ani* *ajay7* *aa-m* *taaqa-ta-m* [*paa-t\$-i* ***puju***]_{NP}
 and.then then DIST-PL person-ABS-PL water-ABS-ACC all
myy7-k-in.
 hide-K-CAUS
 ‘And then the people hid all the water.’
- c. *Amaj7* *wary7* *jangk* [***puju***]_{NP(i)} = *m* *katu7* [*taaqa-ta-m*
 now yes but all = 3PL cut person-ABS-PL
a-qo^R7-i7a-m.]_{NP(ii)}
 ADJZ-sick(pl.)-AUG-PL
 ‘Now [however] they operate on practically all sick people.’
 <‘Amay’ warrêngk puuyum katu’ taaqtam ‘aqer’yam.> (R&E 5)
- d. [***Puju*** *puu-ñu* *moo^R7-ch*]_{NP} *ryyw-y7-k*.
 all 3PL-possession sacred.bundle-ABS absent-RES-K
 ‘All their sacred bundle is gone.’
- e. *Kwyn* *yym7-k-in* [***puju*** *ama-j* *hukah-t-i.*]_{NP}
 QUOT.3SG > 3SG finish-K-CAUS all DIST-ACC deer-ABS-ACC
 ‘It finished [eating] the whole deer.’
- f. [***Puju***]_{NP(i)} = *my-7*¹ *yjy-j* [*acham* *cha-ñuu-j.*]_{NP(ii)}
 all = 3PL-PST steal-IND 1PL.PRO.GEN 1PL-possession-ACC
 ‘All our things were stolen.’
¹ Passive is expressed in SE by a non-referential 3PL subject.
- g. *Kwyny = my-7* [***puju***]_{NP} *paa-my7-k*.
 QUOT = 3PL-PST all water-die-K
 ‘They all apparently drowned.’
 <Kwenemu’ puuyu’ paamuk.> (R&E 22)

Puju is the base for *pujuuchav* ~ *pujuuchuv* ‘everywhere, all over’ and *pujuuhan* ‘everybody’, illustrated in (2).

- (2) SE a. *Pana7 = my-7* *xajku7-ja-m = kwyny = my-7* *oo^R\$an*
 that.way = 3PL-PST White.person-AUG-PL = QUOT = 3PL-PST write

taaq-ta-m ama-tunga7 pujuu-cha-v tum haii-p ty^Rva-v.
 person-ABS-PL DIST-INS all(?)-LOC DISTR INDF-LOC world-LOC
 ‘That is what White people have written about Indians all over the world.’
 <Pana’mu’ Xay’ku’yam kwenemu’ ‘uushan Taaqtam ‘amatunga’ puuyuchaf tum hayp tervav.>
 (R&E 23)

- b. *Wary7 jangk uviht yym7-k-t\$ pujuuhan.*
 yes but long.ago end-K-MOT.CMP everyone
 ‘But all of them disappeared long ago.’
 <Warrêngk ‘uviht ‘empkc puyuhan.> (R&E 283)

The particle *kiti* ‘a few, a little, slightly’ behaves much the same as *puju* ‘all’, above. In (3a,b) *kiti* follows the noun; in (3c,d,f) it precedes it.

- (3) SE a. [*Taaq-ta-m kiti*]_{NP} *pichuu-t\$u-i7-m.*
 person-ABS-PL a.few arrive-MOT-IPST-PL
 ‘A few people had just come.’
- b. [*Paa-t\$*]_{NP(i)} = *kwyn* [*kiti*]_{NP(ii)} *aa-p wyn.*
 water-ABS = QUOT.3SG a.little DIST-LOC be(inan.)
 ‘A little bit of water was there.’
- c. [*Kiti*]_{NP(i)} = *n* *maa~mt\$* [*pa-ta-j pyy-vyravk-t\$i*]_{NP(ii)}
 a.little = 1SG DUR~understand;hear PROX2-ABS-ACC 3PL-language-ACC
 ‘I understand a little bit of their language.’
 <Kitin mamc patay peewerrafktti’.> (R&E 668)
- d. *Pana7 ñaa-nkw ichu7-k-in [kiti puahka7-ti.]*_{NP}
 that.way do-SS.SEQ make-K-CAUS a.little money-ACC
 ‘So they would make a little money.’
 <Pana’ nyaawnk ‘ichu’kin kiti’ pwahkati’.> (R&E 526)

In (4), *kiti* is an adverb and appears alone as an apparent afterthought. It has to be understood as an adverb in (4a) because the verb *raakw* ‘eat, dine’ is intransitive.

- (4) SE a. *Raakwy-j = chymy-7 kiti.*
 eat-IND = 1PL > 3PL-PST a.little
 ‘We would eat a little.’
 <Rraaqwichemu’ kiti’.> (R&E 80)
- b. *Hakup mychani7, kiti.*
 very strong a.little
 ‘It [tea] was a little on the strong side.’
 <Hakup mecaani’, kiti’.> (R&E 350)

Some examples from Dorothy Ramón were have *kit7ik* ~ *kiti7ik*, as in (5).

- (5) SE *Tqa = my-7 kwa7-i kiti7ik myaa-t\$-i.*
 INFR = 3PL-PST eat-IND a.little moon-ABS-ACC
 ‘There must have been a partial eclipse of the moon.’
 <Txamu’ qwa’i kiti’ik méaaci’.> (R&E 125)

The quantifier *wyy^Rr(a-)* ‘much, many’ behaves like *puju* (in (1)) and *kiti* (in (3)). It can appear before or after the modified noun, and such phrases are often discontinuous. Examples (6b,h) show that this quantifier, even in a context where it refers to several, is not a grammatical plural. Example (6a) is an existential statement with a zero copula. The noun phrase in (6e) appears in three separated parts.

- (6) SE a. *A-puuch [hakup wyy^Rr]_{NP} Ø.*
 3SG-seed very much be
 ‘It has a lot of seeds (its seeds were very many).’
 <Apuc hakup weerr.> (R&E 201)
- b. *[Kii-ki-ch wyy^Rr]_{NP} qat\$.*
 PL~house-ABS much be
 ‘There were lots of houses.’
 <Kiikich weerr qac.> (R&E 268)
- c. *[Paa-t\$-i]_{NP(i)} pina-j [wyy^Rr.]_{NP(ii)}*
 water-ABS-ACC bring-IND much
 ‘He brought a lot of water.’

<Paachi' pinay weerr.> (R&E 73)

- d. *Nyy7 = n* *wii7wyn* [**wyy^Rr** *raakw-t\$-i.*]_{NP}
 1SG.PRO = 1SG > 3SG want much food-ABS-ACC
 'I want lots of food.'
- e. *Uviht* [*hakup-i*]_{NP(i)} *qaj = my-7* [*puchuk* *hiit-i*]_{NP(ii)} *ajay7*
 long.ago very-(?) NEG = 3PL-PST very INDF-ABS-ACC then
 [**wyy^Rr** *puahka7-ti.*]_{NP(iii)}
 much money-ACC
 'Long ago they did not earn a lot of money.'
 <'Uviht hakupi' qaymu' puchuk hiiti' 'ayay weerr pwahka'ti'.> (R&E 17)
- f. [**Wyy^Rra**]_{NP(i)} = *m* *ichu7-k-in* [*kwa7-i7aa-t\$-i.*]_{NP(ii)}
 much = 3PL > 3SG make;fix-K-CAUS eat-NMLZ-ABS-ACC
 'They fixed a lot of food.'
- g. *Qaj = n* [**wyy^Rr**]_{NP(i)} *jaanym* [*paa-t\$-i.*]_{NP(ii)}
 NEG = 1SG > 3SG much have water-ABS-ACC
 'I don't have much water.'
- h. *Kwyny = my-7* [**wyy^Rr**]_{NP(i)} *qoo^Rn* [*chaakwa-m*]_{NP(ii)} *waha7.*
 QUOT = 3PL > 3PL-PST much kill(pl.obj) chuckwalla-PL also;too
 'They used to kill a lot of chuckwallas, too.'
 <Kwenemu' weerr qeern chaaqwam waha'.> (R&E 86)
- i. *Qaj = n* [**wyy^Rr**]_{NP} *ynan.*
 NEG = 1SG > 3SG much know
 'I don't know much about it.'
 <Qayn weerr 'enan.> (R&E 114)

The quantifier *wyywy^Rht*, *wyywy^Rham* 'much, many', in (7), is an adjective (see 7.2.3) and has a conventional agreement pattern. This quantifier seems to be a reduplicated version of *wyy^Rr*, above with an instance of the Serran *r ~ h* alternation. The fact that *wyy^Rr(a-)* does not change *r* to *h* when its final vowel is retained under cliticization, cf. *wyy^Rra = m* 'much = they' in (3f) (not *^xwyy^Rha = m*), is paralleled in KI, cf. 4.3.3 (4). The

grammatically singular form, *wyywy^Rht*, collocates with a mass noun, ‘water’, in (7a), and with a distributive inanimate in (7b). With animate nouns the plural form *wyywy^Rham* is used.

- (7) SE a. **wyy~wy^Rh-t** *paa-t\$*
 PL~much-ABS water-ABS
 ‘lots of water’
- b. **Qa~qaii-ch** **wyy~wy^Rh-t** *chyve7k aa-p qat\$.*
 DISTR~hill-ABS PL~many-ABS indeed DIST-LOC be
 ‘There are a lot of hills there.’
 <Qa’qaaych wuuwert chevêk ‘ap qac.> (Ramón & Elliott 2000:790)
- c. *Puju = my-7* **wyy~wy^Rha-m** *na~naacha-m.*
 all = 3PL-PST PL~many-PL PL~girl-PL
 ‘In all, there were lots of girls (at the school).’
- d. *Ani = ny* *ma~majha7* **wyy~wy^Rha-m** *wahma^Rt\$ py-hpa7*
 and.then = 1SG > 3PL REP~bear.a.child PL~many-PL ten 3SG-LOC
wo^Rh.
 two
 ‘And then I had my (several) twelve children.’
- e. *Qa7-a7-aj* *taa-q-ta-m* **wyy~wy^Rha-m** *qat\$ haii-p*
 NEG-ADJZ-good person-ABS-PL PL~many-PL dwell;live INDF-LOC
ii-p.
 PROX-LOC
 ‘It isn’t good that lots of people live all over.’

The final quantifier that can appear with nouns, illustrated in (6), is *chikt\$* ‘nothing but, only, just’. This appears as *chikt* in Dorothy Ramón’s usage. Like the other SE quantifiers, it is a fixed form that exhibits no concord. It is documented only in the position before the noun. In (6d), *chikt* follows the demonstrative, rather than preceding it as the outermost element of the NP as is apparently required with the other quantifiers.

- (8) SE a. *Ivi7 a-\$a chikt\$ paa-t\$.*
 PROX 3SG-soup nothing.but water-ABS
 ‘This soup is all water.’
- b. *Chikt ama-j=ny-7 hii~hi-j.*
 only DIST-ACC = 1SG-PST DUR~see-IND
 ‘That is the only one that I saw [not the other one].’
 <Chikt ‘amay’nu’ hihii.> (R&E 275)
- c. *Amaj7 chikt ih-ip-k taaq-ta-m ii-m qat\$y7 ii-p.*
 now only DUR~mix-K person-ABS-PL PROX-PL be PROX-LOC
 ‘Today there are only these people of mixed blood here.’
 <‘Amay chikt ‘ih’ipk taaqtam ‘im qace’ ‘ip.> ‘Today there are just half-breeds here.’ (R&E 182)
- d. *Ii-m chikt ho^R~ho^Rmi-m ajay7=kwyny pajykja7 mi-j.*
 PROX-PL only PL~healer-PL then = QUOT.3PL over.there go-IND
 ‘Just shamans would go there.’
 <‘Im chikt herheermim ‘ayee’ kwana’ payika’ mih.> (R&E 200)

The quantifiers can also be modified by intensifiers, as in (9).

- (9) SE a. *Kwyn hakup puju a7-ajy-t\$ tum hii-t pyy-ki*
 QUOT.3SG much all ADJZ-good-ABS DISTR INDF-ABS 3PL-house
a7-ajy-t\$.
 ADJZ-good-ABS
 ‘They say it was something entirely beautiful, their beautiful house.’
 <Kwan hakup puuyu’ ‘a’ayec tum hiit peeki’ ‘a’ayec.> ‘It was an entirely beautiful house, that house of theirs.’ (R&E 268)
- b. *Ama7 cream wyn aa-p ama7 hakup wyy^Rr.*
 DIST cream be(inan.) DIST-LOC DIST very much
 ‘There was cream there, a whole lot of it.’
 <‘Ama’ cream wen ‘ap ‘ama’ hakup weerr.> ‘There was a lot of cream.’ (R&E 603)

Chikt ‘nothing but, just, only’ is attested modifying *wyy^{Rr}* ‘much, many’, as in (10) and modifying plural *wyywy^Rham*, as in (11).

- (10) SE a. *Chikt mymy7k-t\$ wyy^{Rr} wyn pyy-hav-pa pyy-wir-Ø.*
 just sickness-ABS much be 3PL-blanket-LOC 3PL-put.on-NMLZ
 ‘Those blankets that they wore were full of disease.’
 <Chikt memekch weerr wen peehafpa’ peewirr.> ‘Those blankets were full of disease.’ (R&E 608)

- b. *Puahka7-ti=m aje-j chikt wyy^{Rr} hawei7t.*
 money-ACC=3PL get;take(pl.obj.)-IND just much always
 ‘They always have plenty of money.’
 <Pwahka’tim ‘ayay chikt weerr hawayt.> (R&E 701)

- (11) SE *Chikt wyy~wy^Rha-m ho^R~hoo^Rmi-m=kwyny=my-7 aa-pia qat\$.*
 just PL-many-PL PL~shaman-PL=QUOT=3PL-PST DIST-LOC be
 ‘There were just lots of shamans at the time.’
 <Chikt wuuwerham herheermim kwenemu’ ‘apya’ qatt.> (R&E 5)

7.2.2. NUMERALS IN SERRANO NOUN PHRASES. Just like the quantifiers reviewed above, SE numerals show no case or number agreement within the noun phrase. Accusative case can be marked on *hoowkp* ‘one’ when it heads a noun phrase, as in (1a). But this is object marking simplex, not agreement. When *hoowkp* is followed by an accusative noun, it remains unmarked, as in (1b).

- (1) SE a. *Kwyn a-\$yka-nu7 hoowkp-i puka-j,*
 QUOT.3SG > 3SG 3SG-shoulder-ABL one-ACC drop-IND
huwa-t\$-i=kwyn ii-piu7 puka-j.
 other-ABS-ACC=QUOT.3SG > 3SG PROX-ABL drop-IND
 ‘She dropped one from her shoulder and dropped the other from this side.’
- b. *Hoowkp peesu7-ti=n jaanym.*
 one dollar-ACC=1SG > 3SG have;carry
 ‘I have one dollar.’

The other numerals are also unmarked for number and case agreement, as seen in (2).

- (2) SE a. *Ama7 aa-p wo^{Rh} pyy^R-ta^Rm-t*\$i* Wahi7-t*
 DIST DIST-LOC two 3PL-kneecap-ACC Coyote-GEN
py-jykja7 = kwyn toq^Rpi7.
 3SG-DAT = QUOT.3SG > 3SG gamble.with
 ‘There he gambled with their two kneecaps against Coyote.’
- b. *Mia = ta = vy-7 qaj naat*\$y7-k-t\$u7* ama-j paahi7 atuuk-i.*
 DUB = IRR = 3SG-PST NEG complete-K-MOT DIST-ACC three night-ACC
 ‘That didn’t complete those three nights.’
- c. *paahi7 wyt*\$y^Rha-m* pa^{Rh}~pa^Rhavi-m*
 three man-PL PL~supernaturally.powerful-PL
 ‘three holy men’
 <paahi’ wecerham par’parhervim > (R&E 140)

A numeral can take a plural suffix when it functions as an animate noun at the head of a noun phrase, as seen in (3). Again, like the accusative of *hoowkp* ‘one’ in (1a) above, this marking is not an agreement with a head noun.

- (3) SE *aa-m paahi7-m*
 DIST-PL three-PL
 ‘the three of them’

7.2.3. ADJECTIVES IN SERRANO NOUN PHRASES. Adjectives exhibit number and case agreement with both animate and inanimate nouns. An adjective can precede or follow the noun and, as is common in SE, the various parts of the noun phrase can be interrupted by other material, as in (1e). So far, no example of genitive-case adjective-and-noun combinations have been found.

- (1) SE a. singular
Amaj7 \$ive7k taamia-t a7-ajy-t\$.
 now;today indeed day;sun-ABS ADJZ-good-ABS
 ‘Today is a good day.’

b. plural

Kwyny = my-7 a-a7~ajy-m na~naacha-m.

QUOT = 3PL-PST ADJZ-PL~good-PL PL~girl-PL

‘They were good girls.’

c. plural with two adjectives and an indefinite demonstrative

Chikt ku7aa-m wyy~wy^Rha-m ty^Rna^R7nka-m hiñi-m Ø.

just;only maggot;insect-PL PL~many-PL black-PL INDF.PL-PL be

‘It was just a lot of black bugs of some kind.’

<Chikt ku’aan wuuwerham ternar’nkam xhinyim.> ‘There was just a whole lot of those black bugs.’ (R&E 270)

d. accusative

Kii-ch-i a-tiy^R7a-t\$-i = ny-7 kii-chu7.

house-ABS-ACC ADJZ-big-ABS-ACC = 1SG > 3SG-PST house-VBLZ

‘I built the Big House (the ceremonial structure).’

e. accusative with demonstrative and two modifiers (discontinuous)

Ama-j = kwyn pichuu-t\$u7 tymy-t-i vaa^Rch-ka-ti

DIST-ACC = QUOT.3SG > 3SG arrive.at-MOT rock-ABS-ACC flat-K.CHAR-ACC

a-tiy^R7a-t\$-i.

ADJZ-large-ABS-ACC

‘She came to that large flat rock.’

With locational cases the pattern is variable. Phrasal marking is quite common, as in (2), where *tiy^Rva-t\$ awaaki-jka7* ‘to dry land’ is not *tiy^Rva-jka7 awaaki-jka7*. The dative form *pajykja7* means roughly ‘over there’ and is semantically quite bleached from its literal meaning ‘to that place near you’ or ‘to that relatively nearby place’.

- (2) SE *Ta = ch pajykja7 je-ii7v tiy^Rva-t\$ a-waak-i-jka7.*
 IRR = 1PL > 2SG over.there take-FUT land-ABS ADJZ-dry-ADJZ-DAT
 ‘We’ll take you away to dry land.’

However, sometimes both adjective and noun (and demonstrative) may be marked for local case, as in (3).

(3) SE a. locative

Kiruh-k aa-p hiñi-p tymy-v namaaj7-v.

sink-K DIST-LOC INDF-LOC rock-LOC soft-LOC

‘They sank into the soft rock formations (of the primordial earth).’

< Kirruhk ‘ap xhinyip temev namay’f. > (R&E 74)

b. ablative

Aa-piu7 tiy^Rva-nu7 huwa-nu7 ani = m – kwynty = my-7

DIST-ABL land-ABL other-ABL and.then = 3PL QUOT = 3PL- PST

pyi7-t\$u7 Maarynga7-ja-m Maara7-p.

begin-MOT Morongo-AUG-PL Twentynine.Palms-LOC

‘[Having come] from that other land, then they – the Morongos started at Twentynine Palms.’

< ‘Apyu’ tervanu’ huwanu’ ‘anim kwenemu’ pëi’cu’ Maarrênga’yam Maarrap. > ‘Coming from that other planet they started over at *Maarra*’ (Twentynine Palms). (R&E 9)

c. dative

Ajay7 = kwynty = vy-7 ahkw pina-j amaj7-ka7

then = QUOT = 3SG > 3SG-PST to.here bring-IND new-DAT

tiy^Rva-jka7 pyy-nyp.

land-DAT 3PL-chief

‘Then their Lord brought them here to a new land.’

< ‘Ayee’ kwenevu’ ‘ahkw ‘ingwa’ pinay ‘amayka’ tervayka’ Peenep. > ‘Then their Lord brought them to a new world.’ (R&E 7)

d. dative

[Pajykja7]_{NP(i)} = m hwa^Rch-k huwa-jka7 qaii-jka7.

over.there = 3PL climb-K other-DAT mountain-DAT

‘They climb up to the other mountain (when they use this trail).’

< Payika’m hwarck huwayka’ qaayka’. > (R&E 344)

Examples are also found in which local case is expressed only on the final element, as in (4), whether noun (4a) or adjective (4b).

- (4) SE a. [*Puu-ñu* *tiy^Rva-v*]_{NP} [*wyy~wy^Rh-t*
 3PL-possession land-LOC PL~many-ABS
a-ta~tamo^Ra-v]_{NP} = *kwyny = my-7* *qat\$*.
 3SG(?) - PL~year-LOC = QUOT = 3PL-PST dwell;live;be
 ‘They had been living on their lands for many years.’
 <Peenyu’ tervav wuuwert ‘ata’tameraf kwenemu’ qatt. > (R&E 9)
- b. *Ani = kwyn* *ky-j*, “*Ama7* *Miingah-t*
 and.then = QUOT.3SG say-IND DIST Gopher-ABS
ky-j *kwyny = mynyt\$* *tav-iv* [*Kii-ch* *A-tiy^R7a-v*]_{NP}
 say-IND QUOT = 2PL > 1SG put-FUT house-ABS ADJZ-big-LOC
ajayp = kwyn *amaj7* *Tyyj-t* *pichyy-ka7*,” *ky-j = kwyn*.
 because = QUOT.3SG now Spirit-ABS arrive-IFUT say-IND = QUOT.3SG
 ‘Then he said, “Gopher said that you people should put me in the Big House
 because now Spirit is going to come.” ’

Also of interest in example (4b), is that in the indirect quote, there is a highly unusual occurrence of a future tense verb not with the irrealis modal *t(a)* but rather with the quotative.

The examples in (5) show some remarkable features. In (5a), the accusative noun phrase is discontinuous. In (5b), the verb governing the accusative is not overtly expressed. In (5c), the embedded side comment maintains the accusative form.

- (5) SE a. *Ahy^Rng-t-i = kwyny = my-7* *chyyva7 jaraa7n-ka-ti*.
 eagle-ABS-ACC = QUOT = 3PL > 3SG-PST follow white- ADJZ-ACC
 ‘They followed a white eagle.’
- b. *Maarynga7-ja-m* *mia = ta = my-7* *ama-j* *huwa-t\$-i*
 Morongo-AUG-PL DUB = IRR = 3PL > 3SG-PST DIST-ACC other-ABS-ACC
tiy^Rva-t\$-i Ø *ani = m* *tywan7-k-in*.
 land-ABS-ACC [VERB?] COMP = 3PL > 3SG name-K-CAUS
 ‘The Morongos seem to have [reached] that other land, which they named.’
 <Maarrênga’yam mitamu’ ‘amay huwa’tti’ terva’tti’ ‘anim tewa’nkin. > ‘The Serrano named
 this place when they came to this world.’ (R&E 7)

- c. *Ni-jy7* – *mana7-k-t\$u7a-j = chymy-7* *cha-kii-jka7* *kim*
 1SG-mother go.home-K-MOT-IND = 1PL-PST 1PL-house-DAT come
ani – *ni-naaw-t\$i* – *ama-j = tqa = vy-7* *ajyy7vy-t\$i* \emptyset –
 and.then 1SG-dress-ACC DIST-ACC = INFR = 3SG-PST last-ACC be
ny-hpa7 *wiha-j*.
 1SG-LOC put-IND
 ‘My mother – we went home and came to our house and then – my dress – the
 last one it must have been – she put it on me.’

There are few examples of constructions of adjectives with intensifiers, but the order is always intensifier–adjective, as seen in (6).

- (6) SE a. *Hakup a7-aj ii-p* \emptyset .
 very ADJZ-good PROX-LOC be
 ‘It’s very good here.’
- b. *Qaj puchuk mitaa-7i7* \emptyset .
 not very tall-ADJZ be
 ‘They (the hills) were not very high.’
- c. *Hakup = vy-7 hihivy-ka7 ama7 taaq-t* \emptyset .
 very = 3SG-PST jolly-ADJZ DIST person-ABS be
 ‘He was a very jolly person.’

7.2.4. DEMONSTRATIVES IN SERRANO NOUN PHRASES. Demonstratives in SE agree in case and number with the nouns they modify, as in (1). Note that accusative is marked on plural objects only in construction with a plural subject.

- (1) SE a. nominative agreement
Ama7 kuchi7 kiti a-tiy^R7a7 ivi-ch py-hpa7 \emptyset .
 DIST dog slightly ADJZ-big PROX-GEN 3SG-LOC be
 ‘That dog is a little bigger than this one.’

b. accusative agreement

Ahqajy-j = kwyn *ama-j* *añii7ch-ti*.
 babysit-IND = QUOT.3SG > 3SG DIST-ACC little.one-ACC
 ‘She took care of the baby.’

c. genitive agreement

Ama-ch *nyy^Rh-t-y7* *a-jy7 = kwyn* *aa-p* *tu7a-j*.
 DIST-GEN woman-ABS-GEN 3SG-mother = QUOT.3SG DIST-LOC pound-IND
 ‘The woman’s mother was pounding there.’

d. accusative and genitive agreements

Kwyn *jaa7* *ama-j* *a-wy^Rt\$yhav-ti* *aa-ngkwa7*
 QUOT.3SG > 3SG take DIST-ACC 3SG-husband-ACC DIST-DAT
ama-ch *tymy-t* *py-jykja7*.
 DIST-GEN rock-ABS-GEN 3SG-DAT
 ‘She took her husband (that husband of hers) there to that rock.’

e. plural agreement

Aa-m *ahy^Rnga-m = kwyny* *qo^R7a-j*.
 DIST-PL eagle-PL = QUOT.3PL die(pl.)-IND
 ‘The eagles died.’

f. accusative plural agreement

Ajay7 = kwyny = my *kuuhan* *aa-m* *huwa-m-i*
 then = QUOT = 3PL > 3PL call;invite DIST-PL other-PL-ACC
taa-q-ta-m-i *kima-qa-m* *aa-ngkwa7* *raakw-ka-m*
 person-ABS-PL-ACC come-IFUT-PL DIST-DAT eat(intr)-IFUT-PL
kwa7-qa-m *hii-t-i* *hami-j*.
 eat(tr)-IFUT-PL INDF-ABS-ACC INDF.HUMAN-ACC
 ‘Then they invited the other people to come there to dine and to eat something.’

g. genitive plural agreement

Kwyny *aa-p* *qat\$* *aa-m-y7* *na~naa^R-m-y7*
 QUOT.3PL DIST-LOC dwell;be DIST-PL-GEN PL~young.woman-PL-GEN
py-my-v.

3-PL-LOC

‘They stayed there at those young women’s place.’

- h. accusative agreement with contained genitive

Kwyny = *vy-7* *tiy^Rha-t\$u7* ***ama-j*** *naash-t* ***a-na7n-i***
 QUOT = 3SG > 3SG-PST tell-MOT DIST-ACC girl-ABS.GEN 3SG-father-ACC
 ‘She went and told the girl’s father.’

- i. accusative and genitive agreement with discontinuous accusative

Ama-j = *tqa* = *vy-7* *ama-ch* *wyt\$i7vy^R-t\$-y7*
 DIST-ACC = INFR = 3SG > 3SG-PST DIST-GEN man-ABS-GEN
a-\$uunga-j *chi\$t\$k*.
 3SG-man’s.daughter-ACC like-K
 ‘He must have liked that old man’s daughter (the daughter of the old man).’

In (2), *iip* ‘here’ and *tiy^Rvav* ‘on earth’ agree, as in (1g), above, where *aap* ‘there’ agrees with *pymyv* ‘at their place’. In examples like these, *iip* and *aap* appear to be specifiers (Hale & Selkirk 1987) within the locational phrase.

- (2) SE locative agreement

Kwyny *puju* *tum* *hi-t-i* *ichu7-k-in* ***ii-p***
 QUOT.3PL > 3SG all DISTR INDF-ABS-ACC make-K-CAUS PROX-LOC
tiy^Rva-v.
 land;earth-LOC
 ‘They made everything here on earth.’

Example (3), with ablative *aapiu7 yskweela7nu7* ‘from that school’, offers further support for the hypothesis that the locational forms of demonstratives may function as specifiers within the locational phrase.

- (3) SE ablative agreement

Ii-m *ajay7* *aa-pia* *puju* *wajaq-ko-w* ***aa-piu7*** ***yskweela7-nu7***,
 PROX-PL then DIST-LOC all exit(pl.)-K-DS DIST-ABL school-ABL
uvia *hiñi-m* *yh-ynan-qa-m*.
 already INDF-PL PL-know-CHAR-PL

‘By the time they graduated from that school, they were pretty well educated.’

<‘Im ‘ayee’ ‘api’a’ puuyu’ waya’xqow ‘apyu’ skwêela’nu’, ‘uvya’ xhinyim ‘eh’enanqam.> (R&E 772)

While SE demonstratives almost always precede the nouns they modify, as seen in (1), example (4) provides a rare exception.

- (4) SE *Ta = mt\$ wahi7-ti pata-j wiaan-iv pajykja7*
 IRR = 2PL > 3SG coyote-ACC PROX2-ACC send-FUT over.there
tiy^Rva-t\$ a-hyyvi-jka7.
 land;world-ABS.GEN 3SG-edge-DAT
 ‘You should send Coyote over to the edge of the world.’

Another possible example of a demonstrative following its head noun is given in (5). However, it seems more likely that the demonstrative *ama7*, rather than being postposed to *nyy^Rht* ‘woman’, is to be understood as introducing the following material, as suggested in the alternative translation. In (5), the syntax got so complicated that the pronominal AUX, *vyny7*, had to be repeated.

- (5) SE *Ani = vyny-7 nyy^Rh-t ama7 aa-p raakw-ia-v*
 and.then = 3SG > 1SG-PST woman-ABS DIST DIST-LOC dine-place-LOC
qat\$-i7a-t\$ pu~puhcha7-i7a-t\$, vyny-7 pichy-j.
 be;dwel-NMLZ-ABS DUR~take.care.of-NMLZ-ABS 3SG > 1SG-PST arrive-IND
 ‘And then that woman, the dining room matron (the one that is there in the dining room and takes care of things), she came to me.’

7.2.5. DISCONTINUOUS NOUN PHRASES IN SERRANO. SE noun phrases provide many examples of discontinuity, already seen in some of the examples above, including the most common type, where a phrase is interrupted by the auxiliary complex, as in (1). This kind of example shows that position of the auxiliary does not provide a test for clause constituency in the Takic languages; the auxiliary can follow the first constituent, whether a phrasal constituent or the first word, as in (1).

- (1) SE *Ama7 = kwyn paa-t\$ oo^Rvai7t waak.*
 DIST = QUOT.3SG water-ABS right.away dry.up

‘The water dried up right away.’

Data on SE also provide examples of many other types of discontinuity, as seen in (2), where diverse grammatical elements interrupt the constituents of noun phrases.

- (2) SE a. **Ama7** = *kwyn* *aa-p* **wahi7** *maaj-k*.
 DIST = QUOT.3SG DIST-LOC coyote pass-K
 ‘The coyote passed by there.’
- b. *Kwyny* **ama-j** *ajay7* **qaii-ch-i** *\$arar-k-in*
 QUOT.3PL DIST-ACC then mountain-ABS-ACC divide-K-CAUS
a-huuna-v.
 center;middle;heart-LOC
 ‘Then they made the mountain split open (in the middle).’
- c. *Aa-m* *taaq-ta-m = kwyny* **ama-j** *tiy^Rmq* **wyt\$y^R\$-t\$-i**
 DIST-PL person-ABS-PL = QUOT.3PL > 3SG DIST-ACC be.afraid man-ABS-ACC
 ‘Those people were afraid of that man.’
- d. *Kwyny = vy-7* **hakup** **atiy^R7a-t\$** *qat\$* **kii-ch**, *pyy-ki* \emptyset .
 QUOT = 3SG-PST very big-ABS be house-ABS 3PL-house be
 ‘There was a big house there, [it was] their house.’
 <‘Kwenevu’ *hakup* ‘ater’ac *qac* *kiich*, *peeki*’. > (R&E 268)
- e. *Amaj7* **hakup** **a-tih~tiy^R7a-t\$** *aa-p* *qat\$* **kii~ki-ch**
 now;today very ADJZ-PL~big-ABS DIST-LOC be PL~house-ABS
amaj7.
 now;today
 ‘Today there are a lot of big houses there.’
 <‘Amay’ *hakup* ‘ater’ta’ac ‘ap *qac* *kiikich* *amay*’. > (R&E 338)
- f. *Ama7* *ni* **a-kaaru7-ti** *maqa-j* **amaj-t-i** \emptyset .
 DIST COMP 3SG-wagon-ACC give-IND new-ABS-ACC be
 ‘He was the one who gave him a new wagon.’
 <‘Ama’ *ni*’ ‘akaarru’ti’ *maqay* ‘amayti’. > ‘He gave him a new wagon. (R&E 316)

- g. [Kiti]_{NP(i)} = *chymy-7* *ichu7-k-in* ***puahka-ti***
 a.little = 1PL > 3SG-PST make-K-CAUS money-ACC
 ‘We made a little money.’
 <Kiti’chemu’ ichu’kin pwahka’ti’. > (R&E 108)
- h. ***Ama7 = kwyny = vy-7*** *pyy-chyva7* *pichy-j* ***Juaakajam***⁸⁴
 DIST = QUOT = 3SG-PST 3PL-with arrive-IND Chemehuevi
ty^Rchin-t
 young.man-ABS
 ‘The Chemehuevi youth came with them.’

An interesting type of discontinuity involves locational phrases, where an element labeled “locational specifier” by Hale and Selkirk (1987) in their study of Tohono O’odham, a related Uto-Aztecan language, is separated from the remainder of the locational phrase. SE examples of this type are seen in (3). In (3a), the locational phrase is continuous, to illustrate more clearly the role of the locational specifier. The locational specifier in these cases is roughly equivalent to the determiners and demonstratives in other types of noun phrases. These cases are especially problematic because, as Mikkelsen (2014) has argued, since locationals have no agreement marked in the verb, they cannot be adjuncts and thus should not have free word order or discontinuity.

- (3) SE a. ***Pajykja7*** ***qaii-ch*** ***a-tyhpi-jka7*** *qat\$* *ny-paar*.
 over.there mountain-ABS.GEN 3SG-behind-DAT be;dwel 1SG-Older
 ‘Over there behind the mountain lives my older brother.’
- b. ***Pajykja7 = kwyn*** *py-mia7* *ja7-i* ***a-kii-jka7***.
 over.there = QUOT.3SG 3SG-COM run-IND 3SG-house-DAT
 ‘Away she ran with him to her house.’

⁸⁴ The word ‘Chemehuevi’ (*Juaa-ka-ja-m* [plains-CHAR-AUG-PL]) is from Southern Numic, meaning ‘plains people’, cf. Southern Paiute *juakanty* <yua-’-xa-nti> ‘being level, desert’ (Sapir 1930:727). It is plural in form but is used for both singular and plural. This pattern is common among Serran gentilics (see 15.2.2).

- c. *Pajykja7 = mia = ta = my-7* *paa-t\$* *a-hyyvi-jka7* *mi-j,*
 over.there = DUB = IRR = 3PL-PST water-ABS.GEN 3SG-edge-DAT go-IND
apuu-jka7.
 east-DAT
 ‘They were going along toward the edge of the water, to the east.’
- d. *Kwyny* *aa-p* *qat\$* *moo^Rmo^Rho^R7* *qaii-ch*
 QUOT.3PL DIST-LOC be anyway mountain-ABS.GEN
a-kupiaa-va7.
 3SG-top-LOC
 ‘They sat there on the mountain top anyway.’

Only one example of a discontinuous possessive phrase has been encountered in SE, seen in (4). However, the discontinuity here is accompanied by inversion, which is also unique to this example.

- (4) SE *A-huun-i* *jaanym* *chyy-nyp.*
 3SG-heart-ACC carry;have 1PL-chief.GEN
 ‘He carries our Lord’s heart.’
 < ‘Ahuuni’ yaanam Cheenep. > (R&E 833)

7.3. KITANEMUK NOUN PHRASES.

7.3.1. QUANTIFIERS IN KITANEMUK NOUN PHRASES. KI quantifiers behave like those in SE in lacking number or case agreement. The KI data are scanty, but it is probably safe to assume that at least the quantifiers *puju* ‘all’ and *wyrr* ‘many’ exhibit the same grammatical patterns as in SE. However, *tsipk* ‘a little’ is not attested with nouns. Instead, it appears as an intensifying adverb, modifying verbs and adjectives. Its opposite, *putsuk* ‘very much, very’ exhibits the same behavior, as does SE *puchuk*. No equivalents to SE *kiti* ‘a little, a few’ or *chikt\$* ‘just, only, nothing but’ are documented.

As in SE, the quantifier *puju* ‘all’ in (1) does not exhibit number or case agreement.

- (1) KI a. **puju** *kiika-m*
 all captain-PL
 ‘all the captains’ (3.100.0387)
- b. **puju** *my-niuu-j*
 all 2PL-possession-ACC
 ‘all your things’ (3.98.0447)

While the SE quantifier *wyy^{Rr}* ‘much, many’ relates to adjectival *wyywy^{Rht}*, *wyywy^{Rham}*, as seen in 7.2.1 (4) and (5) above, the related form in KI, *wyyr*, has no corresponding adjective attested. Like SE *wyy^{Rr}*, it exhibits no number or case agreement. The example in (2d) is the only attestation of a negative with a quantifier in the KI corpus.

- (2) KI a. **wyyr** *akikitam-ja-m*
 many Kitanemuk-AUG-PL
 ‘munchos jaminates ¹ (many Kitanemuk people)’ (3.98.0065)
¹ *Jaminate* is a loan into local Spanish based on *hamina-t* ‘how is it?’, a conventional greeting in the Serran languages. It is rather like calling the French the *bonjour* people.
- b. *A-paa7* **wyyr** *hwiski-ta-j*.
 3SG-drink much whiskey-ABS-ACC
 ‘He drank a lot of whiskey.’ (3.98.0446)
- c. **wyyr** *myymy-t*
 many oceans-ABS
 ‘munchos mares (many oceans)’ (3.100.0526)
- d. *Ni-hiu* *tsipk* *naw* **wyyr**.
 1SG-see a.little NEG much
 ‘I see a little bit, not much.’ (3.98.0467)
- e. *Pa-p* *a-kim* *paa-t\$* **wyyr**.
 PROX2-LOC 3SG-come water-ABS much
 ‘De allá vino muncha agua. (A lot of water came from there.)’ (3.100.0853)

7.3.2. NUMERALS IN KITANEMUK NOUN PHRASES. As in SE, numerals in KI are not marked for number or case agreement with nouns. Further, Anderton (1988:205) states that the accusative suffix does not appear in noun phrases with numerals. She illustrates this point with (1a). The examples in (1b,c) are similar.

(1) KI a. *A-mak = yvyn a-pano mahat\$.*
 3SG-give = 3SG > 1SG 3SG-egg five
 ‘He gave me five eggs.’ (3.98.0268)

b. *Ni-hiu woh ngaaty7.*
 1SG-see two cat
 ‘I saw two cats.’ (3.100.0828)

c. *Ni-hiu hawkup a7-amu7a.¹*
 1SG-see one 3SG-rib
 ‘I saw one of his ribs.’ (3.98.0362)

¹ Anderton (1988:168) states that the augment *-7a* on a root *amu-* is peculiar to this word. It may correspond to the suffix *-7a* of CU and CA which appears on possessed nouns; see 6.2.3. and 14.2.

However the prohibition is variable, as shown by the examples in (2), where accusative case is marked on the noun following the numeral.

(2) KI a. *hawkup pat\$uka-j*
 one man-ACC
 ‘one man (acc.)’ (Anderton 1988:305, from C. H. Merriam)

b. *A-hwan~hwahn-yk hawkup a-tsaka-j.*
 3SG-REP~jump-K.INTR one 3SG-leg-ACC
 ‘He hops on one leg.’ (3.98.0214)

7.3.3. ADJECTIVES IN KITANEMUK NOUN PHRASES. Case and number agreement with adjectives is variable. Anderton (1988) illustrates variability with the examples in (1a-d). Example (1a) shows non-agreement: the noun is marked for accusative while the

adjective is not. Harrington's note on this example is "can not get inf. to put words together, separates them, hence no syntax." This suggests that the adjective was pronounced as an afterthought, but in fact it is unclear if KI has syntactic-case agreement with true adjectives; the only examples involve nouns with other nouns (see examples in (4)). (1b) shows plural agreement. (1c) shows number agreement with a reduplicated adjective of the k-class, while in (1d) the k-class adjective does not reduplicate. (1e) shows a reduplicated adjective of a different class.

- (1) KI a. *Ni-hiu naaha-t\$a-j numua-t\$.*
 1SG-see girl-ABS-ACC good-ABS
 'I saw a good girl.' (3.100.0760; Anderton 1988:133)
- b. *me~meta-m kaaj-m*
 PL~tall-PL mountain-PL
 'sierras muy altas (high mountains)' (3.100.0641)
- c. *ngaaty7-ja-m kwa\$yp~kwa\$yp-k*
 cat-AUG-PL PL~red-K.ADJZ
 'the cats are red (red cats)' (3.100.0840)
- d. *ty~tymy-t kwa\$yp-k*
 PL~rock-ABS red-K.ADJZ
 'the stones are red (red rocks)' (3.100.0840)
- e. *a-nuh~nusi7 taaka-ta-m*
 ADJZ-PL~small person-ABS-PL
 'enanos (dwarfs)' (3.99.0665)

One difficulty with some of these examples, which appear in isolation, is that they may be verbless sentences rather than noun phrases. Harrington's glosses for (1c,d) are 'the cats are red' and 'the rocks are red'. However, these could equally well be noun phrases. Note that for (2), with a structure identical to that in (1c,d), Harrington's translation is simply 'black cats'.

- (2) KI *ngaaty7-ja-m jo7v~jovo7-k*
 cat-AUG-PL PL~black-K.ADJZ
 ‘black cats’ (3.100.0841)

Although (1a) has a noun with an accusative suffix, KI noun phrases with adjectives display the same tendency seen in 7.3.2 with numerals, in that even animate nouns in such phrases need not be marked for accusative, as in (3). Indeed, examples of this type seem to be in the majority. Harrington used the “I saw” frame throughout his work to collect accusative-case forms, and an accusative suffix is nearly always present if the noun is by itself, but not if it appears in a more complex NP. In summary, if either a numeral or an adjective is present in a noun phrase, KI speakers apparently preferred not to mark accusative case.

- (3) KI a. *Ny7 ni-hiu jovo7-k taaka-t.*
 1SG.PRO 1SG-see black-K.ADJZ person-ABS
 ‘I saw a black man.’ (3.100.0554)
- b. *Ny7 ni-hiu a-ty7a tymy-t.*
 1SG.PRO 1SG-see ADJZ-big stone-ABS
 ‘I saw a big stone.’ (3.100.0556)
- c. *Ny7 ni-hiu a-tyh~ty7a ty~tymy-t.*
 1SG.PRO 1SG-see ADJZ-PL~big PL~stone-ABS
 ‘I saw big stones.’ (3.100.0557)

The cases in the KI corpus of apparent noun-adjective accusative agreement may not involve true adjectives, but noun-noun combinations. Examples appear in (4). Regarding (4a), Harrington gives *ni-majr paahaat\$* ‘my oldest child’, where *paahaat\$* ‘oldest’ looks like a noun with absolutive suffix *-t\$*, lost in the plural, as is usual. For (4b), *paat\$uk* ‘man’ is a \emptyset class noun such that *-tay* is the accusative suffix. In (4c), *uvihat* is also translated as ‘an ancestor’, and *mukit* in (4d) appears several times in the sense ‘dead person.’

- (4) KI a. *Ni-hiu my-ma~majha-my-j paaha-my-j.*
 1SG-see 2SG-PL~child-PL-ACC oldest-PL-ACC
 ‘I saw your oldest children.’ (3.98.0366; Anderton 1988:133)
- b. *Ni-hiu my-majha-j paat\$uka-taj.*
 1SG-see 2SG-child-ACC man-ACC
 ‘I saw your son.’ (3.98.0369)
- c. *Ni-7yn putsuk tsitsi7akin-i-tsa-j uviha-ta-j.*
 1SG-know well tell.story-NMLZ-ABS-ACC old-ABS-ACC
 ‘Yo se un cuento viejo. (I know well an old story.)’ (3.98.0464)
- d. *Pyy-wakaa7=mat kiikah-ta-j muuk-i-ta-j.*
 3PL-make.fiesta=FUT lineage.chief-ABS-ACC die-NMLZ-ABS-ACC
 ‘Están festejando a un capitán difunto. (They are going to do a funeral ceremony for a deceased head of a lineage.)’ (3.98.0447)

A single example, in (5), shows that adjectives can agree with their nouns for local case.

- (5) KI *a-ty7a-vea arahu-pea*
 ADJZ-big-LOC cradle-LOC
 ‘in the big cradle’ (3.98.0224)

7.3.4. DEMONSTRATIVES IN KITANEMUK NOUN PHRASES. Demonstratives agree in case and number with nouns. Examples appear in (1).

- (1) KI a. *ivi-j a-nuutsi-taj*
 PROX-ACC ADJZ-little.boy-ACC
 ‘this little boy (acc.)’ (3.98.0466) (cf. *anuutsi7* ‘baby’)
- b. *ii-m ty~tymy-t*
 PROX-PL PL~rock-ABS
 ‘these rocks’ (3.100.0580)

- c. *ii-my-j* *ty~tymy-ta-j*
 PROX-PL-ACC PL~rock-ABS-ACC
 ‘these rocks (acc.)’ (3.100.0584)
- d. *ama-j* *paat\$uka-taj*
 DIST-ACC man-ACC
 ‘that man (acc.)’ (3.98.0465)
- e. *aa-my-j* *ty~tymy-ta-j*
 DIST-PL-ACC PL~rock-ABS-ACC
 ‘those rocks (acc.)’ (3.100.0584)
- f. *ii-m* *pa~paat\$uka-m*
 PROX-PL PL~man-PL
 ‘these men’ (3.100.0636)
- g. *pa-ta* *ngaaty7*
 PROX2-ABS cat
 ‘this cat’ (3.100.0760)
- h. *pa-j* *tymy-ta-j*
 PROX2-ACC rock-ABS-ACC
 ‘this rock’ (3.100.0584)
- i. *pa-my-j* *ngaaty7-ja-my-j*
 PROX2-PL-ACC cat-AUG-PL-ACC
 ‘these cats (acc.)’ (3.100.0580)

There are exceptions to number agreement with inanimate nouns, as in (2). These examples should be compared with those of (1), where both (1b) and (2a) mean the same thing as do (1e) and (2b), though (1e) is accusative while (2b) is nominative.

- (2) KI a. *ivi7* *ty~tymy-t*
 PROX PL~rock-ABS
 ‘these rocks’ (3.100.0580) [compare (1b) above]

- b. *ama7 ty~tymy-t*
 DIST PL~rock-ABS
 ‘those rocks’ (3.100.0754) [compare (1e) above]

7.3.5. WORD ORDER IN KITANEMUK NOUN PHRASES. Quantifiers, numerals, and demonstratives usually appear before their noun. The opposite order is attested, as in (1). Examples such as (1a) probably should be understood as copula sentences. In examples such as (1b-d), the quantifier or numeral may be an afterthought.

- (1) KI a. *A-tsa~tsaka wyyr Ø.*
 3SG-PL~leg many be
 ‘many legs (centipede)’ [= ‘Its legs are many.’] (3.99.0294)
- d. *Ni-hiu tsipk naw wyyr.*
 1SG-see a.little NEG much
 ‘I see a little bit, not much.’ (3.98.0467) [= 7.3.1 (2d)]
- c. *Pa-p a-kim paa-t\$ wyyr.*
 PROX2-LOC 3SG-come water-ABS much
 ‘De allá vino muncha agua. (A lot of water came from there.)’ (3.100.0853)
 [= 7.3.1 (2e)]
- d. *A-mak=yvyn a-pano mahat\$.*
 3SG-give=3SG>1SG 3SG-egg five
 ‘He gave me five eggs.’ (3.98.0268) [= 7.3.2 (1a)]

Order is variable in noun phrases with adjectives, as seen in (2).

- (2) KI a. *ngaaty7 jovo7-k*
 cat black-K.ADJZ
 ‘black cat’ (3.100.0553)

- b. *jovo7-k taaka-t*
 black-K.ADJZ man-ABS
 ‘a Negro’ (3.100.0554)
- c. *tymy-t a-ty7a*
 rock-ABS ADJZ-big
 ‘big rock’ (3.98.0313)
- d. *a-ty7a kii-ts*
 ADJZ-big house-ABS
 ‘big house’ (3.98.0144)

Adjectives can appear with the intensifier *waravk*, which also appears as an intensifier with verbs. Either order of adjective and intensifier is attested, as seen in (3).

- (3) KI a. **Waravk** *ky\$a7 ni-ha-havy, jovo7- k.*
 very bad 1SG-PL~clothes black-K.ADJZ
 ‘My clothes are very dirty.’ (3.98.0387)
- b. *Ki\$a7 waravk ni-kat\$y7.*
 bad very 1SG-condition
 ‘I have very bad luck.’ (3.98.0465)

7.3.6. DISCONTINUOUS NOUN PHRASES IN KITANEMUK. Even the limited corpus of KI attests to several of the usual kinds of discontinuous constituents, so we assume that such structures were common, as they are in the other Tadic languages. Examples appear in (1).

- (1) KI a. **Woh** *ni7-yn hungu-ts.*
 two 1SG-know language-ABS
 ‘I know two languages.’ (3.100.0364)
- b. *Naw pa-j ni7-yn punita7-ihwa7-ta-j.*
 NEG PROX2-ACC 1SG-know play.game-INSTR-ABS-ACC
 ‘I don’t know this game.’ (3.99.0589)

- c. *Wyyr ni-hiu kut\$aa-t.*
 much 1SG-see wood-ABS
 ‘I saw a lot of wood.’ (3.100.0625)
- d. *Puju=vy-n a7-ajn a-nih~niw.*
 all = 3SG > 1SG 3SG-show 3SG-PL~possession
 ‘He showed me all his things.’ (3.98.0380)

7.4. COASTAL CUPAN NOUN PHRASES.

7.4.1. QUANTIFIERS AND NUMERALS IN COASTAL CUPAN NOUN PHRASES. While in the Serran languages case-number agreement with quantifiers is very restricted, in LU and AC all of the quantifiers can exhibit number and case agreement with both syntactic and adverbial cases. Examples appear below for LU *choo7un* ‘all’, *mujuk* ‘many’, *hik* ‘several’, *awoo* ‘some’, and *wehmal* ‘a few’. The AC equivalents are *choo7an*, *mujja7k*, *hik*, and *awo*, with an AC equivalent of LU *wehmal* not found.

Choo7un and *mujuk* are both attested with local suffixes. In (1a), *choo7un* appears with plural inflection in construction with a plural noun. In (1b,c) it appears with local-case suffixes in agreement with the modified noun. (1d) is an example where the plural, *choo7unum*, is in construction with an inflected postposition, *chaamik* ‘to us’, there being no local-case marking on animates. Examples (1e,f) show accusative usages, with animate plural accusative agreement in (1e) and inanimate non-agreement for accusative in (1f). In (1f) the plural is unmarked, a pattern that is frequent with inanimate nouns. In AC, Harrington lists a plural *choo7anam* (3.123.0460), but he does not show it in construction with a noun.

- (1) LU a. *hinge7ma-lu-m choo7unu-m*
 boy-PL all-PL
 ‘all the boys’ (H&E 7)
- b. *choo7un-ngaj hii-ngaj*
 all-ABL thing-ABL
 ‘in everything’ (H&E 2)

- c. *choo7un-man hii-man no-mix-man*
 all-COM thing-COM 1SG-possession-COM
 ‘with all my things’ (H&E 1237)
- d. *choo7unu-m chaam-ik*
 all-PL 1PL.PRO-DAT
 ‘to all of us’ (H&E 126)
- e. *choo7un-m-i atáx-m-i*
 all-PL-ACC person-PL-ACC
 ‘all the people (acc.)’ (H&E 1269)
- f. *Huni7i-k poom-ik pom-heelax-i choo7un.*
 show;teach-USIT 3PL-DAT 3PL-song-ACC all
 ‘He taught them all their songs.’ (H&E 235)

Examples of agreement involving LU *mujuk(u)* ‘many’ appear in (2).

- (2) LU a. *mujuku-m ja7áj-chu-m*
 many-PL man-ABS-PL
 ‘many men’ (H&E 24)
- b. *xwáj-a-an-t-i mujuk-i*
 white-INTR-ADJZ-ABS-ACC many-ACC
 ‘many white ones (acc.)’ (Elliott 1999)
- c. *qaw-la-m-i mujuk-m-i*
 woodrat-ABS-PL-ACC many-PL-ACC
 ‘many woodrats (acc.)’ (H&E 31)

In (3) we see phrasal marking with LU *mujuk(u)* and AC *mujja7k*: the quantifier is marked for case or plural but the associated inanimate noun is not.

- (3) a. LU *ku-t mujuk-i*
 fire-ABS much-ACC

‘a large fire (acc.)’ (Elliott 1999)

b. LU *mujuku-m kwii-la*
 many-PL acorn-ABS
 ‘many acorns’ (H&E 189)

c. LU *mujuk-i naachaxani-sh*
 much-ACC food-ABS
 ‘a lot of food (acc.)’ (H&E 1245)

d. AC *Noo=n ok-x-lat no-kii-nga mujja7k-nga teme-t.*
 1SG.PRO=1SG stay(sg.anim)-COM 1SG-house-LOC many-LOC day-ABS
 ‘Yo voy a quedar muchos días en mi casa. (I am going to stay in my house for many days.’ (3.123.0370)

Though LU *mujuk(u)* can take a local-case suffix, as in (4), we have not found any example of it where it modifies a local-case noun.

(4) LU *mujuku-nga*
 many-LOC
 ‘in many places (H&E 472)

The AC data include only singular nouns with *mujja7k*, but it attests a plural accusative (2i), again showing that such constructions exist and presumably can modify a plural accusative noun within a noun phrase.

(5) AC *Mujja7k-m-a chape77a.*
 many-PL-ACC hit.IMP
 ‘¡Pega muchos! (Hit many!)’ (3.123.0443)

LU (and probably AC) nouns for units of time (day, week, year) are never pluralized, and neither are quantifiers with these nouns, as in (6a). The contrast with the same element, *hikchum* ‘several’, with an ordinary inanimate plural noun, is seen in (6c). The only AC example with this element is in (6d). LU *hik* is also a question word meaning

‘how much, how many?’; the AC equivalent has an absolutive suffix and a plural form, *hikch*, *hikcham* ‘how much, how many’ (3.123.0570).

- (6) LU a. ***hik*** *timé-t*
 several day-ABS
 ‘several days’ (H&E 92)
- b. ***hik-nga*** *tawpa-nga*
 several-LOC year-LOC
 ‘a few years, several years’ (Elliott 1999)
- c. ***hik-chu-m*** *pom-kaarú-ki-m*
 several-ABS-PL 3PL-car-PSD-PL
 ‘several cars’ (H&E 243)
- AC d. *Noo = n* *toow-qat* ***hik-ch-m-a***
 1SG.PRO = 1SG see-RPST several-ABS-PL-ACC
 ‘Unos cuántos vide. (I saw several.)’ (3.123.0570)

The quantifier *awoo* ‘some’, seen in (7) also means ‘other, different’. It exhibits number agreement, but the local-case form *awoonga* means ‘differently’ (Elliott 1999:149). An apparent *-i* adverbial form, *awó-j poné-j* means ‘sometimes’.

- (7) LU a. ***awoo-m*** *amaaju-m* *po~pluva-m*
 some-PL child-PL PL~good-PL
 ‘some good kids’ (H&E 1)
- b. ***awoo*** *av-a-a-t*
 some red-INTR-ADJZ-ABS
 ‘some of that red stuff’ (H&E 35)
- AC c. ***awo-m*** *ano-m*
 other-PL coyote-PL
 ‘otros coyotes (other coyotes)’ (3.123.0391)

- d. *Noo = n* *toow-q* *awo-j.*
 1SG.PRO = 1SG look.at-NFUT.SG other-ACC
 ‘Estoy mirando el otro. (I am looking at the other one’. (3.123.0391)
- e. *Chaa7am7 = cha* *toow-on* *awoo-m-a.*
 1PL.PRO = 1PL look.at-NFUT.PL other-PL-ACC
 ‘We are looking at the other ones.’ (3.123.0391)

Documentation of LU *wehmal* ‘a little, a few’ as a quantifier, rather than in its adverbial form *wehmali* ‘(do) a little’, is sparse. (8a) shows it with phrasal marking with an inanimate noun. The example in (8b) is from the writing of Pablo Tac from the 1830s. Tac translated the phrase as ‘dos osos (two bears)’, not as ‘unos pocos osos (a few bears)’. Setting aside Tac’s translation, the form is that of 20th-century *wehmal* ‘few’, and attests that plural suffixes are acceptable with this item. Tac’s notes have a different plural of the numeral *weh* ‘two’, giving *wehum* ‘two (pl.)’. This is instead of *wehchum*, the form found in Kroeber and Grace (1960:230) and Elliott (1999). *Weh-ma-l* is literally ‘two-diminutive-ABS’. No cognate of *wehmal* is attested in AC.

- (8) LU a. *wehma-l-i* *paa-l*
 a.little-ABS-ACC water-ABS.ACC
 ‘a little water (acc.)’ (H&E 38)
- b. *wehma-l-m-i* *hunwu-t-m-i*
 few-ABS-PL-ACC bear-ABS-PL-ACC
 ‘two bears (acc.)’ (K&G 235)
- c. *wehma-lu-m* *carros*
 few-ABS-PL wagons
 ‘a few wagons’ (H&E 656)

Both *mujuk* and *wehmal* have adverbial forms, *mujuki* (also *mujukkun*) and *wehmali* respectively. *Wehmali* might be confused with accusative constructions (however, (8a) is definitely an object noun phrase). Kroeber and Grace (1960:124) remark that “-i, added to adjectival stems, makes them adverbial in the English translation. It may possibly be

the objective case; but if so, the idiom is not clear.” (We have identified only a few examples of this pattern with adjectives; see 13.14.4.) This adverbial *-i* is not, however, restricted to adjectival stems. (9a) is an interesting example where the suffix makes an entire noun phrase adverbial. In (9b), with a slightly different structure, both elements have *-i*. (9c) shows yet another pattern for such adverbials. However, there is no adverbializing suffix with AC *choo7an* in (9d).

- (9) LU a. *Yi7y-i-vichu-qu\$ po-7eek [choo7un timee-t]-i.*
 play-TR-DES-PST.IPFV 3SG-only all day-ABS-ADVZ
 ‘We only wanted to play all day long.’ (H&E 21)
- b. *Tap-a-an ataax-u-m choo7un-i timee-t-i.*
 end-INTR-PRS.PL person-AUG-PL all-ADVZ day-ABS-ADVZ
 ‘People die every day.’ (H&E 53)
- c. *Pa7 awó-j timé-t wam7 hati7-ja.*
 then other-ADVZ day-ABS already go-INTR.PST
 ‘And so the next day he went.’ (H&E 1280)
- AC d. *Ni-jk \$ull-a choo7an junn-a-nak.*
 1SG-DAT put-TR.IMP all join-TR-SS
 ‘Put the food on my plate todo junto (all on same plate). (Put the food on my plate [lit. for me] joining it all together.)’ (3.123.0505)

The LU quantifier *mujuk(u)* ‘many’ can appear with intensifiers, as seen in (10). The intensifier *ahújaxi* (10a,b) has a complex structure, derived from an intransitive verb *huj-ax* ‘surpass’ with initial *a-*, found in adjectival derivations, and final *-i*, which derives adverbs in LU. For simplicity we do not gloss this internal structure. Both orders of these elements are attested. The intensifier *mas* in (10c) is from Spanish.

- (10) LU a. *ahújaxi mujuk*
 very many
 ‘a whole lot’ (H&E 279)

- b. *Mujuku-m ahújaxi ataax-u-m qal-wun.*
 many-PL very person-AUG-PL be-PRS.PL
 ‘There are too many people.’ (H&E 985)
- c. *Mas mujuku-m toow-chu-m Ø.*
 very many-PL spirit-ABS-PL be
 ‘There are a great many spirits.’ (H&E 57)

7.4.2. NUMERALS IN COASTAL CUPAN NOUN PHRASES. Numerals exhibit case and number agreement in LU, including with local cases on inanimate nouns, as in (9a,b). While the suffix in (9b) is the ablative directional, the idiom translates to English as ‘in one day (something was accomplished)’.

Recall that animate nouns do not appear with oblique-case suffixes, but instead express oblique case with postpositional and relational noun constructions. The plurals of *weh* ‘two’ and *paahay* ‘three’ are irregular, as seen in (1d,e,f,h), while *wasaaʔ* ‘four’ and *mahaar* ‘five’ have regular plurals, *wasaaʔum* and *mahaarum* respectively. (See 15.1 for discussion of the morphology of numerals.)

- (1) LU a. *supúl-nga kii-nga*
 one-LOC house-LOC
 ‘on one (the same) house’ (Elliott 1999)
- b. *supúl-ngay temee-ngay*
 one-ABL day-ABL
 ‘in one day’ (Elliott 1999:826)
- c. *weh kulaawu-t taa~talv-i-sh*
 two stick-ABS PL~long-ADJZ-ABS
 ‘two long sticks’ (H&E 42)
- d. *weh-chu-m no-peetu-m*
 two-ABS-PL 1SG-YoBr-PL
 ‘my two younger brothers’ (H&E 109)

- e. *weh-chu-m-i* *too\$axi-tu-m-i*
 two-ABS-PL-ACC cottontail.rabbit-ABS-PL-ACC
 ‘two cottontail rabbits (acc.)’ (Hyde 1971:165)
- f. *paa-chu-m-i* *ataax-m-i*
 three-ABS-PL-ACC person-PL-ACC
 ‘three people (acc.)’ (Elliott 1999:663)
- g. *paahaj* *temé-t*
 three day-ABS
 ‘three days’ (H&E 275)
- h. *paa-chu-m-i* *wasá7-m-i* *too\$ax-tu-m-i*
 three-ABS-PL-ACC four-PL-ACC cottontail-ABS-PL-ACC
 ‘three or four cottontail rabbits (acc.)’ (H&E 224)

For AC, *sopul* ‘one’ is attested with accusative nouns but consistently is not itself marked for accusative, as in (2). Other numerals appear only with nominatives, like *paahay* ‘three’ in (2d). Two plurals of *mahaar* ‘five’ are attested: *mahaaram* and *mamháaram*. The second form, with reduplication, may be a distributive.

- (2) AC a. *Noo=n* *wann-a7-q* ***sopul*** *nechma-l-a*.
 1SG.PRO = 1SG scare-TR-NFUT.SG one old.woman-ABS-ACC
 ‘Yo espanté a una vieja. (I scared one old woman.)’ (3.123.0300)
- b. *Maxann-a7* ***sopul*** *pun7-x-an7-t-a* *kwamoo-l-a*.
 give-TR.IMP one round-TR-ADJZ-ABS-ACC fisherman-ABS-ACC
 ‘¡Dale un peso al pescador! (Give one peso to the fisherman!)’ (3.123.0482)
- c. *Noo=n* *po-j* *\$oomna-q* ***sopul*** *pun7-x-an7-t-a*.
 1SG.PRO = 1SG 3SG.PRO-ACC beg-NFUT.SG one round-TR-ADJZ-ABS-ACC
 ‘Yo le pedí un peso, I begged a dollar from him.’ (3.123.0493)

- d. *Paahaj too-t won7-q.*
 three rock-ABS lie-NFUT.SG
 ‘Tres piedras están. (Three rocks are there.)’ (3.123.0629)

7.4.3. ADJECTIVES IN COASTAL CUPAN NOUN PHRASES. Adjectives with animate nouns in LU and AC exhibit syntactic case and number agreement, as illustrated in (1).

- (1) LU a. *ja7áj-chu-m-i paa~pa-vi-chu-m-i*
 man-ABS-PL-ACC PL~drink-ABST-ABS-PL-ACC
 ‘thirsty men (acc.)’ (Hyde 1971:1500)
- b. *jo-t-i juvát-a-an-t-i kujxingi-ch-i*
 big-ABS-ACC black-INTR-ADJZ-ABS-ACC spider-ABS-ACC
 ‘big black spider (acc.)’ (Hyde 1971:214)
- AC c. *mujja7ka-m \$avoo-ta-m*
 much-PL cold-ABS-PL
 ‘muchos inviernos (many winters)’ (3.123.0503)
- d. *Noo = n toow-q qeeng-ch-m[-a]*¹
 1SG.PRO = 1SG look.at-NFUT.SG ground.squirrel-ABS-PL[-ACC]
a-piisa-v-m-a.
 ADJZ-rot-(?)-PL-ACC
 ‘I am looking at the rotten squirrels.’ (3.123.0525)
- ¹ Harrington wrote <qéentʃm ’apisavma>, with no accusative suffix on <qéentʃm>. This is probably an error since, as we understand it, the syncope of the absolutive vowel – *qeeng-cham[-a]* > *qeeng-ch-m[-a]* – requires the presence of a following syllable. The sequence -a a- between the words may have been mistranscribed.
- e. *Tovla-q amajja7ma-l-a iiv-t-a.*
 bear.a.child-PRS.SG baby-ABS-ACC new-ABS-ACC
 ‘La mujer parió un chiquito nuevo. (She gave birth to a new baby.)’
 (3.123.0450)

With inanimate nouns, as shown in (2), adjectives appear with the full range of adverbial-case suffixes, and these exhibit agreement.

- (2) LU a. *too-t* *\$aqi-wun-t-i*
stone-ABS.ACC be.hot-ADJZ-ABS-ACC
‘hot stones (acc.)’ (Elliott 1999:841)
- b. *po-kii-nga* *jawáiw-i-nga*
3SG-house-LOC beautiful.INTR-ADJZ-LOC
‘in his beautiful house’ (Hyde 1971:150)
- c. *joo-nga* *neqpi-nga* *hamuu-law-i-nga*
big-LOC war-LOC first-IMPRS-ADJZ-LOC
‘in the Great War (WWI)’ (H&E 7)
- d. *juvát-a-an-ik* *too-jk*
black-INTR-ADJZ-DAT rock-DAT
‘to the black rock’ (Hyde 1971:214)
- e. *too-tal* *joo-tal*
rock-INS big-INS
‘with a big rock’ (H&E 372)
- AC f. *Ngorx-ma* *moj-nga* *iivt-nga* *hange7ma-la-m.*
run(pl.)-HAB moon-LOC new-LOC young.man-ABS-PL
‘Los muchachos corren en luna nueva. (The young men run around at the
new moon.)’ (3.122.0223)

There is an example of phrasal marking of accusative with an inanimate noun in AC, seen in (3).

- (3) AC *Hak-ann = an7* *too-t* *wim-x-an7-t-a.*
lift-CAUS = FUT stone-LOC be.heavy-TR-ADJZ-ABS-ACC
‘Yo voy a levantar la piedra pesada. (I am going to lift the heavy stone.)’
(3.122.0212)

Adjectives can be modified by intensifiers, as in (4). Both possible orders are attested for LU. The only example for AC appears in (4c), illustrating a formation for ‘very’ formed with a same-subject construction on the verb *pomm-a* ‘fill up’ that is unique in Cupan, where the other languages all have a derivation of this intensifier from *huj* ‘surpass’.

(4) LU a. **Ahújaxi** *chaqwísh~qwich-u-m* *mij-qu\$*.
 very poor~ADJZ-AUG-PL be-PST.IPFV
 ‘They were very poor.’ (H&E 245)

b. *Cham-7o7nan* *puloov* **ahújaxi** *mij-qu\$*.
 1PL-friend good very be-PST.IPFV
 ‘He was a very good friend of ours.’ (H&E 214)

AC c. **pomm-a-nak** *jawajwa-ch*
 pack.full-TR-SS pretty-ABS
 ‘muy bonito (very pretty)’ (3.123.0547)

7.4.4. DEMONSTRATIVES AND DETERMINERS IN COASTAL CUPAN NOUN PHRASES. Demonstratives and determiners also agree in case and number with nouns, as in (1) (for LU) and (2) (for AC). The LU demonstrative *oonu* ‘that’ has a special plural form *oonumum* (1b,c), which looks like it might be doubly marked.

(1) LU a. *iví-m* *ataaxu-m*
 PROX-PL person-AUG-PL
 ‘these people’ (Elliott 1999:194)

b. *oonu-mu-m* *cham-kaamaju-m*
 PROX2-PL(?) -PL 1PL-child-PL
 ‘those children of ours’ (Elliott 1999:368)

c. *oonu-mu-m-i* *na~natma-l-m-i* *po~pluv-m-i*
 PROX2-PL(?) -PL-ACC PL~girl-ABS-PL-ACC PL~good-PL-ACC
 ‘those good girls’ (Elliott 1999:210)

d. *wunaa-l-i* *ja7áa-ch-i*

DIST-ABS-ACC man-ACC
 ‘that man (acc.)’ (H&E 1291)

e. *wuní-jk to-jk*
 DIST-DAT rock-DAT
 ‘to that rock’ (Elliott 1999)

f. *puneej-i anáma-t-i*
 DET.ANIM-ACC fish-ABS-ACC
 ‘that fish (acc.)’ (H&E 1272)

g. *hunwu-tu-m-i punee-m-i*
 bear-ABS-PL-ACC DET.ANIM-PL-ACC
 ‘the bears (acc.)’ (Hyde 1971:170)

(2) AC a. *evii-j \$ongwaa-l-a*
 PROX-ACC woman-ABS-ACC
 ‘this woman (acc.)’ (3.123.0614)

b. *evii-m-a \$u~\$nga-l-m-a*
 PROX-PL-ACC PL~woman-ABS-PL-ACC
 ‘these women (acc.)’ (3.123.0614)

c. *oona7p-a je7ii-ch-a*
 PROX2-ACC man-ABS-ACC
 ‘that man (acc.)’ (3.123.0622)

d. *oona7p-m-a \$u~\$nga-l-m-a*
 PROX2-PL-ACC PL~woman-ABS-PL-ACC
 ‘those women (acc.)’ (3.123.0622)

e. *wanaa-l-a je7ii-ch-a*
 DIST-ABS-ACC man-ABS-ACC
 ‘that man (acc.)’ (3.123.0614)

- f. *wanaa-l-m-a* *\$u~\$nga-l-m-a*
 DIST-ABS-PL-ACC PL~woman-ABS-PL-ACC
 ‘those women (acc.)’ (3.123.0614)

Accusative marking is optional with inanimate nouns in LU and AC, as seen in (3). In LU when these appear with quantifiers, adjectives or demonstratives, the modifying element must have an accusative suffix, as seen in (3a-c). However, AC has one example without such a suffix, in (3e). This may be a disfluency, but it might signal another minor grammatical difference between AC and LU. In (3c), the Spanish word *hueso* ‘bone’ remains uninflected.

- (3) LU a. *tavúlvu-ch-i* *kulaawu-t*
 tall-ABS-ACC tree-ABS
 ‘tall tree (acc.)’ (H&E 1273)
- b. *tukma-l* *xwaaj-a-an-t-i*
 basket-ABS white-INTR-ADJZ-ABS-ACC
 ‘white basket (acc.)’ (Hyde 1971:152)
- c. *puné-j* *hueso*
 DET.INAN-ACC bone
 ‘the bone (acc.)’ (H&E 1287)
- AC d. *wanaa-l-m-a* *too-t*
 DIST-ABS-PL-ACC stone-ABS
 ‘those stones (acc.)’ (3.123.0622)
- e. *Noo = n* *toow-q* *wanaa-l* *too-t.*
 1SG.PRO = 1SG look.at-NFUT.SG DIST-ABS stone-ABS
 ‘I am looking at that stone.’ (3.123.0622)

In the Harrington field notes, the sentence in (3e) is followed by the word ‘but’, and the contrasting sentence with an animate noun in (4), suggesting that all elements of a noun phrase headed by an animate noun must exhibit agreement.

- (4) AC *Noo=n toow-q wanaa-l-a je7ii-ch-a.*
 1SG.PRO = 1SG look.at-NFUT.SG DIST-ABS-ACC man-ABS-ACC
 ‘I am looking at that man.’ (3.123.0622)

AC can also mark case on the determiner, leaving the inanimate noun unmarked.

- (5) AC *Chakkw-a-q po-j aja-l.*
 grasp-TR-NFUT.SG DET-ACC poison.oak-ABS
 ‘Lo [sic] agarró la yedra. (He grasped the poison oak.)’ (3.122.0103)

There are few examples in the AC materials of demonstratives with local cases. Most of them are used as locational adverbs, as in (6a). When exhibiting local-case agreement, the inflected demonstratives appear to be functioning as locational specifiers, as in (6b,c) (and in 7.4.6 (3d)).

- (6) AC a. *Oom=\$a hii-ngaj ngee-q ave-j7?*
 2SG.PRO = Q what-ABL go.away-NFUT.SG PROX-ABL
 ‘¿Porqué te fuites de aquí? (Why did you leave here?)’ (3.123.0564)
- b. *ave-j7 av-axx-o-ngaj paa-ngaj*
 PROX-ABL PROX-side-(?)-ABL water-ABL
 ‘este lado del río (this side of the river)’ (3.123.0422)
 Expressions regarding “sides” are typically in the ablative. (Could *avaxxo-ngaj* be based on Spanish *abajo*?)
- c. *wona7 mom-nga*
 DIST.LOC ocean-LOC
 ‘allá en la playa (there on the beach)’ (3.123.0543)

7.4.5. WORD ORDER IN COASTAL CUPAN NOUN PHRASES. In LU and AC, all elements except numerals exhibit free word order in noun phrases. Numerals always precede their nouns. However, as seen in the examples above, quantifiers, adjectives, and demonstratives can appear with nouns in either order.

7.4.6. DISCONTINUOUS NOUN PHRASES IN COASTAL CUPAN. Discontinuous constituents are richly attested in LU, with all of the types identified in other Takic languages present there. The data for AC consists mainly of single words or short phrases, or sentences that are only two or three words long, so there is very little information on discontinuity. An example of an unusual discontinuity in a possessive phrase appears in (2e).

Example (1) shows a constituent interrupted only by a second-position clitic.

- (1) LU **Mujuk-i=n hi-sh toow-q i-va7.**
 many-ACC=1SG INDF-ACC.ABS see-PRS.SG PROX-LOC
 ‘I have seen many things here.’ (K&G 199.9)

The examples in (2) show noun phrases interrupted by verbs.

- (2) LU a. **Mujuku-m qal-qu\$ pom-7aachu-m kabaju-m.**
 many-PL be-PST.IPFV 3PL-animal-PL horse-PL
 ‘They had many horses.’ (H&E 24)
- b. **Wehma-l-i pujaamangaj \$iil-i-munaa paa-l**
 a.little-ABS-ACC always pour-TR-MOVING.IMP water-ABS-ACC
iit-a-an-t-i a\$ún-nga.
 cold-INTR-ADJZ-ABS-ACC that-LOC
 ‘You have to keep pouring a little bit of cold water over that.’ (H&E 39)
- c. **Kiika-tu-m qal-wun ataax-u-m.**
 little-ABS-PL be-PRS.PL person-AUG-PL
 ‘The little people do exist.’ (H&E 191)
- d. **Po7 Ano7 o-7ash-m-i ujootu-qat gajiina-m-i Ø.**
 DET Coyote 2SG-animal-PL-ACC steal-RPST chicken-PL-ACC be
 ‘It’s Coyote who is stealing your chickens.’ (K&G 192.34)
- AC e. **Wona7-l qaj naqma-q pa-teela-j.**
 DIST-ABS NEG hear-NFUT.SG 3sg-speech-ACC
 ‘No se oye su habla de aquél. (That person’s speech is unintelligible.)’
 (3.122.0197)

Discontinuity in locational phrases, where locational specifiers are separated from the rest of the locational phrase, is illustrated in (3).

- (3) LU a. *Mujuku-m a\$ún-nga qal-qu\$ pom-pee-nga.*
 many-PL DIST.INAN-LOC be; dwell-PST.IPFV 3PL-bed-LOC
 ‘Many people were living in their bed.’ (H&E 1290)
- b. *Om wihaaj-a-an wuní-jk Julian-ngaj San Felipe-jk.*
 2SG.PRO go.down-INTR-FUT DIST-DAT Julian-ABL San Felipe-DAT
 ‘You will go down from Julian by way of San Felipe.’ (H&E 910)
- AC c. *Po-\$un-nga nave-q kun-nga.*
 3SG-inside-LOC be.in.ANIM-PRS.SG sack-LOC
 ‘Está adentro del saco. (It is inside the sack.)’ (3.123.0325)
- d. *Wona7 qaal too-nga.*
 DIST.LOC be rock-LOC
 ‘Allá está en la piedra/las piedras. (It is there on the rock/among the rocks.)’
 (3.123.0629)

7.5. CUPEÑO NOUN PHRASES.

7.5.1. QUANTIFIERS AND NUMERALS IN CUPEÑO NOUN PHRASES. CU quantifiers and numerals, like those of LU, agree with the nouns that they modify in case and number. This agreement is required in the case of animate nouns, illustrated in (1). The quantifier *pytá7ama* ‘all’, has the irregular plural *pytá7a-nim*, as seen in (1a). The ending *-nim* syncopates to *-nm-*, as in (1b). The irregular plural suffix *-nim* also appears in the examples below with *pyyxwyn* ‘nothing but’ (1e), *awísma* ‘a few’ (1g), and *-na7akwa* ‘woman’s child’ (1c). (It is also attested in CA, cf. 7.6.1 (4).) The adverb corresponding to *myt7i-sh* ‘many’ is *mylyn* ‘very’ or ‘very much’.

- (1) CU a. *pytá7a-nim pymym icháaywin-wyn-ti-m*
 all-PL DET.PL make-NMLZ-ABS-PL

‘all of the artisans’

- b. *py-ny7y-m-i* *pytá7a-nm-i*
 3SG-relative-PL-ACC all-PL-ACC
 ‘all his relatives (acc.)’
- c. *myt7i-chi-m* *pym-na7akwa-nim*
 many-ABS-PL 3PL-woman’s.child-PL
 ‘many of their children’
- d. *myt7i-sh-m-i* *a\$wy-t-m-i*
 many-ABS-PL-ACC eagle-ABS-PL-ACC
 ‘many eagles (acc.)’
- e. *pyyxwy-nim* *sivuj-lja-m*
 nothing.but-PL worm-ABS-PL
 ‘nothing but worms’
- f. *awísma7a-j* *y-kwa7-í-j*
 a.little-ACC 2SG-eat-NMLZ-ACC
 ‘a little of your food (acc.)’
- g. *nyy7y-ti-m* *qaj* *awísma-nim*
 basket-ABS-PL NEG few-PL
 ‘many baskets’

With inanimate nouns, phrasal marking, appearing only on modifying elements but not on the noun, is common. Examples are seen in (2).

- (2) CU a. *pytá7ama-j* *savá-l*
 all-ACC grass-ABS
 ‘all the grass (acc.)’

- b. *pytá7am-i axwý-ch-i ajxa-t-i ki-sh*
 all-ACC DIST-ABS-ACC old-ABS-ACC house-ABS
 ‘all those old houses (acc.)’
- c. *ki-sh myt7i-ka*
 house-ABS many-DAT
 ‘to many houses’

The quantifier *myt7ish* ‘many’ is attested with intensifiers, in either order, as in (3). The intensifier *atíra* is an interesting puzzle. It is probably from Spanish *al tiro* ‘immediately, right away’. However, a loan blend with a form, not attested, cognate with SE *atíy^R7a7*, KI *aty7a* may be involved.

- (3) CU a. *axwý-chi-m myt7i-chi-m atíra atáxa-m*
 DIST-ABS-PL many-ABS-PL very person-PL
 ‘those very many people’
- b. *atíra myt7i-sh jywá-l*
 very much-ABS salt-ABS
 ‘too much salt’

Agreement with numerals is illustrated in (4). The numerals *wih* ‘two’, *pah* ‘three’, and *wichiw* ‘four’ form plurals with an absolutive *-ch*; the plural of *wih* ‘two’ is often heard as *wishcham*. In LU, only ‘two’ and ‘three’ have these irregular plurals, as seen in 7.4.1 (7) above. The CU word for ‘five’, *nymakwáninga*, literally ‘my hand [which is] half [of ten]’ (see 15.15), does not appear with any suffixes (the Spanish loan *siínko* ‘five’ was used in all contexts except counting).

- (4) CU a. *wih-cha-m myn pah-chi-m ny~n-ti-m*
 two-ABS-PL or three-ABS-PL PL~chief-ABS-PL
 ‘two or three chiefs’
- b. *mukíkma-lji-m wih-cha-m a-kú~kulji7i-m*
 bird-ABS-PL two-ABS-PL ADJZ-PL~little-PL
 ‘two little birds’

- c. *py-na7akwa-nim* *wichi-cha-m*
 3SG-woman's.child-PL four-ABS-PL
 'her four children'

One example has been found of agreement between noun and numeral with a local case (5a). This may be optional or it may depend on the numeral following the noun; compare (5a) and (5b).

- (5) CU a. *Iví-ta* *pal=ny* *wyn-í-qat* *ny7y-t-nga* *pah-nga.*
 PROX-LOC water=1SG.ERG put-ABLAUT-IFUT basket-ABS-LOC three-LOC
 'I'm going to put water in three baskets.'
- b. *Iví-ta* *pal=ny* *wyn-í-qat* *wih* *ny7y-t-nga.*
 PROX-LOC water=1SG.ERG put-ABLAUT-IFUT two basket-ABS-LOC
 'I'm going to put water in two baskets.'

A construction with numerals with the suffix *-nga7aw* 'on' means the given number of places, e.g. *wih-nga7aw* 'in two places', *wichiw-nga7aw* 'in four places'. The numeral *sulit* 'one' does not appear with this suffix. With ordinary quantifiers, the suffix is simply *-7aw*: *myti-7aw* 'in many places', *awísma-7aw* 'in a few places'.

7.5.2. ADJECTIVES, DEMONSTRATIVES, AND DETERMINERS IN CUPEÑO NOUN PHRASES. Adjectives and demonstratives agree in case and number with the nouns that they modify.

- (1) CU a. *axwý-sh-m-i* *atáx-m-i* *xway-ax-wyn-ti-m-i*
 DIST-ABS-PL-ACC person-PL-ACC white-INTR-NMLZ-ABS-PL-ACC
 'those White men'
- b. *iví-mi-chi* *a~7-wyl-vy-mi-chi*
 PROX-PL-INS PL~ADJ-grow.up-REAL.SUB-PL-INS
 'about these elders'

- c. *ki-nga* *a-7ajni-nga*
house-LOC PL~big-LOC
‘in the big houses’
- d. *savá-t-7aw* *xwavi7i-nga7aw*
grass-ABS-LOC green-LOC
‘on the green grass’
- e. *supul-ika* *tymá-t-ika*
other-DAT land-ABS-DAT
‘to another land’

As with the quantifiers, with inanimate nouns case and number marking is optional on the noun, but it must appear on the modifiers, including adjectives and demonstratives, if any are present (2). This is slightly different from LU, where accusative case is required on a modifier of an inanimate noun that is an object, but number can remain unmarked throughout the noun phrase. Note that the singular accusative of ‘all’ is variable, appearing sometimes as *pytá7ama-j*, sometimes as *pytá7am-i*. CU color terms are usually reduplicated, as in (2c,d); this does not seem to encode plurality, distribution, or any other of the common meanings of leftward reduplication; we regard this as a “stative” reduplication.

- (2) CU a. *traapu7* *a-7ajxa-t*
rag PL~old-ABS
‘old rags’
- b. *ki-sh* *aj7ani-ka*
house-ABS big-DAT
‘to the big house’
- c. *savá-l* *xwavi~xwávi-7aw*
grass-ABS ST~green-LOC
‘on the green grass’

- d. *iví-j savá-l xwavi~xwávi-ch-i*
 PROX-ACC grass-ABS ST~green-ABS-ACC
 ‘this green grass (acc.)’

The neutral determiner/demonstrative, *py7*, *pym(y)m*, is never marked for case. These elements can only appear before the noun they modify. In (3e) we see an apparent case of a determiner following a numeral, but in this case *py7* is probably a focalizing particle on *sulit* ‘one’ and not a determiner on *peskaadu7* ‘fish’.

- (3) CU a. *py7 a\$wy-t-i*
 DET eagle-ABS-ACC
 ‘the eagle (acc.)’
- b. *pym pulín-cha-m-i*
 DET.PL baby-ABS-PL-ACC
 ‘the babies (acc.)’
- c. *py7 Sherman-ika*
 DET the.Sherman.Institute-DAT
 ‘to the Sherman Institute’
- d. *py7-y sulit xway-ax-wyny-t*
 DET-CF one-ABS white-INTR-NMLZ-ABS
 ‘the white one’
- e. *sulit py7 peskaadu7*
 one-ABS FOC fish
 ‘one fish (among other fish)’ (a particular fish is being singled out)

7.5.3 WORD ORDER AND DISCONTINUOUS CONSTITUENCY IN CUPEÑO NOUN PHRASES. Word order is free with quantifiers and numerals. Noun-adjective order is much commoner than the opposite order. Adjective-noun order does occur, as in (1), with an expressively lengthened vowel, but it usually seems to have an emphatic reading. Demonstratives are always initial in complex noun phrases.

- (1) CU *akú:::lji waxachi-lj*
sma:::ll frog-ABS
 ‘a little bitty frog’ (Coyote and Flood 024)

Intensifying adverbs with adjectives are attested only in intensifier–adjective order. They can be discontinuous with their quantifiers, as in (2d). These appear in comparative constructions like those in (2a,b); (2a) shows the comparative with the postpositional construction *py-vy* (~ *py-vy7aw*) ‘over it, above it’, while (2b) uses the borrowed Spanish comparative adverb *maas* ‘more’. Interestingly, the CU cognate to the LU adverb *ahújaxi* is an adjective, *ahújaxaj*, seen in (2c,d), formed on the verb *huj-(j)ax* ‘surpass, exceed’.

- (2) CU a. *atíra ylyl7i-sh py-vy amáj py7-y kavaaju*
 very bad-ABS 3SG-over now DET-CF horse
 ‘the very meanest possible horse’
- b. *Pym-y = ku7ut py7 maas a-kú~kulji-m py7-mijax-wyn.*
 3PLPRO-CF = QUOT FOC more ADJZ-PL~small-PL 3PL-be-PST.ST.PST
 ‘They say they were smaller.’
- c. *Py7-y = ku7ut atíra ahújaxaj am-i-va7a-sh*
 3SG.PRO-CF = QUOT very great hunt-NMLZ-INS-ABS
py-mijax-wyn.
 3SG-be-PST.ST.PST
 ‘They say he was a really great hunter.’
- d. *Atíra y7y ahújaxaj aj7ani-sh.*
 very 2SG.PRO great big-ABS
 ‘You are much too big.’

CU noun phrases participate in all of the types of discontinuity observed in the other languages, but also have an elaboration attested only in CU, that of discontinuous noun phrases and discontinuous locational phrases interrupting each other, as in (3).

- (3) CU a. *Mu=ku7ut py7 axwá-7aw kawísi-sh pijáma*
 and=QUOT DET DIST-LOC fox-ABS always
hyt=py-jax-wyn savá-t-7aw.
 crouch=3SG-INTR-PST.IPFV.PL grass-ABS-LOC
 ‘And the fox was always crouching there in the grass.’
- b. *I7i iví-7aw ku7a-l hiw-qa ny-kwa7-í-7aw.*
 PROX PROX-LOC fly-ABS be-PRS.SG 1SG-eat-NMLZ-LOC
 ‘This fly is here in my food.’

The CU materials have many examples of clitics following the first word to interrupt a noun phrase, as in (4).

- (4) CU a. *Pym=ku7ut awá-l-im pym-ku\$.*
 DET.PL=QUOT dog-ABS-PL 3PL-bark
 ‘They say that the dogs barked.’ (H&N 70[140] 16)

Examples of other types of discontinuity are seen in (5). The form *kiljikíljiivy7ychi* in (5a) is structurally ambiguous. Instead of the analysis as an instrumental given in (5a), it might be accusative *kilji~kílji-vy7y-ch-i* [ST~slippery-NMLZR-ABS-ACC]. We assume the reduplication has to do with a stative situation.

- (5) CU a. *Mu=ku7ut ishmiví-j py-chi pi_hum=py-n*
 and=QUOT something-ACC 3SG-INS 3SG.OBJ_paint=3SG-TR
kilji-kílji-vy7y-chi.
 ST~slippery-NMLZR-INS
 ‘And then she painted him with something slippery.’ (H&N 69[138] 58)
- b. *My=kwy=my supul-m-i atax-m-i pym-ny7y-m*
 and=POT=3PL.ERG one-PL-ACC person-PL-ACC 3PL-relative-PL
tanin-wyn-ti-m-i mi_max-wyny qichi-lj.
 dance-PST.IPFV.PL-ABS-PL-ACC 3PL.OBJ_give-USIT money-ABS
 ‘And their relatives (the relatives of the dead) would give money to some of the people who were dancing.’ (H&N 38[76].45)

- c. *Y7=yp* *haxí-j* *kwa7í-sh* *py-kwaani* *a7chiwi-qa?*
 2SG.PRO = 2SG.ERG INDF.HUMAN-ACC food-ABS 3SG-BEN make-PRS.SG
 ‘For whom are you preparing food?’

Examples of discontinuous locational phrases are seen in (6).

- (6) CU a. *A-ngax* *chimi_mujaq=py7-my-n* *chym-ki-ngax,* *Kupa-ngax.*
 DIST-ABL 1PL.OBJ_take.out(pl.) = 3PL-PL-TR 1PL-house-ABL Cupa-ABL
 ‘They threw us out of our homes, out of Cupa.’ (H&N 23[46] ix.2)
- b. *A-ngax=ku7ut* *iví-jka* *ywýpy-ngax* *pým-nyq.*
 there-ABL = QUOT PROX-DAT west-ABL 3PL-come
 ‘They came here from the west.’
- c. *Mu=ku7ut* *a-jka* *isi-lj* *py-ngij* *py-ki-jka.*
 and = QUOT DIST-DAT coyote-ABS 3SG-go 3SG-house-to
 ‘And the coyote went home.’ (H&N 71[140].68)

Examples of discontinuous possessive phrases are rare. Two examples appear in (7).

- (7) CU a. *Py-wikí-j=ny* *tyw-qa* *mukíkma-l-i.*
 3SG-feather-ACC = 1SG.ERG see-PRS.SG bird-ABS-ACC
 ‘I see the bird’s feather.’ [= 5.5.3 (1e), an example of *Suffixaufnahme*]
- b. *Ny-t=kwy=my* *py-ny7y-m* *py-ki-7aw* *pym-puch-i*
 chief-ABS = POT = 3PL.ERG 3SG- relative-PL 3SG-house-LOC 3PL-face-ACC
pym-ju-j *a~7achiwin-wyny.*
 3PL-hair-ACC DIST~make-USIT
 ‘And the relatives of the chief would make their faces and hair [of the
 funerary images] at his house.’ (Funeral III:26)

7.6. CAHUILLA NOUN PHRASES.

7.6.1 QUANTIFIERS IN CAHUILLA NOUN PHRASES. CA quantifiers (and numerals) show yet another pattern of agreement, different from all those discussed above, but they are far less prone to show agreement than we have seen in LU and CU.

The quantifier ‘all’, DCA *umu(n)*, (MCA *u(7)mu*), illustrated in (1) is a fixed form that does not exhibit case or number agreement, like ‘all’ in TV and Serran.⁸⁵ As seen in (1c,d), expressions with *umu(n)* often include variants on *hish* ‘thing’.

- (1) DCA a. *pe7em hem-huja-j umun*
 3PL.PRO 3PL-arrow-ACC all
 ‘all their arrows (acc.)’
- b. *umun taxliswe-te-m*
 all person-ABS-PL
 ‘all the people’ (S&H 225)
- MCA c. *umu ivi-m hi-cha-x-m-i i-pa7 qal-te-m-i*
 all PROX-PL INDF-ABS-(?)-PL-ACC PROX-LOC live-ABS-PL-ACC
 ‘all these beings that lived here (acc.)’ (S&E 734)
- d. *umu ivi-m-i hi-sh te te7-m-i wi7i-t-m-i*
 all PROX-PL-ACC INDF-ABS HES HES-PL-ACC grasshopper-ABS-PL-ACC
 ‘all these whatchamacallits, grasshoppers (acc.)’ (S&E 853)

For ‘many, much’, the singular is *mete(7)wet*, used with uncountable nouns (which include many inanimates, body parts, and mass nouns such those in (2)).

⁸⁵ In Harrington’s MCA materials, inflected forms of *u7mu* were occasionally volunteered by Adán Castillo, Harrington’s multilingual consultant, but they are inconsistent in form (for instance, two plurals, *u7mum* and *u7mujam*, appear). They probably represent interference from LU, where *choo7un* ‘all’ can be freely inflected. Interference probably also accounts for sporadic cases of pluralized numerals in the Harrington MCA corpus.

- (2) MCA a. *metewet qichi-7lj-i*
 much money-ABS-ACC
 ‘a lot of money (acc.)’ (S&E 693)
- b. *metewet iwja-l*
 much thorn-ABS
 ‘many thorns’ (S&E 722)

In MCA, this form can appear with an accusative suffix in questions (3a) as well as in other environments, as in (3b).

- (3) MCA a. *Mete7we-7t-i pe7-qwa7-7i wa7i-7ch-i?*
 much-ABS-ACC 2SG > 3SG-eat-FCT meat-ABS-ACC
 ‘How much meat did you eat?’ (S&M 139)
- b. *box pe-nga metewe-7t-i*
 box 3SG-LOC many-ABS-ACC
 ‘in a lot of boxes’ (S&E 773)

The plural is *mete(7)chem*, seen in (4). This is a regular pattern for adjectives ending in *-wet* (Sauvel & Munro 1981:120). This plural is attested with countable nouns, or, in Seiler’s (1977:321) terms, nouns that can be thought of as individuals, a category which includes a number of inanimates. Seiler states that pluralization of even animate countable nouns is optional with *mete7chem*, and gives the examples in (4a,b), with (4a) illustrating phrasal marking for the plural. Only one example of an accusative plural is attested, seen in (4c); the example has no modified noun. (4e) shows phrasal marking for accusative case.

- (4) DCA a. *mete7-che-m pui-sh*
 many-ABS-PL roadrunner-ABS
 ‘many roadrunners’ (Seiler 1977:321.110)
- b. *mete7-che-m pui-che-m*
 many-ABS-PL roadrunner-ABS-PL
 ‘many roadrunners’ (Seiler 1977:321.111)

- c. *mete-sh-m-i*
 many-ABS-PL-ACC
 ‘many (of them) (acc.)’ (Seiler 1970:149 3)

- MCA d. *he-7ache-m mete-che-m*
 3SG-pet-PL many-ABS-PL
 ‘his many domestic animals’ (S&E 743)

- e. *mete7-che-m pe-j__qwa7-i-sh-m-i*
 many-ABS-PL 3SG-ACC__eat-NMLZ-ABS-PL-ACC
 ‘the (many) ones who have eaten it (acc.)’ (S&E 834)

There are two examples of *mete-sh* with a local-case marker in Harrington’s MCA data:

- (5) MCA a. *Kile7 hem-naq-ve mete-nga7 chemi-jax-ve.*
 NEG 3PL-hear-REAL.SUB much-LOC 1PL.OBJ-say-REAL.SUB
 ‘No han oído tanto de nosotros. (They have not heard that much [of what was said] about us.)’ (3.113.0069)
- b. *Pen pis-qa7a pish hem-penech-i-ve mete-nga7*
 all go.out-PST.SG COMP 3PL-pass-ABLAUT-REAL.SUB much-LOC
wolxulux-wen-e-nga7.
 be.marsh-ST-NMLZ-LOC
 ‘And it turned out that they had passed through much marshy ground.’
 (3.113.0095)

In the fairly large corpus of CA texts, we find no examples of quantifiers modified by intensifiers like *hespen* ‘very, much’, *inis* ‘a little’, or post-posed *acha7* ‘very’ (see 7.6.2). Instead, the preference of speakers appears to be to lengthen the stressed vowel of the quantifier, as in (6). The expressive lengthening is indicated with two colons.

- (6) CA a. *Me::te-che-m qawi-sh hem-wen.*
 so.many-ABS-PL rock-ABS 3PL-be
 ‘There were so many rocks.’ (S&E 888)

- b. *Me::tewe-t hichax-i umu7 aj tawpa pe7*
 very.many thing-ACC all then in.summer FOC
pem-qwa-we7.

3PL > 3SG-eat-PST.PL

‘They would eat a great variety of things in the summer.’ (S&E 923)

7.6.2. NUMERALS IN CAHUILLA NOUN PHRASES. In CA, in contrast with LU and CU, numerals almost never appear with case markers and do not take plural suffixes. Only *supul* ‘one’ is attested with accusative suffixes. A plural suffix appears in the related form *supu-le-m* ‘some, the others’, as seen in (1f). The MCA word for ‘one’ is *suplji* (this is not an accusative form). Note that *supul* can also mean ‘some, other’, in which case it can be pluralized, as in (3f) (and see 7.5.2 (1e) for an example of the same word in CU).

- (1) CA a. *pah e~7la-7t-i*
 three PL~dress-ABS-ACC
 ‘three dresses (acc.)’ (S&M 82)
- b. *wichiw qa~qwi-ch-i*
 four PL~rock-ABS-ACC
 ‘four rocks (acc.)’ (S&M 81)
- c. *wih taxmu7i-lj-m-i*
 two song-ABS-PL-ACC
 ‘two songs (acc.)’ (S&M 82)
- d. *nichi-lj-i suple7-i*
 woman-ABS-ACC one-ACC
 ‘one woman (acc.)’ (Seiler 1970:149.3)
- e. *pe7-ij suplji7-i*
 DET-ACC one-ABS-ACC
 ‘that one (woman) (acc.)’ (S&E 813)

- f. *supu-le-m* *taxswe-te-m*
 one-ABS-PL person-ABS-PL
 ‘other people’ (S&E 967)

CA has a special construction for enumerating animate nouns prefixing *me-* to the numerals ‘two’, ‘three’, and ‘four’, as seen in (2). This seems to be a pronominal prefix, thus treating these numerals as if participating in a relational noun structure (cf. 5.6). The prefix *me-* in these constructions could be glossed as ‘of them’, as in *me-wih* ‘the two of them’ in (2a). Noun phrases containing numerals in this form can appear in either order.

- (2) CA a. *a7wa-le-m* *hé-7ache-m* *me-wih*
 dog-ABS-PL 3SG-pet-PL 3PL-two
 ‘his two dogs’ (S&E 789)
- b. *su~smanga-ñem* *me-pah*
 PL~man’s.daughter-PL 3PL-three
 ‘his three daughters’ (Seiler 1970:113.4)
- c. *me-wichiw* *supu-le-m* *ni~ngki-che-m*
 3PL-four other-ABS-PL PL~woman-ABS-PL
 ‘four other women’ (S&E 969)
- d. *me-wichiw* *hunwe-t-m-i*
 3PL-four bear-ABS-PL-ACC
 ‘four bears (acc.)’ (S&M 81)

7.6.3. ADJECTIVES AND DEMONSTRATIVES IN CAHUILLA NOUN PHRASES. In CA noun phrases, while adjectives agree with nouns in number, they often do not show agreement in case marking. In MCA, phrasal marking is the preferred pattern for noun-plus-adjective phrases (Sauvel & Munro 1981:121). Here case is marked only on the phrase-final word, the adjective, as in the examples in (1). CA tends to have quite rigid Noun Adjective order in noun phrases, although a few exceptions are attested (e.g. (3c) below).

- (1) MCA a. *nea-t* *tevisheki7-ch-i*
 basket-ABS white-ABS-ACC
 ‘a white basket (acc.)’ (S&M 121)
- b. *kava7ma-l* *amnawe7-t-i*
 pot-ABS big-ABS-ACC
 ‘a big pot (acc.)’ (S&E 942)
- c. *na~nwishma-lje-m* *sa~smatneki-sh-m-i*
 PL~girl-ABS-PL PL~thin-ABS-PL-ACC
 ‘the thin girls (acc.)’ (S&M 121)
- d. *nashve-l* *pangi-nga*
 chair-ABS new-LOC
 ‘in the new chair’ (S&M 121)
- e. *ki-sh* *seleki-jka*
 house-ABS red-DAT
 ‘to the red house’ (S&M 121)

There are several examples of full agreement in the Harrington MCA texts, as in (2), which is a translation from the diaries of the Spanish explorer Juan Bautista de Anza.⁸⁶ However, since Sauvel and Munro (1981) are clear on the preference for phrasal marking in MCA (Sauvel’s native language), we are suspicious that these are cases of interference from LU.

- (2) MCA *Chem-ngij-7i* *tavishnik* *acha-nga7* *tema-l-pa7*
 1PL-go.away-FCT straight good-LOC land-ABS-LOC
hakush-wen-e-nga7 *pi-nga7*.
 be.open-ST-NMLZ-LOC road-LOC
 ‘We left straight over good terrain, on an open road.’ (3.113.0077)

⁸⁶ Because the de Anza expeditions had passed through Mountain Cahuilla country, Harrington thought that much could be learned by translating the diaries of the expeditions into that language, consulting with his co-worker Adán Castillo. The resulting texts are remarkable, especially in showing how Castillo drew on the richness of Cahuilla morphology to translate the very complex language of the Spanish originals.

In construction with nouns which are pluralized in *-m*, adjectives agree and also take the *-m* plural suffix, as seen in (3a-c). With nouns that do not pluralize in *-m*, any marking for pluralization must appear on the adjective in some other way, such as by reduplication as in (3d).

- (3) CA a. *neh-ta-m* *pangi-ch-em*
 basket-ABS-PL new-ABS-PL
 ‘new baskets’ (S&M 119)
- b. *a~7wa-le-m* *piintu-m*
 PL~dog-ABS-PL brown-PL
 ‘brown dogs’ (Seiler 1970:73.97)
- c. *tulnek-che-m* *hunwe-te-m*
 black-ABS-PL bear-ABS-PL
 ‘black bears’ (S&E 1341)
- d. *ki-sh* *a~7amnewe-t*
 house-ABS PL~big-ABS
 ‘community houses’ (Seiler 1970:67.31)

Adjectives, like quantifiers, may be intensified by lengthening the stressed vowel, as in (4).

- (4) CA a. *A::mnewe-t* *penga* *pe7* *nek7e7*.¹
 really.big-ABS then FOC come.PST
 ‘A really big one came.’ (S&E 1114)
¹ *nek7e7* or *neke7* ‘came’ is the past corresponding to the present *neke* ‘be coming’. Sauvel and Munro (1981:297) regard both forms as irregular.
- b. *Wa::vuwe-t* *e-t* *alxi7a-t*.
 long.long-ABS PROX2-ABS history-ABS
 ‘It is a long, long history.’ (S&E 1227)

Unlike the quantifiers, adjectives are attested with adverbial intensifiers as well as with expressive vowel lengthening. The order of intensifier and adjective with the quantifier *hespen* ‘very’ is free (5a,b). The word *acha7i* ~*acha7* (5c,d), is an intensifier when it follows the adjective (or noun), and an adjective meaning ‘good’ when it precedes a noun (Seiler (1977:123-124). There are exceptions to this generalization, as in (5d), with *acha7i* in an intensifier role in a position before the intensified form. Another intensifier, MCA *inis* ‘a little,’ is not attested with adjectives.

- (5) MCA a. *Pe7 pe7 iwja-k hespen* \emptyset .
 FOC FOC thorn-ADJZ very be
 ‘They are very thorny.’ (S&E 722)
- b. *Hespen iva-k tewlave-l* \emptyset .
 very strong-ADJZ devil-ABS be
 ‘The devil is very strong.’ (3.110.0643)
- c. *Pe7 paluwe acha7i mijax-we7*.
 FOC beautiful very be-ST.PST
 ‘It was extremely beautiful.’ (S&E 1316)
- d. *Acha7i tutu-t ika paluwe* \emptyset .
 very Indian.tea there beautiful be
 ‘That Indian tea there was really beautiful.’ (S&E 1218)

CA demonstratives have both case and number marking in agreement with the nouns they modify. Unlike the cognate determiner *py7* in CU, CA *pe7* shows accusative case in both singular and plural. However, non-agreeing constructions like (6e) are also attested. Seiler (1977) states that the accusative case of *ivi-m* ‘these’ is unattested in his materials. An example from Catherine Sauvel, a Mountain Cahuilla speaker, appears in 7.6.1 (1d) above, but Mrs. Sauvel usually used the kind of construction seen in (6a). Other demonstratives and the determiner consistently agree in case and number.

- (6) CA a. *ivi-m tav-te-m-i*
 PROX-PL brush.rabbit-ABS-PL-ACC
 ‘these brush rabbits (acc.)’ (Seiler 1970:69.50)
- b. *e-t-e hichaxi-m wikikma-lje-m a-7amna-che-m hem-wak7a*
 PROX2-ABS-(?) thing-PL bird-PL PL~big-ABS-PL 3PL-feather
 ‘the feathers of the larger kinds of birds’ (S&E 1083)
- c. *eva-t-m-i is-ta-m-i*
 PROX2-ABS-PL-ACC coyote-ABS-PL-ACC
 ‘those coyotes (acc.)’ (S&E 733)
- d. *pe7-ij pa-7l-i*
 DET-ACC water-ABS-ACC
 ‘the water (acc.)’ (S&E 813)
- e. *pe7e-m ni-nishljuve-l-m-i*
 DET-PL PL~age.of.woman-VBLZ-REAL.SUB-ABS-PL-ACC
 ‘the old women (acc.)’ (S&E 1108)

The MCA texts from the de Anza diaries include a number of examples of local case agreement with demonstratives and nouns, as in (7).

- (7) MCA *Ivi-ng-max qawi-sh-max chem-hichi-7i tame-t*
 PROX-LOC-ABL hill-ABS-ABL 1PL-GO-FCT sun-ABS
pax-i-ve-jka.
 enter-ABLAUT-REAL.SUB-DAT
 ‘From these hills we continued west.’ (3.113.0117)

7.6.4. WORD ORDER AND DISCONTINUOUS CONSTITUENCY IN CAHUILLA NOUN PHRASES. As is evident in the examples above, word order with the quantifiers and numerals is quite free. There is an apparent preference for noun-adjective order, but adjective-noun order also occurs. Seiler (1977:228) states that NAdj order is “predicative” (that is, such constructions are verbless clauses), while AdjN order is “attributive.” However, there are many exceptions to this generalization. Demonstratives always precede their nouns,

except for the proximal demonstrative *ivi-*, which is attested in noun–demonstrative order, as in example (2c) below.

Discontinuous constituents of all types are attested for CA. Example (1) shows a constituent interrupted by the only CA second-position quotative clitic, =*jal*.

- (1) CA *Pe7em=jal tewlave-l-em pengax jengi-ljew-qal ipa-x*
 DET.PL=QUOT spirit-ABS-PL then time.pass-GOPR-NFUT.SG PROX-ABL
qawi-ngax hem-neken ...
 mountain-ABL 3PL-come
 ‘After a while the spirits of the dead came from the west ...’ (Seiler 1970:49 128)

The examples in (2) show discontinuous constituents separated by verbs and other elements.

- (2) CA a. *Iv7ax supul-i pa7 pe-em-nemi-wen hichemivi-j.*
 now other-ACC then 3SG.OBJ-3PL-follow-NFUT.PL something-ACC
 ‘Today they follow different customs.’ (Seiler 1970:57 267)
- b. *Pe supul hiw-qal penga naxaa-sh puu-l chepé7i-pengki.*
 DET other be-NFUT.SG then man-ABS doctor-ABS truly-like
 ‘Now there lived there another man who was also a doctor.’ (Seiler 1970:71 68)
- c. *Penga pe man tema-l-i pe-ta*
 then FOC and.so earth-ABS-ACC 3SG-place
pe-em-nuk-wen ivi-j.
 3SG.OBJ-3PL-create-NFUT.PL PROX-ACC
 ‘And then there they created this earth.’ (Seiler 1970:41 33)
- d. *Iv7i-m awa-l-i hem-suntawas-wen pe-j__7ashka-te-m*
 PROX-PL dog-ABS-ACC 3PL-forget-NFUT.PL 3SG-ACC__owner-ABS-PL
hem-ki-nga pem-tem-in-wen.
 3PL-house-LOC 3PL > 3SG-close-CAUS-NFUT.PL
 ‘These owners (of it) forgot about the dog and locked him up in the house.’
 (Seiler 1970:187 19.1)

- e. *Pe7-ij Sewaxi-lje-m Nikoláas-i pe-j__mingki-k-te-m.*
 DET-ACC prsn-ABS-PL Nicholas-ACC 3SG-ACC__be.related-PRS.REL-ABS-PL
 ‘The Levi family (the Sewaxilyem) are related to Nicholas.’ (Seiler 1970:81 69)

- f. *Pe7 pe tuku Nikoláas e-ngax pepi-ngax neken*
 DET FOC yesterday Nicholas there-from far-from come
pish-qal.
 arrive-NFUT.SG
 ‘Nicholas came recently from some far off place in that direction.’ (Seiler 1970:81 70)

Example (3) shows the interruption of a locational-case phrase. This is common in CA as it is in the other Takic languages.

- (3) CA *Ip-ika siwma umun siwma chepénga tema-jka hem-chavi-wen*
 PROX-DAT be.hot all be.hot just earth-to 3PL-fall-NFUT.PL
taxat.
 EMPH
 ‘It was so hot that they fell to the ground.’ (Seiler 1970:71.84)

As with the other languages, discontinuity in possessive phrases is very rare. The only potential example we have found, in (4), is not what it appears to be, since the verb *hiwqa* takes only animate subjects. The reading here is probably *bahuvrihi*: ‘They say the girl was a pretty-face.’

- (4) MCA *Nawishma-l jal hé-push acha7i hiwqa penga7.*
 girl-ABS QUOT 3SG-face good be.PRS.SG then
 ‘Había una muchacha buena moza. (They say there was a good-looking girl.)’
 (3.112.0234)

CHAPTER 8

THE AUXILIARY COMPLEX

8.1. COMPONENTS OF THE AUXILIARY COMPLEX. The Tadic languages have an important morphosyntactic complex that may encode the pronominal arguments of a clause (subject and object) as well as evidentiality, modality, and tense. The repertoire of elements, the contexts for use, and the internal hierarchical structure of the complex, vary among the languages. We refer to this system as the auxiliary complex (Hill 2005:61) or more succinctly, the auxiliary or just AUX, in accord with Steele's (1979) usage of "aux" for this element in LU.

Elements of the auxiliary complex are typically unstressed and mainly occur as clitics. Most of the elements are so reduced that they cannot occur except as clitics (8.1.3, 8.3.2) but several elements or combinations of elements can stand as independent words.

For reasons of expository convenience, we sometimes refer to the auxiliary as the "clitic complex." Auxiliary elements that occur only as clitics are usually cited with the preposed marker =. Other elements, those that can occur initial position, albeit rarely, or sometimes as separate particles are cited with no special marker. The CU quotative *ku7ut* is an example of the latter sort.

The auxiliary complex typically occurs in "second" position within a clause (8.1.2). The "first" position can be a single word or any higher constituent of the clause sometimes including an entire subordinate clause. The auxiliary may follow the first element of a noun phrase, such as a demonstrative, or the entire phrase. Sometimes forms of the auxiliary complex can be found in first position, or not cliticized even when in second position. These possibilities are rare in most of the languages but common in SE.

The details of inclusion within the (first or) second-position auxiliary complex differ from language to language. The pronominal argument morphemes that figure so significantly in the auxiliary complex of some of the languages are in other languages part of the verb construction. In TV and Serran, the auxiliary marks both subject and object, while in LU and AC it marks only subjects. KI subjects may be marked twice, once on the verb and, for transitives, also in the auxiliary. In CU, the pronominals appear in the auxiliary only in non-past clauses, while in past-tense clauses they are verbal

prefixes. Pronominal arguments in CA occur only as verb prefixes or proclitics, or as subject proclitics with verbless predicates (8.3.6) and nominalizations.

Case alignment is exclusively nominative-accusative in all of the languages except CU, where pronominal marking in the auxiliary complex exhibits ergative/absolute alignment.

Tense marking is part of the auxiliary complex in the two Serran languages. KI marks both past and future in the auxiliary and has no tense marking in the verb. SE marks past tense in the auxiliary, but future tense in the verb. Auxiliaries in TV and the Cupan languages are unmarked for tense, which is handled exclusively in the verb.

In some of the languages, some elements that typically occur within the auxiliary complex can also occur outside it, examples include the CU quotative *ku7ut* and the SE dubitative *mia*. Within the complex, most elements are in fixed order although there are occasional exceptions.

In SE, the negative, *qaj* ‘not’, normally occurs as though it was first in the string of auxiliary elements. A typical example can be seen in (1), where *qaj* appears in second position as if part of AUX in (1a), but non-initially – and interrupting AUX? – in the somewhat disfluent (1b). The status of *qaj* as part of AUX is questionable. Though *qaj* typically appears in first or second position, it is independently stressed and not heard as cliticized to any preceding material. We suspect that negation has some special status in the grammar; we do not pursue this question further in this study.

- (1) SE a. *Aa-m qaj = [kwynny = vy]_{AUX} hii-t-i raakwynia7n.*
 DIST-PL NEG = QUOT = 3SG > 3SG > 3PL INDF-ABS-ACC feed
 ‘He didn’t feed them anything.’
- b. *Pyy-na7 = [kwyn] qaj = [vy]_{AUX} uii7wyn aa-m taamia-t*
 3PL-father = QUOT.3SG NEG = 3SG > 3PL want;like DIST-PL sun-ABS
a-majha-m.
 3SG-son-PL
 ‘Their father (the girls’ father) didn’t like those Sons of the Sun.’

8.1.1. EVIDENTIALS. Is any element a minimal requirement for the auxiliary complex? Since the quotative is the only component of what may be the auxiliary complex in CA,

perhaps evidentiality is the foundational element for Takic. Such a position implies that for the reporting of personal experience, this theoretical element is zero, the “direct” evidential (DRCT). As a consequence of this element’s zero representation, a vast number of example sentences show no overt (phonetically present) evidential, and we do not indicate its presence in the examples in this work. Nonetheless, for the Takic languages, such sentences are not neutral in the way that they are for a language like English with no grammaticalized evidentials. In a language like SE, a translation of “the coyote ate the grasshopper” with the zero evidential, i.e., with no overt evidential, would necessarily be understood to mean that the speaker has the personal experience of perceiving the coyote eat the grasshopper. Otherwise an appropriate evidential would have to be used, indicating whether the speaker heard from someone else that this happened, that the speaker has inferred that it happened from some sort of evidence, and so on. These differences can be expressed in English, but their expression is entirely optional. In Takic it can be grammatically obligatory. Although the languages vary somewhat in this, if a sentence is not to be interpreted as direct, it will nearly always include an overt evidential.

The tendency of elements of the auxiliary to appear in a weak, usually cliticized second position, a very common position cross-linguistically for such elements (“Wackernagel’s position”), may have led to the phonological reductions that we see to varying degrees in the Takic languages. In SE, which allows AUX to occur in strong, initial position and sometimes uncliticized even when in second position, the complex remains quite robust. The other languages show losses in the contents of AUX to varying degrees, all the way to near the endpoint reached by CA, where AUX may no longer exist as a surface syntactic node at all.

8.1.2. SECOND POSITION. The auxiliary complex is illustrated in (1) with one example for each of the Takic languages, showing the auxiliary complex, in brackets, following the first word.

- (1) a. TV *Noo* = [*n = 7e*]_{AUX} *t\$e7ee7a-x*.
 1SG.PRO = 1SG = IND sing-NFUT
 ‘Estoy cantando. (I am singing.)’ (3.103.0421)

- b. SE *Hyiiñ-t\$u7a-j = [kwynty]_{AUX} wyt\$y^Rha-m.*
 hunt-MOT-IND = QUOT.3PL man-PL
 ‘The men went hunting.’
- c. KI *Tsa-kim = [mat = yt\$.]_{AUX}*
 1PL-come = FUT = 1PL
 ‘Vamos a venir. (We’re going to come.)’ (3.100.0388; Anderton 1988:120)
- d. LU *Naxánma-l = [up]_{AUX} neexi-sh chipilípi-q.*
 old.man-ABS = 3SG gourd-ABS break-PRS
 ‘The old man is breaking the gourd.’ (Jacobs 1975:77.181)
- e. AC *Ma\$iqq-ja7 = [p = al]_{AUX} na-ma.*
 wrench-PST.INTR = 3SG = REAL 1SG-hand
 ‘Se me falseó la mano ya hace mucho. (My hand got wrenched some time ago.)’ (3.122.0220)
- f. CU *Pym-táxwi = [ku7ut]_{AUX} py7-miljý(w)-wyn.*
 3PL.PRO-body;self = QUOT 3PL-argue-PST.IPFV.PL
 ‘They were arguing with one another.’ (Hill 2005:186.43c)
- g. CA *Qawa-7l-i = [l]_{AUX} pe-wawaj-qal.*
 rat-ABS-ACC = QUOT 3SG.OBJ-marry-NFUT.SG
 ‘They say he married a rat.’ (Seiler 1970:101.10)

Second position may also be defined in relation to a multi-word first constituent, as in (2). The first constituent in (2a) is the accusative case two-word sequence *amaj chichinti* ‘that boy (acc.)’ and in (2b) it is a compound noun phrase *Toni Xwaan weh* ‘both Tony and Juan’. Thus the “second position” in (2a) is after the first two words, in (2b), after the first three as subject, and in (2c), after the first three words as the first half of a compound object.

- (2) a. SE *Ama-j chichin-t-i = [kwyny]_{AUX} kii-ch a-tiy^R7a-v*
 DIST-ACC boy-ABS-ACC = QUOT.3PL > 3SG house-ABS ADJZ-big-LOC
aa-p a-huuna-v tavy-j.
 DIST-LOC 3SG-heart;inside-LOC put-IND
 ‘They put the boy in the Big House (the ceremonial house).’
- b. LU *Toni Xwaan weh = [xu = m = p = kwa]_{AUX} aamu~mu-ma.*
 Tony Juan two;both = DES = 3PL = IRR = COND hunt~PROG-CFAC
 ‘[Both] Tony and Juan should have been hunting.’ (Jacobs 1975:77)
- c. SE *Paa-t\$-i ama-j \$yrii-7n-ka7-ti = [tqa]_{AUX} pyn-k-in*
 water-ABS-ACC DIST-ACC red-ST-NMLZ-ACC = INFR.3PL > 3SG pass-K-CAUS
pa-ta-j Maara7-ti ii-ngkwa7 Maarynga7-ja-m
 PROX2-ABS-ACC Twentynine.Palms-ACC PROX-DAT Morongo-AUG-PL
Maarynga-j7ka7.
 Morongo-DAT
 ‘The Morongos must have passed the Colorado River and Twentynine Palms
 on the way here to Morongo (the Morongo Reservation).’ [= 6.0 (1)]

A special kind of putative second position appears in complex sentences in SE, where the dependent clause follows the main clause and has a different set of arguments, as in (3). In such cases the auxiliary complex encoding the arguments of the dependent clause is always initial in that clause. We could consider that the first, main, clause constitutes “first position.” But when the verb is final in such a main clause, the following auxiliary complex never triggers indicative suffixation (11.2.1); a condition on such triggering may be that the verb and the following auxiliary material must be clause mates. An example of with indicative suffixation appears in (3b) where it is triggered by the pronominal clitic for the first clause. Since the auxiliary complex containing the dependent clause arguments cannot be cliticized to the last word of the main clause, maybe it should be thought of as simply being in initial position in its clause.

- (3) SE a. *Aa-pia = n a^Rcha^R7-k-in ny puhche-i7vaju7.*
 DIST-LOC = 1SG > 3SG tire-K-CAUS 1SG > PL care.for-SS.SIMUL
 ‘I’m tired of taking care of you pl.’
 <‘Apin ‘acar’kin nepuhcay’veyu’.> ‘I’m sick of taking care of you guys.’ (R&E 611)

- b. *Uii7wyna-j=n* *vyn* *a-maq-kj-t\$*
 want-IND = 1SG > 3SG 3SG > 1SG 3SG-give-IRR.SUB-ACC
 ‘I want him to give it to me.’
- c. *Uviht* *taaq-ta-m = [kwyny = my-7]_{AUX}* *hawei7t* *waqaa-7*
 long.ago person-ABS-PL = QUOT = 3PL > 3SG-PST always fiesta-VBZR
[kwyny]_{AUX} *hiy-nkw* *amaj-t-i* *myaa-t\$-i*
 QUOT.3PL > 3SG see-SS new-ABS-ACC moon-ABS-ACC
 ‘Long ago the Indians used to hold a ceremony when they saw a new moon.’
 <‘Uviht Taqtam kwenemu’ hawayt waqa’ kwana’ hiwnk ‘amayti’ mēaaci’.> (R&E 78)
- d. *Aa-m* *ajay7 = [my-7]_{AUX}* *mahmamq* *[myn]_{AUX}* *maat\$-ivaju7*
 DIST-PL then = 3PL-PST laugh(pl.subj) 3PL > 1SG hear-SS.SIMUL
ny-jy7 *ami7* *ny-na7*.
 1SG-mother and 1SG-father
 ‘My parents really had a good laugh when they heard me.’
 <‘Aam ‘ayee’mu’ mahmamq men maattivayu’ neye’ ‘ami’ nena’.> (R&E 611)

The auxiliary complex can interrupt constituents, especially noun phrases, as in (4), where the quotative element appears after the first word, separating a determiner and its noun. (See also discussion of discontinuous constituents in chapter 7.)

- (4) a. SE *Aa-m = [kwyny]_{AUX}* *na~naacha-m* *haii-p* *mi-j*.
 DIST-PL = QUOT.3PL PL~girl-PL INDF-LOC go-IND
 ‘Those girls went off somewhere (it is said).’
- b. CU *Py-m = [ku7ut]_{AUX}* *awá-li-m* *pym-ku\$*.
 DET-PL = QUOT dog-ABS-PL 3PL-bark
 ‘They say that the dogs barked.’

In (5), the quotative interrupts a postpositional phrase, separating the embedded noun phrase from its inflected postposition head. (*Pymia7* ‘with it’ governs the accusative case in (5).)

- (5) SE *Ama-j* *añii7chi-ti* = [*kwyn*]_{AUX} *py-mia7* *hiñi7-k*.
 DIST-ACC little.one;baby-ACC = QUOT.3SG 3SG-COM fly-K
 ‘She flew off with that baby.’

8.1.3. CLITICIZATION AND ITS REPRESENTATION. In representations like those above, the marker = is often not contained inside the brackets containing cliticized AUX. This is because the external fact of cliticization is not a necessary part of the internal structure of the auxiliary. This is in contrast with the representation of suffixes, which by their nature, may interact phonologically, syntactically, and semantically with the items to which they attach. For instance, it is widespread in the Uto-Aztec languages that the initial vowel of a suffix replaces the final vowel of the preceding stem. Marking the suffix with the hyphen of suffixation is thus a way of representing that part of its nature. Clitics, however, are syntactically separate words, but “words” which happen to attach to a preceding word, which may be of any syntactic status or semantic content. It should be noted that while the pronominal arguments are often expressed within AUX, there is nothing in the nature of pronominal arguments that requires them to have clitic status in the morphosyntax. In some structures in CU, for example, pronominal elements have migrated out of AUX to become verb prefixes.

The clitics are not always morphologically inert. In CU the presence of a clitic may block the usual truncation of final consonants in certain verb constructions. In (1a), the truncation of *-qal* to form the present tense form *-qa* is blocked, while in (1b), with the auxiliary complex before the verb, the truncation goes through. Nevertheless, despite the homophony of the untruncated present singular and past imperfect singular *-qal*, we know that (1a) is in the present tense because there is no pronominal prefix on the verb to mark the past tense, as there is in (1c).

- (1) CU a. *Jykwín-qal* = [*yn.*]_{AUX}
 be.afraid-PRS.SG = 1SG
 ‘I’m scared!’ (Coyote and Verdins 20)
- b. *M* = [*yn*]_{AUX} *jykwín-qa* *mylyn* *Isi-lj-i*.
 and = 1SG be.afraid-PRS.SG very Coyote-ABS-ACC
 ‘I am very afraid of Coyote.’ (Faye Creation 125)

- c. *Wy7* = [*ku7ut*]_{AUX} *py-jykwín-qał*
 but = QUOT 3SG-be.afraid-PST.IPFV.SG
 ‘But he was afraid, they say.’ (Fox and Cottontail 23)

In SE, the presence of an overt (non-zero) auxiliary immediately after a verb triggers the presence of the indicative *-j* on the verb. Compare (2a) and (2b) which have the same meaning. The only difference is that AUX is sentence initial in (2a), where it appears as a separate particle, and in second position in (2b), where it is cliticized.

- (2) SE a. [*Vyny-7*]_{AUX} *ich-ichun.* b. *Ich-ichuna-j* = [*vyny-7.*]_{AUX}
 3SG > 1SG-PST dip-BEN dip-BEN-IND = 3SG > 1SG-PST
 ‘He dipped it for me.’

Example (3) shows a verb in initial position before a zero auxiliary, with no added indicative suffix.

- (3) SE *Uii7wyn* [\emptyset]_{AUX} *a7-yyn-kj-t\$i* *a-chaat\$u-ik-t\$i.*
 want 3SG > 3SG 3SG-know;learn-IRR.SUB-ACC 3SG-sing-IRR.SUB-ACC
 ‘He wants to learn how to sing.’

Clitics are not phonologically inert. For instance, in SE, the presence of a clitic may block word-final vowel shortening, as with SE *mu(u)* ‘shoot’ in (4).

- (4) SE a. *Qaj7* = [*t\$*]_{AUX} *mu.*
 PROH = 2 > 3SG.IMP shoot.IMP
 ‘Don’t shoot it!’
- b. “*Muu* = [*t\$,*”]_{AUX} *ky-j* = [*kwyn.*]_{AUX}
 shoot.IMP = 2 > 3SG.IMP say-IND = QUOT.3SG
 “Shoot it!” he said.

Another example is found in KI, where a glottal stop may be elided before a clitic, as seen in the two versions of the same sentence given in (5). The glottal stop that is present in (5a) does not occur before the clitic in (5b). In the example, the final glottal stop of

kwaara7 appears to be a derivational morpheme which is lost by the phonological process involved here.

- (5) KI a. [Mat]_{AUX} *ni-kwara-7* *paakwini-ny.*
 FUT 1SG-smear-TR mud-INS
 b. *Ni-kwara-Ø* = [mat]_{AUX} *paakwini-ny.*
 1SG-smear-TR = FUT mud-INS
 ‘I’m going to plaster my house with mud.’ (3.99.0426; Anderton 1988:122)

In SE, a cliticized element can block the phonological rule of apocope. Compare apocopated *mo^Rch* ‘again’ in (6a) and unapocopated *mo^Rchy* in (6b).

- (6) SE a. [Kwyny]_{AUX} *mo^Rch* *churup-k.*
 QUOT.3PL again enter-K
 ‘They came back in.’
 b. *Mo^Rchy* = [n]_{AUX} *ñiha-j.*
 again = 1SG > 3SG do-IND
 ‘I’m doing it again.’

Of theoretical interest is the fact that the underlyingly monosyllabic, apocopated pronominals, such as *n* [1SG > 3SG] in (6b), are syntactically excluded from first position, while their non-apocopated equivalents are not, as in (7).

- (7) SE a. [Ny-7]_{AUX} *pa-pia* *tyhtyj* *tum* *haii-p* *ii-p.*
 1SG-PST PROX2-LOC work DISTR INDF-LOC PROX-LOC
 ‘I worked somewhere.’
 b. [Ny]_{AUX} *hiu-t\$u7.*
 1SG > 3PL see-MOT
 ‘I went to see them.’

To account for this, either the syntax has to be able to “peek ahead” to the phonological derivation so as to place the not-yet-apocopated forms correctly, or else there is a cycle involving both phonology and syntax: phonology then syntax then

phonology again. (1) Apocope derives the pronominal *n* from underlying *ny*, phonotactically constraining it to be in suffix position. (2) With this limitation on its occurrence, *n* is syntactically located in second position, not first. (3) Apocope is blocked in the item to which *n* is attached. Thus apocope constrains syntax, which in turn creates the condition that blocks apocope in the preceding item. (An alternative might be to allow for derivations that fail, which consequently would simply not be used.)

Example (8) provides a pair of examples that differ in word order but with interesting consequences occasioned by the suffixal nature of the pronominal clitic *n*. In (8a), the underlying final vowel of the accusative suffix *-i(y)* (< **-jy*) is not apocopated, just as in (6b) above. There is nothing phonotactically wrong with word-final *in* (cf. *pynkin* later in the sentence), it's just that apocope does not apply here. In (8b), the pronominal *n* follows the consonant-final word *iip* 'here'. The word-final sequence *^x-pn* is phonotactically excluded in SE. This problem is resolved by the insertion of the augment *-ia-*, a variant of which has been seen in 5.3 as *-ja-* in plural formation with \emptyset -class nouns.

- (8) SE a. *A-tuuk-iy* = [*n*]_{AUX} *pyn-k-in* *ii-p*.
 NMLZ-at.night-ACC = 1SG pass-K-CAUS PROX-LOC
- b. *Ii-p-ia* = [*n*]_{AUX} *a-tuuk-i* *pyn-k-in*.
 PROX-LOC-AUG = 1SG NMLZ-at.night-ACC pass-K-CAUS
- 'I passed the night here.'

8.1.4. PRONOMINAL ARGUMENTS. While pronominal arguments are not the only elements in the auxiliary complex (and in some of the languages are not always present in it), this dimension of the auxiliary complex figures importantly in Takic syntax. The Takic languages are notable for frequent double representation of arguments, with pronominal argument elements and case-marked independent nominals appearing in the same clause. In pronominal argument languages the overt nouns and independent pronouns of a clause have been said to be adjuncts rather than arguments, and those should therefore be unmarked for case, their status as subject, object, etc. being signaled by the pronominal arguments alone (cf. Baker 1996, Jelinek 1984). The corresponding nominals in the Takic languages, though, are marked for case (albeit in a limited way, as discussed in chapter 5). The pronominal elements within the Takic AUX have up to three thematic roles: (1) subject, (2) object, and (3) a second object. Only plural object can be overtly

marked for the third role. Nominative case is unmarked so there is no morphological consequence for nominals that are adjoined to pronouns of role (1). Nominals adjoined to pronouns of roles (2) and (3) are marked for accusative case. An overtly marked role (3) pronominal has been found only for SE within Takic, but since the category is also found in Nahuatl (Carochi 2001[1645]:63; see 8.3.2 (7) below) the pattern it represents might be a deep feature of Uto-Aztecan.

Takic word order is remarkably free. This has been argued to be a natural consequence of the status of independent nominals as adjuncts: their order in the clause is not fixed, because there is no direct syntactic relationship between the verb and the semantically associated nominals. However, the relationship between these independent nominals and their case marking, and the pronominal arguments in the auxiliary complex alongside the verbal prefixes in KI and Cupan, requires further exploration.

In the Takic languages often the pronominal material in AUX is inadequate for indexing subject and object. The person marker for 3SG object is zero (just the same as for no object) and 3SG subject, in the absence of a marked object, is also usually zero. Thus, when there is but one overt noun phrase in a clause, which is what one encounters most frequently in Takic discourse, then neither word order nor AUX is up to the job of revealing its thematic role. The case marker serves to do that, just as if there was no AUX. Compare (1a) and (1b) below, two sentences in sequence within a text and both with the same verb *chi\$t\$k* ‘like’. The case markers reveal who likes whom.

- (1) SE a. *Ama-j = [tqa = vy-7]_{AUX} wyt\$ i7vy^R-t\$-y7 a-\$uunga-j chi\$t\$k.*
 that-ACC = INFR = 3SG > 3SG-PST old.man-ABS-GEN 3SG-MaDa-ACC like-K
 ‘He must have liked that old man's daughter.’

- b. *Uii7wyn, [tqa = vy-7]_{AUX}¹ a7-u-iik-t\$i ami7 ama7*
 want INFR = 3SG > 3SG-PST 3SG-take-IRR.SUB-ACC and that
naash-t = [tqa = vy-7]_{AUX} waha7 chi\$t\$k.
 girl-ABS = INFR = 3SG > 3SG-PST also;too like-K
 ‘He wanted, he must have, to marry her and the girl must have loved him too’.

¹ *tqavy7* is in second position but not cliticized here. This may represent a momentary disfluency. With cliticization, the example would begin with *uui7wynaj tqavy7*, i.e., *uui7wyna-j = tqa = vy7*.

While the problem of the co-existence of pronominal arguments, including full-blown multiple exponency as in KI, as well as case marking on adjunct nouns and pronouns, does not yield to easy explanation, the pattern of varying participation of pronominal elements in the auxiliary complex can perhaps be understood as the result of a pronoun migration away from AUX into the verb (Givón 2011:190). The first stage may yield an agreement pattern analogous to that seen in KI, which has a rather reduced system of pronominals within AUX and also, possibly to partially make up for the reductions in the pronominal markings in AUX, an agreement system of subject prefixes on the verb.⁸⁷ In CU the migration has advanced to the point that only subject prefixes appear in past-tense clauses. The pronoun migration has completed itself in CA, which has no pronominals whatsoever in AUX but includes pronominal prefixes in almost every type of verb construction. Whether CA now has a proper AUX syntactic unit at all remains problematic.

8.1.5. OCCURRENCE IN FIRST POSITION. The auxiliary is not necessarily cliticized. Although it is found only as a clitic or sequence of clitics in most of the languages, if it is phonologically robust enough, it may also occur uncliticized (as in 8.1.4 (1b) above) and even in sentence-initial position. While no example of sentence-initial AUX has been found in TV, AC, or CA, it is attested for KI, LU, and CU (1) and is quite common in SE (2). In SE, even the single consonant *t*, the irrealis particle, can occur in utterance-initial position, as in (2d).

- (1) a. KI [Mat]_{AUX} *ni-kwara7 paakwini-ny.*
 FUT 1SG-smear mud-INS
 ‘I’m going to plaster my house with mud.’ (3.99.0426; Anderton 1988:122)
 [= 8.1.3 (5a)]
- b. LU [Kun]_{AUX} *po7 qaj toow-q.*
 QUOT 3SG.PRO NEG see-PRS.SG
 ‘They say he can’t see.’ (H&E 352)

⁸⁷ The KI agreement prefixes, however, *pace* Givón, are not diachronically from pronominal forms which were once within AUX. They are instead based on the set of possessive prefixes (see 5.2.1 (3)).

- c. CU [Ku7ut]_{AUX} ni~nish-ljy-vy-li-m kilma-ngax
 QUOT PL~age,of.woman-VBLZ-REAL.SUB-ABS-PL outside-ABL
pym-qal
 3PL-be.PST
 ‘They say the old women were outside.’ (H&N 9[18].19)
- (2) SE a. [Vy = n]_{AUX} cha^Rna^Rn-k-in.
 3SG = 1SG wake.up-K-CAUS
 ‘He woke me.’
- b. “[Kwyny = mynyt\$]_{AUX} puhcha7,” ky-j = [kwyn.]_{AUX}
 QUOT = 2PL > 1SG take.care.of say-IND = QUOT.3SG
 ‘“You should take care of me,” he said.’
- c. [“Tqa = ny-7]_{AUX} kuuman,” ky-j = [kwyn.]_{AUX}
 INFR = 1SG-PST sleep say-IND = QUOT.3SG
 ‘“I must have been sleeping,” he said.’
- d. [T]_{AUX} ny-huun¹ umi7-k-iv.
 IRR.3SG > 3SG 1SG-heart forget-K-FUT
 ‘I’ll forget it.’
- ¹ In the Takic languages, many mental processes, emotional states, and the like are expressed as things that the heart does.

8.1.6. OCCURRENCE IN LATER THAN SECOND POSITION. The auxiliary may occur, though rarely, later than in second position in the Serran languages, as in (1). The fact that the preceding element in (1a) is an independent pronoun hints at topicalization, which may make the element extra-clausal as far as computing the position of the auxiliary complex is concerned. Similarly in (1b), where the extra-clausal element is a discourse-connecting temporal adverb. Example (1c) at first looks more challenging. However, we believe that the fact that AUX appears after *amaj waha7* is evidence for treating the latter as a syntactic unit and that the English translation is misleading. Further investigation, inspired by this example, has revealed that the particle *waha7* ‘too, also’ follows its head such that example (1c) shows a regular second position occurrence of AUX after all. However, (1d) probably really is exceptional. While initial *ami7* ‘and’ can be understood as extra-clausal,

both the subject *aam* ‘they’ and the adverb *uvia* ‘already/used to’, which precede AUX, definitely seem to be within the clause.

- (1) a. KI. *Ny7 ni-kon = [mat=yvy7]_{AUX} ngaaty7-ja-my-j.*
 1SG.PRO 1SG-kill = FUT = 1SG > 3 cat-AUG-PL-ACC
 ‘I’m going to kill all the cats.’ (3.100.0669; Anderton 1988:122)
- b. SE *Amaj7 nyy7 = [tqa = n]_{AUX} no-uk Taaqt ani = [n]_{AUX}*
 now 1SG.PRO = INFR = 1SG 1SG-EMPH person;Indian COMP = 1SG
qat\$.
 be;live
 ‘Now I must be the only [pure] Indian living.’
- c. SE *Ama-j waha7 [qaj = kwyn]_{AUX} jou7kin.*
 DIST-ACC too;also NEG = QUOT.3SG > 3SG pay.attention.to
 ‘She didn’t pay any attention to him either.’
- d. SE *Ami7 aa-m uvia = [kwyny = my]_{AUX} ii-m*
 and DIST-PL already;used.to = QUOT = 3PL > 3PL PROX-PL
Maarynga7-ja-m kuuhan.
 Morongo-AUG-PL call;invite
 ‘And (it is said that) they used to invite these Morongos.’

8.2. THE PRONOMINAL ELEMENTS OF THE AUXILIARY COMPLEX. Before illustrating the details of the auxiliary complex in the various languages, we present a set of tables illustrating the most complicated part of the system, the forms of the pronominal elements that appear in the auxiliary complex in the various languages. These are presented together in this section so that the similarities and differences among the systems can be more easily seen. They are repeated in the individual language sections further on.

The AUX pronouns for TV appear in Table 8.2 (1). For TV, the principal source, the fieldnotes of J. P. Harrington, does not include a complete paradigm for these forms. Forms not attested in examples are indicated by (?). A dash, –, indicates a reflexive/reciprocal cell. Reflexives and reciprocals are morphologically treated as intransitive within AUX; for TV reflexives, see 6.2.1.

Table 8.2 (1) Tongva pronominals in aux

object	1SG	1PL	2SG	2PL	3SG	3PL	intrans.	
subject	1SG	–	–	= <i>re</i>	= <i>re=ve</i>	= <i>n=(7)a</i> ~ = <i>no</i>	= <i>ne=me</i> ~ = <i>n=a=hem</i> = <i>no</i>	= <i>n(e)</i> ~
	1PL	–	–	(?)	(?)	= <i>r=a</i>	(?)	= <i>re</i>
	2SG	= <i>ne=7a</i>	= <i>re=7(a)</i>	–	–	= <i>r=a</i>	(?)	= <i>7(a)</i>
	2PL	= <i>ne=7av(e)</i> ~ = <i>ne=ve</i> ~ = <i>ne=me</i>	= <i>re=7av(e)</i>	–	–	= <i>r=av</i>	(?)	= <i>7av(e)</i>
	3SG	= <i>ne</i>	= <i>re</i>	= <i>me</i>	= <i>me</i>	∅	(?)	∅
	3PL	= <i>ne=me</i>	= <i>re=me</i>	(?)	(?)	= <i>m=a7</i>	(?)	= <i>m(e)</i> ~ = <i>mo</i>

Although the pronominal complexes in TV can be segmented, many of the transitive pronominal clitics of the Serran languages seen in tables 8.2 (2) and 8.2 (3) are fusions of subject and object marking. Some elements are recognizably related to other pronominal elements in these languages, such as *n* ‘1SG’, *m* ‘2SG’ and ‘3PL’, and *p* ~ *v* ‘3SG’. The TV 3SG object element, *-(7)a*, resembles the 3SG possessive prefix *a-* in TV and Serran. In SE, 3SG subject is marked (as *vy-*) only with past tense (*-7*) or when it takes an object other than 3SG. Otherwise it is zero. In KI, 3SG subject is always zero. In TV, 1SG = *ne* and 1PL = *re* always precede other pronominal elements, regardless of grammatical role, while in SE and KI the object components, to the extent that they are separately identifiable, follow the subject components.

While some elements appear in both of the Serran languages, SE and KI are quite different in major respects. On the one hand, SE has elaborated a special series of pronominals for clauses with more than one object, such as direct and indirect, or direct and benefactive. In such a combination, the first object has to be singular and the second object, to be marked, has to be plural. If there are two plural objects, plural is marked just once. On the other hand, the KI system is greatly reduced. Number is not distinguished for subjects, and there is no series of intransitive-subject pronominals.

The SE, KI and TV systems share the property of the fusion of at least some of the elements encoding transitive arguments, but they are otherwise rather different from one another. KI does not have subject pronominals in intransitive clauses; only the pronominal prefixes on the verb are required there. In SE the past tense suffix is available

only in a limited number of combinations and with various complications; past tense forms are omitted from the table here but are displayed later in Table 8.3.2.2 (2). Also omitted from the display here are special SE forms that occur only in combination with certain evidentials and modals. Forms beginning in = cannot occur in initial position. The 1PL.IMP forms appear only after hortative *na7* ‘let’s’, potential *kwy7*, or negative *qaj*.

Table 8.2 (2) Serrano pronominals in aux

	object	1SG	1SG + PL	1PL	2SG	2SG + PL	3SG/INTR	2PL/3PL
	1SG	= <i>n</i>	–	–	= <i>n</i>	<i>ny</i>	= <i>n</i>	<i>ny</i>
	1PL	–	–	= <i>ch</i>	= <i>ch</i> ~ <i>chym</i>	<i>chymy</i>	= <i>ch</i>	<i>chymy</i>
	1PL IMP	–	–	–	–	–	= <i>t\$</i> ~ = <i>t\$yt\$</i>	(?)
subject	2SG	<i>chi7</i>	<i>chi7 = py</i>	<i>chymyt\$</i>	–	–	= <i>m7</i>	<i>py</i>
	2SG IMP	<i>chi7</i>	<i>chi7 = py*</i>	<i>chymyt\$*</i>	–	–	= <i>t\$</i>	= <i>t\$ = py</i>
	2PL	<i>mynyt\$</i>	<i>mynyt\$ = py</i>	<i>chymychi7</i> ~ <i>chymyt\$</i>	–	–	= <i>mt\$</i>	<i>pymyt\$</i> ~ = <i>mt\$ = py</i>
	2PL IMP	<i>mynyt\$</i>	<i>mynyt\$ = py*</i>	<i>chymyt\$</i>	–	–	= <i>mt\$</i>	= <i>mt\$ = py</i>
	3SG	<i>vy = n</i>	<i>vy = ny</i>	<i>vy = chi7</i>	= <i>m</i>	<i>my</i>	∅	<i>vy</i>
	3PL	<i>my = n</i>	<i>my = ny</i>	<i>my = chi7</i>	= <i>m</i>	<i>my</i>	= <i>m</i>	<i>my</i> ~ ∅

Table 8.2 (3) Kitanemuk pronominals in aux

	object	1SG	1PL	2SG	2PL	3SG	3PL	HORT/IMP.PL
subject	1	∅	–	= (<i>y</i>) <i>m</i>	= <i>mymy</i>	∅	∅ (inan.), = (<i>y</i>) <i>vy</i> (anim.)	<i>t\$</i> = <i>t\$</i>
	2	= (<i>y</i>) <i>tsi7</i>	= (<i>y</i>) <i>tsym</i>	∅	–	∅	= (<i>y</i>) <i>vy(m)</i>	= <i>t\$</i>
	3	= (<i>y</i>) <i>vyn</i>	= (<i>y</i>) <i>vytsym</i>	= <i>m</i>	= (<i>y</i>) <i>vy</i>	∅	= (<i>y</i>) <i>vy7</i> ~ ∅	–

The three Cupan languages that have pronominals in AUX, i.e., those other than CA, exhibit systems that are very different from those in TV and Serran. The forms of the clitics are transparently related to the forms of other pronominal elements, and there is no set of fused transitive clitics.

LU and AC have only subject clitics, shown in Table 8.2 (4). In the singular, non-first-person subjects have fallen together.

Table 8.2 (4) Coastal Cupan pronominals in aux

subject	LU	AC
1SG	= <i>n</i>	= (<i>a</i>) <i>n</i> ~ = <i>na</i>
1PL	= <i>cha</i> ~ = <i>ch</i> ~ = <i>sh</i>	= <i>cha</i>
2SG/3SG	= <i>up</i> / \emptyset	= (<i>a</i>) <i>p</i> / \emptyset
2PL	= (<i>u</i>) <i>m</i>	= (<i>a</i>) <i>m</i>
3PL	= <i>pum</i> / = <i>m</i>	= <i>pom</i> / = <i>m</i>

CU has a more elaborate set, with intricate usage distinctions and contextual conditioning that will be described in detail in 8.3.5.

Table 8.2 (5) Cupeño pronominals in aux

subject	ergative	absolute	before = <i>py</i> 'irrealis'
1SG	= <i>ny</i>	= <i>yn</i>	= <i>ny</i>
1PL EX	= <i>chy</i>	= <i>yh</i>	= <i>chy</i>
1PL INC	= <i>chy</i> = <i>my</i>	= <i>chy</i> = <i>7yl</i>	= <i>chy</i>
2SG	= (<i>7</i>) <i>yp</i>	= (<i>7</i>) <i>yt</i>	= (<i>7</i>) <i>y</i>
2PL	= <i>7ym</i> (<i>y</i>)	= <i>yl</i>	= <i>7ym</i> (ERG) / = <i>yl</i> (AB)
3SG	= <i>p</i> (<i>y</i>)	= <i>yt</i> ~ \emptyset	\emptyset
3PL	= <i>my</i>	= <i>yl</i>	= <i>ym</i> (ERG) / = <i>yl</i> (AB)

CA has a remarkably reduced set which have been converted into proclitics, shown in Table 8.2 (6). These pronominals are used preposed to verbless clause complements (see 8.3.6, 9.4.12).

Table 8.2 (6) Cahuilla subject proclitics

subject	
1SG	<i>hen</i> <u> </u>
1PL	<i>esh</i> <u> </u> ~ (<i>h</i>) <i>ish</i> <u> </u>
2SG	<i>et</i> <u> </u>
2PL	<i>eme</i> <u> </u>
3	\emptyset

8.3. THE AUXILIARY COMPLEX IN THE INDIVIDUAL LANGUAGES.

8.3.1. THE TONGVA AUXILIARY COMPLEX. We owe most of our understanding of the TV auxiliary complex to Munro (2000), who has pioneered work on this language in collaboration with the Tongva heritage community. In TV, the clitics of AUX appear in second position, i.e., after the first element in the sentence, nearly always following the first word. The clitic complex includes marking of modality, along with pronominal clitics. In TV, all arguments of the verb are encoded in these pronominal clitics, and often they are the only marking of these arguments in the sentence.

The order of clitics in the TV auxiliary complex is interrogative or irrealis⁸⁸ + pronominal + indicative. The marking of indicative within AUX occurs only in TV. Within Takic the indicative element occurs only in TV and SE; in SE it is a verb suffix.

8.3.1.1. TONGVA MODAL CLITICS. The modal clitics are listed in (1). No evidentials, quotative or otherwise, are attested for TV, possibly because Harrington never collected the type of discourse in which such elements would appear. The indicative mode clitic is always final, following any pronominals.

- (1) TV a. interrogative = *ha7*
 b. Irrealis = *p(o)*
 c. Indicative = *7e7 ~ =7e ~ =e7 ~ =j7 ~ =7 ~ =j*

An example of each TV modal clitic in context is given in (2).

- (2) TV a. *Kovii-no-k = ha7 = a?*
 be.hungry-NO-NFUT = Q = 2SG
 ‘¿Tienes hambre? (Are you hungry?)’ (3.104.0096)
- b. *Koo = 7a, xaj = p = n = a = 7 noo-m koo.*
 call.IMP = IMP NEG = IRR = 1SG = 3SG.OBJ.ANIM = IND 1SG.PRO-AUG call.IMP
 ‘Llámalo, yo no lo llamo. (Call him, I’m not calling him.)’ (3.104.0106)

⁸⁸ We use “irrealis” for Munro’s (2000) “subjunctive” to accord with the treatment of the corresponding clitic *=*py* in the Cupan languages.

- c. *Noo = ne = me = 7 mookaa-ro.*
 1SG.PRO = 1SG = 3PL = IND kill-FUT
 ‘Yo los voy a matar. (I’m going to kill them.)’ (3.104.0098)

While Munro (2000) represented only the variants =7*e* and =*j* in her practical materials, forms of the indicative clitic are quite variable. Examples of =7 appear in (2b,c). The other forms are illustrated in (3). The =*j* allomorph of the indicative occurs only with vowel-final pronominal clitics, which Munro (2000) called the “Series II” pronominals. These include variants of the pronominals with the vowel *o* instead of *e*, as in (3e).

- (3) TV a. *Noo = n = 7e7 jakeena-x.*
 1SG.PRO = 1SG = IND dance-NFUT
 ‘Estoy bailando. (I’m dancing.)’ (3.104.0137)
- b. *Heaa7mo = 7av = 7e omoom jakeena-x.*
 now = 2PL = IND 2PL.PRO dance-NFUT
 ‘Uds. ya bailaron. (You pl. already danced.)’ (3.104.0093)
- c. *To~took-ra-m = Ø = e7 jakeena-x.*
 PL~woman-ABS-PL = 3PL = IND dance-NFUT
 ‘The women are dancing.’ (3.104.0092)
- d. *Jaxaa = j7 heaa paa-r.*
 not.exist = IND now water-ABS
 ‘Ya no hay agua. (There is no water now.)’ (3.102.0885)
- e. *Momoo = mo = j \$o~\$oov-ra-m ta~raaxe-m Ø.*
 DIST = 3PL = IND PL~different-ABS-PL PL~person-PL be
 ‘Son otros gentes. (They are a different people.)’ (3.104.0014)

The interrogative clitic does not cooccur with an interrogative form in the same clause, such as with *hetaa* ‘what?’ in (4). This example is structurally four separate verbless sentences.

- (4) TV *Hetaa manee-7m amooja, tokoo-r=ha7 worooj-t=ha7,*
 what DIST-AUG dead.person woman-ABS = Q man-ABS = Q
he-taa = ha7?
 INDF-ABS = Q
 ‘¿Qué es el muerto, woman or man? [¿Cuál?] (What is that dead person, a woman or a man? Which?)’ (3.104.0110)

Further examples with the irrealis modal are given in (5).

- (5) TV a. *Wehee7=p=re mii.*
 two = IRR = 1PL go.NFUT
 ‘Los dos los vamos ir, let’s you and [me] go together. (We two are surely going.)’ (3.105.0375)
- b. *Woo = po.*
 be(inan.) = IRR
 ‘Que haiga. (Let there be [some].)’ (3.104.0576)
- c. *No~noov-nga = po woono.*
 PL~basket.tray-LOC = IRR be(inan.)
 ‘Que haiga en las bateas. (Let there be [some] in the basketry trays.)’
 (3.105.0469)
- d. *Tee = 7a xaroo = po.*
 leave = IMP be = IRR
 ‘Déjalo que esté. (Let it be.)’ (3.104.0505)

8.3.1.2. TONGVA PRONOMINAL CLITICS. The individual pronominal clitics are listed in Table 8.3.1.2 (1). Variants with the vowel *o* appear only before indicative =*j*, and do not combine with other clitics, whether pronominal or modal. When other vowel-final pronominals appear before =*j*, the same restriction applies. The exception is that combinations with third singular object =*a* do appear before =*j* (as in (4c) below).

Munro (2000) treats the pronominals with =*j* as a separate series, distinguishing them as “Series II” pronominals in contrast with the more common, unmarked “Series I” forms.

Table 8.3.1.2 (1) The individual Tongva pronominal clitics

1SG	= <i>n(e)</i> ~ = <i>no</i>	1/1PL	= <i>r(e)</i>
1 > 2	= <i>r</i>		
2SG	= <i>ʔ(a)</i> ~ = <i>aʔ</i>	2PL	= <i>ʔav</i> ~ = <i>ve</i> ~ = <i>ʔam</i>
3SG	∅	3PL	= <i>m(e)</i> ~ = <i>mo</i>
3 > 2	= <i>me</i>		
3SG.OBJ	= <i>a</i> ~ = <i>ʔa</i>		

3SG subject and inanimate subject or object, whether singular or plural, are unmarked. Further, 3PL subject is usually left unmarked when there is a plural suffix in *m* on the subject noun or demonstrative. All these are indicated analytically as “∅” where needed. Table 8.3.1.2 (2) is repeated from Table 8.2 (1), and shows the attested sequences of pronominals.

Table 8.3.1.2 (2) Tongva pronominal clitics in combination

	object	1SG	1PL	2SG	2PL	3SG	3PL	intrans.
subject	1SG	–	–	= <i>re</i>	= <i>re=ve</i>	= <i>n=(ʔ)a</i> ~ = <i>no</i>	= <i>ne=me</i> ~ = <i>n=a=hem</i>	= <i>n(e)</i> ~ = <i>no</i>
	1PL	–	–	(?)	(?)	= <i>r=a</i>	(?)	= <i>re</i>
	2SG	= <i>ne=ʔa</i>	= <i>re=ʔ(a)</i>	–	–	= <i>r=a</i>	(?)	= <i>ʔ(a)</i>
	2PL	= <i>ne=ʔav(e)</i> ~ = <i>ne=ve</i> ~ = <i>ne=me</i>	= <i>re=ʔav(e)</i>	–	–	= <i>r=av</i>	(?)	= <i>ʔav(e)</i>
	3SG	= <i>ne</i>	= <i>re</i>	= <i>me</i>	= <i>me</i>	∅	(?)	∅
	3PL	= <i>ne=me</i>	= <i>re=me</i>	(?)	(?)	= <i>m=aʔ</i>	(?)	= <i>m(e)</i> ~ = <i>mo</i>

The third person object columns and the 3PL subject row reference only animates. Inanimate objects are unmarked and inanimate plural subjects are treated the same as 3SG. This is to say that “transitive” morphology applies only when there is an animate object. When the first person category is referenced, it appears first, whether subject or object. Note that =*r(e)* ‘1’ is used for 1PL and in certain combinations involving 1SG and second person. It is to be construed as ‘1PL’ only when it occurs in a position where =*ne*

'1SG' could otherwise occur. There is also second person =*r* such that a unified gloss for all pronominals in *r* seems impractical. The fact that there is a clitic =*me* for 3PL and also a =*me* for second person object of a third person subject is paralleled in SE. The label "intransitive" covers all predications that are not transitive, including copula and location constructions, as well as intransitive verb predicates. Examples illustrating the attested pronominal forms of AUX are given below.

- (1) TV 1SG > 2SG
- a. *Noo = re = ʔ mokaa-ro.*
 1SG.PRO = 1 = IND kill-FUT
 'Yo te voy a matar. (I'm going to kill you sg.)' (3.104.0098)
- b. *Oo = r = aʔ hopeey-ʔa-ro.*
 2SG.PRO = 1 = 2SG paint-(?) -FUT
 'Te voy a pintar. (I'm going to paint you sg.)' (3.104.0100)

The examples in (2) are variants with a difference of focus.

- (2) TV a. 1SG > 2PL
- Noo = re = ve omoo-m mokaa-ro.*
 1SG.PRO = 1 = 2PL 2PL.PRO-AUG kill-FUT
 'I am going to kill ye.' (3.104.0098)
- b. 1SG > 2PL
- Omoo = re = ve noo mokaa-ro.*
 2PL.PRO = 1 = 2PL 1SG.PRO kill-FUT
 'A Uds. los voy a matar yo. (I'm going to kill you pl.)' (3.104.0098)

The clitic =(7)*a* is used for 3SG animate object. (3a,b,c) show three different manifestations of the indicative clitic. (3c,d,e) show three forms of the 1SG > 3SG combination with the same verb, with (3e) showing no overt marking of the 3SG object.

(3) TV 1SG > 3SG animate

- a. *Noo = n = a = 7* *mokaana-x* *ne-t\$uu-7-rar.*
 1SG.PRO = 1SG = 3SG.OBJ = IND kill-NFUT 1SG-arrow-PSD-INS
 ‘Yo lo maté con mi jara. (I killed it with my arrow.)’ (3.104.0334)
- b. *Honuuk = n = a = 7e* *koona-x.*
 long.ago = 1SG = 3SG.OBJ = IND call-NFUT
 ‘Ya hace mucho que lo llamé. (Now it has been a long time since I called him.)’ (3.105.0094)
- c. *Worooj-ta = n = a = j* *koo-ro.*
 man-ABS.ACC = 1SG = 3SG.OBJ = IND call-FUT
 ‘I’m going to call the man.’ (3.104.0119)
- d. *Noo = n = 7a* *koo-ro.*
 1SG.PRO = 1SG = 3SG.OBJ call-FUT
 ‘Lo voy a llamar. (I’m going to call him.)’ (3.105.0048)
- e. *Koo-ro = no = Ø = j* *noo-ma7.*
 call-FUT = 1SG = 3SG = IND 1SG.PRO-AUG
 ‘Lo voy a llamar. (I’m going to call him.)’ (3.105.0048)

An inanimate object is unmarked, with no difference between singular and plural, as in (4). An indefinite, negated object is also unmarked, in (4c), apparently being treated as if inanimate. Note that inanimate subjects or objects are necessarily third person.

(4) TV 1SG > 3 inanimate

- a. *Heaa = n = 7e* *xamee7-ena-x.*
 already = 1SG = IND bury-CAUS-NFUT
 ‘Ya lo enterré. (I already buried it.)’ (3.103.0544)
- b. *Noo = ne = j* *naxaakwa-ro* *pomoo-\$iro-j.*
 1SG.PRO = 1SG = IND hear-FUT 3PL-speaking-ACC
 ‘I am going to hear their words.’ (3.104.0398)

- c. *Xaaj=ne huuto-k hakii-ja.*
 NEG = 1SG see-NFUT INDF.HUMAN-ABS.ACC
 ‘A nadien no lo vide. (I didn’t see anyone.)’ (3.104.0406)

The examples in (5) show two ways of expressing 1SG > 3PL. The sequence $=n=a$ $=he7=m$ in (5b) hints at the possibility that there may be a dual category in TV grammar.

(5) TV 1SG > 3PL

- a. *Noo=ne=me=7 wo~woo\$i7-a-mo mokaa-ro.*
 1SG.PRO = 1SG = 3PL = IND PL~dog-AUG-PL.ACC kill-FUT
 ‘I’m going to kill the dogs.’ (3.104.0098)
- b. *Noo=n=a=he7=m huuto-k wehee-mo t\$aa-j-t-mo.*
 1SG.PRO = 1SG = 3OBJ = (?) = PL see-NFUT two-PL.ACC sick-IPST.ABS-PL.ACC
 ‘Yo vide a dos enfermos. (I saw two sick people.)’ (3.103.0166)

The pronominal $=no$ seems to be restricted to the environment before indicative $=j$, as in (6a,b). Otherwise the 1SG is $=ne$, as in (6c,d). Note that $=ne$ is also found with indicative $=j$, as in (6b). Also appearing only before $=j$ are 1PL $=ro$ and 3PL $=mo$.

(6) TV 1SG intransitive

- a. *T\$orii-no-k=no=j.*
 wake.up-NO-NFUT = 1SG = IND
 ‘Estoy recordando, I am waking up.’ (3.105.0121)
- b. *Heaa=no=j t\$orii-no-k.*
 now = 1SG = IND wake.up-NO-NFUT
 ‘Ya me recordé. (Now I’ve woken up.)’ (3.105.0121)
- c. *Jaaw7ke=ne t\$orii-no-k.*
 last.night = 1SG wake.up-NO-NFUT
 ‘Anoche me recordé. (I woke up last night.)’ (3.105.0121)

- d. *Matuu7 = ne kii.*
 from.there = 1SG come.NFUT
 ‘I came from there.’ (3.103.0573)

- (7) TV 1PL > 3SG
Ejoomo-mb = r = a = 7 pokiit\$a-x.
 1PL.PRO-AUG = 1 = 3SG.OBJ = IND steal-NFUT
 ‘We stole it.’ (3.104.0091)

- (8) TV a. 1PL intransitive
Ejoomo = re paara-r.
 1PL.PRO = 1PL thirsty-ABS
 ‘We are thirsty.’ (3.105.0345)

- b. 1PL intransitive
T\$aaro-k = ro-j.
 dance.patada-NFUT = 1PL = IND
 ‘We are dancing the patada.’ (3.103.0352)

- (9) TV 2SG > 1SG
Oo = ne = 7a moka-ro.
 2SG.PRO = 1SG = 2SG kill-FUT
 ‘Tu me voy (vas) a matar. (You sg. are going to kill me.)’ (3.104.0098)

2SG > 1PL: no example.

- (10) TV 2SG > 3SG
 a. *He7uu = p = r = a = 7 kweero7-nga.*
 carry = IRR = 2 = 3SG.OBJ = IND hide;leather-LOC
 ‘Lo traes en un cuero. (You carry him in a hide.)’ (3.104.0108)
- b. *Meih = r = a = 7 mokaana-x.*
 INDF.MANNER = 2 = 3SG.OBJ = IND kill-NFUT
 ‘¿Cómo lo matates? (How did you kill it?)’ (3.105.0332)

2SG > 3PL: no example.

(11) TV 2SG (intransitive)

Oo = 7a t\$e7ee-na-x.
 2SG.PRO = 2SG sing-CAUS-NFUT
 ‘You are singing.’ (3.104.0093)

The different usages in (12a,b,c) are from three different speakers.

(12) TV 2PL > 1SG

- a. *Omoo-m = ne = 7ave = 7 moka-ro.*
 2PL.PRO-AUG = 1SG = 2PL = IND kill-FUT
 ‘Uds. me van a matar. (You pl. are going to kill me.)’ (3.104.0098)
- b. *Omoo-m = ne = ve = 7 moka-ro.*
 2PL.PRO-AUG = 1SG = 2PL = IND kill-FUT
 ‘Uds. me van a matar. (You pl. are going to kill me.)’ (3.104.0098)
- c. *Omoo-ma = ne = me = 7 moka-ro.*
 2PL.PRO-AUG = 1SG = 2PL = IND kill-FUT
 ‘Uds van a matar a mí. (You pl. are going to kill me.)’ (3.105.0150)

(13) TV 2PL > 1PL

Eoomo-mb = re = 7ave = 7 moka-ro.
 1PL.PRO-AUG = 1 = 2PL = IND kill-FUT
 ‘Uds. are g. to kill us. (You pl. are going to kill us.)’ (3.104.0098)

2PL > 3SG: no example.

(14) TV 2PL intransitive

- a. *Omoo-m = 7av jakeena-x.*
 2PL.PRO-AUG = 2PL dance-NFUT
 ‘Ye are dancing.’ (3.104.0092)

- b. *Omoo = 7ave = m jakee7-ro.*
 2PL.PRO = 2PL = AUG dance-FUT
 ‘Uds van a bailar. (You pl. are going to dance.)’ (3.104.0359)

(15) TV 3SG > 1SG

- a. *Menee-j, worooj-t = ne = j mokaa-ro.*
 PROX-ABS man-ABS = 1SG = IND kill-FUT
 ‘Este hombre me va a matar. (This man is going to kill me.)’ (3.104.0098)

- b. *Menee7 tokoo-r xaj = ne oii\$me-no-k.*
 PROX woman-ABS NEG = 3SG > 1SG want-NO-NFUT
 ‘This woman does not love me.’ (3.105.0344)

(16) TV 3SG > 1PL

- a. *Heaa-mo = re = j jaaw7ke.*
 now-AUG = 1PL = IND be.night
 ‘Ya está noche para nosotros. (Now it is night for us.)’ (3.103.0645)
- b. *Muuro = re = j wakoo-k.*
 there = 1PL = IND rain-NFUT
 ‘Allá nos llovió. (It rained on us there.)’ (3.103.0480) (answer to (18b))

(17) TV 3SG > 2SG

- a. *Pe7ee-j = me = j worooj-t mokaa-ro.*
 PROX2-ABS = 2SG = IND man-ABS kill-FUT
 ‘Este hombre te va a matar. (This man is going to kill you sg.)’ (3.105.0150)
- b. *Hamii-nga = me wakoo-k oo-ma7?*
 INDF-LOC = 3 > 2 rain-NFUT 2SG.PRO-AUG
 ‘¿Ónde te llovió? (Where did it rain on you sg?)’ (3.103.0480)

(18) TV 3SG > 2PL

- a. *Pe7ee-j, worooj-t = me = j mokaa-ro omoo-ma7.*
 PROX2-ABS man-ABS = 3 > 2 = IND kill-FUT 2PL.PRO-AUG
 ‘Aquel hombre los va a matar a Uds. (That man is going to kill you pl.)’
 (3.104.0099)

- b. *Hamii-nga-m = me = j wakoo-k.*
 INDF-LOC-AUG = 3 > 2 = IND rain-NSG
 ‘¿Ónde les lluvió a ustedes? (Where did it rain on you pl.?) (3.103.0480)

3SG > 3SG animate: no example.

(19) TV 3SG > 3SG inanimate

- a. *Anaange ∅ jaaw-ro ajoo7e toraana-t.*
 later 3SG > 3SG.INAN grasp-FUT much money-ABS
 ‘Afterwards he will have lots of money.’ (3.104.0169)
- b. *Hakii-m ∅ paa-x ne-paajro7-a.*
 INDF.HUMAN-AUG 3SG > 3SG.INAN drink-NFUT 1SG-whiskey-ACC
 ‘¿Quién tomó mi licor? (Who drank my whiskey?) (3.104.0406)

(20) TV 3SG intransitive

- a. *Menee = ∅ = 7e paara-r.*
 PROX = 3SG = IND thirsty-ABS
 ‘This person is thirsty.’ (3.105.0345)
- b. *Menee = ∅ = 7 ni-kaato7 xaa a-\$uun-nga tangaa-nga.*
 PROX = 3SG = IND 1SG-cat be.there 3SG-inside-LOC sack-LOC
 ‘Este mi gato está adentro del saco. (This cat of mine is inside the sack.)’
 (3.105.0013)
- c. *Pe7ee = ∅ = j worooj-t mokaana-x a-taax.*
 that = 3SG = IND man-ABS kill-NFUT 3SG-self
 ‘That man will kill himself.’ (3.105.0150)
- d. *Metee = ∅ = 7 hekaaj-ro.*
 now = 3SG = IND be.windy-FUT
 ‘Está haciendo mucho viento. (It’s very windy.)’ (3.103.0087)

(21) TV 3PL > 1SG

Memoo wo~woo\$ⁱ7-a-m = ne = me = 7 moka-ro.

these PL~dog-AUG-PL = 1SG = 3PL = IND kill-FUT

‘These dogs are going to kill me.’ (3.104.0098)

(22) TV 3PL > 1PL

a. *Memoo wo~woo\$^e7-a-m = re = me = 7 moka-ro.*

PROX PL~dog-AUG-PL = 1PL = 3PL = IND kill-FUT

‘Estos perros nos van a matar. (These dogs are going to kill us.)’

(3.104.0098)

b. *Eoome-mb = re = me = 7 memoo wo~woo\$^e7-a-m moka-ro.*

1PL.PRO-AUG = 1PL = 3PL = IND PROX PL~dog-AUG-PL kill-FUT

‘Estos perros nos van a matar a nosotros. (These dogs are going to kill us.)’

(3.104.0098)

3PL > 2: no example.

(23) TV 3PL > 3SG animate

He7uuk = m = a yovaa-ra a-\$uun-nga.

take = 3PL = 3SG.OBJ.ANIM church-ABS.GEN 3SG-inside;heart-LOC

‘They took him into the church.’ (3.105.0467)

3PL > 3PL: no example.

(24) TV 3PL animate intransitive

a. *To~took-ra-m = Ø = e7 jakeena-x.*

PL~woman-ABS-PL = 3PL = IND dance-NFUT

‘The women are dancing.’ (3.104.0092)

b. *Waraak = mo = j jakeen-emo-k.*

really = 3PL = IND dance-CONT-NFUT

‘They are really dancing.’ (3.105.0396)

- c. *Ekwaa = me xaa.*
 here = 3PL be.NFUT
 ‘Aquí están. (They are here.)’ (3.104.0065)
- d. *Xaj = me woroo-ro-m.*
 NEG = 3PL man-ABS-PL
 ‘No son hombres. (They are not men.)’ (3.104.0372)
- e. *T\$aa-j-no-k = mo = j.*
 be.sick-NO-NFUT = 3PL = IND
 ‘Están enfermos. (They are sick.)’ (3.104.0417)
- f. *Momee = mo = j so~soov-ra-m ta~raaxa-m.*
 DIST = 3PL = IND PL~different-ABS-PL PL~person-PL
 ‘Son otras gentes (said of islanders). (They are a different people.)’
 (3.104.0014)

(25) TV 3PL inanimate intransitive

- a. *A-hooken = Ø = e7 to~too-t.*
 ADJZ-dry = 3PL.INAN = IND PL~rock-ABS
 ‘Están secas las piedras. (The rocks are dry.)’ (3.104.0065)
- b. *Oee Ø xa~xaa-j woo a-\$uun-nga*
 all 3PL.INAN PL~mountain-ABS be.there 3SG-middle-LOC
moom-nga.
 ocean-LOC
 ‘Lots of sierras are in the sea. (All [those] mountains are in the ocean.)’ [in a
 discussion of the islands off the California coast] (3.103.0363)

8.3.1.3. TONGVA IMPERATIVES, PROHIBITIVES, DIRECTIVES. Imperatives may have the clitics =7a(a) (sg.), = (7a)vo7 (pl.), as in (1). Imperatives are peculiar in that clitics are often stressed. Harrington’s frame for collecting transitive imperatives was almost always with a 3SG object, but two examples with discourse participant objects in (1c,d) hint that the imperative construction does not accommodate other pronominals.

- (1) TV a. *Koo = 7aa.*
 call = 2SG.IMP
 ‘¡Lámalo! (Call him!)’ (3.105.0073)
- b. *Hevaaw = 7a.*
 touch = 2SG.IMP
 ‘¡Téntalo! (Touch it!)’ (3.105.0146)
- c. *Wootke = 7a ne-paa ne-haavo-n-tar.*
 cover = IMP 1SG-on.top.of 1SG-blanket-PSD-INS
 ‘¡Tápame con mi fresada! (Cover me with my blanket [on top of me]!)’
 (3.105.0351)
- d. *Naxaakwa = 7aa eyoomo = ma.*
 hear = IMP 1PL.PRO = AUG
 ‘¡Oye a nosotros! (Hear us!)’ (3.104.0429)
- e. *T\$e7ee = 7a.*
 sing = IMP
 ‘¡Canta! (Sing sg.!)’ (3.104.0412)
- f. *T\$e7-ee-7a-vo7.*
 sing-CAUS-IMP-2PL
 ‘¡Canten! (Sing pl.!)’ (3.104.0412)
- g. *Xaroo = vo7 ekwaa.*
 dwell;stay = 2PL.IMP here
 ‘¡Estense aquí! (Stay pl. here!)’ (3.104.0395)

The imperative suffixes attach to the negative element to form prohibitive *xa7aa* (sg.), *xa7aav* (pl.), as in (2).

- (2) TV a. *Xa = 7aa oom \$eraaw7.*
 PROH = 2SG.IMP 2SG.PRO speak.IMP
 ‘¡No hables! (Don’t speak!)’ (3.104.0060)

- b. $Xa = 7aav$ *jakee*.
 PROH = 2PL.IMP kill
 ‘¡No bailen Uds! (Don’t dance, you pl.!)’ (3.104.0359)

Transitive prohibitives use the pronominal clitics =*r-a(a)* (sg.), =*r-av* (pl.), as in (3).

- (3) TV a. $Xa = r = aa$ *mokaa*.
 PROH = 2 > 3SG = IMP kill
 ‘¡No lo mates! (Don’t kill him!)’ (3.104.0099)
- b. $Xa = r = aa = v$ *mokaa omoo-ma*.
 PROH = 2 = 3SG.OBJ = 2PL.IMP kill 2PL.PRO-AUG
 ‘¡No lo maten Uds.! (Don’t kill it, you pl.!)’ (3.104.0099)

Prohibitives also occur with future tense constructions, as in the examples in (4). Note that these directives allow the expression an additional object pronominal, as in (4b); cf. (1c), which lacks the 1SG object pronominal =*ne*, and (1d), which lacks 1PL =*re*.

- (4) TV a. $Xa = 7aa$ *huu7a-ro*.
 PROH = 2SG.IMP get.angry-FUT
 ‘¡No te enojas! (Don’t get angry!)’ (3.104.0379)
- b. $Xa = nee = 7a$ *hevuut\$-ro*.
 PROH = 1SG = 2SG.IMP wait-FUT
 ‘¡No me esperes! (Don’t wait for me!)’ (3.105.0155)

8.3.2. THE SERRANO AUXILIARY COMPLEX. As in TV, the SE auxiliary complex includes modal and pronominal elements. However, SE also has a set of evidentials that are not attested in TV, and, unlike TV, in SE the complex includes a marker for past tense. The forms with past-tense marking are shown in Table 8.3.2.2 (2). The SE auxiliary complex presents a hierarchy of elements ranging from relatively free particles through forms that are sometimes free, sometimes suffixed, to remnant forms that are revealed in features of neighboring sounds, elements that are theoretically present underlyingly but lost

through the application of the general rules of SE phonology. There are, in addition, theoretically posited zero forms, both evidential (8.1.1) and pronominal (8.1.4).

8.3.2.1. SERRANO MODALS AND EVIDENTIALS. The modal and evidential elements listed in (1) appear first in the complex. More than one of these elements can appear in a single auxiliary complex, and ordering in such cases appears not to be rigidly fixed. (We also postulate a zero form, the evidential of direct experience (DRCT), as noted in 8.1.1.) In discussion of the class of elements in (1), we often use the term “modal,” regardless of whether a given item may have an evidential sense rather than a more strictly “modal” sense.

- (1) SE
- a. *kwyn(y)* ‘quotative’
 - b. *t(a)* ‘irrealis’ (required with questions and with the future suffix *-iv*); 2SG past has the special form *cha = m7* ‘IRR.PST = 2SG’
 - c. *tq(a)* ‘inferential’
 - d. *mitkin(a) ~ mit* ‘seem like’
 - e. *pyt\$(y)* ‘emphatic’
 - f. *kwy7* ‘potential (can, should, must, might)’; takes the imperative form of second person pronominals and of verbs
 - g. *mia ~ maj ~ mi* ‘dubitative (perhaps, maybe)’
 - h. *qaj* ‘negative’ (usually functions as though within AUX, but sometimes not)

The modals and evidentials in (1a-e) mark 3PL (and 2PL > 3SG) by retention of the otherwise apocopated final vowel. *Kwy7* (1f) takes the imperative forms of second person pronominal clitics and the imperative form of the verb. The same element also appears as the clitic =*kwy* in the CU auxiliary complex, where specialized verb constructions appear with it.

Mia (1h) appears in several shapes and is used in clause-initial or second position often followed by other clitics, as seen in (2). Sarah Martin usually used *mia*, as in (2a,b), though she also used *maj*. (2c) is an example of her use of *maj* in a song. Louie Marcus used the form *maj* (2d). Dorothy Ramón mainly used *mi* (2e-i) but she used *maj* in the combination *maj = t* in afterthoughts at the end of the sentence, as in (2h). There is one Ramón example, (2j), in which the spelling given, <ma’>, seems to represent an occurrence of *mia*.

- (2) SE a. **Mia = chymy-7** *moo^Rmo^Rho^R7* *waqaa-7*.
 DUB = 1PL-PST anyway fiesta-VBLZ
 ‘I guess we had fiestas anyway.’
- b. *Pa-jykja7 = mia = ta = my-7* *paa-t\$* *a-hyyvi-jka7* *mi-j*.
 PROX2-DAT = DUB = IRR = 3PL-PST water-ABS 3SG-edge-DAT go-IND
 ‘I guess they may have been going toward the shore.’
- c. *Ni-jyky-my7,* *ni-na7na-my7,* *puu-ku7 = maj* *hu7a-j*.
 1SG-mother-PL.GEN 1SG-father-PL.GEN 3PL-fire = DUB burn-IND
 ‘My mothers and my fathers’ fire is burning.’ (in a song)
- d. **Maj = t** *kwyn* *mi-iv* *kwyn* *hi-iv* *wany-t-i*.
 DUB = IRR.3SG QUOT.3SG go-FUT QUOT.3SG > 3SG see-FUT river-ABS-ACC
 ‘When he goes home, he will see the river.’
- e. *Ama7 = mi = kwyn* *puchu-v-k* *ama7*.
 DIST = DUB = QUOT.3SG hard-become-K that
 ‘And then it hardens.’
 <‘Ama’ mi’ kwan puchufk ‘ama’. > (R&E 719)
- g. *Uvia = m* *cha^Rna^Rn-k* *mi = t* *hiñiki7* *juu7o-w,*
 used.to = 3PL wake.up-K DUB = IRR.3SG how.many cry.out-DS
wachah juu7o-w *py^R-na^R* *cha^Rna^Rn-k*.
 four cry.out-DS 3SG-like wake.up-K
 ‘They used to get up at some hour, they got up like at four o’clock.’
 <‘Uvyam chenar’nk mit hinyiki’ yuu’ow, waca’ yuu’ow perna’ chenar’nk. > ‘They would get up
 bright and early, around four o’clock.’ (R&E 241)
- h. **Mi = ta** *haami7* *hamin* *ñiaa-t\$u-i7v* **maj = t**.
 DUB = IRR.3PL in.the.future how be-MOT-FUT DUB = IRR.3SG
 ‘Who knows know how it will come to be in the future.’
 <Mita’ haami’ hamin nyaacwi’f mayt. > ‘I don’t know how it’s going to end.’ (R&E 683)

- i. **Mi** *piaa7 = t\$*, **mi** *piaa7 = t\$*.
 DUB bewitch = 2SG.IMP DUB bewitch = 2SG.IMP
 ‘Just witch him, just witch him.’ (what *kiimat\$* ‘woodpecker’ says)
 <Mi’ pya’c, mi’ pya’c.> (R&E 134)
- j. **Ama7 = m[i]a** *kiimua7n* *py^R-na^R*.
 DIST = DUB be.drilling 3SG-like
 ‘It looks like he is drilling.’
 <‘Ama’ ma’ kiimwa’n perna’.> (R&E 353)

The examples in (3) illustrate further properties of *mia*, illustrating its co-occurrence with quotative *kwyn(y)*. The two frequently appear together. In (3a-d) they are in clause-initial position, in both possible orders. Note that in (3c) a third modal clitic, *t(a)* ‘irrealis’ is also present. *Mia* appears frequently with *t(a)*, which may contribute additional uncertainty to the evidential status of the clause. Example (3d) seems to show that when *kwyn(y)* precedes *mia*, the pronominal marking must be repeated. In (3e) *mia* and *kwyn* are discontinuous, seemingly in the same clause, with one of them late in the clause, not in a canonical position for the auxiliary complex; *mia* seems to be particle external to AUX in this example. *Mia* in example (3f) is probably also external to AUX and the following clause as well. It probably serves as a discourse-level commentary on the embedded clause *nymyjkwyn* ‘(it is said that) he was walking along’.

- (3) SE a. **Mia = kwyn** *yky-j*.
 DUB = QUOT.3SG lie-IND
 ‘He may have just lain there, they say.’
- b. **Ama7 = kwyn** *qaj* *hii-t-i* *hii~hi-j* *hukah-t-i*,
 DIST = QUOT.3SG > 3SG NEG INDF-ABS-ACC DUR~see-IND deer-ABS-ACC
mia = kwyny *aa-p* *hiñi-my-7* *kim*, *hiñi-my-7*
 DUB = QUOT.3PL DIST-LOC INDF-PL-UNCERT come INDF-PL-UNCERT
pa-m *huuhu7a-m* *wo^Rh*, *kwyny* *kim*.
 PROX2-PL beetle-PL two QUOT.3PL come
 ‘He didn’t see any deer, but some things came there, some things, those two beetles, they came.’

- c. **Kwyn** **mia = t** **ama7** **pyt\$** **pyjaan** **aa-piu7.**
 QUOT.3SG DUB = IRR.3SG DIST EMPH.3SG far there-ABL
 ‘It seems to have been quite far from there, they say.’
- d. **Kwyny** **mia = my** **i7ihma7** **chiinaru7-ja-m** **vakeeru7-ja-m.**
 QUOT.3PL DUB = 3PL > 3PL tease Mexican-AUG-PL cowboy-AUG-PL
 ‘Mexican cowboys used to make fun of them (the bears).’
- e. **Ivi7 = kwyn** **a-to^R7 = mia** **aa^Rny^R7-k.**
 PROX = QUOT.3SG 3SG-belly = DUB be.open-K
 ‘This belly of his must have been open.’
- f. **Mia** **nymy-j = kwyn.**
 DUB walk-IND = QUOT.3SG
 ‘It seems that he was walking along.’

Like *mia* ~ *maj*, *qaj* ‘negative’ appears frequently in first or second position as an anchor for other clitics, as in (4), where it seems to be functioning within AUX.

- (4) SE a. **Maa.** **Qaj = t** **ymi7** **maa~mt\$y-j ?**
 listen.IMP NEG = IRR.2SG > 3SG 2SG.PRO DUR~hear-IND
 ‘Listen! Don’t you hear it?’
- b. **Qaj = kwyny = vy** **widhap-k-in.**
 NEG = QUOT = 3SG > 3PL leave.alone-K-CAUS
 ‘He didn’t leave them alone.’

Qaj also patterns like *mia* in combinations with modal and evidential elements in diverse orders, as in (5).

- (5) SE **Kwyny = vy-7** **qaj** **mi-j** **haii-ngkwa7** **amaj7** **taamia-t.**
 QUOT = 3SG-PST NEG go-IND INDF-DAT now day-ABS
 ‘She didn’t go anywhere that day.’

However, the semantic scope of *qaj* is different from most of the other members of AUX in a way that might be important. In addition to having the usual scope over predicates like other members of AUX, it may also serve to negate indefinite determiner phrases, as in (6). This is a well-known pattern in English and many other languages. SE and the other Tadic languages have negative polarity; there can be only one negative in a clause.

(6) SE a. *Yym qaj = mt\$ hii-t-i chamaqaan.*

2PL.PRO NEG = 2PL > 3SG INDF-ABS-ACC think

‘You don’t think about anything.’

b. *Qaj = kwyn hi-j ama7 tyj-t*

not = QUOT.3SG > 3SG see-IND DIST spirit-ABS

ajayp = kwyn qaj hii-t-i hii~hi-j.

because = QUOT.3SG > 3SG NEG INDF-ABS-ACC DUR~see-IND

‘Spirit didn’t see it because she didn’t see anything (she saw nothing). (She was blind.)’

In (6b), while *kwyn* cliticizes to *qaj* (in the first clause), *qaj* does not cliticize to *kwyn* (in the second clause). One difference is that *kwyn* is one of the evidential/modal elements that are obligatorily followed by argument pronominals (including 3SG zero). The only auxiliary-internal marking possible after an auxiliary pronominal is past tense -7. The other difference is in the scope of negation; *qaj* serves to negate the following element. Following the auxiliary, *qaj* negates the indefinite demonstrative *hiiti*, i.e., *qaj hiiti* means ‘nothing’. In the first clause of (5b), with the negative preceding the evidential *kwyn*, the entire clause is negated: ‘She didn’t see it.’

The potential form *kwy7* is also invariant, with no special form (retained vowel) marking 3PL, as seen by the presence of the 3PL pronominal *-m* in (7a), with (7b) showing the unmarked 3SG. *Kwy7*, like negative *qaj*, seems not to cliticize to preceding materials though *kwy7*, unlike *qaj*, seems definitely to be within AUX. While verbs with *kwy7* are formally imperatives, we indicate that in the examples below only for verbs where the imperative form of the verb is distinctive.

- (7) SE a. *Uii7wyna-j=vy aa-m nyy-j ppy^R-my^Rny^R7-kj-t*\$i**
 want-IND = 3SG > 3PL DIST-PL 1SG.PRO-ACC 3PL-swallow-K.IRR.SUB-ACC
jangk qaj kwy7=m haipa7n nyy-j ppy^R-my^Rny^R7-kj.
 but NEG POT = 3PL ever 1SG.PRO-ACC 3PL-swallow-K.IRR.SUB
 ‘He wants them to swallow me but they’ll never be able to swallow me.’
- b. *Hamukpi7 kwy7 Ø woo^Rnga-nia7n waha7.*
 or POT 3SG > 3SG rain-CAUS also
 ‘Or he could also make it rain.’
 <Hamukpi’ kwa’ weernganya’n waha’.> (R&E 70)

The examples in (8) seem to have plural-subject *kwy7* with no marking. However, these sentences may have hidden complexities. Example (8a) has the overt plural suffix *-m* cliticized to *qaj* ‘not’. This suggests that the introductory *mi = t kwy7* is extra-clausal and is not within the scope of plural agreement. Example (8b) has no plural marking whatever. In its original context (8b) is a partial repetition of (8a), perhaps leaving out a bit of structure in the process.

- (8) SE a. *Mi = t kwy7 ii-m qaj = m haii-ngkwa7 mana7-k.*
 DUB = IRR.3SG POT PROX-PL NEG = 3PL INDF-DAT go.home-K
 ‘Why couldn’t these (spirits) go home somewhere?’
 <Mit kwa’ ‘im qaym haynkwa’ manak. ‘Why won’t they go home?’> (R&E 30)
- b. *Mi = t kwy7 haii-ngkwa7 mana7-k.*
 DUB = IRR.3SG POT INDF-DAT go.home-K
 ‘They should go home somewhere.’
 <Mit kwa’ haynkwa’ manak.> ‘They should go home.’ (R&E 30)

The second person pronominals anchored by *kwy7* appear in their imperative forms, seen in (9a-d), with (9e) showing an example of the 1SG pronominal, which has no contrastive imperative form, and (9f) with an example of the zero for 3SG > 3SG. Further, where there is a difference between the indicative and imperative form of a verb, the imperative form is the one that collocates with *kwy7*. Examples can be seen in (8c-e), where the verb ‘go’ appears as *mia* (9c) (cf. indicative *mi-j*, seen in (5) above), ‘see’ is *hiy7* (8d) (not the usual reduplicated *hi~hi-j*), and ‘get’ is *ay* (9e) (not indicative *aje-j*).

In (9f) the transitive k-class verb *ichu7kin* ‘make, do’ is in its truncated, imperative form *ichu7kj*, a strong demonstration that the verbs of (9c-e) really are imperative forms rather than simply verbs that lack the suffix *-j* of the indicative.

- (9) SE a. ***Kwy7 = t\$*** *kut\$-ia7n,* *pa-ta-j* ***kwy7 = t\$ = py***
 POT = 2.IMP fire-CAUS PROX2-ABS-ACC POT = 2.IMP = 3PL.OBJ
ichu7-kj-chun.
 make-K-BEN
 ‘You could make a fire and you could make that (food) for them.’
- b. “*Ivi-j* ***kwy7 = mt\$*** *jaanym,*” *ky-j = kwyny* *py-my-kja7.*
 PROX-ACC POT = 2PL > 3SG have say-IND = QUOT.3PL 3-PL-DAT
 ‘“You must have it,” they said to them.’
 <“‘Ivi’ kwa’mc yaanam,” key kwana’ pemeka’.> ‘“Accept it,” they told them.’ (R&E 59)
- c. ***Kwy7 = t\$*** *py-my-kja7* *mia.*
 POT = 2.IMP 3-PL-DAT go.IMP
 ‘You should go to them.’
- d. *Tuuk* ***kwy7 = t\$ = py*** *hiy7.*
 at.night POT = 2.IMP = 3PL.OBJ see.IMP
 ‘You can see them at night.’
 <Tuuk kwa’cpe’ hye’.> (R&E 430)
- e. *Nyy7* ***kwy7 = ny*** *aj.*
 1SG.PRO POT = 1SG > 3PL get(pl.obj).IMP
 ‘I can get them.’
- f. “*Ajayp* *ama7* ***kwy7*** \emptyset *tq-amin* *hii-t-i*
 because DIST POT 3SG > 3SG INFR-how INDF-ABS-ACC
ichu7-kj,” *ky-j = kwyn.*
 do-K.CAUS.IMP say-IND = QUOT.3SG
 ‘“Because he (Coyote) might do something strange,” he said.’

Quite unlike most other modals and evidentials, but like *mia* ‘may’ and *qaj* ‘not’, *kwy7* never follows the verb. However, not like *mia*, *qaj*, and quotative *kwyn*, *kwy7* is not attested late in the clause outside the canonical auxiliary position.

The modals and evidentials in (1c-g) have special forms for third-person subjects, seen in Table 8.3.2.1.

Table 8.3.2.1. Serrano modals and evidentials with final vowel retention for 3pl subject

	underlying form	3SG subject unmarked	past	3PL subject unmarked	past
quotative	<i>kwyny</i>	<i>kwyn</i>	<i>kwyny = vy-7</i>	<i>kwyny</i>	<i>kwyny = my-7</i>
irrealis	<i>ta</i>	<i>t</i>	<i>ta = vy-7</i>	<i>ta</i>	<i>ta = my-7</i>
inferential	<i>tqa</i>	<i>tq</i>	<i>tqa = vy-7</i>	<i>tqa</i>	<i>tqa = my-7</i>
emphatic	<i>pyt\$y</i>	<i>pyt\$</i>	<i>pyt\$y = vy-7</i>	<i>pyt\$y</i>	<i>pyt\$y = my-7</i>
seem	<i>mitkina</i>	<i>mitkin</i>	<i>mitkina = vy-7</i>	<i>mitkina</i>	<i>mitkina = my-7</i>

The underlying forms are superficially the same as the 3PL “unmarked” forms, the latter being exceptional to apocope. This exceptionality seems to result from their final vowels being derivationally lengthened to mark plural, making them not subject to apocope, but then they are shortened in word-final position. The abstract lengthening here is probably of the same origin as the (non-abstract) length of the plural possessive prefixes *chyy-* ‘our’, *yy-* ‘your (pl.)’, *pyy-* ‘their’ (cf. 5.2.2 (2)), namely compensatory lengthening upon the loss of a plural marker **-m*. The 3SG-subject forms are just the underlying forms with regular apocope.

The quotative *kwyn(y)* can exemplify this class of forms, as seen in the non-past complexes in (10). If the quotative appears in a clause with 3SG arguments, and no marking of past tense, the short form *kwyn* appears. If the clause is intransitive this is understood as *kwyn* \emptyset ‘it is said that 3SG’ (10a). If the clause is transitive, there is a theoretical double zero, *kwyn* $\emptyset \emptyset$ ‘it is said that 3SG > 3SG (10c). The 3PL subject forms, which are marked only by retention of the final vowel of the underlying form, can have the intransitive argument reading ‘3PL’ (10b), or the transitive reading ‘3PL > 3SG’ (10d) or even ‘3PL > 3SG > 3SG’ (10e). A plural object requires an overt pronominal, as in (10f,g). If the past tense is to be marked, this requires an overt pronominal anchor; the 3PL past with quotative is *kwyny = my-7* (as opposed to non-past *kwyny*).

- (10) SE a. *Kwyn ama7 pyn-k ama7 hukah-t.*
 QUOT.3SG DIST pass-K DIST deer-ABS
 ‘(It is said that) the deer passed.’
- b. *Kwyny wo^Rh qat\$.*
 QUOT.3PL two be
 ‘(It is said that) there were two of them.’
- c. *Ani = kwyn tiy^R.*
 and.then = QUOT.3SG > 3SG tell
 ‘And then (it is said) she told him.’
- d. *Jangk qaj = kwyny ynan pyy-na7n-i.*
 but NEG = QUOT.3PL > 3SG know;recognize 3PL-father-ACC
 ‘But (it is said) they didn’t recognize their father.’
- e. *Ami7 qaj = kwyny ichu7kin kwa7-i7aa-t\$-i*
 and NEG = QUOT.3PL > 3SG make eat-NMLZ-ABS-ACC
ami7 = kwyny vu7kich ichu7kj-chun
 and = QUOT.3PL > 3SG > 3SG separately make-BEN
huwa-t\$-i.
 other;different-ABS-ACC
 ‘And they made food and they made different [food] separately for him.’
- f. *Kwyny = vy aa-p qoo^Rn aa-m a-majha-m.*
 QUOT = 3SG > 3PL DIST-LOC kill(pl.obj.) DIST-PL 3SG-child-PL
 ‘There he₁ (the badger) killed those (his₂, the coyote’s) children.’
- g. *Ajay7 = kwyny = my kuuhan aa-m huwa-m-i*
 then = QUOT = 3PL > 3PL call;invite DIST-PL other-PL-ACC
taa-q-ta-m-i.
 person-ABS-PL-ACC
 ‘Then they invited other people.’

Examples of 3SG and 3PL forms of *mitkin(a)* and *pyt\$(y)* are given in (11).

- (11) SE a. *Ama7 = tqa = vy-7 pyt\$ paa^Rhavi-t ama7 chichin-t.*
 DIST = INFR = 3SG-PST EMPH.3SG powerful.being-ABS DIST boy-ABS
 ‘That boy must have been quite a powerful being.’
- b. *Mitkin ivi7 cha-na7.*
 seem.3SG PROX 1PL-father
 ‘This one seems to be our father.’
- c. *Jangk mitkina pyt\$y a~a7-ajy-m.*
 but seem.3PL EMPH.3PL ADJZ~PL-good-PL
 ‘But they seemed to be such good ones.’

Examples with inferential *tq(a)* and irrealis *t(a)* illustrating this singular-plural contrast appear in (12) and (13), with (12c) and (13c) included to illustrate the unapocopated forms which are found when followed by a suffix.

- (12) SE a. *Ni-na7 = tq mymy7.*
 1SG-father = INFR.3SG die.COMPL
 ‘My father must have died.’
- b. *Tqa ynan a-tywan-i.*
 INFR.3PL > 3SG know 3SG-name-ACC
 ‘I guess they knew his name.’
- c. *Havah-ky-j = tqa = chymy-7.*
 be.tired-K-IND = INFR = 1PL-PST
 ‘We must have been tired.’
- (13) SE a. *Kwyn mia = t ama7 pyt\$ pyjaan aapiu7.*
 QUOT.3SG DUB = IRR.3SG DIST EMPH.3SG far from.there
 ‘It seems to have been quite far from there, they say.’ [= (3c)]

- b. *Mia = ta aa-p pyy-taq hii~hi-j paa-v.*
 DUB = IRR.3PL DIST-LOC 3PL-self CONT~see-IND water-LOC
 ‘They may have seen themselves there in the water.’
- c. *\$yy7a-j = ta = vy-7 ?*
 bloom-IND = IRR = 3SG-PST Q
 ‘Did it bloom?’

Modals appearing in sequence, as in many of the examples above, may attest to a rich pattern of embedding if we understand that there can be only one instance of AUX within a clause. In the examples in (14), brackets indicate the presumed structure. Examples above with appearances of modal and evidential particles displaced to the right, like (3c,e), probably have similar embedding; they are repeated in (15) below, with proposed bracketing. Note that examples like (14b) and those in (15) suggest that the quotative particle may be part of a performative clause to which the remaining clause is subordinate, as illustrated in the proposed bracketing for (14b).

- (14) SE a. *Mia = [ta = n nyy7 mymy7-k-iv].*
 DUB = IRR = 1SG 1SG.PRO die-K-FUT
 ‘Maybe I’ll die.’
- b. *Kwyn [mia huwa7i7].*
 QUOT.3SG DUB different
 ‘It is said that it was different.’
- c. *Mia [kwyn yky-j].*
 DUB QUOT.3SG lie-IND
 ‘It is said that he just lay there.’
- d. *Ama7 = tqa = vy-7 [pyt\$ paa^Rhavi-t ama7 chichin-t].*
 DIST = INFR = 3SG-PST EMPH.3SG powerful.being-ABS DIST boy-ABS
 ‘That boy must have been quite a powerful being.’ [= (10a)]

- e. **Pyt\$** [tqa = chymy-7 o^Rh~o^Rngai7-m.]
 EMPH.3SG INFR = 1PL-PST PL~lazy-PL
 ‘We must have been very lazy.’
- f. *Jangk mitkina* [pyt\$y a~a7-ajy-m.]
 but seem.3PL EMPH.3PL ADJZ~PL-good-PL
 ‘But they seemed to be such good ones.’ [= (8c)]
- g. *Huuna-m = kwyny = my-7 ii-p nymy-j. Kwyny*
 bear-PL = QUOT = 3PL-PST PROX-LOC walk-IND QUOT.3PL
 [mia = my ii7ihma7 chiinaru7-ja-m vakjeeru7-ja-m.]
 DUB = 3PL > 3PL tease Mexican-AUG-PL cowboy-AUG-PL
 ‘There were bears around here. The Mexican cowboys used to tease them.’

- (15) SE a. **Kwyn** [mia = t [ama7 pyt\$ pyjaan aa-piu7.]]
 QUOT.3SG DUB = IRR.3SG DIST EMPH.3SG far there-from
 ‘It seems to have been quite far from there, they say.’ [= (3c)]
- b. *Ivi7 = kwyn* [a-to^R7 = mia aa^Rny^R7-k.]
 PROX = QUOT.3SG 3SG-belly = DUB be.open-K
 ‘This belly of his must have been open, they say.’

As discussed in 8.1, examples of sentences in languages like SE that lack overt modals or evidentials can be understood as encoding the zero evidential of direct personal experience. To clarify this point, we give the examples in (16) and (17) below, although in other examples we leave this theoretical evidential unspecified.

The examples in (16) are of intransitive sentences. In (16d), the pronominal for the final clause is cliticized to the end of embedded sentence, which consists of two clauses. Unfortunately the translation doesn’t do the SE syntactic structure justice.

- (16) SE a. *Hakup-ia = Ø = n pah~pan.*
 very-AUG = DRCT = 1SG CONT~be.thirsty
 ‘I’m very thirsty.’

- b. *Ama7 = Ø = vy-7* *hii-ta-7* *pa-m* *piichchua7-m*
 DIST = DRCT = 3SG-PST INDF-ABS-UNCERT PROX2-PL fly-PL
ani = Ø = m *my-qa^Rva-v* *juu7*.
 COMP = DRCT = 3PL 2SG-ear-LOC cry.out
 ‘That was just, uh, those flies (that are) buzzing in your ears.’
- c. *Acham = Ø = ch* *ii-p* *qat\$* *Wahi7-t* *py-mia7*.
 1PL.PRO = DRCT = 1PL PROX-LOC be;dwell coyote-GEN 3SG-COM
 ‘We live here with Coyote.’
- d. *Ivi7* *tyhtyji-ch = Ø = vy-7* *yym7-k-t\$u7* *ami7 = Ø = m* *mo^Rch*
 PROX work-ABS = DRCT = 3SG-PST end-K-MOT and = DRCT = 3PL again
mana7-k *pa-jykja7* *Maarynga-j7ka7 = Ø = m* *qat\$*.
 go.home-K PROX2-DAT Twentynine.Palms-DAT = DRCT = 3PL be;dwell
 ‘This work came to an end and they went back home over to Twentynine Palms
 where they lived.’
- e. *Aa-my = Ø = m* *pyy7-ashta-va7* *kim*.
 DIST-PL = DRCT = 3PL 3PL-animal;horse-LOC come
 ‘They came on horseback.’

Examples of transitive sentences appear in (17).

- (17) SE a. *Ama7 = Ø = vy = chi7* *tiy^R* *ii-ngkwa7* *kima-qa-m*.
 DIST = DRCT = 3SG.SUBJ = 1PL.OBJ tell PROX-DAT come-IFUT-PL
 ‘He told us to come here.’
- b. *Ama-jy = Ø = m* *naash-t-i* *ii-ngkwa7* *pina-j*.
 DIST-ACC = DRCT = 3PL > 3SG girl-ABS-ACC PROX-DAT bring-IND
 ‘They brought the (dead) girl here.’
- c. *T* *hamin* *pa-t* *ñiha-j = Ø = vy = chi7* *chysh~chyva7*.
 IRR how PROX2-ABS do-IND = DRCT = 3SG.SUBJ = 1PL.OBJ DISTR~follow
 ‘What’s the matter with him that he’s following us around?’

8.3.2.2. SERRANO PRONOMINALS AND THE PAST TENSE MARKER. As in TV, in SE pronominal arguments are encoded exclusively within the auxiliary complex, and these can be the only such encoding in the clause. The pronominals not marked for past tense are shown in Table 8.2.3.2 (1) (repeated from Table 8.1 (2)). The reduced set of past tense forms appear in Table 8.2.3.2 (2). Past tense can be marked on only some of the pronominals and the marking of past tense even with these pronominals often seems optional; many clauses with past-tense readings lack such marking.

Table 8.3.2.2 (1) Serrano pronominals in AUX (no past tense marking)

	object	1SG	1SG + PL	1PL	2SG	2SG + PL	3SG/INTR	2PL/3PL
	1SG	= <i>n</i>	–	–	= <i>n</i>	<i>ny</i>	= <i>n</i>	<i>ny</i>
	1PL	–	–	= <i>ch</i>	= <i>ch</i> ~ <i>chym</i>	<i>chymy</i>	= <i>ch</i>	<i>chymy</i>
	1PL HORT	–	–	–	–	–	– <i>t\$ ~ t\$yt\$</i>	
subject	2SG	<i>chi7</i>	<i>chi7=py</i>	<i>chymyt\$</i>	= <i>m7</i>	–	= <i>m7</i>	<i>py</i>
	2SG IMP	<i>chi7</i>	(?)	(?)	–	–	– <i>t\$</i>	= <i>t\$=py</i>
	2PL	<i>mynyt\$</i>	<i>mynyt\$=py</i>	<i>chymychi7</i> ~ <i>chymyt\$</i>	–	–	– <i>mt\$</i>	<i>pymyt\$ ~</i> = <i>mt\$=py</i>
	2PL IMP	(?)	(?)	<i>chymyt\$</i>	–	–	– <i>mt\$</i>	= <i>mt\$=py</i>
	3SG	<i>vy=n</i>	<i>vy=ny</i>	<i>vy=chi7</i>	= <i>m</i>	(?)	∅	<i>vy</i>
	3PL	<i>my=n</i>	<i>my=ny</i>	<i>my=chi7</i>	= <i>m</i>	<i>my</i>	= <i>m</i>	<i>my ~ ∅</i>

Table 8.3.2.2 (2). Serrano pronominals in AUX with past tense marked

	object	1SG	2SG/3SG/intr.
subject	1SG	–	<i>ny-7</i>
	1PL	–	<i>chymy-7</i>
	3SG	<i>vyny-7</i>	<i>vy-7</i>
	3PL	<i>myny-7</i>	<i>my-7</i>

Past tense can be marked only on intransitive or singular object pronominals. There is no past tense marking on second person pronominals (except with special forms of the irrealis modal in questions, discussed below). Constructions having second person as object can have past tense marked only when the pronominal used is the same as that used for third person object. And of course there is no marking of past tense on imperatives.

The past tense mark is a final glottal stop on the pronominal. In origin this seems to be the consequence of the exceptionality of the final vowel to undergo apocope, similar to the situation described earlier (4.2.2 (4)) for the demonstratives *ivi7* ‘this’ and *ama7* ‘that’. The past tense glottal stop is not an independently occurring clitic.

When we consider the position of the pronominal elements on the continuum between independent particles and bound elements introduced in Section 8.2.2.1, we find that some pronominals can behave like particles in that they can appear in clause-initial position as well as appearing as clitics in second position. The forms in Tables 8.3.2.2 (1) and 8.3.2.2 (2) that are not preceded by = can appear in initial position. At the extreme of the continuum on the bound end is the past-tense marker, which only appears in the environments specified in Table 8.2.3 (2). Its origin may be as a prosodic feature, presumably stress.

The examples in (1) show examples of 1SG subject forms in (obligatorily) cliticized (1a) and initial (1b,c) positions.

- (1) SE a. *Nyy7=n ahkw kim yskwela-j7ka7 churup-ka7.*
 1SG.PRO=1SG to.here come school-DAT enter-K.IFUT
 ‘I came here to go to school.’
- b. *Ny niat\$-k-ina-qa7.*
 1SG>3PL lock-K-CAUS-IFUT
 ‘I’m going to lock them.’
- c. *Ny-7 uii7wyn ny-mi-ik-t\$i ni-tyhtyj-ik-t\$i*
 1SG-PST want 1SG-go-IRR.SUB-ACC 1SG-work-IRR.SUB-ACC
haii-ngkwa7 ii-ngkwa7.
 INDF-DAT PROX-DAT
 ‘I wanted to go and work somewhere or other.’

Second-person intransitives and transitives with 3SG objects appear only in bound position, as in (2a,b). However, second-person subject transitive pronominals with other object types can appear initially, as in (c). Second person pronominals cannot appear with past-tense -7.

- (2) SE a. *A-mym7k-i = m7.*
 ADJZ-die-ADJZ = 2SG
 ‘You were dead.’
- b. *Ymy = mt\$ kuuhan ichamy-kja7.*
 2PL.PRO = 2PL > 3SG call;invite 1PL.PRO-DAT
 ‘You pl. invited him for us.’
- c. *Chi7 my^Rny^R7-k-in-iv wary7 jangk paa-t\$ puut-k-iv.*
 2SG > 1SG swallow-K-CAUS-FUT truly but water-ABS fill-K-FUT
 ‘If you swallow me, the water will rise.’

Clause-initial third-person pronominals appear in (3). Recall that a non-past third person intransitive subject pronominal is zero. The short forms of modals and evidentials that are underlyingly vowel-final can be considered portmanteau representations of 3SG subjects (and objects), as in (3d).

- (3) SE a. *Vy piihan.*
 3SG > 3PL nurse
 ‘She nursed them.’
- b. *Vy-7 a-taq mu-j.*
 3SG-PST 3SG-self shoot-IND
 ‘He shot himself.’
- c. *Vy = n tiy^R ii-p = kwyny ny-ñaa-m qat\$.*
 3SG = 1SG tell PROX-LOC = QUOT.3PL 1SG-relative-PL be; dwell
 ‘She told me that my relatives live here.’
- d. *Kwyn ajay7 maahwa7n. Kwyn ama7 hu7a-j.*
 QUOT.3SG > 3SG then burn(tr.) QUOT.3SG DIST burn(intr)-IND
 ‘Then she₁ burned her₂. She₂ burned.’ (cremation)

First-plural subject pronominals appear in (4).

- (4) SE a. *Acham=ch ii-p qat\$ Wahi7-t py-mia7.*
 1PL.PRO = 1PL PROX-LOC be; dwell coyote-GEN 3SG-COM
 ‘We live here with Coyote.’
- b. *Chymy-7 mi-j waqaa-jka7 pajykja7 Maarynga7-pa7.*
 1PL-PST go-IND fiesta-DAT over.there Mission.Creek-LOC
 ‘We went to a fiesta over there at Mission Creek.’
- c. *Chymy raakwy-nia7n.*
 1PL > 3PL eat(intr)-CAUS
 ‘We gave them food.’

2PL subjects are poorly attested, appearing mainly in directives following modal particles as in (5b,c,d).

- (5) SE a. *Yym=pymyt\$ ty7.*
 2PL.PRO = 2PL > 3PL roast
 ‘You (pl.) roasted them.’
- b. *Ta=mt\$ yy7-ash-ti raakwy-nia7n-iv kjavaaju7-ti.*
 IRR = 2PL > 3SG 2PL-animal;horse-ACC eat(intr)-CAUS-FUT horse-ACC
 ‘You’ll feed your horse.’
- c. *Panaa7 uii7wyno-w kwy7=mt\$ ñia.*
 that.way want-DS POT = 2PL do.IMP
 ‘If you want to, you can do that.’
 <Pana’ wi’wanow kwa’mc nyah.> (R&E 773)
- d. *Yym=ta=chymyt\$ puhche-i7v.*
 2PL.PRO = IRR = 2PL > 1PL wait-FUT
 ‘You (pl.) will be waiting for us.’

Third person subject pronominals are seen in (6). These are also represented by the long forms of the modals and evidentials with underlying final vowels, as in (6d,e). In

(6e), the two orderings, AUX + verb or verb + AUX, seem to be the same. There is probably a stylistic difference of some subtle sort, perhaps analogous to the difference between “He’s not going” vs. “He isn’t going.”

- (6) SE a. *Hachaa7i = m.*
sharp = 3PL
‘They’re sharp.’
- b. **My** *py-my-kja7* *ichu7-k-in* *kwa7-i7aa-t\$-i.*
3PL > 3PL 3-PL-DAT make-K-CAUS eat-NMLZ-ABS-ACC
‘They fixed food for them.’
- c. **My-7** *chawyy-t\$u7* *a-huuna-jka7* *hiit-iy7* *nyhnga-t\$-i.*
3PL > 3SG-PST pick-MOT 3SG-center-DAT INDF-ACC.HES grape-ABS-ACC
‘They went to town and picked, uh, grapes.’
- d. *Jangk* *qaj = kwyny* *ynan* *pyy-na7n-i.*
but NEG = QUOT.3PL > 3SG know 3PL-father-ACC
‘But they didn’t recognize their father.’
- e. **Ta** *naamu-iv.* ~ *Naamu-iv = ta.*
IRR.3PL fight-FUT fight-FUT = IRR.3PL
‘They’ll fight.’

Plural marking with the surface retention of underlying final vowels discussed above for the modals and evidentials is also found in the plural object inflection of certain pronominals, as in Table 8.2.2.2 (3). Examples appear above in (1b, 3a, 4c, 6b). Note that in two of the pronominal sequences in the table, *vyny* and *myny*, the plurality of the long form does not relate to the first object, which in SE is 1SG, but to a second object. In Tactic, this pronominal structure, subject + singular object + plural object, is found only in SE. However, this construction is found elsewhere in Uto-Aztecan, as in Nahuatl (7) (given in traditional spelling), where the first object can be first or second person and the second is third person plural.

Table 8.3.2.2 (3). Serrano plural object marking by final vowel retention

	underlying forms	unmarked	plural object
1SG	<i>ny / ny-</i> ¹	= <i>n</i>	<i>ny</i>
1PL	<i>chy / chy-my-</i> ²	= <i>ch</i>	<i>chymy</i>
2SG	= <i>m7 / py-</i> ³	= <i>m7</i>	<i>py</i>
3SG	\emptyset / <i>vy-</i> ⁴	\emptyset	<i>vy</i>
3PL	<i>my / my-</i>	= <i>m</i>	<i>my</i>
3SG > 1SG	<i>vy-ny / vy-ny-</i>	<i>vy-n</i>	<i>vy-ny</i>
3PL > 1SG	<i>my-ny / my-ny-</i>	<i>my-n</i>	<i>my-ny</i>

¹ The underlying length feature, from loss of plural *-*m* with compensatory lengthening, blocks apocope in the plural and then is lost. Or rather, apocope reduces a final vowel by one mora.

² *chy / chymy* seems arbitrary.

³ = *m7 / py-* is even more arbitrary.

⁴ The alternation of \emptyset and *vy* for 3SG has been mentioned above.

- (7) Nahuatl a. ***Xi-nēch-in-tla-qua-lt-ili***
 2SG.IMP-1SG.OBJ-3PL.OBJ-INDF.INAN.OBJ-eat-APPL-APPL.IMP
in__no-pil-huā-n-to~tōn.
 DET__1SG-child-PSD-PL-PL~DIM
 ‘Feed my poor little children for me!’ (Carochi [Lockhart] 2001:253)
- b. ***Ni-mitz-in-tlazòt-ilia*** *in__mo-pil-huā-n.*
 1SG.SUBJ-2SG.OBJ-3PL.OBJ-love-APPL DET__2SG-child-PSD-PL
 ‘Amo a tus hijos.’; lit. ‘Te amo a tus hijos.’ (I love your children for you.)’ (Launey 1992:190)

The Nahuatl *-in-* ‘plural second object’ is underlyingly epenthetic *i* plus *-m*. Underlying *m* is revealed when the following morpheme begins with a vowel. This is the same *m* as that posited above for SE (Table 8.3.2.2 (3), note 1).

Returning to SE, the examples in (8) show ditransitive predicates with plural second objects.

- (8) SE a. ***Vy=ny*** *kuuhan-ichun.*
 3SG.SUBJ = 1SG.OBJ + 3PL.OBJ call-BEN
 ‘He is calling me for them/He is calling them for me.’

- b. *Aa-m = ta = my = ny* *kuuhan-ichun-iv.*
 DIST-PL = IRR = 3PL.SUBJ = 1SG.OBJ + 3PL.OBJ call-BEN-FUT
 ‘They will invite me for them/They will invite them for me.’
- c. *Pa-ta-j* *kwy7 = t\$ = py* *ichu7-kj-chun.*
 PROX2-ABS-ACC POT = 2.IMP > 3SG = 3PL.OBJ make-K.CAUS-BEN
 ‘You could make that [food] for them.’

Example (9) goes beyond the marking available within AUX and has to insert an independent pronoun, accusative case *ymyj* ‘you (sg.acc.)’. Although long-form transitive pronominals like those illustrated in (8) permit a reading of a third argument as long as it is plural, if a third argument is singular, it is not represented within AUX. It would seem that once the object position within AUX has been allocated, there is no way to index a further object ‘you’, so an independent word must be added. But is it added inside AUX in this example? If AUX is constrained to first or second position, it might appear that the answer here is yes. However, (9) was offered with a clear break between *ama7* ‘that one, he’ and the rest of the sentence, so it seems likely that *ama7* is a topicalized form, with the rest of the sentence, beginning in *ymyj*, providing the context for the positioning of the AUX pronominals.

- (9) SE *Ama7, ymy-j = vy = chi7* *kuuhan-ichuna-qa7.*
 DIST 2SG.PRO-ACC = 3SG.SUBJ = 1PL.OBJ call-BEN-IFUT
 ‘He is going to call you for us.’

The examples in (10) show special hortative and imperative pronominals.

- (10) SE a. *Qaj7 = chi7* *pana7 ñia.*
 PROH = 2SG > 1SG thus do.IMP
 ‘Don’t do that (to me)!’
- b. *Na7 = t\$yt\$* *raakw.*
 HORT = 1PL.IMP eat
 ‘Let’s eat.’

c. *Kwy7 = t\$yt\$ my^Rka^Rn ivi-j.*
 POT = 1PL.IMP kill(sg.obj.) PROX-ACC
 ‘We ought to kill him.’

d. *Kwa7 = t\$ pa-t.*
 eat = 2 > 3SG.IMP PROX2-ABS
 ‘Eat that.’

8.3.2.3. QUESTIONS AND THE AUXILIARY. There is a special way to mark past tense for 2SG subject in questions, which is to use a unique form of the irrealis modal. The irrealis modal, used in futures and questions, is normally *t(a-)*, but to ask a question about ‘you singular’ in the past, the modal has the form *cha-*, to which the second person pronominal =*m7* is attached. An example appears below in (1). Note that there is no question intonation on sentences with question words like (1).

(1) SE *Hami-j = cha = m7 hii~hi-j.*
 who-ACC = IRR.2SG.PST = 2SG > 3SG DUR~see-IND
 ‘Who did you see?’

But on yes–no questions like (2), rising question intonation appears on the final syllable of the verb rather than necessarily that of the sentence final word. Example (2) also shows a peculiar feature of non-past questions with ‘you singular’ as subject. In such a question the pronominal element *-m7* is not used at all, and the irrealis modal occurs in its minimal form *t*.

(2) SE *Kwa7-i = t ? ymi7 kihuu-t\$-i.*
 eat-IND = IRR.2SG > 3SG Q 2SG.PRO fish-ABS-ACC
 ‘Are you eating fish?’

It might be tempting to take this odd contour location as evidence for the inclusion of Q as a category within AUX. However, example (3) shows that the location of question intonation is controlled by the predicate, not AUX. In (3a), the question intonation triggers the presence of the indicative suffix *-j* on the verb *muumu7k(y)* ‘hoot’ while in (3b), with the same question contour, the non-occurrence of the indicative suffix shows that the

immediate future form *tyaa7qam* ‘be going to roast (pl.)’ is a non-verb; presumably it is a nominalization despite its translation.

- (3) SE a. *Muum-t = [ta = vy-7]_{AUX} muumu7-ky-j ?*
 owl-ABS = IRR = 3SG-PST hoot-K-IND Q
 ‘Did the owl hoot?’
- b. *Acham = ta = chymy tyaa7-qa-m ?*
 1PL.PRO = IRR = 3PL > 3PL roast-IFUT-PL Q
 ‘Are we going to roast them?’

The treatment of immediate future of *tyy7(a)* in (3b) is remarkable in that when an immediate future form occurs before AUX, it is treated not as a nominalization but as an ordinary indicative verb, as in (4).

- (4) SE a. *Paa^Rvchana-qa-j = n ivi-j.*
 tell.a.story-IFUT-IND = 1SG > 3SG PROX-ACC
 ‘I’m going to tell this story.’
- b. *\$yy-7-nina-qa-j = chymy.*
 flower-VBLZ-CAUS-IFUT-IND = 1PL > 3PL
 ‘We’re going to decorate them (the graves) with flowers.’
- c. *Q^Ra7-qa-j = m.*
 die;be.sick(pl.)-IFUT-IND = 3PL
 ‘They’re going to be sick.’

Since cliticization obscures word boundaries, when AUX is cliticized to a verb, it becomes part of the verb word and participates in question intonation, as in (5a). In (5b) however, where AUX precedes the verb, question intonation remains on the verb, ignoring AUX. The consonant-final future suffix *-iv* is elaborated in (5b) by the addition of a echo vowel to accommodate the question intonation.

- (5) SE a. *Ay-iv* = [*ta = n*]_{AUX} ?
 get(pl.obj.)-FUT = IRR = 1SG > 3SG Q
- b. [*Ta = n*]_{AUX} *ay-iv-i* ?
 IRR = 1SG > 3SG get(pl.obj.)-FUT-ECHO Q
 ‘Could I get them?’

8.3.2.4. SYNTAX OF THE SERRANO AUXILIARY COMPLEX. We close this discussion with a few questions regarding the syntax of the auxiliary complex. First are examples that appear to lack AUX, in that they include no overt modal or evidential elements or pronominal forms. These examples can be presumed to have an appropriate zero AUX, as indicated within the sentences in (1).

- (1) SE a. *Puu-ñu* \emptyset \emptyset *ryyw-y7-k* *ngyt\$ka7*.
 3PL-possession DRCT 3SG vanish-RES-K beads
 ‘Their beads are gone.’
- b. *Aa-p* \emptyset \emptyset *nymy-j* [*hiit-iy7* \emptyset \emptyset]
 DIST-LOC DRCT 3SG walk-IND INDF-ACC.HES DRCT 3SG > 3SG
tangat-i *ngaan*.
 sack.ABS-ACC look.for
 ‘She was going around looking for something, for sacks.’
- c. *Nyyp-k* \emptyset *jangk*.
 sit.down-K 2SG.IMP then
 ‘Sit down then!’
- d. *Nyy7* \emptyset \emptyset *miaa-qa7*.
 1SG.PRO DRCT 1SG go-IFUT
 ‘I’m going [I’m going to go].’

Examples (1a,b) have the usual zero realization for third person subject with 3SG object. (1c) has zero for 2SG imperative subject. (1d) has only an independent pronoun and lacks the expected pronominal = *n*.

Example (1d) is especially mysterious. The expected 1SG pronominal = *n* is not used immediately before the immediate future verb *miaaqa7* ‘be going to go’. The 1SG pronominal is used, though, when following this verb or when separated from *miaaqa7* by another word, as shown in (2). The two pairs of examples in (2) were collected on two separate occasions to verify what was being heard. This odd behavior has been noted uniquely with immediate future *miaaqa7* ‘be going to go’ and with *kimi-t* ‘have just come’ the immediate past of *kim* ‘come’ (see 12.2.5.2 (1e)). (From here on, we omit the distracting reference to the \emptyset “direct” evidential.)

- (2) SE a. *Apuu-jka7* \emptyset *miaa-qa7*.
 east-DAT 1SG go-IFUT
 ‘I’m going east.’
- b. *Miaa-qa-j = n* *apuu-jka7*.
 go-IFUT-IND = 1SG east-DAT
 ‘I’m going east.’
- c. *Tiy^Rva-jka7* \emptyset *miaa-qa7*.
 land-DAT 1SG go-IFUT
 ‘I’m going to the land.’
- d. *Huwa-t*\$*-i = n* *tiy^Rva-jka7* *miaa-qa7*.
 other;different-ABS-ACC = 1SG land-DAT go-IFUT
 ‘I’m going to another land.’

The auxiliary complex in SE can be repeated at different levels within a sentence, as in (3).

- (3) SE a. *Jangk = [kwyn]_{AUX}* *ama7* *wyt*\$*^R*\$*-t*\$*-y7* *a-jy7 = [kwyn]_{AUX}*
 but = QUOT.3SG DIST man-ABS-GEN 3SG-mother = QUOT.3SG > 3SG
hakup *k^Rijij-k*.
 very hate-K
 ‘But [it was that] the man’s mother hated her.’

- b. “Nyy7 = [n]_{AUX} ama7 yy-na7,” ky-j = [kwyn.]_{AUX}
 1SG.PRO = 1SG DIST 2PL-father say-IND = QUOT.3SG
 ‘ ‘I’m your father,’ he said.’

In (3a), *jangk* = *kwyn* serves as an introduction to the sentence. It can’t be dismissed as a false start because the word *jangk* ‘but’ is part of the sentence and is not repeated as would be expected if the following material was being offered as a correction. Since *jangk* refers back to a situation that was set up in the preceding discourse, the first instance of *kwyn* in (3a) is at a higher node than the predication which follows. The second instance of *kwyn* relates to the predication ‘the man’s mother hated her’ and treats the three-word noun phrase *ama7 wyt\$y^R\$t\$y7 aly7* ‘the man’s mother’ as a unit. This unit, more precisely, is ‘that mother of [the] man’: nominative-case *ama7* ‘that/the’ modifies nominative-case *aly7* ‘his mother’, not genitive-case *wyt\$y^R\$t\$y7* ‘man’. Genitive case *ama7* is *amach*. In (3b), one instance of AUX is inside the direct quote and the other attaches to the main verb of the matrix sentence. Apparently the entire block “direct quote plus verb of saying” can be considered a single syntactic unit, at least for the placement of AUX.

8.3.3. THE KITANEMUK AUXILIARY COMPLEX. The material in this section comes from Anderton (1988) and from our own new examination and analysis of the Harrington field notes. This has been greatly facilitated by the fact that the notes are now available on line. The paucity of data, however, especially the complete absence of narrative text except for a tiny snippet carefully analyzed by Anderton, makes our analysis tentative, and it depends in some respects on evidence from comparative Takic.

As in other Takic languages, there are several distinct semantic classes of AUX elements in KI: moods and evidentials, tense, and pronominals expressing the arguments of transitive clauses. Strikingly absent from the attested evidentials is the quotative category, which is found in all the other Takic languages, save TV. Probably KI had such an evidential, and maybe TV did as well, but the nature of the material collected by Harrington seems not to have provided appropriate contexts for such an evidential to occur.

The KI pronominal arguments expressed in AUX are shown in Table 8.3.3 (1) (repeated from Table 8.2 (3)). Unlike the SE pronominals within AUX, which mark person and

number of both subject and object in all clause types, the KI pronominals within AUX are found only in transitive clauses, where there is no subject number distinction except with imperatives and hortatives (cf. the right-most column of Table 8.3.3 (1)).

Table 8.3.3 (1) Kitanemuk pronominals in aux

	object	1SG	1PL	2SG	2PL	3SG	3PL	HORT/IMP.PL.
subject	1	–	–	= (y)m	= mymy	∅	∅ (inan.), = (y)vy (anim.)	tsa- = t\$
	2	= (y)tsi7	= (y)tsim	–	–	∅	= (y)vy(m)	= t\$
	3	= (y)vyn	= (y)vytsym	= m	= (y)vy	∅	= (y)vy7 / ∅	

Full subject marking, for both intransitive and transitive, including both person and number, is expressed outside the auxiliary complex as prefixes on verbs (see 11.3.1). Thus in a transitive sentence, subject person is marked at least twice, once in the auxiliary complex and once in a pronominal prefix. The pronominal prefixes also encode subject number. Additionally of course, a noun or pronoun can also appear to encode the subject.

The parenthesized initial vowels in the table appear following consonants (except for 7 and y). These vowels seem to represent a reanalysis: the underlying form-final vowel that once was subject to apocope (cf. the situation in SE) has been reassigned to the clitic and normalized as the vowel y.

In the table, cells containing lines represent reflexive contexts, which are encoded by the relational noun construction with *-tak* ‘self’ (cf. 6.2.2) and a possessive prefix agreeing with the subject, as in (1), but with no auxiliary pronominal, just as with intransitives.

- (1) KI a. *Ni-tak ni-puhtsi7 numua-ik.*
 1SG-REFL 1SG-take.care.of good-ADVZ
 ‘I am taking good care of myself.’ (3.98.0288)
- b. *Pyy-py7-k pyy-tak.*
 3PL-fan-K.CAUS 3PL-REFL
 ‘They are fanning themselves.’ (3.98.0465)

Examples illustrating the pronominals in transitive clauses are given in (2).

- (2) KI a. *Ny = m* *ni-myk ymy-j.*
 1SG.PRO = 1 > 2SG 1SG-hit 2SG.PRO-ACC
 ‘Yo te pegué a ti. (I hit you sg.)’ (3.100.0561)
- b. *Ni-myky = mymy ymymy-j.*
 1SG-hit = 1SG > 2PL 2PL.PRO-ACC
 ‘I hit ye.’ (3.100.0561)
- c. *Ni-hi~hiu = mymy.*
 1SG-DUR~see = 1SG > 2PL
 ‘I am looking at ye.’ (3.100.0560)
- d. *Ni-mytsyk = yvy.*
 1SG-pity = 1 > 3PL
 ‘I pity them.’ (3.100.0621)
- f. *My-myk = ytsim.*
 2SG-hit = 2 > 1PL
 ‘You hit us.’ (3.100.0753; Anderton 1988:114)
- g. *My-myk = yvy.*
 2SG-hit = 2 > 3PL
 ‘You hit them.’ (3.100.0413; Anderton 1988:114)
- h. *Ny-j = yvyn a7-i~7ihama7.*
 1SG-ACC = 3 > 1SG 3SG-IPFV~tease
 ‘He is joshing me.’ (3.100.0750; Anderton 1988:114)
- i. *A-puhtsi7 = vytsym.*
 3SG-take.care.of = 3 > 1PL
 ‘He is taking care of us.’ (3.100.0619)
- l. *A-koon = yvy7 muungu-my.*
 3SG-kill(pl.obj) = 3 > 3PL owl-PL.ACC
 ‘He killed tecolotes (great horned owls).’ (3.99.0323)

- m. *Pyy-hi~hiu = vyn.*
 3PL-DUR-see = 3 > 1SG
 ‘They are looking at me.’ (3.100.0560)

No pronominal clitic appears when the object of a transitive sentence is 3SG, cf. Table 8.3.3 (1). Further, as noted above, pronominal clitics marking 3PL objects appear to be optional with animate objects and are ruled out with inanimates. Examples of third-person object contexts without object marking are seen in (3) (contrast with (2d,g,l) where the object is marked in AUX).

- (3) KI a. 1SG > 3PL *Ni-hiu pyy-waki7 kut\$aa-m.*
 1SG-see 3PL-dry stick-PL
 ‘I saw dry sticks.’ (3.100.0625)
- b. 1PL > 3SG *Tsy-paa7 hakwa-j-tsa-j.*
 1PL-drink stir-PASS.NMLZ-ABS-ACC
 ‘We drank some chia batida.’ (3.98.0209; Anderton 1988:106)
- c. 2SG > 3SG *Hi7-ta-j¹ my-hiu tyyj-ta-j.*
 what-ABS-ACC 2SG-see spirit-ABS-ACC
 ‘What kind of ghost did you see?’ (3.99.0686; Anderton 1988:116)
¹ Elsewhere this word is attested as *hiitaj*.
- d. 1SG > 3PL *Ni-hiu ki~ki-ta-my-j*
 1SG-see pl~captain-ABS-PL-ACC
 ‘I saw the captains.’ (3.98.0364)

Imperative and hortative plurals are marked by $=(y)t\$. Imperatives take no person prefix on the verb (in (4a)), while the hortatives take *tsa-* as the 1PL subject prefix (in (4b-d)) rather than the non-hortative *tsy-* (Anderton 1988:251). The hortative construction may also contain the future marker $=mat$, as in (4c). It is unclear how to construe this.$

- (4) KI a. *Tsi7 = t\$*.
gather;pick.up = IMP.PL
'Gather, you pl!' (3.98.0256)
- b. *Tsa-tsi7 = t\$*.
1PL.HORT-gather;pick.up = IMP.PL
'Let's go gather!' (3.98.0256); 'Let's pick it up!' (Anderton 1988:281)
- c. *Tsa-mi = mat = yt\$*.
1PL.HORT-go = FUT = IMP.PL
'Let's go!' (3.98.0359; Anderton 1988:120)
- d. *Kiva tsa-kwa = t\$*.
come.IMP 1PL.HORT-eat = IMP.PL
'Come to eat (Come, let's eat)!' (3.100.0689; Anderton 1988:126)

Singular imperatives take the same pronominal forms as in declarative sentences. Examples appear in (5). Note that the negative *kaj* (as in (5a)) is restricted to the prohibitive sense; the negative in declarative and interrogative sentences is *naw* (which, remarkably, seems not to be a loan from Spanish or English *no*; or at least, so speakers assert).

- (5) KI a. *Kaj = tsi7 hiu*.
PROH = 1SG.IMP.OBJ see;look.at
'Don't look at me!' (3.98.0351)
- b. *Kwirav = ytsi7*.
braid = 1SG.IMP.OBJ
'Braid my hair!' (3.98.0236)
- c. *Kaj = tsym hiu*.
PROH = 2 > 1PL.IMP.OBJ see;look.at
'Don't look at us!' (3.98.0351)

- d. *Kaj = vym = yt\$ hii.*
 PROH = 2 > 3PL.IMP = IMP.PL see;look.at
 ‘Don’t look at them!’ (3.98.0351; Anderton 1988:125)
- e. *Kaj = vym hii.*
 PROH = 2 > 3PL see;look.at
 ‘Don’t look at them!’ (3.100.0758; Anderton 1988:114)

Preceding the pronominals are modals and tense markers. Questions are marked by the clitic =*(y)t(a)* ‘interrogative, uncertainty’ (glossed Q). Examples are given in (6). It is the cognate of the SE irrealis *t(a)*, with the vowel *y* in =*(y)t(a)* the result of the reanalysis mentioned above in the discussion of Table 8.3.3 (1). The vowel *a* of =*(y)t(a)* is attested in but a single example (6d), where it occurs before the consonant-initial clitic =*m* ‘3 > 2SG’. It is presumed that KI, like SE (and like English, for that matter), had no question intonation on a question-word question, as in (6b-d) (and as in English), so we omit the orthographic question mark from the KI examples.

- (6) KI a. *My-mi = t ?*
 2SG-go = Q
 ‘Are you going (with me)?’ (3.100.0650; Anderton 1988:118)
- b. *Hami-tsy = t a-ki.*
 who-GEN = Q 3SG-house
 ‘Whose house is it?’ (3.100.0554; Anderton 1988:119)
- c. *Hamina = t = ytsi7 my-hi~hinitun.*
 why = Q = 2 > 1SG 2SG-CONT~bother
 ‘Why do you bother me?’ (3.100.0758; Anderton 1988:219)
- d. *Haipaje7 = ta = m mytsane7.*
 where = Q = 3 > 2SG hurt
 ‘Where do you hurt? (Where does it hurt you?)’ (3.98.0277; Anderton 1988:402)

The past tense marker is =*uvu7* (or =*vu7*, =*uvu*, =*yvy*). Since past tense is unmarked for most examples, the rarely occurring marked past must have some special meaning, probably having to do with some sort of focus on the past-ness of the example. The past tense clitic follows the question clitic =*t(a)*, as in (7a), and precedes any pronominal clitics (7b). The past-tense clitic =*uvu7* may be related to the past-time adverb *uvea* (= SE *uvia*) ‘already, long ago’. It was also sometimes recorded as =*yvy*, suggesting that phonetic bleaching accompanying the grammaticalization of the element was under way.⁸⁹ Example (7c) shows an example of =*uvu7* without its first vowel. Examples (7b,d) show occurrences of =*uvu7* without its final glottal stop. (7d) also shows an unusual occurrence of a clitic after an element that is apparently not the first constituent. Anderton (1988:123) suggests that this “may be conceived of as meaning something more like ‘It is here that it was’; that is, perhaps some focusing strategy has created a higher clause than the one in which the tense clitic belongs.” (7e) shows an example of the phonetically bleached form =*yvy*. (7f) shows the past tense clitic in a verbless sentence. Also in (7f), the past tense clitic shows a postvocalic form =*vu7*.

- (7) KI a. *Ni-ngyt\$-ky = t = uvu7 = Ø.*
 1SG-cut-K.CAUS = Q = PST = 1 > 3SG
 ‘[Did I cut it?]' (3.100.0443; Anderton 1988:125)
 (no Harrington gloss)
- b. *A-hiu = uvu = vy.*
 3SG-see = PST = 3 > 2PL
 ‘He saw ye.’ (3.100.0614)
- c. *Uvea = vu7 ni-mirin ap ama7j naw.*
 before = PST 1SG-can but now NEG
 ‘Yo podía pero ahora no puedo. (I could [before] but now I can’t.)’ (3.98.0466;
 Anderton 1988:224)

⁸⁹ An alternative possibility is that an original =*yvy* is converging with *uvea* by analogy. =*yvy* would be cognate with the CU realis clitic from *=*yvy*, CU =*7yp*, which is largely restricted to occurrence with past-tense verbs.

- d. *li-p a-kat\$-uvu.*
 PROX-LOC 3SG-be-PST
 ‘It was here (said of a piece of meat).’ (3.100.0382; Anderton 1988:123)
- e. *Ni-myk = yvy = Ø woh ta~taav-ja-my.*
 1SG-kill-PST = 1 > 3PL two PL~ethn-AUG-PL.ACC
 ‘I killed two Tatavians.’ (3.98.0121; Anderton 1988:173)
- f. *Taaka-ta = vu7 kutsi7 Ø.*
 person-ABS = PST dog be
 ‘El perro era gente. (The dog used to be a person.)’ (3.98.0061; Anderton 1988:119)

The other KI tense marker is the future, *mat*. This can occur in initial position as in (8a), though it is usually cliticized as in the other examples in (8). Examples (8c-e) show *mat* preceding overt pronominals. (8f) illustrates future tense occurring after a two-word first constituent. The example also shows future *mat* in an intransitive clause, with the consequent non-occurrence of any pronominal clitic. No example of a future tense question has been encountered.

- (8) KI a. ***Mat ni-kwaara7 paakwyni-ny.***
 FUT 1SG-smear mud-INS
 ‘I am going to plaster my house with mud.’ (3.99.0426; Anderton 1988:122)
 [repeated from 8.1.3 (5a)]
- b. *Ni-kwa7 = mat ivi-j a-tapa-j.*
 1SG-eat = FUT PROX-ACC 3SG-meat-ACC
 ‘I am going to eat this [meat].’ (3.98.0287; Anderton 1988:111)
 Harrington left *atapay* unglossed; ‘meat’ is Anderton’s gloss.
- c. *Ni-kon = mat = yvyn ngaaty7-ja-m-i.*
 1SG-kill(pl.obj) = FUT = 1 > 3 cat-AUG-PL-ACC
 ‘I am going to kill all the cats.’ (3.100.0669; Anderton 1988:124)

- d. *li-p = mat = ym* *ni-puhtsi7*.
 PROX-LOC = FUT = 1 > 2SG 1SG-wait
 ‘Aquí te voy esperar. (I will wait here for you sg.)’ (3.98.0450; Anderton 1988:120)
- e. *My-jyk = mat = ytsi7*.
 2SG-answer = FUT = 2 > 1SG
 ‘Tú me vas a contestar. (You sg. will answer me.)’ (3.98.0465; Anderton 1988:114)
- f. *Ivi7* *tamea-t = mat* *ni-jaa-hea*.
 PROX sun;day-ABS = FUT 1SG-catch-PASS
 ‘Este día me van a agarrar. (Today I am going to get caught.)’ (3.100.0697; Anderton 1988:122)

The fact that *mat* and the question clitic $= (y)t(a)$ do not cooccur leaves open the possibility that the *-t* component of *mat* also represents the same element as the SE irrealis *t(a)*. If this identity holds, then the *ma-* component of *mat* could correspond to the SE dubitative *maj* ~ *mia*. The SE combination *mia = t(a)* [DUB = IRR] (*mi-t(a)* in Ramón & Elliott 2000) is quite common and it seems reasonable to believe that the corresponding sequence has become reanalyzed as a unit in KI.

The counterfactual modal $=myk$,⁹⁰ seen in (9), may also belong within AUX. Its position within AUX might be after the future or the pronominals but no example of $=myk$ cooccurring with either has been found.

- (9) KI *Ny-kat\$ = myk* *aa-p*.
 1SG-be = CFAC DIST-LOC
 ‘¡Estuviera yo ahí! (Would that I were there!)’ (3.100.0580)

$=myk$ is often followed by $=wat$u7$, as in (10). The significance of $=wat$u7$ is unknown.

⁹⁰ Mistransliterated < mek > in Anderton 1988:233.

- (10) KI a. *Ty = myk = wat\$u7 ni-tsyk, a-juu7 = myk = wat\$u7.*
 if = CFAC = WAT\$U7 1SG-stick;stab 1SG-cry = CFAC = WAT\$U7
 ‘If I had stuck him with the scissors, he would have cried.’ (3.100.0843)
- b. *Ty = myk = wat\$u7 aap ni-kat\$, naw = myk = wat\$u7*
 if = CFAC = WAT\$U7 there 1SG-be not = CFAC = WAT\$U7
a-myk ama-j kwihaka-taj.
 3SG-kill(sg.obj) that-ACC woman-ACC
 ‘If I had been there he wouldn’t have killed the woman.’ (3.100.0844)

Whatever the meaning of =*wat\$u7*, it is mutually exclusive with =*ne(he)*, whose meaning is similarly unknown. Compare example (11) with the examples of (10) above.

- (11) KI *Ty = myk = nehe naw a-nip-yk, a-kat\$ = myk = nehe kii-vea.*
 if = CFAC = NEHE not 3SG-die-K 3SG-be = CFAC = NEHE house-LOC
 ‘If he hadn’t died, he would still be living in the house, si no hubiera muerto, hubiera estado en la casa.’ (3.100.0844)

The element =*nehe* (with variant =*ne*) was transcribed by Harrington as a separate word (Anderton 1988:244). Anderton’s practice, however, was to write it as a clitic. In support of this choice is the morphological fact that k-class verbs lose their *-k* thematic suffix before consonant-initial clitics, including both =*nehe* and =*mat* (Anderton 1988:127), cf. the examples in (12) and in 10.3.2 (7).

- (12) KI a. *Ni-murah-k. Ni-murah = nehe.*
 1SG-loosen-K.CAUS 1SG-loosen = NEHE
 ‘Yo lo solté. (I loosened it.)’ (3.98.0232; Anderton 1988:128)
- b. *Ni-ngyt\$-k. Ni-ngyt\$ = mat.*
 1SG-cut-K.CAUS 1SG-cut = FUT
 ‘Lo corté. (I cut it.)’ ‘Lo voy a cortar. (I will cut it.)’
 (3.100.0574; Anderton 1988:128)

The mystery clitic =*ne(he)* follows pronominal clitics as in (13), as well as the counterfactual =*myk* (cf. (11) above).

- (13) KI a. *A-kiivaw = vyn = nehe.*
 3SG-ask = 3 > 1SG = NEHE
 ‘He asked me for it.’ (3.98.0276; Anderton 1988:246)
- b. *A-hiu = m = nehe ymy-j.*
 3SG-see = 3 > 2SG = NEHE 2SG.PRO-ACC
 ‘Te miró a ti. (He saw you.)’ (3.100.0751)
- c. *Ny-m = ne ni-jam-k.*
 1SG.PRO = 1 > 2SG = NEHE 1SG-remember-K.CAUS
 ‘I remembered (reminded?) you.’ (3.98.0232; Anderton 1988:246)

=*ne(he)* can appear as the only clitic, as in (14a,b), or with the question clitic =*(y)t(a)*, as in (14c).

- (14) KI a. *Uvea = ne ni-wi.*
 long-ago = NEHE 1SG-make.acorn.mush
 ‘Hice atole. (I already made acorn mush.)’ (3.98.0275; Anderton 1988:247)
- b. *Ymy7 = ne my7-yjyw aa-my.*
 2SG.PRO = NEHE 2SG-rob DIST-PL.ACC
 ‘You robbed them.’ (3.100.0342)
- c. *Yym = yt = ne aa-p my-kat\$?¹ hawkupichu7j-vea.*
 2SG.PRO = Q = NEHE DIST-LOC 2SG-be Q assembly-LOC
 ‘¿Estabas en la junta? (Were you at the meeting?)’ (3.98.0381; Anderton 1988:248)

¹ We presume that KI question intonation is the same as in SE, i.e., a contour with rising pitch on the verb and not on the remainder of the clause.

Harrington made various notes on usage, such as “the *nehe* is added cuando está avisando a uno (when one is telling someone)” (3.98.0250), but it appears in questions as well as with negatives and counterfactuals as seen above. It does not appear with imperatives, and is not attested with the future tense. Anderton (1988:245) states that

nehe appears with =*uvu7* ‘past tense’, but in her list of all documented examples no such attestation occurs. Nor did we find any examples in our search of Harrington’s field notes on KI. However, there are attestations of =*nehe* with the past adverb *uvea* (as in (14a) above). One possibility is that =*nehe* is a contrastive focus particle; this idea, for now mere speculation, is stimulated by the fact that in Harrington’s field notes it often appears when he is eliciting pronominal paradigms, keeping the verb stem (such as ‘hit’ or ‘see’) constant while changing the person and number of subjects and objects.

The last item to mention in this survey is *kaj*, which Anderton (1988:239) glosses as ‘possibly’ and we label it as ‘dubitative’ (DUB). It appears in final position, perhaps within the string of clitics (15a,b). The data are scanty. Semantically, *kaj* seems to fit among the members of AUX, but the fact that it can appear as a full utterance (15c) suggests that it may instead be an independent adverbial particle.

- (15) KI a. *Ni-muk = mat = kaj.*
 1SG-die = FUT = DUB
 ‘Tal vez voy a morir. (Maybe I’m going to die.)’ (3.100.0849; Anderton 1988:239)
- b. *A-nip-yk; hami = t = kaj.*
 3SG-die-K who = Q = DUB
 ‘Se murió alguno, ¿quién será? (Someone died, who can it be?)’ (3.98.0463; Anderton 1988:239)
- c. *Kaj.*
 DUB
 ‘Tal vez. (Maybe.)’ (in answer to ‘Do you think you’re sick now?’) (3.98.0353; Anderton 1988:240)

In summary, the ordered pattern of occurrence of the clitics, as presently understood, is as in (16). Note that ‘past’ can follow ‘question’ but there is no evidence that ‘future’ ever occurs except as the first clitic in a sequence. Similarly, =*myk* ‘CFAC’ is attested only as a first clitic and it can be followed only by =*wat\$u7* and =*ne(he)*. =*wat\$u7* (of unknown meaning) associates uniquely with =*myk*.

- (16) KI = (y)t(a) ‘Q’ = uvu7 ‘PST’ pronominals = t\$ ‘IMP’
 mat ‘FUT’ = kaj ‘DUB’
 = myk ‘CFAC’ = wat\$u7 ‘(?)’
 = ne(he) ‘(?)’

8.3.4. THE COASTAL CUPAN AUXILIARY COMPLEX. The LU and AC auxiliary complexes appear to be nearly identical. Our treatment of the LU auxiliary complex synthesizes two sources, Kroeber and Grace (1960) and Jacobs (1975). For AC we depend on the Harrington archive. The complex in both languages nearly always appears in second position, following the first word or the first constituent.

In LU, the pronominal clitics, which encode the subject, seldom appear except in a larger complex with modal, evidential, and tense clitics. In Hyde (1971), a pedagogical grammar, sentences always include subject clitics. However, in the nearly 1500 pages of text in Hyde and Elliott (1994), the majority of indicative sentences encode the subject only with a lexical element, or simply do not mark subject at all where discourse context makes the identity of the subject clear (and sometimes when it does not and cultural knowledge is required to fill in the reference).

In the AC materials the pronominal clitics, with the exception of the third person singular, are almost invariably present. For instance, nearly all verbs were elicited in the nonfuture singular, and the informants preferred to give these with a 3SG pronominal, e.g. *hakut-q = ap* [hollow-NFUT.SG = 3SG] “está hueco (it is hollow). Means a tree is agujerado (full of holes) and bofo (squishy) in its center” (3.123.0274).

An important element in Coastal Cupan is a dubitative particle *tee* ‘perhaps, I don’t know, I guess, let’s see if’ (among other definitions offered by Elliott 1999). This form is always in first or second position in the clause, and often anchors other clitics, as in the LU example in (1c) and in AC in (1f). In (1e), it follows an entire constituent. Elliott always writes it as fully stressed in Hyde and Elliott (1994). In comparison, he does not write =*sun*, with a similar dubitative sense, as stressed; compare (1a), where we mark stress, with (1b). *Tee* seems similar in meaning and distribution to the SE dubitative *mia*, discussed in 8.2.2.1, and is almost certainly cognate with KI *ty* ‘if’, seen in 8.3.3 (10-11). It is a particle rather than a clitic, but should surely be assigned to the auxiliary complex as more broadly understood.

- (1) LU a. *Pi7 téé noo pa7 micha7 axán-an.*
 and DUB 1SG.PRO then what happen-FUT
 ‘And I didn’t know what would happen.’ (H&E 116)
- b. *Pi7=sun noo micha7 axán-a-lut.*
 and=Q 1SG.PRO what happen-INTR-IFUT.SG
 ‘And I didn’t know what was going to happen.’ (H&E 116)
- c. *Tee=pu loovi-maan.*
 DUB=IRR good-FUT.IPFV
 ‘Let’s see if it will be good.’ (H&E 118)
- d. *Hax tee po-7aash po7 miy-qu\$.*
 who DUB 3SG-animal 3SG.PRO be-PST.IPFV
 ‘I don’t know whose animal it was.’ (H&E 295)
- e. *Awoo hax po-mix tee.*
 other who 3SG-belonging DUB
 ‘[It was] someone else’s, I don’t know whose.’ (H&E 310)
- AC f. *Tee=\$=p=a hii-ngay chey-k hatii7-x-nga-q.*
 DUB=Q=3SG=DPST INDF-ABL this.way-DAT go-INTR-GO&NFUT.SG
 ‘Yo no sé porqué vino. (I don’t know why he came/Who knows why he came this way.)’ (3.123.0565)

The fully bound clitics in Coastal Cupan can be grouped according to position in the complex. Several clitics attested in LU are not attested in the AC data, but it seems likely that they were present in that language as well. For the attested clitics, the glosses often neglect their meanings. In glossing these sentences, we have assumed the LU sense of the clitics, unless there is evidence to the contrary. First-position clitics are seen in (2).

- (2) a. quotative [QUOT] LU = *kun(u)*; AC = *k(w)on(o)* (< **kwyny*)
 b. interrogative₁ [Q] LU = *\$u ~ =su ~ =s-*; AC = *\$a ~ = \$* (< **\$y*)
 c. interrogative₂ [Q] LU = *\$un ~ = \$an* (< **\$yn*, **\$an*)
 “less direct interrogative” (K&G 61, Jacobs 1975:75)

d. desiderative [DES] LU = *xu*

(Jacobs 1975:74). Kroeber and Grace (1960:61) call this “conditional,” cf. this reading in (7j, 10f).

The pronominal clitics in the second position in the auxiliary complex are shown in (3). Though the LU and AC pronominals are superficially quite different, underlyingly they are identical. The vowel *u* in the LU forms represents unstressed *o*, from **y*. In AC **o* from **y* often appears in unstressed position as *a*. The 3PL, however, is never **=pam*.

(3)		singular	plural
a.	LU	1 = <i>n</i>	= <i>cha</i> ~ = <i>ch-</i> ~ = <i>sh</i>
		2 = <i>up</i> ~ \emptyset	= (<i>u</i>) <i>m</i>
		3 = <i>up</i> ~ \emptyset	= <i>pum</i> ~ = <i>m</i>
b.	AC	1 = <i>n</i> ~ = <i>na</i>	= <i>cha</i>
		2 = (<i>a</i>) <i>p</i> ~ \emptyset	= (<i>a</i>) <i>m</i>
		3 = (<i>a</i>) <i>p</i> ~ \emptyset	= <i>pom</i> ~ = <i>m</i>

The clitics of (3) encode only the subject, which may otherwise remain unexpressed. The object must be overtly expressed by a lexical element or an independent pronoun, and marked for object status by an accusative suffix. Since the subject clitics are largely optional, LU discourse exhibits a high frequency of zero-subject sentences, i.e., sentences with no overt indication of subject in any form.

The third-position clitics are seen in (4).

(4)	a.	realis, past [REAL]	LU = <i>il</i> ; AC = <i>il</i>
	b.	irrealis, future [IRR]	LU = <i>pu</i> ; AC = <i>pa</i> (< <i>*py</i>)
	c.	counterfactual [CFAC]	LU = <i>ma</i> (only with = <i>xu</i> (2d)?; cf. (7k))

The fourth-position clitics are listed in (5).

(5)	a.	dubitative [DUB]	LU = <i>7a</i>
	b.	distant past [DPST]	LU = <i>a(7)</i> ~ = <i>u(7)</i> ; AC = <i>a</i>

(Kroeber and Grace (1960:61; not encountered by Jacobs 1975:80)

- c. conditional [COND] LU = *kwa* ~ = *ka* ~ = *ku*; AC = *kwa* ~ = *ko*
 ‘thinks, possibly, probably, for all I care, go ahead and, so’ (Elliott 1999:404)
- d. emphatic [EMPH] LU = *taq* ~ = *taʔ* ~ = *ta*
 (Elliott 1999 treats *ta* as a headword.)

Emphatic = *taq* ~ = *taʔ* ~ = *ta* (5d) is considered a clitic of the fourth position by Kroeber and Grace (1960:60). Jacobs (1980:80) states that this element “occurs as a free form in almost any position in a sentence,” but he gives no examples. It may be related to the DCA particle *takat*, which punctuates narratives told by men (Seiler 1970, Mamet 2011). We have identified only examples of the bound-clitic type seen in (6). Mrs. Hyde, in her texts in Hyde and Elliott (1994), used = *ta* almost exclusively after the negative, as in (6b).

- (6) LU a. *Noo = kunu = n = taq toʔma-lut po-j.*
 1SG.PRO = QUOT = 1SG = EMPH marry-IFUT.SG 3SG.PRO-ACC
 ‘It is I, not you, who is the one that will marry her, they say.’ (K&G 66)
- b. *Qaj = ta qaʃí-la-m mij-quʃ.*
 NEG = EMPH lizard-ABS-PL be-PST.IPFV
 ‘They weren’t (really) lizards.’ (H&E 1349)

Examples with first-position clitics are seen in (7).

- (7) a. LU *Noo = \$u = n = il murópa-q.*
 1SG.PRO = Q = 1SG = REAL forget-PRS.SG
 ‘So I forgot it?’ (K&G 66)
- b. LU *Kupuʔa-q = \$u = n = il.*
 sleep-PRS.SG = Q = 1SG = REAL
 ‘So, I fell asleep?’ [or ‘I must have been asleep.’] (H&E 129)
- c. LU *Hax = \$u hunwu-t-i aamu-q.*
 who = Q bear-ABS-ACC hunt-PRS.SG
 ‘Who is hunting the bear?’ (Jacobs 1975:75)

- d. LU *No-miix = s = il* *miy-q.*
 1SG-possession = Q = REAL be-PRS.SG
 ‘So that is mine!’ (K&G 66)
- e. AC *Om = \$a* *hii-ngay* *ngee-q* *ave-j7.*
 2SG.PRO = Q what-ABL go.away-NFUT.SG PROX-ABL
 ‘¿Porqué te fuites de aquí? (Why did you go away from here?)’ (3.123.0564)
- f. AC *Axi-m = \$o = m.*
 who-PL = Q = 3PL
 ‘¿Quiénes son? (Who are they?)’ (3.123.0262)
- g. LU *Wunaa-l = \$un = pu* *po-\$uun* *loovi-q.*
 DIST-ABS-Q-IRR 3SG-heart be.good-PRS.SG
 ‘I wonder if he’s happy.’ (Jacobs 1975:76)
- h. LU *Pitoowili = xu = m = pu = kwa* *ataax-u-m* *jaw-ma*
 still = DES = 3PL = IRR = COND person-AUG-PL maintain-CFAC
pom-huhlav-i.
 3PL-religion-ACC
 ‘I wish the people still maintained their religion.’ (H&E 235)
- i. LU *Wunaa-l = xu = pu* *po-j* *wat-i.*
 DIST-ABS = DES = IRR 3SG.PRO-ACC hit-TR.IMP
 ‘He should hit him.’ (Jacobs 1975:76)
- j. LU *Chaam = xu = sh = pu = kwa* *cham-sinava-ki* *wan7-ma* *pi* *chaam*
 1PL.PRO = DES = 1PL = IRR = COND 1PL-money-PSD have-CFAC and 1PL.PRO
nech-i.
 pay-TR.IMP
 ‘If we had the money, we would pay.’ (Jacobs 1975:79)

- k. LU *Qaj = xu = ma* *po7* *ngeem,*
 NEG = DES/COND(?) = CFAC 3SG.PRO go.away.PST.PFV
pi = xu = ma = ku *qaj* *luvi7-a-q* *ehéngmaj.*
 and = DES/COND(?) = CFAC = COND NEG make-INTR-PRS.SG bird
 ‘If he hadn’t gone, he would not have turned into a bird.’ (Elliott 1999:478)
- l. LU *Pi7 = kunu7* *nakm-uk* *pom-teela-j.*
 and = QUOT hear-USIT 3PL-speech-ACC
 ‘It is said he understood their speech.’ (K&G 63)
- m. AC *Karap-qa = kwon* *pa-qenx.*
 break.INTR-NFUT.SG = QUOT 3SG-collarbhone
 ‘[They say] he broke his collarbone.’ (3.123.0401)
- n. AC *Kii-ch = pom* *tappa-won,* *wom7 = p* *kott-a-cta-m* *eech*
 house-ABS = 3PL finish-NFUT.PL now = IRR cover-TR-IFUT-PL above
kiw-tal = kono = m *kott-a-cta-m,* *paveesa-tal* *men7.*
 wild.alfalfa-INS = QUOT = 3PL cover-TR-IFUT-PL tule;reed-INS or
 ‘Acabaron la casa, ya van a techarlo arriba, o con alfalfa o con tule. (They have finished the house and now they are going to roof it with either wild alfalfa or tule.)’ (3.123.0417)

The first position class clitic LU = *kun(u)* ‘quotative’ can appear with others in that class, that is, with another first position clitic, as in (8).

- (8) LU *No-miix = su = kun* *miy-q.*
 1SG-possession = Q = QUOT be-PRS.SG
 ‘Is it said that there is mine?’ (K&G 66)

Additional examples of the pronominal clitics are given in (9).

- (9) a. LU *Noo = n* *o-jk* *naaw-i-lut.*
 1SG.PRO = 1SG 2SG-DAT write-TR-IFUT.SG
 ‘I am about to write to you.’ (K&G 64)

- b. AC *Haruura = n wawwan-q.*
 always = 1SG call-NFUT.SG
 ‘Siempre lo llamo. (I always call him.)’ (3.123.0621)
- c. AC *Noo = na = pa miich-an.*
 1SG.PRO = 1SG = IRR strangle-FUT
 ‘Yo lo voy a horcar, I am going to strangle him with my hands.’ (3.122.0185)
- d. LU *Amu7 = cha chaam mokna-wun punee-ji anoo-ji.*
 already = 1PL 1PL.PRO kill-PRS.PL DET.ANIM-ACC coyote-ACC
 ‘We have already killed the coyote.’ (K&G 192.49)
- e. LU *Naqma-wun = cha o-mah-i-qala o-7uwó7ax-i.*
 hear-PRS.PL = 1PL 2SG-stop-TR-DS 2SG-work-ACC
 ‘We heard that you quit your job.’ (H&E 121)
- f. AC *Chaam7am7 = cha mux-won pe7 amu7 chiw7-x-on.*
 1PL.PRO = 1PL gamble-NFUT.PL and already lose-INTR-NFUT.PL
 ‘We were gambling and we lost.’ (3.123.0472)
- g. AC *Amú7 = cha neech-x-on.*
 already = 1PL go.for.walk-INTR-NFUT.PL
 ‘Ya nos paseamos. (We already went for a walk.)’ (3.123.0537)
- h. LU *Wam = up paahaj-kun ne-j o-wingeni-7i.*
 already = 2SG three-times 1SG.PRO-ACC 2SG-tell.lie-NMLZ:PSD
 ‘You have already lied to me three times.’ (K&G 191)
- i. AC ... *nii = 7ap moll-a-maxan.*
 ... 1SG.PRO.ACC = 2SG remember-TR-FUT.IPFV
 ‘... para que te acuerdas de mí. (... so that you will remember me.)’
 (3.123.0388)
- j. AC *Om = op ju7n-a-q.*
 2SG.PRO = 2SG be.wet-TR-NFUT.SG
 ‘Tú lo estás mojando. (You are getting it wet.)’ (3.123.0407)

- k. LU *Hakmaxwi-chu-m = um.*
 hungry-ABS-PL = 2PL
 ‘You are hungry.’ (K&G 65)
- l. AC *Amom = \$a = m qaj maqa7-x-k-ta-m?*
 2PL.PRO = Q = 2PL NEG go.to.sleep-INTR-IFUT-ABS-PL
 ‘¿Uds. no van a dormir? (Aren’t you pl. going to sleep?)’ (3.123.0578)
- m. LU *Po7 = up o-paamaj aaw-q.*
 3SG.PRO = 3SG 2SG-FaOSi be-PRS.SG
 ‘She is your father’s sister.’ (K&G 208)
- o. AC *Qaj wom7 = p chuung-a7-q.*
 NEG now = 3SG suck;nurse-TR-NFUT.SG
 ‘Ya no mama. (He is no longer nursing.)’ (3.123.0385)
- p. AC *Mana = p amuula-w7-ch.*
 come = 3SG first-GENT-ABS
 ‘Ay viene el primero. (The first one is coming.)’ (3.123.0295)
- q. AC *Oona = p pa-7jall-a7 pa-7qinn-a.*
 PROX2 = 3SG 3SG-know-TR 3SG-be.midwife-TR
 ‘Ella sabe partear, she knows how to be a midwife.’ (3.123.0325)
- r. LU *Jax-wun = pum ne-j om = kunu ma7ma-q*
 say-PRES.PL = 3PL 1SG.PRO-ACC 2SG.PRO = QUOT want-PRS.SG
o-ki-j no-kii-chu-pi.
 2SG-house-ACC 1SG-house-VBLZ-IRR.SUB
 ‘They tell me that it is said that you want me to build you a house.’ (K&G 200)
- s. LU *O-j = pum jax-wun.*
 2SG.PRO-ACC = 3PL say-PRS.PL
 ‘They’re talking to you.’ (H&E 613)

- t. AC *Karap-x-on7=pom.*
 fall-INTR-NFUT.PL = 3PL
 ‘Ellos se cayeron. (They fell down.)’ (3.123.0588)
- u. AC *Pom-xo=m ajalla7-maxan.*
 3PL-only = 3PL know-FUT.IPFV
 ‘Ellos solos sabrán. (They alone will know.)’ (3.123.0395)

The clitics of the third position are illustrated in (10) and (11). The modal clitics LU = *il* ~ AC = *al* and LU = *pu* ~ AC = *pa* often appear with past and future senses respectively. However, many examples suggest that their sense is ‘realis’ and ‘irrealis’ respectively, as in (10a) with =*il* and an inceptive verb. Jacobs (1975:78) gives the examples in (10a-c), with the latter two examples suggesting quite complex readings of =*il*. That is, these clitics are modals, not tenses like =*uvu7* ‘past’ and =*mat* ‘future’ in KI. The irrealis modal LU = *pu*, AC = *pa* can appear with imperative forms of verbs, which in that context play a “subjunctive” role, as in (10f). Additional examples appear in (7i) above and (12d). This structure is like the TV constructions with irrealis =*p(o)* and the imperative, suggesting that it may have been a Proto-Takic construction as well.

- (10) a. LU *Wunaa-l=up=il luvi7-ax.*
 DIST-ABS = 3SG = REAL make-TR:PST.PFV
 ‘He made it.’ (Jacobs 1975:78)
- b. LU *Po-xil-a-vuta-muk=p=il.*
 3SG-rain-INTR-POT-PST.IPFV = 3SG = REAL
 ‘It might have rained.’ (Jacobs 1975:78)
- c. LU *Noo=\$=il teetil-ax-lut exngay.*
 1SG.PRO = Q = REAL talk-INTR-IFUT.SG tomorrow
 ‘I might talk tomorrow.’ (Jacobs 1975:78)
- d. AC *Amu7=\$=al ngool-q.*
 already = Q = REAL be.drunk.INTR-NFUT.SG
 ‘Ya se emborrachó. (He must have gotten drunk already.)’ (3.123.0302)

- e. LU *O-j = nu = pu* *pitoo* *hila7-i-n.*
 2SG.PRO-ACC = 1SG = IRR now eat-TR-FUT
 ‘Now I am going to eat you.’ (K&G 190)
- f. LU *Noo = xu = n = pu* *hati7-ax* *pa7áw-juk* *pe7* *iita-q.*
 1SG.PRO = DES = 1SG = IRR go-INTR.IMP mountain-DAT but cold-PRS.SG
 ‘I would go to the mountains, but it is cold.’ (K&G 153)
- g. AC *Ava7 = \$a = pa* *moj7-x-an.*
 PROX.LOC = Q = IRR rest-INTR-FUT
 ‘Aquí vamos a descansar. (Let’s rest here.)’ (3.123.0509)
- h. AC *Avaá7 = na = pa* *wet-a77-an* *pa-hkwis-x-la-p.*
 PROX.LOC = 1SG = IRR stop-TR-FUT 3SG-rest-INTR-GOPR-IRR.SUB
 ‘Lo voy a parar aquí para que descansa. (I am going to stop him here so he can rest.)’ (3.123.0509)

The counterfactual modal =*ma* is barely attested (in contrast to the counterfactual suffix *-ma* on verbs, which is common); Elliott (1999:478) cites just one example, given in (11), repeated from (7k). Counterfactual *-ma* as a suffix *-ma* on verbs has not been distinguished from habitual *-ma* (see 11.4.6). This seems wrong, and we propose that there are two homophonous suffixes *-ma*, not just a single *-ma* with a bipartite meaning (see 11.4.6).

- (11) LU *Qaj = xu = ma* *po7* *ngeem,*
 NEG = DES/COND(?) = CFAC 3SG.PRO go.away.PST.PFV
pi = xu = ma = ku *qaj* *luvi7-a-q* *ehéngmaj.*
 and = DES/COND(?) = CFAC = COND NEG make-INTR-PRS.SG bird
 ‘If he hadn’t gone, he would not have turned into a bird.’ (Elliott 1999:478)
 [repeated from (7k)]

Clitics of the fourth position appear below. The nearly homophonous dubitative (= *7a*) and distant past (= *a(7)*) appear in (12).

- (12) a. LU *Hi-sh = n = il = 7a* *noo* *samsa-lut*
 INDF.INAN-ABS.ACC = 1SG = REAL = DUB 1SG.PRO buy-IFUT.SG
mon-qat.
 come-PST.IPFV.SG
 ‘I was going to buy something (and I can’t remember what it was).’ (K&G 66)
- b. LU *Manweel = kun = a7* *kük-chu.*¹
 Manuel = QUOT = DPST house-VBLZ.PST
 ‘It is said Manuel built a house some time ago.’ (K&G 67)
¹ With a short vowel, *kikchu*, in Elliott (1999:389).
- c. AC *Je7i-ch = kon = a(7)* *lavi77-ja* *a\$\$o-t.*
 man = QUOT = DPST turn.into-INTR.PST eagle-ABS
 ‘[They say that] the man turned into an eagle.’ (3.122.0124)

We gloss the clitic =*ku* ~ =*ka* ~ -*kwa* ‘conditional’ and give LU examples in (13). The label “conditional” is not especially felicitous, since this element has a wide range of uses beyond its appearance in “if” clauses. Kroeber and Grace (1960:61) label it as “(conditional), hypothetical.” It is probably cognate with SE *kwy7* and CU =*kwy*, which we have called “potential.” However, LU has a “potential” verb suffix -*luta* ~ -*vuta* (10.4.2.4) which appears when the sense is ability or potential to do or be, central for the SE and CU auxiliary elements, but not for =*ku* ~ =*ka* ~ -*kwa* in LU. It can appear in construction with irrealis =*pu*, as in (13a,b). It also appears with future (13c-e) and counterfactual verbs (13f,g). Its appearance in imperatives, as in (13h), is reminiscent of the “subjunctive” construction found in SE with the potential modal *kwy7*, in which verbs and pronominals that appear with *kwy7* are in imperative form (8.3.2.1 (8)).

- (13) LU a. *Noo = xu = n = pu = kwa* *saamsa* *ayxaniq.*
 1SG.PRO = DES = 1SG = IRR = COND buy.IMP like.that
 ‘I would buy it (if I had money).’ (K&G 66)

- b. *Chaam = cha = pu = ku wun-áj hiqw-i-n ivi7 paa-l*
 1PL.PRO = 1PL = IRR = COND DIST-ABL run-TR-FUT PROX water-ABS.ACC
iví-jk cham-ki-jk.
 PROX-DAT 1PL-house-DAT
 ‘So we’ll have to run some water over there to where our house is.’ (H&E 442)
- c. *Pi7 = nu = pu = ku noo luvi7-i-n no-ki-j.*
 and = 1SG = IRR = COND 1SG.PRO make-TR-FUT 1SG-house-ACC
 ‘And I think I will build my house.’ (Elliott 1999:405)
- d. *Tee = 7um = ka umoom ajalinuk heel-ax-an,*
 DUB = 2PL = COND 2PL.PRO good;well sing-INTR-FUT
umóm-i = nu = pu sikinavul-m-i¹ mujuk-m-i nech-i-n.
 2PL.PRO-ACC = 1SG = IRR money-PL-ACC much-PL-ACC pay-TR-FUT
 ‘Si cantarás bien, os pagaré, muchos dineros.’ / ‘If you [pl.] would sing well, I will pay you much money.’ (Pablo Tac 1838, Haas 2011:184-5)
¹ <siquinabolmi>; cf. <sínavu-l> (Bright 1968), <sinava-l> Elliott (1999)
- e. *Pi7 = mu = ka o-j taván-i-n palvun-nga.*
 and = 3PL = COND 2SG.PRO-ACC put-TR-FUT plain-LOC
 ‘And they are probably going to put you on a plain.’ (K&G 209.31)
- f. *Jixélva-lu-m = xu = sh = pu = ku mij-qanik pa7 pi7*
 intelligent-ABS-PL = DES = Q = IRR = COND be-SS then and
chaam choo7un hi-sh pom-miix-i oki-ma.
 1PL.PRO all INDF.INAN-ABS.ACC 3PL-possession-ACC save-CFAC
 ‘If we had been intelligent, we would have saved all their things.’ (H&E 519)
- g. *Pitoowili = xu = m = pu = kwa pumóm qal-ma.*
 still = DES = 3PL = IRR = COND 3PL.PRO live-CFAC
 ‘I wish they were still alive.’ (H&E 235)
- h. *Om = ku qiin-i eexi-l.*
 2SG.PRO = COND plow-TR.IMP land-ABS.ACC
 ‘Go ahead and plow the land.’ (Elliott 1999:405)

In AC, conditional *-k(w)o* is mainly attested with imperatives, as in (14). In (14a) it is inexplicably marked for stress. With (14b), Harrington includes the note “also v[olunteer]s *pe7pkopa7*.” The last element is presumably =*pa7* ‘irrealis’, but the irrealis clitic should precede =*ko*, as in several of the LU examples in (13).

- (14) AC a. *Haal=kwó pe7=ko taloww-an.*
 look.for.IMP = POT and = COND find-FUT
 ‘¡Búscaló! Y hallarás. Hunt for it and you may find it.’ (3.123.0634)
- b. *\$uul-a oona7 pe7=p=ko ajalla7nak pomm-an.*
 put.in-TR.IMP PROX2 and = 2SG = COND well press-FUT
 ‘Échale ese, y apriétalo bien, said of filling a trunk or sack full. (Put it in, and press it down well.)’ (3.123.0461)

In the examples in (15) =*kwa* may be polite, as suggested by the Spanish translations with *pues* ‘well, well then’. SE *kwy7* is also used as a polite form, as in (16).

- (15) AC a. *Hani=kkwa.*
 HORT.PRT = COND
 ‘¡Anda pues! (Well, come on!)’ (3.123.0592)
- b. *Ngaang=kwa.*
 cry.IMP = COND
 ‘¡Llora pues! (Well, cry!)’ (3.123.0318)
- (16) SE *Kwy7=t\$ ichaa-t\$ paa-t\$i haii-ngkwa7.*
 POT = 2SG.IMP dip-MOT.IMP water-ABS-ACC INDF-DAT
 ‘Would you [please] go search for water somewhere.’
 <Kwa’c ‘ichaac paachi’ khaynkwa’.> (R&E 846)

8.3.5. THE CUPEÑO AUXILIARY COMPLEX. The CU auxiliary complex, or clitic complex, appears in the second position in clauses, following either the first word or the first

constituent. The complex includes modals and evidentials along with pronominal argument markers.

Four positions within the clitic complex can be identified. The first position includes two evidentials and the dubitative =*\$y*, listed in (1).

- | | | | | |
|-----|----|----|---------------------------------|-------------------------|
| (1) | CU | a. | quotative [QUOT] | <i>ku7ut</i> |
| | | b. | mirative [MIR] | = (<i>a</i>) <i>m</i> |
| | | c. | interrogative, dubitative [DUB] | = <i>\$y</i> |

The quotative⁹¹ element *ku7ut* (1a), while usually cliticized as a second position element as in (2a), may also occur outside the complex as in (2b), and be found in other positions within the clause, even initially as in (2c). It appears to be intermediate in status between a clitic and a free particle. *Ku7ut* is probably etymologically a sequence of two elements. Initial *ku* is probably from **kwyny*, which underlies the quotatives in SE (*kwyn(y)*), LU (*kun(u)*), and AC (*kwon(o)*). The syllable *-7ut* may be the 3SG absolute case clitic = (*y*)*t*.

- | | | | | | | |
|-----|----|----|--|--------------------------------------|-------------------------|-------------------|
| (2) | CU | a. | <i>Mu=ku7ut</i> | <i>wijika</i> | <i>py-7amu-ngij-qal</i> | <i>yw7ypy-ka.</i> |
| | | | and = QUOT | around | 3SG-hunt-GOING-IPFV.SG | west-DAT |
| | | | ‘And it is said he was always going hunting off to the west.’ (Coyote and Flood) | | | |
| | | b. | “ <i>Hax = am,</i> ” | <i>p7ym-jax-wyn = yp</i> | <i>ku7ut.</i> | |
| | | | who = MIR | 3PL-say-IPFV.PL = REAL | QUOT | |
| | | | ‘“Who could it be?” they said, it is said.’ (H&N 64[128] VI.24) | | | |
| | | c. | <i>Ku7ut</i> | <i>ni~nish-l7y-vy-li-m</i> | <i>kiljma-ngax</i> | <i>pym-qal.</i> |
| | | | QUOT | PL~age,of.woman-VBLZ-REAL.SUB-ABS-PL | outside-ABL | 3PL-be.PST |
| | | | ‘They say the old women were outside.’ (H&N 9[18].19) [= 8.1.5 (1c)] | | | |

The mirative clitic = (*a*)*m* (1b) (= *am* after consonants (3a,b,d), = *m* after vowels (3c)) characteristically appears alone, very rarely in combination with other clitics (3d).

⁹¹ “Reportative” in Hill 2005:62.

- (3) CU a. *Jax-qál = am icháa7i = ku7ut mijax-wy.*
 say-IPFV.SG = MIR good = QUOT be-ST.PRS
 ‘He says that they say there is good news.’ (Faye field notes 4-6-27 23(267))
- b. *Mu = ku7ut “Isi-lj = am,” pý-jax = ku7ut.*
 and = QUOT coyote-ABS = MIR 3SG-say = QUOT
 ‘And they say he said, “It’s Coyote!”’ (H&N 64[128] VI.26)
- c. *Atíra = m ting-qa.*
 very = MIR be.hot-PRS.SG
 ‘It’s hot!’
- d. *I7 = am = py naxáni-sh nimxana-qat.*
 PROX = MIR = IRR man-ABS betray-IFUT
 ‘This is the man who will betray (me).’ (Faye Future 11 049)

The final member of the first-position clitics, interrogative and dubitative = \$y (1c), can also be used in questions (4a) or in contexts of doubt and uncertainty, as in (4b,c). It may appear alone (4a) or in combination with other clitics (4b). In a single example, (4c), it is attested following quotative *ku7ut*, a fellow “first position” clitic. Unlike the cognate LU element = \$u, it does not cooccur with question words.

- (4) CU a. *My = \$y y-t pytá7ama?*
 and = DUB PROX2-ABS all
 ‘And is that all?’ (Faye Past Time 13 (276))
- b. *Aax, chy7-matíma = \$y = py axwý-sh.*
 oh 1PL-SiSo = DUB = IRR DIST-ABS
 ‘Oh, that must be our sister’s son!’ (H&N 19[38] 67)

- c. *Mu = ku7ut = \$y = t* *qaj* *pym-hiwchu-wyn* *mixanuk*
 and = QUOT = DUB = 3SG.AB NEG 3PL-know-IPFV.PL INDF.MANNER
pyxanuk *axwý-ch-i* *py-7achiwi-qali.*
 DEF.MANNER DIST-ABS-ACC 3SG-do-DS.SG
 ‘And it is said that it must be that they did not know what he was doing.’
 (Creation)

The only clitic of the second position is =*kwy* ‘potential’⁹² which appears in sentences having to do with custom, capability, and necessity. As already mentioned, this clitic is probably cognate with SE *kwy7* ‘potential’ (cf. 8.2.2.1 (6)), and LU *kwa* ‘conditional’. While SE *kwy7* takes the imperative form of the verb, CU =*kwy* appears with its own special set of verb forms, seen in the examples in (5). These are discussed in section 11.5.5. The combination of =*kwy* and =*py* ‘irrealis’ yields a counterfactual reading, as in (5d). =*kwy* also appears with the habitual/usitative suffixes *-ny*, *-wyny* (see 11.5.4).

- (5) CU a. *Hi-sh = kwy = my* *aja* *pu7u7uj?*
 INDF-ABS = POT = 3PL.ERG then eat,be.able.to
 ‘Then what can they eat?’ (Faye Creation 009; H&N 1[2] 10)
- b. *My = kwy = t* *qa7a7aw.*
 and = POT = 3SG.AB die,be.able.to
 ‘And he might die.’ (Faye KP 103 75; H&N 11[22] 77)
- c. *Hax = kwy* *nynywyny.*
 who = POT walk,be.able.to
 ‘Who could be going around?’ (Faye KP notes 13 23a; H&N 9[18] 23)
- d. *Hani = kwy = py* *maa* *py-pa-7a-j,* *my = kwy* *ny-t*
 HORT = POT = IRR stop,be.able.to 3SG-drink-PSD-ACC and = POT chief-ABS
mijaxwyny.
 be,be.able.to
 ‘If he had stopped drinking, he would be a chief.’ (Faye Present 19 (340))

⁹² “Non-instantiative” in Hill 2005:62.

In the third position are the pronominal clitics of Table 8.2.5 (1). The marking of pronominal arguments in CU is complex. It is divided between the pronominal clitics that appear in non-past-tense sentences, the verbal prefixes for subjects that appear only with the past tense, and a set of object proclitics that appear initially in verb constructions of any tense. The CU pronominal clitics exhibit ergative/absolute case alignment, while the verbal prefixes have nominative-accusative alignment like all the other Takic systems for pronominal marking. Since the term “absolutive” has been used in Uto-Aztecan studies for the non-possessed noun suffixes, in an attempt to avoid confusion, we use the term “absolute” for the CU case rather than the usual “absolutive.” We use the abbreviation ABS for the “absolutive” suffixes, and AB for the CU “absolute” case. The absolute-case clitics encode the subjects of intransitive verbs and, mainly in imperatives, the objects of transitives. The pronominal clitics that appear before =*py* ‘irrealis’ distinguish case only in the second and third persons plural.

Table 8.3.5 (1). CU pronominals in aux

	absolute	ergative	before = <i>py</i> ‘irrealis’
1SG	= (y)n	= ny	= ny
2SG	= (ʔ)yt	= (ʔ)yp	= (ʔ)y
3SG	= (y)t / ∅	= p(y)	∅
1PL EXCL	= (y)sh	= chy	= chy
1PL INCL	= chyʔyl	= chymy	
2PL	= (y)l	= (ʔ)ym(y)	= (y)l (AB), = ʔym (ERG)
3PL		= my	= (y)l (AB), = (y)m (ERG)

The forms beginning with parenthesized *y* have the vowel when following a consonant and lack it when following a vowel; those with parenthesized glottal stop have the glottal stop when following a vowel and lack it when following a consonant. Examples are shown in (6).

- (6) CU a. *Apút = yl* *amu-wy* *my = \$y = m = py* *ham*
 already = 3PL.AB hunt-PRS.PL and = DUB = 3PL.ERG = IRR whether
myqan-wy.
 kill(sg.obj)-PRS.PL
 ‘They went hunting but I don’t know if they killed anything.’ (Hill 2005: 90.64b)
- b. *Apú = \$y = l* *hanaka* *mi7aw-wy.*
 already = DUB = 3PL.AB again come-PRS.PL
 ‘Already again they must have come.’ (Hill 2005:70.17; Faye Creation 082)
- c. *Jax-qál = yt* *tani-lja7-ika = ku7ut* *ha\$-ax-qa-t*
 say-PST.IPFV.SG = 2SG.AB dance-INS-DAT = QUOT go-INTR-IFUT-ABS
iví-j *tukmijat.*
 PROX-ACC night
 ‘You say that you’re going to go to a dance tonight?’ (Faye field notes fp 12)
- d. *Qaj = kwy = 7yt* *ha\$a7a.*
 NEG = POT = 2SG.AB go,be.able.to
 ‘You can’t go.’ (Faye field notes fp 12)

Apú ‘already’ (in (6b)) appears in Paul-Louis Faye’s notes as a pre-clitic variant of *apút* (in (6a)). In (6c) *ku7ut* appears to have a dubitative sense: “You say you are going, but I don’t think so.”

The third person singular in non-past clauses may be encoded by the clitic = (y)t or it may be zero. The factors determining the choice are not clear. It is likely that the overt clitic = (y)t has a foregrounding function, while the zero form, which is most common, is neutral. The difference is illustrated in (7).

- (7) CU a. *My = t* *py7 = y* *kumu* *awá-l-i* *jax-wy.*
 and = 3SG.AB 3SG.PRO = CF like dog-ABS-ACC be-ST.PRS
 ‘And he is just like a dog.’ (Hill 2005:78.37a)

- b. *My = ∅* *hi-sh* *axwý-sh* *yla-qa.*
 and = 3SG.AB INDF-ABS DIST-ABS wait.for-PRS.SG
 ‘What is he waiting for?’ (Hill 2005:382.37)

Examples of the contrasting ergative and absolute forms of the pronominal clitics appear in (8).

- (8) CU a. *Isi-lj = ny* *py-xuchi* *ty~typi-qa-t.*
 coyote-ABS = 1SG.ERG 3SG-track CONT~follow-IFUT-ABS
 ‘I am going to track a coyote.’
- b. *Aj = yn* *ha\$í-qa-t.*
 now = 1SG.AB go-IFUT-ABS
 ‘I’m going now.’ (Coyote and Cat 005)
- c. *My aja = chymy* *nang-i-ngij-qa-ti-m* *pa-nga.*
 and now = 1PL.ERG pay-TR-GOING-IFUT-ABS-PL water-for
 ‘And now we’re going to be paying for water.’ (RN Kupa II)
- d. *Han = chy7yl* *ngij-wy.*
 come.on = 1PL.INC.AB go.home-IPFV.PL
 ‘Come on, let’s go home!’
- e. *Aja = sh* *max-qa-ti-m.*
 now = 1PL.EXC.AB pound-IFUT-ABS-PL
 ‘Now we’re going to pound acorns.’
- f. *Y7y = kwy = p* *mixanuk* *pyxanuk* *ny7y-j*
 2SG.PRO = POT = 2SG.ERG INDF.MANNER DEF.MANNER 1SG.PRO-ACC
ni_kwyli.
 1SG.OBJ_cure,be.able.to
 ‘You can cure me somehow.’ (RN Creation)

- g. *Qaj = kwy = 7yt ha\$a7a.*
 NEG = POT = 2SG.AB go,be.able.to
 ‘You can’t go.’ (Faye field notes fp 12)
- h. *My = 7ym = py mi_wicháx-in.*
 and = 2PL.ERG = IRR 3PL.OBJ__throw-TR.FUT
 ‘And you (pl.) will throw it at them.’ (Faye Creation)
- i. *Ym = yl pyjka7máj pulín-cha-m.*
 2PL.PRO = 2PL.AB still baby-ABS-PL
 ‘You (pl.) are still young.’
- j. *Yjyt = py itú7-qa ny-7ach-i gajiina7a-j tukmuchi.*
 thief = 3SG.ERG steal-PRS 1SG-animal-ACC chicken-ACC last.night
 ‘A thief stole my chicken last night.’
- k. *Ny-jka = kwy = 7yt qa7a7aw.*
 1SG-DAT = POT = 3SG.AB die.be.able
 ‘He might die on me.’ (Faye Creation 130)
- l. *Pym-\$awi = my kwa-wy.*
 3PL-bread = 3PL.ERG eat-PRS.PL
 ‘They are eating their bread.’ (Faye 2-6-27 f11)
- m. *Na~nxa-lu7-vy-li-m = yl puj-wy.*
 PL~age,of.man-VBLZ-REAL.SUB-ABS-PL = 3PL.AB dine-IPFV.PL
 ‘The old men are eating.’ (Faye 4-6-27 f11)

The ergative series is used to encode a possessor, as in (9).

- (9) CU *Y(7) = 7yp y-tyw-7a Kava-lj mijax-wyny.*
 2SG.PRO = 2SG.ERG 2SG-name-PSD prsn-ABS be-ST.FUT
 ‘Your name will be Kavall.’ (RN KP II)

Absolute clitics encode objects, but are attested mainly with imperative verbs, as in (10). Note that in CU, as in all the Takic languages except TV, independent nouns encoding objects of imperatives cannot be marked with the accusative suffix *-i*. Nor can pronominal object prefixes/proclitics appear on imperative verbs. CU examples with pronominal object proclitics are seen below in (13).

- (10) CU a. *Yla-n-am = yn.*
 wait-TR-PL = 1SG.AB
 ‘Wait (pl.) for me!’
- b. *Tan-in-max = y7ysh.*
 dance-TR = BEN.IMP = 1PL.AB
 ‘Dance (sg.) for us!’ (Faye Bancroft 82 (4) 299)

As seen in (10a), the mark of the plural subject for imperatives is *-am*, which, unstressed, is heard as *-ym*, homophonous with the absolute-case pronominal *=ym*. The combination ^x*-ym = ym* does not occur. For this reason, a construction like *ylánym* can mean ‘wait for them (sg.subj.)’, ‘wait for them (pl.subj.)’, or ‘wait for him/her/it (pl.subj.)’, with the sequence *ym* being ambiguous, interpretable as a third-plural absolutive clitic *=ym*, or as the suffix *-am* marking the imperative verb as having a plural subject.

Examples of absolute clitics in the object function outside of the imperative context do occur, as in (11). All examples involve first persons. Examples (11a,b) involve ghosts and spirits as subjects; the use of the absolutive first person clitic may suggest the reduced power of mortal humans. However, this is entirely speculative; example (11c) is from the Faye field notes and the request is to an ordinary human. The strong preference is to encode objects with pronominal object prefixes, which do not occur with imperatives. Note that the verb in (11c) is not imperative. It is a future-tense form, a common usage for polite imperatives. The singular imperative form of the benefactive suffix *-max* appears in (10b) above.

- (11) CU a. *Apút = yn = py* *ja-qá7.*
 already = 1SG.AB = 3SG.ERG say-PRS.SG
 ‘Already she is speaking to me.’ (Coyote Kills Daughter)

- b. *My = kwy = sh* *aja* *chimi__piqin-wyny.*
 and = POT = 1PL.AB now 1PL.OBJ__touch-CUST.PL
 ‘And then they touch us.’ (Faye Creation)
- c. *Hani,* *ka~kva7ma-l* *wyn-max = yn.*
 HORT PL~pot-ABS put(pl.obj.)-BEN.FUT = 1SG.AB
 ‘Please, set the table for me.’ (Faye PT 43)

A number of examples in the CU corpus show an ergative pronominal clitic in object function. Again, all such examples are with first persons, and suggest a person hierarchy.

- (12) CU a. *Axwý-sh = ny = kwy = p* *ishmiví-j* *ni__ma7a.*
 DIST-ABS = 1SG.ERG = POT = 3SG.ERG something-ACC 1SG.OBJ__give,be.able.to
 ‘That one could probably give me something (illness).’ (RN Creation)
- b. *Y-ti-m = yl = chym* *qaj* *chimi__7ajyw-wy.*
 PROX2-ABS-PL = 3PL.AB = 1PL.INC.ERG NEG 1PL.OBJ__want-PRS.PL
 ‘They don’t like us.’

In (12a) the third person agent (Coyote, who plays a major role in the Creation account) is in the ergative case in the auxiliary, while the first person object (one of the twin creators, who is speaking) is also in the ergative. In (12b), the agent of *ajyw* ‘want, like’ is in the absolutive. This is part of a general pattern that permits some flexibility in the choice of case. For instance, a speaker might be represented as using an ergative clitic in what should be an absolute context, to assert special power, as in (13a), where the speaker, Fox, is bragging and uses an ergative clitic with an intransitive verb. This example shows the clitics of the main clause following the subordinate clause. Note that in the main clause the object is encoded with proclitic *ni__* on the verb construction. This is the most common pattern, and the only one attested with non-first-person objects, as in (13b,c).

- (13) CU a. *Chinga = kwy = ny ja7-ja7a = kwy = p qaj*
 if = POT = 1SG.ERG run(sg.)-INTR.be.able.to = POT = 3SG.ERG NEG
hax ni_namyjy-lu.
 INDF.HUMAN 1SG.OBJ_catch-GOPR
 ‘If I run, no one can catch me. [If I am able to run, no one goes and catches me.]’ (Fox and Cat)
- b. *Imi_kwa7 = kwy = p.*
 2PL.OBJ_eat = POT = 3SG.ERG
 ‘He could eat you pl.’ (Faye Kisilj Pywik 150)
- c. *My = kwy = p pi_jawmu-max.*
 and = POT = 3SG.ERG 3SG.OBJ_bring-BEN
 ‘He can bring it along for us.’ (Faye 4-6-27 f11)

The two fourth-position clitics are shown in (14).

- (14) CU a. realis [REAL] = 7yp
 b. irrealis [IRR] = py

Irrealis =py is cognate with LU future/irrealis =pu (from =po). Before =py the ergative/absolute difference is neutralized for all pronominal categories except second and third person plural, where it is maintained.

Examples of first person, and second and third person singular, pronominal clitics neutralized for case before irrealis =py are seen in (15). 3SG is always zero before the irrealis clitic, as in (15e). Second person examples are sometimes zero in this context as well, as in (15d).

- (15) CU a. *Tukumáj = ny = py qaawi.*
 tomorrow = 1SG = IRR die.FUT
 ‘Tomorrow I will die.’
- b. *Chym = chy = py ishmiví-j i_max.*
 1PL.PRO = 1PL = IRR something-ACC 2SG.OBJ_give.FUT
 ‘We will give you something.’

- c. *Amáj =y =py pijú7pan hiwchu.*
 today = 2SG = IRR moreover know.FUT
 ‘Moreover you will know today.’ (Fox and Cat)
- d. *My =py chinga ishmiví-j tywa-násh, my =py*
 and = IRR if something-ACC see-IPFV.FUT.SG and = IRR
wil-ja-nash.
 hide-INTR-IPFV.FUT.SG
 ‘And if you see something, then you hide.’ (Coyote Growing Up)
- e. *Kym-jax =py.*
 turn.over-INTR.FUT = IRR
 ‘It will turn over.’ (Faye Creation)

An example of the ergative/absolute contrast maintained for plural pronominals before =*py* appears in (16).

- (16) CU *Amáj m =yl =py mynmax tan-in-vymax,*
 today and = 3PL.AB = IRR come.FUT dance-TR-COMING.FUT
m =ym =py i_wiw_xan.
 and = 3PL.ERG = IRR 2SG.OBJ__step.on.FUT
 ‘And today they will come dancing, and they will step on you.’ (Faye Creation 40)

The clitic =*7yp* is used infrequently, in contrast with =*py* which always appears in future-tense clauses. Realis =*7yp* never co-occurs with quotative *ku7ut* or dubitative&interrogative =*\$y*, suggesting that it is restricted to first-hand knowledge and has a force or evidential dimension as well as realis modality. Where =*7yp* and *ku7ut* appear together in a sentence, *ku7ut* is always in a higher clause, as in (17).

- (17) CU *Mu = ku7ut [aja = 7yp atáxa-m py-m kilma-ngax-wi-cha-m*
 and = QUOT then = REAL person-PL DET-PL outside-from-GENT-ABS-PL
iví-j a7chi7a-j ishmiví-j hisyxvy-l].
 PROX-ACC pretty-ACC something-ACC clothes-ABS
 ‘And they say that then the outsiders grabbed these fine clothes and things.’
 (Eagle II)

Realis = *7yp* most commonly appears at the beginnings of recountings, and also appeared very commonly in responses to elicitation of past-tense verbs using the frame *tuku* ‘yesterday’. There are many examples like (18).

- (18) CU *Tuku = 7yp ny-ti7iva-j ny-7a\$á7.*
 yesterday = REAL 1SG-dress-ACC 1SG-put.on
 ‘Yesterday I put on my dress.’

There is one example in the CU corpus of = *7yp* with the mirative, suggesting that it is associated with assertive force as well as realis modality:

- (19) CU *Suplywyt = am = 7yp amáj = 7yp ny-mijax-wyn ný-jy py-na7akwa.*
 one = MIR = REAL just = REAL 1SG-be-ST.PST 1SG-mother 3SG-child
 ‘[Surprisingly] I was my mother’s only child .’ (Faye SV 2-1-21 11 (0175))

8.3.6. REMNANTS OF THE AUXILIARY COMPLEX IN CAHUILLA. CA lacks completely the second-position auxiliary complex found in the other Takic languages. Pronominal marking has shifted to a system of proclitics and verbal prefixes, modality is expressed through particles and verbal suffixes, and evidentiality is encoded with particles.

The only pronominals that have survived the almost total reassignment to the verb are the subject proclitics in (1) (cf. Seiler 1977:75). These are used with verbless clause complements (see also 9.4.12).

- | | | | |
|--------|--------|--|--------------------------|
| (1) CA | | sg | pl |
| | person | 1 <i>hen</i> _{__} | <i>esh</i> _{__} |
| | | 2 <i>e</i> _{__} ~ <i>et</i> _{__} | <i>eme</i> _{__} |
| | | 3 \emptyset | \emptyset |

Examples with subject proclitics are given in (2).

- (2) CA a. *Hen_7awa-l* \emptyset .
 1SG_dog-ABS be
 ‘I am a dog.’ (Seiler 1977:76)
- b. *Eme_ne-nesi-m* \emptyset .
 2PL_1SG-YoSiCh-PL be
 ‘You are my nieces.’ (Seiler 1977:77)

The only remaining evidential is the quotative *yal* \sim *=el* \sim *=l*. Oddly, it appears to be a completely independent development in this function, since SE, LU, and CA’s very close relative CU all have reflexes of a particle **kwynty*.⁹³ While *yal* appears most frequently in the second position, it can appear in any later position in the sentence, and, like the CU quotative *ku7ut*, it appears to be located on a continuum somewhere between an independent particle and a bound clitic. Since this quotative element is used in such a nonsystematic way in CA, it might be best to say that it operates as though its link with the auxiliary complex as found elsewhere in Takic has been lost.

In contrast with CU *ku7ut* or SE *kwyn*, which appear in nearly every sentence of traditional narratives (and sometimes appear more than once in a single sentence), the quotative is relatively rare in DCA, where some speakers let long stretches of narrative go by without using it. Harrington’s MCA consultant Adán Castillo did use quotatives frequently, although with nothing like the compulsive repetition seen in CU and SE. Another contrast with the quotatives of the other languages is that it almost never appears initially. An example of *yal* initial in a clause in MCA is seen in (3f). All of the DCA examples below in (3) are from one text told by Chona Dominguez, who used the evidential relatively frequently.

⁹³ While CA *jal* does not relate to **kwynty*, it may have a common origin with the Hopi quotative *jaw*. The sound correspondences don’t quite work. While most examples of Hopi *l* are from **w*, the sound change here would be the other way, *w* < **l*; and there is no evidence that CA **l* relates to **w*.

- (3) DCA a. *Qawa7-l-i=l* *pe-wa~waj-qal*.
 rat-ABS-ACC = QUOT 3SG > 3SG-IPFV-marry-NFUT.SG
 ‘They say he married a rat.’ (Seiler 1970:101.10)
- b. *Me-wih=jal* *pe7* *me-majju-qa7l*.
 3PL-two = QUOT 3SG.PRO 3SG > 3PL-bear.a.child-NFUT.SG.FCT
 ‘They say that she bore two children.’ (Seiler 1970:101.14)
- c. *Ngij-qal = el*.
 go.home-NFUT.SG = QUOT
 ‘They say that he returned home.’ (Seiler 1970:101.21)
- d. *Pe-7amin-qal* *pe7-ij=jal* *peem-kwa-wen*.
 3SG.OBJ-put.aside-IPFV.SG 3SG.PRO-ACC = QUOT 3PL > 3SG-eat-IPFV.PL
 ‘She put it aside and they ate it.’ (Seiler 1970:101.27)
- e. *Pe=l* *ekwashma-l* *hé-7i-j* *pi-sh* *jaw* *pi-jax-7e*
 DET = QUOT boy-ABS 3SG-leg-ACC 3SG-INS catch 3SG-do-FCT
yal.
 QUOT
 ‘But the boy caught hold of his leg.’ (Seiler 1970:105.59)
- DCA f. *Chipatma-l* ***jal*** *puli-7i,* ***jal*** *angapa7* *pe-vuk-7i* *tame-t*
 basket.tray-ABS QUOT fall-FCT QUOT again CF-throw-FCT sun-ABS
paxi-ve-jka.
 enter-REAL.SUB-DAT
 ‘They say the basket tray fell, they say again he threw it to the west.’
 (3.112.0137)

Like CU *ku7ut* (as in 8.3.5 (4c)), *yal* sometimes has dubitative force. The MCA examples in (4) are consecutive sentences from a story. The first *yal* is ordinary quotative *yal*, but the second, a dubitative *yal*, introduces a subordinate clause, a complement of the verb *ayaw* ‘want’. The girl does not “want” something that she has heard about from others, but instead a course of future events that would be beneficial to her. What she wants is, in fact, not going to happen. Both she and Lazy Man stay awake, and Lazy Man

is able to kill the monster snake and marry the girl, who of course is a rich man's daughter. Harrington has a note on (4a): "You put *yal* twice for once would mean for the girl to sleep." However, this idea, presumably volunteered by Mr. Castillo, that the second *yal* disambiguates the subject of the subordinate-clause verb, does not account for its presence in (4b).

- (4) MCA a. *Nawishma-l yal pe-7ajaw-qa7a jal pish*
 girl-ABS QUOT 3SG.OBJ-want-PST.SG QUOT COMP
kup-pi-j.
 sleep-IRR.SUB-ACC
 'La muchacha quería que él se dormiera. (The girl wanted him to go to sleep.)' (3.112.0147)
- b. *Nawishma-l yal pengax pe-7ayaw-qa7a pax*
 girl-ABS QUOT then 3SG.OBJ-want-PST.SG from.there
ngiy-pi-j yal sewe-t pish pe-memqwa7-pi
 GO.AWAY-IRR.SUB-ACC QUOT snake-ABS COMP 3SG.OBJ-swallow-IRR.SUB
Ismi7iva-7l-i Naxa-sh.
 Lazy-ABS.ACC Man-ABS
 'The girl wanted to go away from him so that the serpent would swallow Lazy Man (and not her).' (3.112.0148)

CHAPTER 9

RELATIONAL CLAUSES

9.0. INTRODUCTION. Dixon (2010:159) distinguishes copula clauses, where the predicate has relational meaning, from intransitive and transitive clauses, where the predicate has referential meaning. He also cautions that for some languages it may be important to distinguish copula clauses, where a copula verb is present, from truly verbless clauses, which express relation without any overt predicate (Dixon 2010:162). We find that in the particular case of Takic, verbless clauses and clauses with an overt copula verb are intimately related and we treat the two together. Further, there are clauses of existence, location, and possession that we also find useful to treat along with copula clauses.

The verbless clauses of Takic are copula clauses with the (quite literally) unmarked form of the copula. The subject and the copula complement relate, in surface form, “simply by apposition. That is, the copula slot is left blank and we have ‘verbless clauses’” (Dixon (2010:160).

The term “predicate” is reserved for the copula itself. A copula has two core arguments, a copula subject and a copula complement (Dixon 2010:159). So-called “predicate nouns” and “predicate adjectives” are both “complements,” not “predicates.” In the verbless case they can be called “verbless complements.” For a verb to be identified as a copula, it must express at least a relation of identity (“I am a man”) and/or of attribution (“The man is tall”) (Dixon 2010:160). In some languages, the same predicates that appear in clauses of identity and attribution can also express relations of possession, benefaction, and location. In some languages, the copula predicate may also appear in clauses which have only a single argument, existence clauses containing subject and the copula, but no complement. We were doubtful that this last type was to be found in Takic, but (1) may be an example. (And see 9.1.6 (2) for more possible examples of this type, under negation.)

- (1) TV *A-hooke-n* *totaa* \emptyset .
3SG-dryness-PSD rock.ABS be
'La piedra está seca. (The rock is dry [The rock's dryness exists].)' (3.105.0345)

We use the representation in example (1) throughout, namely with the zero copula posited as following the complement. This is in line with the overall verb-final structure of Takic wherein verb final is regarded as neutral while verb-non final is marked, motivated by focus, emphasis, and the like.

The copula structures of the Takic languages line up quite well with Dixon's typological proposals though there many details that pose interesting problems. All the languages have verbless clauses of identity and attribution. These are verbless (having zero copulas) only in the unmarked tenses (the nonfuture in TV, Serran, AC, and DCA, the present in LU, CU, and MCA) and moods (non-imperative). In the Cupan languages, overt present-tense copula verbs are attested, although they are not required. In TV and the Serran languages an overt copula verb appears in such clauses only when it is needed to carry a tense or subordinating suffix. In imperatives and in subordinate clauses the overt copula verb will appear in order to carry the imperative or subordinating inflection.

While the generalization that “verbless clauses do not [...] mark tense” (Dixon 2010: 161) applies to Takic, there are two types of tense-marking which do not require a verb: In CA, nouns can be marked with a special past-tense suffix and in the Serran languages, SE and KI, any tense that is marked in the auxiliary complex needs no overt verb.

CA examples of verbless-clause tense marking are seen in (2), where a past tense suffix *-7a* can appear on the verbless clause complement. In (2b), the subject of the predication is marked by the proclitic *hen_* ‘1SG’ on the first word of the complement.

- (2) DCA a. *Iv7i tema-l taxs-te-m he[m]-mexan-7a Ø.*
 PROX land-ABS Indian-ABS-PL 3PL-property-PST be
 ‘The land here belonged to the Indians.’ (Seiler 1970:149 2)
- b. *Hen_7amu-we-t achaj-7a Ø.*
 1SG_hunt-NMLZ-ABS good-PST be
 ‘I was (and no longer am) a good hunter.’ (Seiler 1977:239 53)
- MCA c. *Joe ting7aj-va-sh-7a Ø.*
 cure-AG-ABS-PST be
 ‘Joe used to be a doctor.’ (S&M 1980:169)

An example of a past tense verbless clause in SE is given in (3). Past tense is marked in the auxiliary by a glottal stop at the end of the pronominal element.

- (3) SE *Ky^Rstiaana7* = [vy-7]_{AUX} ∅ *a-tywan*.
 Cristiana = 3SG-PST be 3SG-name
 ‘Her name was Cristiana.’

In (3), the complement precedes the subject, probably motivated by focus, and the tense marking follows the complement. This does not make it a tensed complement; it is simply a complement followed by a second-position clitic.

Marking past tense in SE is mostly optional; compare (3) with (4), which has no tensed auxiliary.

- (4) SE *Pyy-tywan* [∅]_{AUX} *Paq^Rykta-ch* *ami7* *Kukiita-ch* ∅.
 3PL-name 3SG prsn-ABS and prsn-ABS be
 ‘Their names were Paq^Rykta^Rch and Kukiita^Rch.’

It should be noted of example (4) that Paq^Rykta^Rch and Kukiita^Rch are the names of the two creator divinities and thus belong to the remote past when the world was new. Even so, past tense does not need to be overtly specified.

Both past and future tense clitics can appear with verbless clauses in KI. All identity and attribution clauses are verbless, i.e., with a zero copula, since in KI no verb construction is needed to support tense marking, as in (5).

- (5) KI a. *Ny7 = vu7* *ni-7aatsit* *pata7* *ngaaty7* ∅.
 1SG.PRO = PST 1SG-animal PROX2 cat be
 ‘Era mi gato. (That cat used to be mine.)’ (3.100.0760)
- b. *Uvea* *a-nipyk* *ki7ka7j* *wyt\$yhy-t\$* *pata7 = mat* *ki7ka7j* ∅.
 already 3SG-die captain old-man-ABS PROX2 = FUT captain be
 ‘The old captain is dead, this man is going to be captain.’ (3.98.0447)

The comparison with KI illustrates the value of a comparative approach to the Takic languages. The KI situation supports the idea that the overt copula verbs in clause types

that must be marked for tense, aspect, or mood in the verb construction, at least in TV and SE, are semantically empty verbs – dummy verbs – that serve only to provide anchors for the tense, aspect, or mood affixes and do not in themselves signal equivalence or attribution. However, we lack crucial information about subordination in KI; in that context a copular verb may have been required for the attachment of a subordinating suffix.

Different light verbs function as copulas in the various languages. In TV the copula verb is based on *xaa*⁹⁴ ~ *xaroo* ‘be located’ (< PTak **kaLy* < PUA **katy*). In SE it is based on *ñihaj* ‘do, become’.⁹⁵ In KI, as noted above, no overt copula has been found. In the Cupan languages, the copula is formed on *jax* ‘do, say, be’ in combination with indefinite elements such as *mi-*, as in Coastal *mijx* and Inland *mijax*.

Which clause types can be verbless also differ among the languages. In TV, possessive clauses are verbless, but in the Serran languages, they appear with the same verb used in locational and existence clauses. However, interrogative and negative forms of such clauses are nearly always verbless, with certain exceptions.

In TV and the Serran languages, verbs in clauses of location, possession, and existence derive from the Proto-Takic number-suppletive positional verb **kaLy* (sg.)/**wyny* (pl.). In Serran and in Cupan, reflexes of **kaLy*/**wyny* are intransitive verbs used in clauses expressing location, identity, existence, and possession. As in Serran, they have no copula function.

KI *wyn* is underattested and may have had a similar range of usages, but the only examples attested of KI *wyn*, in (6), finds it in construction with an adverb.

- (6) KI a. *Tsono7k a-wyn woonga-t.*
 standing 3SG-be rain.cloud-ABS
 ‘The cloud está parado (is standing up).’ (3.98.0449) (cf. SE *cho^Rnu7k* ‘stand, stop’)

⁹⁴ Though we normally write *xaa* in its stressed form for reasons of referential transparency, in many of Harrington’s examples it is unstressed, unlengthened *xa*.

⁹⁵ A cognate empty verb, =*ni-* ~ =*ñii-*, appears in Hopi.

- b. *Ni-wyn tsono7k.*
 1SG-be standing
 ‘Estoy parado. (I am standing.) (3.98.0450)’

9.0.1. COPULA CLAUSES AND CASE. Copula clauses are grammatically neutral regarding case. Normally copula clauses that amount to complete sentences, complete with modal/evidential auxiliary, show the unmarked nominative case. This is true of all attested examples except for (1). In this unique example, both the subject and the complement of the parenthetic copula clause retain the accusative marking of the coreferential noun *ninaawt\$* ‘my dress (acc.)’ in the matrix clause.

- (1) SE *Ni-jy7 – mana7-k-t\$u7a-j = chymy-7 cha-kii-jka7 kim ani –*
 1SG-mother go.home-K-MOT-IND = 1PL-PST 1PL-house-DAT come and.then
ni-naaw-t\$i – [ama-j = tqa = vy-7 ajyy7vy-t\$i Ø] – ny-hpa7 wiha-j.
 1SG-dress-ACC DIST-ACC = INFR = 3SG-PST last-ACC be 1SG-LOC put-IND
 ‘My mother – we went home and came to our house and then – my dress – (it must have been the last one) – she put it on me.’ [= 7.2.3 (5c)]

9.1. RELATIONAL CLAUSES IN TONGVA. When the verb *xaa ~ xaroo* (< PTak *kaLy) is used in TV clauses of identity and attribution, it seems to lack content. When used in clauses with marked tense or mood, the base is *xaroo*. With no such marking, the short base *xaa* may be used, but it appears only in certain contexts. When *xaa* appears in what seem to be copula clauses (cf. 9.1.2 below), it is unclear whether there is any structural or semantic difference entailed by its presence or absence.

The same verb *xaa ~ xaroo* appears as well in all clauses of location and existence, regardless of tense or mood, and in this usage it should probably be classified as an intransitive light verb.

Possessive clauses in TV are verbless in the unmarked tense and mood, although a verb *jaawk* ‘hold’ is attested in clauses where the possessed noun is not, and perhaps cannot be, marked for possession. The TV possessive clauses contrast with those of the Serran languages, where SE *qat\$* and KI *kat\$*, cognates of TV *xaa*, may be used in possessive clauses. In TV clauses of location and existence, a second verb, *woo ~ woon*,

also appears with plural and collective subjects. The cognate *wyn* is also found in Serran, but it is not attested in this context in KI.

Translations in this section are as found in the Harrington field notes, though with normalized Spanish orthography, and our own glosses. Harrington's notes, which seem to reflect closely what his consultants said when queried about forms, often do not constitute an exact translation, as will be clear in many of the examples below. A particular problem arises when using these translations to assess whether an expression is an identity clause. A note (usually in Spanish, reflecting the language of elicitation with most consultants) on a file slip with a TV fragment might read “es mujer” or “es una mujer” (it's a woman). This note could be a gloss reflecting an identity sentence in TV. However, in some cases the possibility arises that it reports a metalinguistic comment, a reply to a query like “¿Qué quiere decir *tokoor*?” (What does *tokoor* mean?). It is also difficult to distinguish locational from existence clauses.

9.1.1. CLAUSES OF IDENTITY. Clauses expressing identity in the TV data are verbless in the unmarked, nonfuture tense. Otherwise, if the clause has a tense that requires a verbal suffix, such as future or immediate past, the verb base *xaroo* will appear to anchor the suffix. We are able to confirm this distribution because Harrington collected a set of sentences (in (1, 2, 4)) that demonstrate it.

Examples (1a,b) are in the unmarked (nonfuture) tense and consequently verbless; Harrington included adverbs *honuuko* ‘long ago’ and *mateema* ‘now’ to show the temporal range of the nonfuture. The intransitive pronominal clitics discussed in chapter 8 appear to be entirely optional in identity clauses where the subject is first or second person – compare (1a), with the pronominal clitic, and (1b), without it, for an example – and are usually not present at all for 3SG. (3SG pronominal clitics are optional in intransitive clauses as well.) Two versions of the same word appear in (1); perhaps *\$ieen7ar* (1b) represents a correction of *\$iee7enar* (1a).

- (1) TV a. *Noo = n = 7e* *\$iee7e-na-r* *honuuko* \emptyset .
 1SG.PRO = 1SG = IND cure-NMLZ-ABS long.ago be
 ‘Yo era curador antes. (I was a healer long ago.)’ (3.103.0472)

- b. *Mateema noo=ma \$iee-n7a-r Ø.*
 now 1SG.PRO = AUG cure-NMLZ-ABS be
 ‘Yo soy ahora curador. (I am a healer now.)’ (3.103.0473)

In (2), the verb *xaroo* anchors the immediate past tense *-t* (2a) and the future tense *-ro* (2b).

- (2) TV a. *Noo=n=7e xaroo-t \$iee-n7a-r honuuko.*
 1SG.PRO = 1SG = IND be-ABS.IPST cure-NMLZ-ABS long.ago
 ‘Yo era curador antes. (I used to be a healer long ago.)’ (3.103.0473)
- b. *Noo=n=7e xaroo-ro \$iee-n7a-r.*
 1SG.PRO = 1SG = IND be-FUT cure-NMLZ-ABS
 ‘Yo voy estar curador. (I will be a healer.)’ (3.103.0473)

The two examples in (3) are the only other future-tense identity clauses in the TV corpus.

- (3) TV a. *Noo=n=7e tootomja-r¹ xaroo-ro.*
 1SG.PRO = 1SG = IND kneeler-ABS be-FUT
 ‘Voy estar hincado. (I will be on my knees [I will be a kneeler].)’
 (3.104.0561)

¹ ‘Kneeler’ seems to be based on the same root as *tomyaar* ‘capitán (captain, clan head)’, but that root is not separately attested. ‘Knee’ is unrelated *-toongo-*, as in *ne-toongo-n* ‘my knee’ (3.104.0557). However cf. AC *-temalaka* ‘knee’ (< **tom...*), SE *-ta^Rmo^R*, KI *-tamo*, CU *-tami*, all with *m* instead of *ng*. We wonder if some instances of *ng* arise as lenitions of **m*.

- b. *Tootomja-r=n=7e xaroo-ro.*
 kneeler-ABS = IND be-fut
 ‘Ya me voy hincar. (Now I will kneel [be a kneeler].)’ (3.105.0154)

Example (4) shows that the imperative counts as marked, with the anchoring verb *xaroo* required. This is true even though the imperative form of this verb lacks an overt affix.

- (4) TV *Totoomja-r xaroo.*
 kneeler-ABS be.IMP
 ‘¡Híncate! (Kneel! [Be a kneeler!])’ (3.105.0154)

Additional examples of unmarked nonfuture verbless clauses of identity are given in (5). Both orders of subject and complement are attested, except for first and second person pronouns, which always precede the complement. There is number agreement between subject and complement, with plural agreement in (5e,f).

- (5) TV a. *Tokoo-r=7e menea7 Ø.*
 woman-ABS = IND PROX be
 ‘Ésta es mujer. (This one is a woman.)’ (3.102.0567)
- b. *Menea=j paa-ra a-kii-n Ø.*
 PROX = IND PROX2-GEN 3SG-house-PSD be
 ‘That [near one] is that fellow’s house.’ (3.104.0080)
- c. *Noo = ne = m tokoo-r Ø.*
 1SG.PRO = 1SG = AUG woman-ABS be
 ‘Yo soy mujer. (I am a woman.)’ (3.102.0517)
- d. *Oo = 7a hamaa \$ii\$o7 Ø.*
 2SG.PRO = 2SG also devil be
 ‘Tú también eres diablo. (You too are a devil.)’ (3.104.0334)
- e. *Ejoomo = ma Jaa-ve-ta-m Ø.*
 1PL.PRO = AUG Los.Angeles-GENT-ABS-PL be
 ‘Somos de Los Ángeles. (We are people of Los Angeles [Jaanga].)’
 (3.102.0554)
- f. *Memoo-m = 7e Xaxaaramo-ta-m Ø.*
 PROX-PL = IND Los.Verdugos.person-ABS-PL be
 ‘Éstos son losverdugueños. (These are people of Los Verdugos.)’
 (3.105.0511)

- g. *Pe7ee n-eehja7 Ø.*
 PROX2 1SG-friend be
 ‘Aquél es mi amigo. (He is my friend.)’ (3.103.0638)
- h. *Ne-ku\$na = 7e pe7ee Ø.*
 1SG-bro.in.law = IND PROX2 be
 ‘Ése es mi cuñado. (He is my brother-in-law.)’ (3.104.0473)
- i. *Ni-hii-n = 7e kii-j Ø.*
 1SG-possession-PSD = IND house-ABS be
 ‘Es mía la casa. (The house is mine.)’ (3.105.0149)
- j. *Menee a-xaa-ve7 Jesús Ø.*
 PROX 3SG-be-LOC be
 ‘Este (lugar) es onde Jesús siempre está (said of Jesús[’s] bench here in sun).
 (This is where Jesús always is [This is Jesús’s place to be, his station,
 location, where he stays].)’ (3.103.0079)
- k. *Ne-towaanja-n = 7e Xoaan Ø.*
 1SG-name-PSD = IND Juan be
 ‘My name is Juan.’ (3.104.0376)
- l. *Ataamb-ro-t mo-paaxo-n. Ø.*
 sharp-NMLZ-ABS 2SG-knife-PSD be
 ‘Your knife is sharp (is a sharp one).’ (3.105.0119)
- m. *Noo = n = 7e worooj-t ahuuvoroj-t Ø.*
 1SG.PRO = 1SG = IND man-ABS doctor-ABS be
 ‘I am a doctor.’ (3.104.0333)
- n. *Momoo = mo = j \$o~\$oov-ra-m ta~raaxe-m Ø.*
 DIST = 3PL = IND PL~different-ABS-PL PL~person-PL be
 ‘Son otros gentes. (They are a different people.)’ (3.104.0014)

We can determine that (6) is an identity clause, not a locational clause, because there is no verb *xaa*, required in the latter type. Note that the morphologically locative *Jaa-nga* ‘in Los Angeles’ is also the citation form for the place name.

- (6) TV *Ne-kii-n=7e* *Jaa-nga* \emptyset .
 1SG-house-PSD=IND Los.Angeles-LOC be
 ‘Mi casa está en Los Ángeles. (My home is in Los Angeles [My home is Los Angeles].)’ (3.102.0544)

The examples in (7) are problematic. Munro (2011) analyzes verb roots with absolutive suffix *-t* as “past.” We follow her treatment but use the expanded label “immediate past” (IPST), as in example (2a) above with *xaroo-t* [be-ABS.IPST]. We do this partly to facilitate comparison with cognate inflections in the other languages but also to reflect a frequent function of this suffix in TV (see chapters 10, 11, 12). However, as will be discussed in chapter 11, “past” forms in *-t* should be understood as nominalizations and for this reason we include them here with verbless nonfuture identity clauses. This treatment is suggested by Harrington’s gloss in (7b). Thus we treat *xaroo-t*, cited above, more analytically as *xaroo- \emptyset -t* [be-IPST-ABS]. The TV immediate past morpheme has no phonological content other than the feature that selects the *t* form of the absolutive suffix.

- (7) TV a. *Paaxo-t=7e* *ngooxa- \emptyset -t* \emptyset .
 knife-ABS=IND grind-IPST-ABS be
 ‘[El cuchillo] está amolado. (The knife is sharpened [is a sharpened one].)’
 (3.105.0092)
- b. *Menee7* *worooj-t=7e* *koore- \emptyset -t* \emptyset .
 PROX man-ABS=IND step-IPST-ABS be
 ‘Ese hombre fué que pisó. (This man is the one who stepped.)’ (3.105.0144)

There is no ambiguity about the nominalizations in *-r* in (8), which are of the same type as *totoomjar* ‘kneeling person’ in (3) and (4). While the English translations use adjectives, in TV these forms seem to be nouns and are not attested as modifiers in noun

phrases. But even though they seem to be nouns, at least some of them do not show plural agreement with plural subject, as in (8c).

- (8) TV a. *Jaata-r=no=j* \emptyset .
 sleepy.one-ABS = 1SG = IND be
 ‘Tengo sueño. (I am sleepy [I am a sleepy one].)’ (3.104.0366)
- b. *Heaa7=mo=re=j jaata-ro-m* \emptyset .
 now = AUG = 1PL = IND sleepy.one-ABS-PL be
 ‘We are sleepy. (We are sleepy ones.)’ (3.104.0366)
- c. *Ejoomomb=re paara-r* \emptyset .
 1PL.PRO = 1PL thirsty-ABS be
 ‘We are thirsty (“a thirsty one?”).’ (3.105.0345)
- d. *Pavaa-r=7e to-taa* \emptyset .
 wet.one-ABS = IND rock-ABS be
 ‘La piedra está mojada. (The rock is wet [a wet one].)’ (3.104.0335) (cf. *pavaarok* ‘make wet’)

Verbless identity clauses can be coordinated with the conjunction *koy*.

- (9) TV *Menee=j ne-naak* \emptyset *koy menee-j ne-ook* \emptyset .
 PROX-IND 1SG-father be and PROX-IND 1SG-mother be
 ‘This is my father and this also is my mother.’ (3.104.0090)

It is possible to have verbless identity clauses where only the complement is overtly expressed. For instance, Harrington notes of example (10a) that it would function as the answer to a question. The 3SG subject pronominal in non-transitive clauses is zero; consequently no overt third-person pronominal clitic appears with these utterances. These examples consist of but a single word. The presence of the indicative clitic shows that they are predications, not just citations of nouns.

- (10) TV a. *Tokoo-r=7e* \emptyset .
 woman-ABS = IND be

‘Es una mujer. (It’s a woman.)’ (answer to the question at 9.1.7 (4f)): What is that dead one, a woman, a man, or what?) (3.104.0110)

- b. *T\$e7een-7a-r = 7e* \emptyset .
sing-NMLZ-ABS = IND be
‘Es cantador. (He is a singer.)’ (3.104.0359)
- c. *Ne-7aa\$on = 7e* \emptyset .
1SG-spouse = IND be
‘Es mi marido. (He’s my husband.)’ (3.104.0422)
- d. *A-hoor-e-n = 7e7* \emptyset .
3SG-dig.hole-NMLZ-PSD = IND be
‘Ay está un ollo, es un ollo. (e.g. hole in ground out in field) (There is a hole, it’s a hole.)’ (3.105.0156)

Example (11) is a weather expression and as such probably could not take an overt noun subject. Nevertheless, most Uto-Aztecan weather expressions are treated grammatically as having an implicit 3SG subject (indicated in the example).

- (11) TV *A-hiike-n = \emptyset = 7e* \emptyset .
3SG-breath-PSD = 3SG = IND be.
‘Es el viento. (It’s the wind.)’ (3.105.0093)

In addition to minimal examples like those in (10) and (11), there are clauses where the predication is modified by an adverb, as in (12).

- (12) TV a. *Heaa toow-t\$* \emptyset .
now spirit-ABS be
‘Ya no hay, es diablo, ya se murió. (He no longer exists, he is a devil [a spirit], he already died.)’ (3.102.0418)
- b. *Heaa = \emptyset = 7e tokoo-r* \emptyset .
now = 3SG = IND woman-ABS be
‘Ya es mujer. (Now she is a woman [i.e., grown up].)’ (3.103.0682)

- c. *Waraak=no=j worooj-t Ø.*
 truly = 1SG = IND man-ABS be
 ‘I am a man. (exclamation)’ (3.103.0707)

Many time expressions, like those in (13), are of this type. The time expressions in (13) all end in *-e*. They are not verbs (all nonfuture TV verbs end in *-k* or *-x* except for the four base-changing verbs). Corresponding to the word *aawme ~ aawmet* ‘dark’ is the adjective *aawmko* from which a verb *aawmkomok* ‘become dark’ is derived. These expressions do not appear to be deverbal adjectives in *-e(7)* (see 14.14.1 (1)) since they are never attested with *xaa*. Perhaps they should be understood as temporal adverbials – ‘in the morning’, ‘at noon’, ‘in the night’ – in accord with similar vocabulary in SE.

- (13) TV a. *Heaa=7e heaamne Ø.*
 now = IND morning be
 ‘Ya es de mañana. (Now it is morning.)’ (3.103.0758)
- b. *Heaa=7e tomiive Ø.*
 now = IND noon be
 ‘Ya es mediodía. (Now it is noon.)’ (3.104.0532)
- c. *Heaa=7e a7~aawme Ø.*
 now = IND IPFV~darkness be
 ‘Ya está oscuro. (Now it is dark.)’ (3.103.0151)
- d. *Heaa=7e jaawke Ø.*
 now = IND night be
 ‘Ya es noche. (Now it is night.)’ (3.103.0648)
- e. *Heaa7=mo=re=j jaawke Ø.*
 now = AUG = 1PL = IND night be
 ‘Ya es noche para nosotros. (Now it is night for us. [We are at night now.]’
 (3.103.0645)

“Time of day” expressions sometimes have complements marked with local suffixes, as in (14). However, these are not true locational clauses in that such clauses always have an overt verb *xaa* ~ *xaaro* (see 9.1.3).

- (14) TV a. *Heaa = 7e a\$eaa-nga* \emptyset .
 now = IND late.afternoon-LOC be
 ‘Ya es tarde. (Now it is afternoon.)’ (3.103.0648)
- b. *Heaa = 7e a\$eaa-ngaro*¹ \emptyset .
 now = IND late.afternoon-DAT be
 ‘Ya va ser tarde (late evening) (Now it’s going to be afternoon. [Now it’s towards evening.])’ (3.103.0231)
¹ Note *-ngaro* for expected *-ng7aro*. *-ngaro* may be a special temporal form.
- c. *Heaa = 7e oroo-nga* \emptyset .
 now = IND hot-LOC be
 ‘Ya es muy de día. (Now it is very much daytime. [Now it’s the heat of the day.])’ (3.103.0435)

9.1.2. CLAUSES OF ATTRIBUTION. Clauses expressing attribution contrast with those expressing identity in that the presence or absence of an overt verb in an unmarked tense and mood is determined by the class of the copula complement. The verb *xaa* ~ *xaroo* nearly always appears with one important class of modifiers derived with the suffix *-ko* that also have adverbial function. It is optional with deverbal adjectives ending in *-k*. However, *xaa* never appears in the unmarked context with other types of complements including primary adjectives,⁹⁶ quantifiers, and numerals.

Most examples of attribution expressions with attributive forms derived with *-k/-ko* include *xaa* ~ *xaaro* or *woo(n)* in unmarked clause types, as in the examples in (1). These constructions may be adverbial. For instance, we can contrast the more noun-like *tehoovet* ‘good, good one’ with the more adverb-like *tehoovko* ‘good, well.’ *Tehoovet* may function as a primary adjective that can appear as a modifier of nouns and that does not appear with *xaa* when it is a verbless complement in unmarked clause types. In contrast,

⁹⁶ “Primary” adjectives are those for which no source verb base can be identified (Hill 2005:202).

tehoovko (1b) does not directly modify nouns and can appear with *xaa*. Thus these *-ko* and *-k* forms are not quite identical semantically to attribution clauses where the attributive expression is a modifier of the subject. However, as seen in (2), *-k/-ko* forms can appear in verbless clauses. Note that the long form of *xaa* ~ *xaroo* appears in the imperatives of (1e,f). The verb *woo(n)* appears in (1g). It is a reflex of the Uto-Aztecan position verb **wyl~ry/*wyny* ‘stand, lie, be in a place’ (cf. Stubbs 2011 #2158), and is attested in all the Tactic languages (PTak **wyny*), usually with plurals or subjects that are uncountable (i.e., mass nouns; the piles in (1h) are probably of *kotaa* ‘firewood’).

- (1) TV a. *Awees-ko = ne xaa.*
 happy-ADVZ = 1SG be.NFUT
 ‘Estoy alegre. (I am joyful.)’ (3.103.0558)
- b. *Tehoov-ko = 7e mo-\$uun xaa.*
 good-ADVZ = IND 2SG-heart be.NFUT
 ‘Tiene buen corazón. (You have a good heart [lit., Your heart is good; figuratively, you are happy].)’ (3.104.0419) ¹
¹ In Tactic languages, most mental and emotional states and processes are attributed to one’s heart, which is more broadly to be understood as one’s “inside”.
- c. *Mo-haavon = 7e weoox-ko xaa.*
 2SG-blanket = IND hang-ADVZ be.NFUT
 ‘Su fresada está colgada. (Your blanket is hung up.)’ (3.105.0141)
- d. *Noo = n = 7e karuu-k xaa.*
 1SG.PRO = 1SG-IND stand-ADJZ be.NFUT
 ‘Yo estoy parado (no estoy sentado). (I am standing [I am not sitting down].)’ (3.104.0142)
- e. *Ekwa = m xaroo = vo7 karuu-ko.*
 here = AUG be.IMP = 2PL.IMP stand-ADVZ
 ‘¡Aquí estense parados! (Be [pl.] standing up here!)’ (3.104.0142)
- f. *Toruu-k xaroo.*
 quiet-ADJZ be.IMP

‘¡Estate quieto! (Be calm!)’ (3.105.0128)

- g. *Mo7aa-k-e7* **woo.**
 piled.up-ADJZ-IND be(pl.).NFUT
 ‘Está amontado. (It is piled up.)’ (3.103.0623)

While most of the examples with adjectives in *-k* and adverbs in *-ko* have *xaa*, Harrington’s notes indicate that the verb is optional, as in (2a,b,c), where the alternate forms (expressed here with *xaa* in parentheses) are noted in the field notes. Example (2e) was noted at the same time as (2d), but without *xaa* (for context, the year was 1933; conditions must have been very bad indeed). Example (2a) can be compared with 9.1.1 (10c) above, which has *aawme* ‘dark’ and is verbless.

- (2) TV a. *Heaa=7e aawm-ko (xaa).*
 now = IND dark-ADVZ be.NFUT
 ‘Ya está oscuro. (Now it is dark.)’ (3.103.0151)
- b. *Heaa7=mo weaax-ko (xaa).*
 now = AUG hang-ADVZ be.NFUT
 ‘Ya está colgado. (Now it is hung up.)’ (3.105.0141)
- c. *Raawro-k=e7 (xaa)*
 white-ADJZ = IND be.NFUT
 ‘Está blanco. (It is white.)’ (3.105.0105)
- d. *Ejoomo=re xaa ekwaa moriiv-ko.*
 1PL.PRO = 1PL be.NFUT here sad-ADVZ
 ‘Estamos aquí muy triste. (We are very sad here.)’ (3.103.0222)
- e. *Ejoom-xar-e-n waraak moriiv-ko Ø.*
 1PL-be-NMLZ-PSD very sad-ADVZ be
 ‘El estado de nosotros es muy triste (no joy or money at Soboba in these hard times). (Our condition is very sad.)’ (3.103.0222)

The construction *ejoom-xar-e-n* ‘our condition, state’ in (2e) contains the same root as *a-xaa-ve7* ‘at his station, location, where he stays’ in 9.1.1 (5j). Both are derived from the verb *xaa* ~ *xaroo*.

The second type of attributive element, deverbal adjectives in *-e*, can also appear with *xaa*, as in (3). We analyze these constructions as adjectives based on similar forms in SE, where adjectives are derived with a suffix *-i7* and also often with a prefix *a-* (unrelated to the third-person pronominal prefix *a-*), e.g. *a-mym7k-i7* ‘dead (sg)’ from *mymy7k* ‘die (sg.)’. See 14.14.1 (3) for discussion of these TV adjectives.

As with the *-k* adjectives and *-ko* adverbs, *xaa* is optional in unmarked clauses with adjectives in *-e*, as shown by the verbless examples in (3e,f).

- (3) TV
- a. *A-mooj-e=7e xaa.*
 ADJZ-die-ADJZ=IND be.NFUT
 ‘Está muerto. (He is dead.)’ (3.103.0770)
- b. *Heaa pujn-e xaa.*
 now fill-ADJZ be.NFUT
 ‘Ya está lleno. (Now it is full.)’ (3.105.0334)
- c. *Eaaxan-e=7 xaa.*
 swell-ADJZ=IND be.NFUT
 ‘Está hinchado. (It is swollen.)’ (3.105.0098)
- d. *Honuuko ma~maav-e-m xaroo-to-m.*
 long.ago PL~nude-ADJZ-PL be-PST-PL
 ‘In ancient times we used to be naked.’ (3.104.0509)
- e. *Noo=n=7e=m jaroor-e7 Ø.*
 1SG.PRO=1SG=IND=AUG thin-ADJZ be
 ‘Estoy flaco yo. (I am thin.)’ (3.104.0422)
- f. *Waraak=7e awee7-e ma7eete Ø.*
 truly=IND sugar-ADJZ very be
 ‘Es[tá] muy dulce. (It is very sweet.)’ (3.103.0157)

A number of common primary adjectives are attested in verbless clauses as in (4).

- (4) TV a. *Worooj-t=7e kamuuho7 ∅.*
 man-ABS=IND short be
 ‘Es muy chapo el hombre. (The man is very short.)’ (3.104.0385)
- b. *Anaange t\$enuuho7 ∅.*
 still little be
 ‘Todavía es chiquito. (He is still little.)’ (3.104.0067)
- c. *Heaa=7e ot\$oo7 ∅.*
 now=IND cold be
 ‘Está haciendo frío. (It is cold [of weather].)’ (3.105.0348)

Unlike the *-ko* adverbs, these are attested with number agreement with their subjects; a reduplicated plural form appears in (5).

- (5) TV *Ka~kaaho7 ne-t\$uur ∅.*
 PL~long 1SG-nails be
 ‘Están largas mis uñas. (My nails are long.)’ (3.104.0338)

Many examples that appear to have adjectival predicate complements based on their translations into English, in fact show overt noun morphology, with absolutive suffixes and plurals in *-m*, as in (6). In either case, whether identified as nouns or adjectives, the syntactic result is the same: the predicate is verbless.

- (6) TV a. *Tehoove-t=7e7 ne-xaar-e-n ∅.*
 good-ABS=IND 1SG-be-NMLZ-PSD be
 ‘Es bueno mi estado. (My condition is [a] good [one].)’ (3.103.0132)
- b. *Wehee=7am=7e oroo-ra-m ∅.*
 two=3PL=IND hot-ABS-PL be
 ‘Dos están calientes. (Two are hot.)’ (3.104.0117)

- c. *Heaa7=mo jo7ooj-t moaa-r Ø.*
 now = AUG big-ABS moon-ABS be
 ‘Ya está grande la luna. (The moon is big now.)’ (3.104.0062)

When quantifiers appear as attributes in attributive clauses, they behave like the primary adjectives in (4), never appearing with *xaa* in unmarked clauses. Like the primary adjectives, they can appear as modifiers in NPs (see 7.1.3). In contrast to the situation in attribution clauses, *xaa ~ xaaro* is always present when quantifiers are modifiers of subjects in existence clauses; these are discussed below in 9.1.5. Examples of attribution clauses with the complement *ajoo7en* ‘much, many’ appear in (7).⁹⁷ Note that Harrington translated the sentence in (7c) with an existential predicate *hay* in Spanish. However, as will be shown in the section on existential clauses, in TV existence clauses always have an overt predicate, with *xaa ~ xaroo* or *woo(n)*. So we suspect that the quantifier in (7c) is attributive.

- (7) TV a. *Ajoo7e-mb=re ejoomo=ma Ø.*
 many-PL = 1PL 1PL.PRO = AUG be
 ‘Somos muchos. (We are many.)’ (3.104.0463)
- b. *Ajoo7en=mo=j Ø.*
 many = 3PL = IND be
 ‘Son muchos. (They are many.)’ (3.104.0463)
- c. *Ajoo7en=mo=j piit\$okwa-r-am Ø.*
 many = 3PL = IND house.fly-ABS-PL be
 ‘Hay muchas moscas. (There are many flies.)’ [‘The flies are many/They are many flies.’] (3.104.0064)

The examples in (8) show numerals as complements in attribution clauses. As with *ajoo7en* ‘many’, these do not appear with *xaa* in such clauses. When numerals from ‘two’

⁹⁷ Munro (2012) suggests that *ajoo7en* is a possessed noun: *a-joo7-en* ‘3SG-bigness-PSD’, ‘its bigness’, but the form *ajoo7e* as in (2) suggests it may be an adjectival derivation with *a-...-e* [ADJZ-...-ADJZ], like the construction illustrated in (3a). However, the variable final *-n* of *ajoo7e(n)* remains to be understood.

to ‘six’ appear as modifiers of animate nouns or as attribution clause complementizers, they must have the plural suffix *-m*.

- (8) TV a. *Wat\$aa7a-m woroo~ro-ta-m* \emptyset .
 four-PL man~PL-ABS-PL be
 ‘Son cuatro hombres. (They are four men [The men are four (in number)].)’
 (3.104.0094)
- b. *Wat\$aa7a-m* \emptyset .
 four-PL be
 ‘Son cuatro. (They are four.)’ (3.104.0094)

As with identity clauses, there are short forms of attributive clauses that have only a complement, usually with a pronominal and/or indicative clitic. Examples appear in (9).

- (9) TV a. *Tehoove-t=7e* \emptyset .
 good-ABS=IND be
 ‘Es bonito. (It is pretty.)’ (3.105.0033)
- b. *Tehoov-ko=ne* \emptyset .
 good;well-ADVZ=1SG be
 ‘Estoy bueno. (I am well.)’ [answer to *Avaaxa7a xaa?* ‘¿Cómo estás? (How are you?)’.] (3.105.0033)
- c. *Xaj tehoove-t* \emptyset , *mohaa-j=7e* \emptyset .
 NEG good-ABS be bad-ABS=IND be
 ‘No es bueno, es malo. (It is not good, it is bad.)’ (3.105.0113)
- d. *Oroo7o=7e* \emptyset .
 hot=IND be
 ‘Está caliente. (It is hot.)’ (3.103.0290)

9.1.3. CLAUSES OF LOCATION. TV clauses of location, regardless of tense or mood, always have a locational verb, either *xaa* ~ *xaroo* or *woo(n)*. The latter verb is restricted to

locative and existential clauses, used when the subject is a non-human plural or a mass noun.

Like the verb *qat\$* in SE, *kat\$* in KI, and *qal* and its suppletive allomorphs in the Cupan languages, TV *xaa* ~ *xaroo* is not only a neutral light verb meaning ‘be in a place’, it also includes in its range of meanings ideas like ‘dwell, stay, sit’. It is sometimes difficult to determine exactly which sense is in play. Since the TV data nearly always take the form of isolated sentences, we must depend on the translations and other notations given in the Harrington notes. For instance, (1a) is translated with Spanish *quedar* ‘to stay, remain’, while (1b) is translated with Spanish *estar* ‘to be in a place, condition’. However, meaning of the verb *xaa* ~ *xaroo* is not precisely ‘stay’. Of (1c), Harrington’s notes say “No dice que van a quedar, quedar es otro [verbo] (It doesn’t say that they are going to stay, stay is a different verb)”; this is presumably a reference to the verb *haajkomok*, which is explicitly the verb ‘stay, remain in place’. It is quite possible that the intended sense of *xaroo* was ‘dwell’ in (1b) as well as in (1a). Since (1a,e) include no specifically locative expression, we suspect that the *quedar* translation may be closer to what was intended. The sense of the reflexive form *estarse*, represented by *estate* in (1d), corresponds exactly to the English gloss ‘stay’. Harrington’s notes indicate that (1e) is the answer to a question, “¿Ónde están los caseros? (Where are the inhabitants?)”.

- (1) TV a. ***Xaroo*** = *vo7* *omooma*.
 be.there.IMP = IMP.PL 2PL.PRO
 ‘¡Quédense! (Goodbye!) (Stay [pl]!)’ (3.104.0089)
- b. *Ekwaa* = *7a* ***xaroo-ro***.
 PROX = 2SG be.there-FUT
 ‘Aquí vas a estar. (You will be here.)’ (3.105.0293)
- c. *Wehee7a-m* = *mo* = *j* ***xaroo-ro***.
 two-PL = 3PL = IND be.there-FUT
 ‘Dos van a estar. (Two of them will be [there].)’ (3.105.0104)
- d. *Ooma7* *paam* ***xaroo***.
 2SG.PRO PROX2 be.there.IMP
 ‘¡Tú estate ay! (You stay there!)’ (3.104.0121)

e. *Paamom = 7em xaa.*
 PROX2 = 3PL be.there.NFUT
 ‘Ay están. (They are there.)’ (3.105.0162)

f. *Muuro = 7e xaa.*
 DIST = IND be.there.NFUT
 ‘Allá está. (It is there.)’ (3.104.0110)

Examples with complements that bear local case suffixes or have other clearly locational senses, are seen in (2). In this type of clause, the verb is always present. In (2f) there is no specifically locative element, but the Spanish verb is *estar* ‘to be in a place’.⁹⁸

- (2) TV a. *Awvong = 7e xaa.*
 outside = IND be.there.NFUT
 ‘Está afuera. (He is outside.)’ (3.104.0060)
- b. *Heaa = 7e heteeek xaa taame-t.*
 now = IND above be.there.NFUT sun-ABS
 ‘Ya está muy arriba el sol. (The sun is already quite high.)’ (3.103.0643)
- c. *Kii-nga a-\$uun-nga xaa.*
 house-in 3SG-inside-in be.there.NFUT
 ‘Está adentro de la casa. (It is inside the house.)’ (3.105.0332)
- d. *Matuu a-t\$ax-ve xaroo-t.*
 far.away 3SG-back-LOC be.there-PST
 ‘Al otro lado estaba. (It was on the other side.)’ (3.103.0381)

⁹⁸ Note that though English requires a locative in expressions of ‘be in a place’, there is no corresponding requirement in Spanish, where the use of *estar* does not require it; cf. a phone call: A: ¿Está Memo? B: No está. ‘A: Is Bill [there]? B: He’s not [here].’ TV may be more like Spanish than English in this regard. (*Memo* ‘Bill’ is the hypocoristic of *Guillermo* ‘William’.)

- e. *Viitor ekwaa xaroo-t.*
 Victor PROX be.there-PST
 ‘V́ctor aqú estaba. (Victor used to be here.)’ (3.103.0079)
- f. *Te7e=7aa xaroo=po.*
 leave = 2SG.IMP be.there.IMP = IRR
 ‘D́jalo que est́. (Leave it, let it be.)’ (3.104.0505)

The examples in (3a-c), with the locational verb *woo(n)* are Harrington’s “prose” renderings of song lines; he does not translate the second line (3b). The reference is to offerings of food presented in basket trays at ceremonies.

- (3) TV a. *Namaake-nga7=po woo.*
 middle-in = IRR be.there(pl.).NFUT
 ‘En medio habŕa. (It should be in the center.)’ (3.105.0484)
- b. *Jovaanga=po woo.*
 sacred.enclosure-in = IRR be.there(pl.).NFUT
 ‘[It should be in the sacred enclosure.]’ (3.105.0484)
- c. *No~noov-nga=po woono.*
 PL~tray-in = IRR be.there(pl.).IMP
 ‘Que haiga en las bateas. (May it be on the trays.)’ (3.105.0469)
- d. *Owee xa~xaa-j woo a-\$uun-nga moom-nga.*
 all PL~mountain-ABS be.there(pl.).NFUT 3SG-middle-in ocean-in
 ‘Lots of mountains (islands) are in the sea.’ (3.103.0363)

The clauses in (4) pose an analytic problem in that Harrington’s Spanish translations with *hay* ‘there is’ suggest that they may be existence clauses with locative adverbial adjuncts. If they express a locative relation, then the locative clauses are complements. Absent any discourse context, this ambiguity cannot be resolved. Since these clauses contain locatives, we list them with the locative relational clauses.

- (4) TV a. *Muuro=j woo ajoo7en ko-taa.*
 there = IND be.there(pl.) much;many stick;firewood-ABS
 ‘Por allá hay muchos palos. (There are a lot of sticks over there.)’
 (3.104.0068)
- b. *Ajoo7en=7e7 woo muuro7 \$o~\$oaa-r.*
 much;many = IND be.there(pl.) there PL~reed-ABS
 ‘Allá hay mucho juncal. (There is a large stand of reeds there.)’
 (3.104.0069)
- c. *Ajoo7en mamaaha-r woond-ro menea7 tameev-nga*
 much;many grass.plant-ABS be.there(pl.)-FUT this year-LOC
heaa ekwaa Sovoovo-nga.
 now here Soboba-LOC
 ‘Muncho zacate va a haber este año aquí en Soboba.’ (This year there will be
 a lot of hay here in Soboba.)’ (3.104.0447)
- d. *Ajoo7en joaa-t xaaj-nga woo.*
 much;many snow-ABS mountain-LOC be.there(pl.)
 ‘Hay mucha nieve en la sierra. (There is a lot of snow in the mountains.)’
 (3.104.0325)
- e. *Xaa-j moom-t=7e¹ a-\$uun-nga woo.*
 mountain-ABS ocean-ABS = IND 3SG-inside-in be.there(pl.)
 ‘There are mountains in the sea (islands).’ (3.102.0463)
¹ Here the indicative clitic is after what seems to be the first word of the second constituent.
 This seems odd. *Xaaj* may be topicalized extra-clausally: “The mountains, there are [some] in
 the ocean.”
- f. *Ajoo7en ekwaa woo ke~keuu-r moom-nga.*
 much;many here be.there(pl.) PL~fish-ABS ocean-LOC
 ‘Hay muchos pescados aquí en el mar. (There are many fish in the sea here.)’
 (3.104.0083)

- g. *Ajoo7en ne-t\$aaj-n woo ne-\$uun-nga.*
 much;many 1SG-sickness-PSD be.there(pl.) 1SG-heart-LOC
 ‘Tengo mucha enfermedad adentro de mí. (I have [there is] much sickness inside me.)’ (3.105.0101)

The examples in (5) might be read as identity clauses with noun complements. However, unlike the canonical identity clauses in 9.1.1, these examples have the verb *xaa* in unmarked tense and mood. We believe that in these clauses *xaa* is simply an intransitive verb, ‘be in a place’, although there is no locative element.

- (5) TV a. *Noo=n=7e xaa ne-nuuno7.*
 1SG.PRO=1SG=IND be.there 1SG-alone
 ‘Estoy solo yo. (I am [stay, dwell] alone.)’ (3.104.0414)
- b. *Menee7 huuna-r a-neenev xaa, a-meaa-t\$.*
 this bear-ABS 3SG-footprint be.there 3SG-go-NMLZ
 ‘Este oso su huella, donde él fue. (This is [located here] the bear’s track, where he went.)’ (3.105.0145)
- c. *Jaaj-t=7e xaa, xaj=7e jataamkok.*
 awake-ABS=IND be.there not=IND be.asleep
 ‘He (who is lying down) is awake, not asleep. (He is [lies as] an awake one, he is not sleeping.)’ (3.103.0769)
- d. *Ja~jaaj-t=me xaa.*
 PL~awake-ABS=3PL be.there
 ‘Están despiertos, no dormidos. (They are awake, not sleeping [They are ones who are awake].)’ (3.103.0152)
- e. *A-hiike-n=7e xaa.*
 3SG-breath;life-PSD=IND be.there
 ‘Está vivo. (He is alive [His life exists].)’ (3.103.0155)

Example (5e) is interestingly similar to example 9.1.1 (11), repeated here as (6). The presence of *xaa* in (5c) or its absence in (6) seems to make an important contribution to the understanding of *ahiiken*.

- (6) TV *A-hiike-n = Ø = 7e* Ø.
 3SG-breath-PSD = 3SG = IND be.
 ‘Es el viento. (It’s the wind.)’ (3.105.0093)

9.1.4. CLAUSES OF POSSESSION. TV clauses of possession are verbless in unmarked tense and mode (unfortunately there are no examples with futures or imperatives in the corpus). In this feature they are quite unlike the Serran languages, where possessive clauses include the verbs SE *qat\$*, KI *kat\$*, cognates of TV *xaa* ~ *xaroo*.

- (1) TV a. *Wehee-s mahaar ne-hii-n tameevnge-j* Ø.
 two-times five 1SG-possession-PSD year-ABS be
 ‘I am 10 years old. (My years are ten.)’ (3.103.0123)
- b. *Wehee7a-m a-7aa\$on* Ø.
 two-PL 3SG-wife be
 ‘Él tiene dos mujeres, son dos sus mujeres. (He has two wives, his wives are two.)’ (3.104.0353)
- c. *Ajoo7en ne-7aar* Ø.
 much;many 1SG-flea be
 ‘Tengo muchos piojos. (I have a lot of fleas. [My fleas are many.])’
 (3.105.0407)
- d. *Ajoo7en a-taax-nga a-peeha-n* Ø.
 much;many 3SG-body-on 3SG-down;fur-PSD be
 ‘Owl has lots of down on [his] body. (His down on his body is a lot.)’
 (3.105.0409)

TV possessive clauses use the verb *jaaw-k* ‘have, hold’, cognate with verbs meaning ‘hold, grasp’ in other Tactic languages, where the possessed noun itself is not marked with a possessive prefix.

- (2) TV a. *Pe7ee-j jaaw-k ajoo7e toraana-t.*
 3SG.PRO-IND have-NFUT much;many money-ABS
 ‘Aquél tiene muchos pesos. (He has lots of money.)’ (3.104.0095)
- b. *Anaange jaaw-ro ajoo7e toraana-t.*
 later have-FUT much;many money-ABS
 ‘Después va a tener (Later he will have) lots of money.’ (3.104.0169)
- c. *Ajoo7e noo = n jaaw-t toraana-t honuuko.*
 much;many 1SG.PRO = 1SG have-PST money-ABS long.ago
 ‘Antes tenía (I used to have) lots of money.’ (3.104.0169)

9.1.5. CLAUSES OF EXISTENCE. Existence clauses in TV, regardless of tense or mood, always have an intransitive predicate, *xa(a) ~ xaroo* or *wo(o) ~ woon*. (Contextual reduction/non-lengthening is found with both *xaa* and *woo*.) Such clauses have only subjects. Many existence clauses in the TV data exhibit various kinds of adjuncts, especially locative phrases indicating where something is (as in 9.1.3 (4)) and quantifiers used as modifiers of the subject. Examples of existence clauses with such quantifiers appear in (1b-e). Note that noun phrases can be discontinuous (see chapter 8), as in examples like (1c,d). In (1e) the extension is an adverb. *Maanet* ‘toloache’⁹⁹ in (1c) is the hallucinogenic drink derived from *Datura meteloides*¹⁰⁰ (jimsonweed). The plant is also called *maanet*.

- (1) TV a. *Ooxo-r = 7e xaa.*
 land-ABS = IND be.there
 ‘Hay tierra. (There is land.)’ (3.104.0449)
- b. *Ajoo7en woo.*
 much be.there(pl.)
 ‘Muncho hay. (There is a lot.)’ (3.103.0739)

⁹⁹ Mexican Spanish *toloache* is from Nahuatl *toloatzin* (Santamaría 1978:1065).

¹⁰⁰ Species name in accord with Bean & Saubel 1972:60. The most recent species name of priority seems to be *innoxia*, but keeping up to date with shifting botanical taxonomic terminology is all too often a fool’s errand.

- c. *Ajoo7en = e7 wo maane-t.*
 much = IND be.there(pl.) datura-ABS
 ‘Hay mucho toloache. (There is a lot of datura.)’ (3.104.0068)
- d. *Jaawjo = 7e woo \$a~\$aaxa-t.*
 nothing.but = IND be.there(pl.) PL~black.willow-ABS
 ‘Puro sauzal hay. (There is nothing but a willow thicket.)’ (3.104.0391)
- e. *Heaamne = 7e woo pan.*
 morning = IND be.there(pl.) bread
 ‘De mañana hay pan. (There is bread in the morning.)’ (3.104.0428)

9.1.6. NEGATIVES IN TONGVA RELATIONAL CLAUSES. Negatives of identity and attribution clauses use the ordinary negative particle *xaaj ~ xaj*. There is no good example of a negative locative sentence in the TV corpus. However, the documentation suggests that the distribution of verbless and verbal clauses with negatives is identical to that in positive clauses.

- (1) TV a. *Xaj = me woroo~ro-m Ø.*
 NEG = 3PL man~PL-PL be
 ‘No son hombres. (They are not men.)’ (3.104.0065)
- b. *Xaj he-taa-ra a-miime-n Ø.*
 NEG INDF.INAN-ABS-GEN 3SG-value-PSD be
 ‘No vale nada. (It’s worthless.)’ (3.105.0150)
- c. *Xaj = me tehoov-ko xaa meteema7.*
 NEG = 3PL good-ADVZ be now
 ‘No están buenos ahora. (They are not good now.)’ (3.103.0769)
- d. *Xaj = n tehoov-ko xaa.*
 NEG = 1SG good-ADVZ be
 ‘No estoy bien. (I am not well.)’ (3.104.0351)

Existential and verbless possessive sentences take a special negative *jaxaa*. When the reference of the subject is a mass noun, the indefinite element *hetaa* ‘what, something, anything, any’ can appear, but there are examples without it. This distribution raises a problem. While there is always a verb in positive existence clauses, in (2) there is no verb other than *jaxaa* itself. Given the phonological resemblance, *jaxaa* may be a predicate related to *xaa* ~ *xaroo*. However, positive possessive clauses are verbless. Unfortunately there is no attestation of negatives in a marked tense or aspect. Considering the fact that *jaxaa* occurs in a clause in the positions occupied by the negative particle *xa(a)y*, namely in first or second position, and not in the final position normally occupied by the verb *xaa* ~ *xaroo*, we think it is most likely that the *-xaa* component of *jaxaa* is the negative element. This element occurs unaffixed as the unstressed prohibitive particle *xa* ‘don’t’, which appears with imperative verbs (11.1). The *ja-* component of *jaxaa* may relate to the adverb *heaa* ‘now’, but synchronically *jaxaa* and *heaa* may cooccur, as in (2b,c,e). The treatment of *jaxaa* as a negative particle entails positing a zero copula for the clauses which use it and those clauses would consist of just of a verbless clause subject. Though Dixon (2010:161) says such a clause type is rare, it is well known that many limitations on syntactic cooccurrences are suspended under negation.

- (2) TV a. *Jaxaa=j7 moroo he-taa paa-r Ø.*
 not.exist=IND DIST any-ABS water-ABS be
 ‘Ya no hay nada de agua. (There is now no water at all.)’ (3.104.0065)
- b. *Jaxaa=j7 heaa paa-r Ø.*
 not.exist=IND now water-ABS be
 ‘Ya no hay agua. (There is no water now.)’ (3.102.0885)
- c. *Heaa=7 jaxaa7 Ø.*
 now=IND not.exist be
 ‘Ya no hay. (Now there isn’t any.)’ (3.103.0155)
- d. *Jaxaa=j7 ne-nii he-taa Ø.*
 not.exist=IND 1SG-food any-ABS be
 ‘No hay nada de comida. (There isn’t any [of my] food.)’ (3.103.0097)

- e. *Heaa=7e jaxaa7 a-t\$oo~t\$o-n Ø.*
 now = IND not.exist 3SG-PL~eye-PSD be
 ‘Ya no tiene ojos (said trying to say ‘he is blind’). (He has no eyes now.)’
 (3.103.0073)
- f. *A-t\$oo~t\$o-n jaxaa7 Ø.*
 3SG-PL~eye-PSD not.exist be
 ‘No tiene ojos. (He has no eyes.)’ (3.105.0316)
- g. *Jaxaa=j7 a-ook a-naak Ø.*
 not.exist = IND 3SG-mother 3SG-father be
 ‘No tiene madre o padre. (He has no mother or father.)’ (3.105.0328)

9.1.7. INTERROGATIVES IN TONGVA RELATIONAL CLAUSES. Complements or predicative elements in clauses of identity, attribution, location, possession, and existence can be replaced with interrogatives of all types. The interrogative elements always appear in clause-initial position.

The verbs *xaa ~ xaroo / woo(n)* usually appear in questions with *hamiinga(m)* ‘where?’, as in (1).

- (1) TV a. *Hami-nga=7a xaroo-t?*
 INDF-LOC = 2SG be.there-PST
 ‘¿Ónde estabas? (Where were you sg.?)’ (3.103.0292)
- b. *Hami-nga=m xaa mo-7eehja7?*
 INDF-LOC = AUG be.there 2SG-friend
 ‘¿Dónde está tu compañero? (Where is your sg. friend?)’ (3.103.0638)
- c. *Hami-nga7m xaa ne-waakt\$?*
 INDF-LOC = AUG be.there 1SG-hairbrush
 ‘Where is my hairbrush?’ (3.102.0707)

The example in (2) seems peculiar because, as was seen above, locative clauses always have verbs. Example (2) might be accounted for by regarding it as a question regarding

where one lives – ‘Where is your home?’ – rather than a one regarding where one’s house is located. Cf. the difference in Spanish: *¿Dónde es tu hogar?* vs. *¿Dónde está tu casa?*

- (2) TV *Hamii-nga = m mo-kii-n Ø?*
 INDF-LOC = AUG 2SG-house-PSD be
 ‘Where is thy house?’ (3.102.0724)

The question particle *avaa* ‘how?’ in the sense of ‘how are you?’ always has a verb, consistent with the requirement that adverbial attributions always have verbs, as seen in 9.1.2. (The question word *hamiinko* ‘how, why’, with the adverbial suffix *-ko*, is not used in this sense.)

- (3) TV a. *Avaa = 7a xaa?*
 how = 2SG be
 ‘¿Cómo estás? (How are you?)’ (3.103.0318)
- b. *Avaa = ha7 xaa m-ook?*
 how = Q be 2SG-mother
 ‘¿Cómo está tu madre? (How is your mother?)’ (3.105.0364)

Identity questions, as expected, are verbless. Several of the examples below exhibit the interrogative clitic = *ha7*. We analyze Harrington’s transcription <aváxaxa mók> in (3b) above as also containing this element.

- (4) TV a. *Hakaake-m Ø?*
 INDF.HUMAN-PL be
 ‘¿Quiénes son? (Who are they?)’ (3.103.0135)
- b. *Hakii = ma7 Ø?*
 INDF.HUMAN = AUG be
 ‘¿Quién es? (Who is it?)’ (3.103.0135)
- c. *Heniike7 = ha7 a-hoiit Ø?*
 INDF.QUANT = Q 3SG-value be
 ‘¿Cuánto vale? (How much is it?)’ (3.102.0871)

- d. *Heniike7 mo-hiin Ø?*
 INDF.QUANT 2SG-possession be
 ‘¿Cuánto tienes? (How much do you have?)’ (3.104.0408)
- e. *He-taa meene7 Ø?*
 INDF-ABS PROX be
 ‘¿Qué es éste? (What is this?)’ (3.103.0621)
- f. *He-taa manee7 = m amooja7 Ø, tokoo-r = ha7, worooj-t = ha7,*
 INDF-ABS DIST = AUG dead.person be woman-ABS = Q man-ABS = Q
he-taa = ha7?
 INDF-ABS = Q
 ‘¿Qué es el muerto, woman or man? (What is that dead one, a woman, a man, or what?)’ (3.104.0110)
- g. *Mejii = ha7 mo-towaanja-n Ø?*
 INDF.MANNER = Q 2SG-name-PSD be
 ‘What is your name?’ (3.102.0885)

9.2. RELATIONAL CLAUSES IN SERRANO. SE and TV have a similar distribution of verbless clauses and clauses with intransitive verbs among the various clause types. The major differences are, first, that SE uses a different copula verb, *ñihaj*, instead of a reflex of **kaLy* as in TV, to support marked tenses, and second, that in SE possessive clauses have *qat\$*, while in TV these are verbless. Also, as pointed out in 9.0, SE can have past tense encoded with verbless clauses.

In SE, as in TV, clauses expressing identity or attribution in the nonfuture are verbless. While Dorothy Ramón (in Ramón & Elliott 2004) occasionally used *qat\$* in such sentences (as seen in 9.2.1 (4) below), it is possible that this is a feature of terminal generation speech (in her late years Ms. Ramón was perhaps the last speaker alive who had learned Serrano as a child). In the speech of Sarah Martin, collected by K. Hill in the early 1960s, clauses of identity and attribution are invariably verbless in the nonfuture. In the future tenses, they require an overt verb to support the future-tense suffix *-iv* or the immediate future suffix *-qa7*. The overt verb is also found with subordinate clauses

that are formed with verbal suffixes. In SE, the verb in such clauses is not *qat\$-iv*, *qat\$y-ka7*, *qat\$o-w* (< PTak *kaLy) but instead is *ñi-iv*, *ñiaa-qa7*, *ñiaa-w*, the futures and the different-subject subordinated form of *ñihaj* ‘do, become’. However, the verb *qat\$* does appear in locational, possessive, and existential clauses, and it also appears frequently with adverbs.

9.2.1. CLAUSES OF IDENTITY. Clauses expressing identity are invariably verbless in the speech of Sarah Martin, recorded by K. Hill in the early 1960s. Both orders of subject and complement are well attested. Such clauses often appear with modal, evidential, and pronominal elements. If these include a marker for past tense, a pronominal marker must appear as well, the marker for past tense being a glottal stop following the pronominal. Verbless clauses with overt auxiliary-level pronominals appear in (1).

- (1) SE a. *Nyy7=n* *ama7* *yy-na7* \emptyset .
 1SG.PRO = 1SG DIST 2PL-father be
 ‘I’m your (pl.) father.’
- b. *Mia = ta = ch* *hamin* \emptyset *pyt\$ = tqa = chymy-7*
 DUB = IRR = 1PL INDF.MANNER be such = INFR = 1PL-PST
o^Rh~o^Rngay7-m \emptyset .
 PL~lazy.one-PL be
 ‘We must have been such lazy ones. (Maybe we were somehow; we must have been such lazy ones.)’
- c. *Pyt\$y = m7* *juu7-i7a-t\$* *ymi7* \emptyset .
 such = 2SG cry-AGT-ABS 2SG.PRO be
 ‘You’re such a crybaby.’
- d. *Ama7 = vy-7* *Wili Paavlu7-ty7* *a-majr* \emptyset .
 DIST = 3SG-PST Willy Pablo-GEN 3SG-son be
 ‘He was Willy Pablo’s boy.’

- e. *Ama7* *ajyy-t=vy-7* *a-majr* \emptyset .
 DIST *end;only.one-ABS = 3SG-PST* *3SG-son* be
 ‘That was the only son he had (that one was his only son).’
- f. *Mia = ta = my-7* *hiñi-m* *paa^Rhavi-m* \emptyset .
 maybe = IRR = 3PL-PST INDF-PL *powerful.being-PL* be
 ‘They must have been some kind of powerful beings.’

Verbless clauses with third person subjects with no overt auxiliary-level pronominals appear in (2). Note the postposed subject in (2f). Postposed subjects normally follow the predicate so we place the zero indicating the empty copula position before the postposed subject.

- (2) SE a. *Tyyj-t* \emptyset *ni-jy7* \emptyset .
 spirit-ABS 3SG 1SG-mother be
 ‘Spirit is my mother.’
- b. *Naa^Rh-t\$* \emptyset *mutu7* *ama7* \emptyset .
 young.woman-ABS 3SG still;yet 3SG.PRO be
 ‘She was a young lady yet.’
- c. *Ivi7* *a-\$a* \emptyset *chikt\$* *paa-t\$* \emptyset .
 PROX 3SG-soup 3SG only;nothing.but water-ABS be
 ‘This soup is all water.’
- d. *My-havy7* \emptyset *chikt\$* *paa^Rkwyñi-t* \emptyset .
 2SG-clothes 3SG only;nothing.but mud-ABS be
 ‘Your clothes are all dirty (nothing but mud).’
- e. *Ama7* *Kwaa7-t\$* *a-majr = kwyn* *a-taar* \emptyset .
 DIST hawk-ABS.GEN 3SG-son = QUOT.3SG 3SG-mo.bro be
 ‘Hawk’s son was his uncle.’

- f. *Kwyny paa^Rhavi-m Ø aa-m chichina-m.*
 QUOT.3PL powerful.being-PL be DIST-PL boy-PL
 ‘Those boys were supernaturally powerful beings.’

SE has verbless identity clauses where the verbless clause subject is marked only by an auxiliary-level pronominal, as in (3a-c), or where the subject is zero, as in (3d).

- (3) SE a. *Luunis = vy-7 Ø.*
 Monday = 3SG-PST be
 ‘It was Monday.’
- b. *Tyyj-t = kwyny = vy-7 Ø.*
 spirit-ABS = QUOT = 3SG-PST be
 ‘He was a spirit.’
 <Teyt kwenevu’.> (R&E 32)
- c. *Cheeqo^R-m = kwyny = my-7 Ø.*
 twin-PL = QUOT = 3PL-PST be
 ‘They were twins.’
- d. *“Ny-majha-m Ø Ø,” ky-j = kwyn.*
 1SG-child-PL 3PL be say-IND = QUOT.3SG
 ‘“They’re my children,” he said.’

As mentioned at the beginning of this section 9.2, Dorothy Ramón, whose usage was recorded by Eric Elliott some 30 years after K. Hill worked with Sarah Martin, occasionally used the verb *qat\$* in clauses of identity. Examples appear in (4).

- (4) SE a. *Amerikaanu7-ja-m Ø puju qat\$.*
 American-AUG-PL 3PL all be
 ‘They are all Americans.’
 <‘Amêrikaanu’yam puuyu’ qatt.> (R&E 36)

- b. *Pyy-pita-m = kwyny = my-7 qat\$.*
 3PL-Yo.Si-PL = QUOT = 3PL-PST be
 ‘They were the (their) younger sisters.’
 <Peepitam kwenemu’ qatt. > (R&E 8)
- c. *Houngani7-ja-m Ø qat\$y7.*
 poor-AUG-PL 3PL be
 ‘They are poor.’
 <Hoongani’yam qatte’. > (R&E 10)

In identity clauses where an inflection requires a verb stem, we find appropriate forms of *ñihaj* ‘do, become’ used as an empty verb to support the verbal affixes. Examples with future *ñi-iv* are given in (5a-c) and the immediate future *ñiaa-qa7* appears in (5d). In (5e) the imperative form of the copula, *ñia*, is governed by the potential modal *kwy7*. This “subjunctive” use of imperative constructions is also found in TV and LU.

- (5) SE a. *Ta = n houngani-ch ñi-iv.*
 IRR = 1SG poor.one-ABS be-FUT
 ‘I’ll be poor (a poor one).’
- b. *Hoowkp py-hpa7 wo^Rh paahi7 = t ñi-iv.*
 one 3SG-LOC two three = IRR.3SG be-FUT
 ‘One plus two is three.’
- c. *Nyy7 = ta = n myaa-t\$ ñi-iv.*
 1SG.PRO = IRR = 1SG moon-ABS be-FUT
 ‘I will be the moon.’
 <Ne’tan mēaac nyiiv. > (R&E 14)
- d. *Pa-pia kii-ka-m ñiaa-qa-m.*
 PROX2-LOC house-CHAR-PL be-IFUT-PL
 ‘They were to become the residents.’
 <Papy’a’ kiikam nya’qam. > (R&E 162)

- e. *Kwyny-my-7* *maaja7*, *mia = t* *qaj = kwy7*
 QUOT = 3PL > 3SG-PST ask maybe = IRR.3SG NEG = POT.3SG
myaa-t\$ *ñia*.
 moon-ABS be.IMP
 ‘They asked her if she couldn’t be the moon.’
 <Kwenemu’ maaya’ “Mit qay’ kwa’ mäaac nyah.” > ‘They asked her to be the moon.’ (R&E 14)

9.2.2. CLAUSES OF ATTRIBUTION. Clauses expressing attribution are verbless in SE. But, as above, where an inflection requires a verb stem, an appropriate form of *ñihaj* ‘do, become’ is inserted to support the verbal affix. The examples in (1) show the alternation between verbless (1a-c) and dummy-verb-containing clauses (1d-g).

- (1) SE a. $Y^R t \$ y y^R = kwyn$ *taamia-t* \emptyset . *Hakup = kwyn* $y^R t \$ y^R$ \emptyset .
 hot = QUOT.3SG sun;day-ABS be very = QUOT.3SG hot be
 ‘It was a hot day. It was very hot.’
- b. $Y^R t \$ y y^R = vy-7$ \emptyset .
 hot = 3SG-PST be
 ‘It was hot.’
- c. *Ivi-ia* *too^Rngava7* \emptyset *hakup* $y^R t \$ y^R$ \emptyset .
 PROX-time in.the.summer 3SG very hot be
 ‘This summer is very hot.’
- d. $Y^R t \$ y y^R = t$ *ñi-iv*.
 hot = IRR.3SG be-FUT
 ‘It will be hot.’
- e. *Hachaa7-i7* \emptyset *ñiaa-qa-m*.
 sharp-ADJZ 3PL.INAN be-IFUT-PL
 ‘They’re going to be sharp.’

- f. *Ivi7 tiy^Rva-t\$ Ø, uviht mutu7 namaa7-i7 ñiaa-w,*
 PROX earth-ABS 3SG long.ago still;yet soft-ADJZ be-DS
kwyny = my-7 qat\$ wo^Rh.
 QUOT = 3PL-PST be;live;dwell two
 ‘Long ago, when this earth was still soft, there were two.’
- g. *Uii7wyna-j = vyn hawawa7n ny-ñi-ik-t\$i.*
 want-IND = 3SG > 1SG light.in.weight 1SG-be-IRR.SUB-ACC
 ‘He (the doctor) wants me to lose weight (wants me to be light).’

In unmarked attributive clauses there are no exceptions to the verbless structure. Examples appear in (2). Note that 3PL pronominal markers are optional – for instance, =*m* is absent in (2c) but present in (2d). Examples (2c,d) also show plural agreement between the subject and the verbless complement.

- (2) SE a. *Ny-huun Ø kiti a7-aj Ø.*
 1SG-heart 3SG a.little;slightly ADJZ-good be
 ‘I’m feeling a little better.’
- b. *Hoowkp = kwyn a-tiy^R7a7 Ø, ama7 huwa-t\$ = kwyn*
 one = QUOT.3SG ADJZ-big be DIST other-ABS = QUOT.3SG
añii7i7 Ø.
 small be
 ‘One was big, the other was small.’
- c. *Kjavaaju7-m Ø a-ty^Rh~ty^R7a-m Ø.*
 horse-PL 3PL ADJ-PL~big-PL be
 ‘The horses were big.’
- d. *Xajku7-ja-m huwa-my = m a7ajy-m Ø; my-7 mamajyv-k*
 White.person-AUG-PL other-PL = 3PL good-PL be 3PL-PST help-K
taaq-ta-m.
 person-ABS-PL
 ‘Other Whites are good; they have helped the Indians.’
 <Xay’ku’yam huwamim ‘a’ayem: mu’ maamayuwk Taaqtam.> ‘Some whites are good and have helped the Indians.’ (R&E 11)

Clauses expressing attribution where the verbless clause subject is present only in the form of an AUX pronominal, as in (4), are well attested.

- (4) SE a. *A-mym7-k-i7 = m7* \emptyset .
 ADJ-die-K-ADJ = 2SG be
 ‘You were dead.’
- b. *Hachaa7-i7 = vy-7* \emptyset .
 sharp-ADJZ = 3SG-PST be
 ‘It was sharp.’
- c. *Hachaa7i = m* \emptyset .
 sharp-ADJZ = 3PL be
 ‘They’re sharp.’
- d. *Hachaa7i7 = my-7* \emptyset .
 sharp-ADJZ = 3PL-PST be
 ‘They were sharp.’
- e. *Pyy^rna = n* \emptyset .
 naked = 1SG be
 ‘I’m naked.’
- f. *Pyy^rna = ny-7* \emptyset .
 naked = 1SG-PST be
 ‘I was naked.’

Attribution with quantifiers has the same verbless structure, as seen in (5).

- (5) SE a. *Kwyn wyy^rr a-pin- \emptyset* \emptyset .
 QUOT.3SG much 3SG-bring-NMLZ be
 ‘What he brought was a lot.’

- b. *Kiti = tq wary7 Ø.*
 few;little = INFR.3SG truly be
 ‘It must have been just a little bit.’
- c. *Puu~pulin-ja-m = kwyny = my-7 wachkuvik Ø.*
 PL~daughter-AUG-PL = QUOT = 3PL-PST seven be
 ‘They had seven daughters. (Their daughters were seven.)’
- d. *Na~naacha-m = kwyny = my-7 woo^R-m Ø.*
 PL~girl-PL = QUOT = 3PL-PST two-PL be
 ‘There were two girls. (The girls were two.)’
- e. *Puju Ø kwe-i7-ch Ø.*
 all 3SG eat-RES-ABS be
 ‘It’s all eaten up.’
- f. *Chikt\$ = kwyn kuku-t Ø.*
 just;nothing.but = QUOT.3SG ash-ABS be
 ‘It (the fire) was only ashes.’
- g. *Taaqt-a-m = my-7 chikt Ø.*
 Indian-AUG-PL = 3PL-PST just;nothing.but be
 ‘There was nothing but Indians.’
 <Taaqtammu’ chikt.> (R&E 5)
- h. *Chikt\$ Ø \$yrii-7n-ka7 Ø.*
 just;nothing.but 3SG red-ST-K.CHAR be
 ‘There’s nothing but red.’
- i. *Chikt\$ = kwyny = my-7 muucha-m o-uuv-p Ø.*
 just;nothing.but = QUOT = 3SG-PST worm-PL 3SG-eye-LOC be
 ‘It was just worms in his eyes (as Coyote lay dead there).’

Expressions of weather and attribution clauses with abstract non-referential subject, as in (6) have a verbless structure. Note that in (6c) a pronominal marker *vy-* is present to support the past tense marker. But past tense marking itself is optional.

- (6) SE a. *Kwyn hakup y^Rt\$y^R ∅.*
 QUOT.3SG very hot be
 ‘It was very hot.’
- b. *Kiti y^Rt\$y^R ∅.*
 a.little;slightly hot be
 ‘It’s a little hotter.’
- c. *Y^Rt\$yy^R=ta=vy-7 ∅ ?*
 hot=IRR=3SG-PST be Q
 ‘Was it hot?’
- d. *Kwyn – mia huwa-7i7 ∅.*
 QUOT.3SG maybe other-ADJZ be
 ‘It was – different.’

9.2.3. CLAUSES OF ADVERBIAL ATTRIBUTION. Like adverbial attributive clauses in TV, SE attributive clauses where the attributive element is an adverb have the verb *qat\$* instead of copula *ñihaj*. Comparing (1a,b) with (1c) shows that *qat\$* behaves like an ordinary intransitive verb in this context. (7d,e) show interrogative and negative forms of manner adverbial clauses. In the interrogative sentence in (1d) *qat\$* forms a compound with *hamia*, the combining form of *hamin* ‘how, somehow’. The negative *qa* ‘no’ in *qahamin* is peculiar to the environment of compounds. The compound *qahamiaqat\$* also occurs.

- (1) SE a. *Qat\$y-j = m ynaat\$.*
 be.there;live;dwel-IND = 3PL well;nicely
 ‘They’re getting along well.’
- b. *Qaj = kwyny ynaat\$ qat\$.*
 not = QUOT.3PL well;nicely be.there;live;dwel
 ‘They were unhappy (They weren’t getting along well).’

- c. *Ynaat\$y = n raakw ynaat\$y = n kuuman.*
 well = 1SG eat well = 1SG sleep
 ‘I ate well and slept well.’
- d. *Hamia-qat\$ = ta = mt\$ “ja7-i = n” ky-j yy-vyravk.*
 how-be = IRR = 2PL run-IND = 1SG say-IND 2PL-language
 ‘How do you say “I’m running” in your language?’
- e. *Qa-hamin Ø qat\$ cha-hiik-k mo^Rch.*
 NEG-how;way 3SG be 1PL-live;breathe-IRR.SUB again;back
 ‘There is no way for us to come back to life.’

9.2.4. NEGATIVES AND INTERROGATIVES OF IDENTITY AND ATTRIBUTION CLAUSES. There are relatively few examples of negated identity clauses and attribution clauses in the SE corpus. Negatives are identical to the positive clauses in the distribution of verbs, except for the presence of the negative *qaj*. This particle is nearly always in first position, so is often the anchor for pronominal and other clitics, as in (1a,c). The pronominal clitic in (1c) may seem not to agree with the subject, ‘others’, but in fact it is in agreement with *puuhun* ‘their hearts’, which is a grammatical singular.

- (1) SE a. *Qaj = m puju taaq-ta-m Ø.*
 NEG = 3PL all person-ABS-PL be
 ‘They aren’t all (completely) Indian.’
- b. *Qaj Ø ychy aa-p Ø.*
 NEG 3SG cold DIST-LOC be
 ‘It’s not cold there.’
- c. *Qaj = kwyny = vy-7 pyy-hun a7aj Ø huwa-m.*
 NEG = QUOT = 3SG-PST 3PL-heart good be other;different-PL.GEN
 ‘Others were unhappy.’
 <Qay kwenevu’ peehun ‘a’ay huwam.> ‘Some were not glad (to see her rise up as the moon).’
 (R&E 16)

Negatives can be used for questions about identity and attribution, as in (2). The distribution of verbless (2a) and verbal (2b) marking is the same as in positive clauses. Note that in (2a) the question intonation contour (HLH), marked with the question mark and with the contour below, falls on the adjective and locative (which have been run together – note the retained apocopic vowel *y*), and does not include the final word.

- (2) SE a. *Qaj=t a7-ajy ii-p Ø ? ymy-jka7.*
 NEG = IRR.3SG ADJZ-good PROX-LOC be Q 2SG-DAT
 H L H L
 ‘Isn’t it good here for you?’
- b. *Y^Rt\$yy^R=t ñi-iv-i ?*
 hot = IRR.3SG be-FUT-ECHO Q
 H L H
 ‘Will it be hot?’

Question-word questions about identity and attribution do not show the HLH question intonation (just as they do not in English). The irrealis modal *t(a)*, which is normally required in questions, is apparently optional for some questions with words like *hami7* and *hiit*, as seen in (3c,e).

- (3) SE a. *Haii-m = ta = mt\$ Ø.*
 INDF.HUMAN = IRR = 2PL be
 ‘Who are you?’
- b. *Hami7 = t Ø.*
 INDF.HUMAN = IRR:2SG/3SG be
 ‘Who are you?’
- c. *Hami7 Ø pat Ø.*
 INDF.HUMAN 3SG PROX2 be
 ‘Who is he? / Who is it?’

- d. *Hii-ta=t* \emptyset .
 INDF-ABS = IRR.3SG be
 ‘What is it?’
- e. *Hii-t* \emptyset *ivi7* \emptyset .
 INDF-ABS 3SG PROX be
 ‘What’s this?’

The examples in (4) show embedded questions with the same question words, but in this case also with dubitative *mia* ‘maybe, if, whether’. The verb *hiut\$* in (4a) is the imperative of the motion verb *hiut\$u7* ‘go see’. Also in (4a), the verb *hat\$ik* ‘go on’ is known only as an imperative.

- (4) SE a. *Hat\$ik* *hiu-t\$* *mia=t* *hii-t* \emptyset *mia=t*
 go.on-K.IMP see-MOT.IMP DUB = IRR.3SG INDF-ABS be DUB = IRR.3SG
chichin-t *ha* *naash-t* \emptyset .
 boy-ABS or girl-ABS be
 ‘Go see whether it’s a boy or a girl (Go on, go see what it may be, whether (maybe) it’s a boy or a girl).’
- b. *Mia = ta = my-7* *haii-m* \emptyset *aa-m* *juaaka-ja-m*
 DUB = IRR = 3PL-PST INDF.HUMAN-PL be DIST-PL Chemehuevi-AUG-PL
ty^Rchiña-m.
 youth-PL
 ‘I didn’t know who they were, those young Chemehuevi men.’

9.2.5. CLAUSES OF LOCATION. The verb *qat\$*, along with its suppletive partner *wyn*, appears in clauses of location, possession, and existence. As we have seen in 9.2.2 (1), it also occurs in clauses of attribution with an adverb of manner.

Examples of *qat\$* that clearly mean ‘live, dwell’ are sometimes difficult to distinguish from more bleached locational usages. The examples in (1) illustrate this. (1a) could easily mean ‘live with’, but (1b) seems to be strictly locational. (1c), an interrogative, is also locational.

- (1) SE a. *Acham = ch ii-p qat\$ Wahi7-t py-mia7.*
 1PL.PRO = 1PL PROX-LOC be.there;dwel Coyote-GEN 3SG-COM
 ‘We’re here (live here) with Coyote.’
- b. *Pajykja7 = kwyn qat\$ tymy-t a-tiy^R7a-t\$.*
 over.there = QUOT.3SG be.there rock-ABS ADJ-big-ABS
 ‘Over there was a large rock.’

There is some optionality; locational clauses sometimes lack verbs, as in (2). However, it should be noted that none of the verbless examples in (2) are compatible with a verb of stance, such as is the primary meaning of *qat\$(y)* ‘sit’ and *wyn(y)* ‘lie’.

- (2) SE a. *Kwyn paa-t\$ a-naa^Rv-p Ø.*
 QUOT.3SG water-ABS 3SG-foot-LOC be
 ‘Water was at his feet.’
- b. *Kwyn mia = t ama7 pyt\$ pyjaan aa-piu7 Ø.*
 QUOT.3SG maybe = IRR.3SG DIST quite.3SG far DIST-ABL be
 ‘It seems to have been quite far from there.’
- c. *Ama7 = tq haii-p Ø ama7 Ø qaii-v Ø.*
 DIST = INFR.3SG INDF-LOC be DIST 3SG mountain-LOC be
 ‘It must have been somewhere in the mountains (It must have been somewhere, it was in the mountains).’

Interrogatives of locational clauses with *haiip* ‘where, somewhere, anywhere’ also have an overt verb (3).

- (3) SE a. *Haii-pia = t ivi7 qat\$.*
 INDF-LOC = IRR.3SG PROX be
 ‘Where is this place?’ (Asked upon reaching a road intersection in a remote part of the desert.)

b. *Haii-p = t* *qat\$* *ny-majr.*
 INDF-LOC = IRR.3SG be 1SG-son
 ‘Where is my son?’

c. *Haii-pia = t* *qat\$.*
 INDF-LOC = IRR.3SG be
 ‘Where is he?’

9.2.6. CLAUSES OF EXISTENCE. A SE story almost always begins with a formulaic existence clause like those in (1), with *qat\$* used in the sense of ‘there existed/there lived/once upon a time there was’.

(1) SE a. *Chichin-t = kwyn* *uviht* *qat\$.*
 boy-ABS = QUOT.3SG long.ago be
 ‘Long ago there was a boy (“Once upon a time there was a boy”).’

b. *Hyiiñ-i7a-t\$ = kwyny = vy-7* *qat\$.*
 hunt-AGTV-ABS = QUOT = 3SG-PST be
 ‘There was a hunter.’

Existence clauses from other contexts are shown in (2) and (3). Example (2e) contains a reduplicated, distributive form of *qat\$*.

(2) SE a. *Jangk = kwyn* *a-kicham* *qat\$* *ky-j = m.*
 but = QUOT.3SG 3SG-door be say-IND = 3PL
 ‘But they say there was a door.’

b. *Kwyny = vy-7* *uviht* *qaj* *qat\$* *hami7* *xajku7*
 QUOT = 3SG-PST long.ago NEG be INDF.HUMAN White.person
kwyny = vy-7 *tiy^R7ana-qa7* *taaqa-ta-m.*
 QUOT = 3SG-PST cure-IFUT person-ABS-PL
 ‘Long ago there was no White doctor to cure the Indians.’
 <Kwenevu’ ‘uviht qay’ qatt hami’ Xay’ku’ kwenevu’ ter’ernaqa’ Taaqtam.> ‘Long ago there were no white doctors to cure the Indians.’ (R&E 5)

- c. *Chyy-ñu* *tiy^Rva-v* *pu-htk* \emptyset *qat\$* *huwa-t\$*.
 1PL-possession world-LOC 3SG-under 3SG be other-ABS
 ‘There is another world under ours (At our world, another is under it).’
 <Cheenyu’ tervaf petkw qatt huwatt.> (R&E 32)
- d. *Chaa-t\$* \emptyset *py-jykja7* *qat\$*.
 song-ABS 3SG 3SG-DAT be
 ‘There is a song about it.’
 <Chaatt peyika’ qatt.> ‘There is a song to it.’ (R&E 16)
- e. *Puju* *ajaypa-t* *ty~tywan-i-ch* \emptyset *qa~qt\$*
 all various.kinds-ABS DISTR~name-NMLZ-ABS 3SG DISTR~be
taaqa-ta-v.
 person-ABS-LOC
 ‘There are Indian names (names in Indian) for all the particular places.’
 <Puuyu’ayeewpat tetewanich qaqc Taaqtav.> (R&E 100) [= 5.4 (5)]

In (3) Dorothy Ramón uses the verb *ñihaj* instead of *qat\$*, perhaps by analogy with this verb’s use as inflected verb in clauses of identity and attribution. (3) appears to be a unique instance of this. However, since this example contains the uninflected form of the verb (the indicative ending *-j* being entailed strictly by the phonological form of the verb root), *ñihaj* here cannot be understood to be a dummy verb inserted to support an inflection.

- (3) SE *Ajay7=kwyny* *wyywy^Rha-m* *taaqa-ta-m* *ñiha-j*.
 then = QUOT.3PL many-PL person-ABS-PL be-IND
 ‘Then there were many Indians.’
 <Ayee’ kwana’ wuuwerham Taaqtam nyihay.> ‘There were many Indians.’ (R&E 27)

9.2.7. INANIMATE CLAUSES OF LOCATION AND EXISTENCE. The verb *wyn*, cognate with TV *woo(n)*, appears in locational and existence clauses in SE with inanimate subjects, especially mass nouns.

- (1) SE a. *Taamia-t* \emptyset *tukuhpa-v* **wyn.**
 sun-ABS 3SG sky-LOC be(inan.)
 ‘The sun is up in the sky.’
- b. *Pajykja7* \emptyset **wyn** *paa-t\$* *a-huuna-v* *paaqa-t\$.*
 over.there 3SG be(inan.) water-ABS.GEN 3SG-inside-LOC reed-ABS
 ‘Over there in the water there are reeds.’

Example (2) shows that once animate but now deceased subjects are grammatically inanimate, and the verb of location is *wyn*. The fact that the jackrabbits of (2a.i) are no longer alive is made clear in sentence (2a.ii). In (2b), *wo^Rha^Rn* ‘both’ governs the genitive case.

- (2) SE a. i. *Hiñi-my-7=kwyny* **wyny-j,** *hwii7-m.*
 INDF-PL-UNCERT = QUOT.3PL be(inan.)-IND jackrabbit-PL
- ii. *Aa-m=kwyny=vy* *\$iikw* *ani=vy* *nyvy-m-in.*
 DIST-PL = QUOT = 3SG > 3PL gut(vt.) and.then = 3SG > 3PL bury-PL-CAUS
 ‘Some things were lying there, jackrabbits. She gutted them and buried them.’
- b. *A-nan-chui7v-t* *wo^Rha^Rna=m* **wyn** *pa-pia.*
 3SG-father-DEC-GEN both = 3PL be(inan.) PROX2-LOC
 ‘Both she and her dead father lay there.’

Negatives of existence clauses, in (3), can use the ordinary negative *qaj*.

- (3) SE a. *Qaj=kwyn* *hii-t* *a-raakw* **wyn.**
 NEG = QUOT.3SG INDF-ABS 3SG-food be(inan.)
 ‘There was nothing for him to eat.’
- b. *Qaj* \emptyset **wyn** *paa-t\$.*
 NEG 3SG be(inan.) water-ABS
 ‘There was no water.’

9.2.8. CLAUSES OF POSSESSION. The most common way to express possession in SE is with the verb *jaanym* ‘have’. However possessive clauses with *qat\$*, as in (1), are also well attested. These seem best identified structurally as existence clauses. (Dorothy Ramón’s sentence-final form of *qat\$* as *qat\$y7*, as in (1d), remains unexplained.)

- (1) SE a. *Ama7 = vy-7 ny-ka7 wyt\$ i7vy^R-t\$-∅ a-hiintu7a7 qat\$.*
 DIST = 3SG-PST 1SG-FaPa old.man-ABS-GEN 3SG-wife be
 ‘My old grandfather had a wife (My old-man paternal grandparent’s wife existed).’
- b. *Ny7-aachi7 kuchi7 ami7 kiri7 ∅ qat\$.*
 1SG-animal dog and cat 3SG(?) be
 ‘I have a dog and a cat (My dog and cat exist).’
- c. *Qaj = kwyn haii-p a-ki qat\$.*
 NEG = QUOT.3SG INDF-LOC 3SG-house be
 ‘He had no house (anywhere) (His house did not exist anywhere).’
- d. *Pyy-ñu tiy^Rva-t\$ wyy~wy^Rh-t = kwyny = vy-7 qat\$y7.*
 3PL-possession land-ABS PL~much-ABS = QUOT = 3SG-PST be
 ‘They had a lot of land (Their large amount of land existed).’
 <Peenyu7 tervatt wuuwert kwenevu’ qatte’.> (R&E 8)

A query regarding possessor appears without a verb.

- (2) SE *Hami-ch = t a-ñu ∅.*
 INDF.HUMAN-GEN = IRR.3SG 3SG-possession be
 ‘Whose is it?’

9.2.9 THE VERB RYYW7K ‘BE ABSENT, GONE’. SE has a verb *ryyw7k* ‘be absent, gone’ which can be used instead of ordinary negative expressions with *qaj* in negated clauses of existence (which often translate as negated possession). This usage seems to occur at least as frequently as ordinary negation. No similar usage is attested for Kitanemuk. Examples appear in (1).

- (1) SE a. *Puu-ñu* \emptyset *ryyw7-k* *ngyt\$ka-t*.
 3PL-possession 3SG absent-K ceremonial.beads-ABS
 ‘Their ceremonial beads were gone.’
- b. *Mia* *ryyw7-ky-j=kwyn*.
 DUB absent-K-IND=QUOT.3SG
 ‘There must have been nothing (no sound or anything).’
- c. *Qaj=kwyn* *hii-t* *a-raakw* ***wyn*** *ajayp*
 NEG=QUOT.3SG INDF-ABS 3SG-food be(inan.) because
a-ki=kwyn *ryyw7-k*.
 3SG-house=QUOT.3SG be.absent-K
 ‘There was nothing for him to eat because he had no house.’

9.3. RELATIONAL CLAUSES IN KITANEMUK. Verbless clauses are the only type of identity clause in KI. Since KI has no tense inflection in verbs, but encodes tense with the clitic =*uvu7* ‘past’ and a future-tense particle/clitic =*mat*, even future tense clauses of identity and attribution in KI are verbless. Unfortunately, the KI corpus includes no data with subordinate clauses, or imperatives, of any of the types discussed in this chapter. We suspect that a verb would be present to carry the infinitive suffix *-ik* in an infinitive sentence like “I knew he was a devil” but we do not know which verb would appear. KI, like TV, has a class of adverbs/adjectives ending in *-k* that nearly always appear with the verb *kat\$* in clauses expressing attribution.

A particularly interesting pattern in KI is that clauses of location, possession, and existence always have a verb, *kat\$*, when they are positive assertions. However, negatives and interrogatives are usually verbless. There are hints of such a pattern in the SE corpus as well, but the data are not clear.

9.3.1. CLAUSES OF IDENTITY. All attested identity clauses in Kitanemuk are verbless. The order of subject and complement is free. Tense is marked with the clitics =*uvu* ‘past’ and =*mat* ‘future’, the latter also appearing in clause-initial position as a particle. Kitanemuk

has verbs that are cognate with SE *ñihaj* (*nihnea* ‘do as a custom’, *niw* ‘do, happen’) but no use of these verbs in a clause of identity or attribution is attested.

Examples of identity clauses appear in (1). The examples in (1) show clauses without tense clitics. Note that the final word in (1f) is an identity clause, consisting of a single word (since there are no intransitive pronominal markers in KI).

- (1) KI a. *Ny7 kwiihake7e akikitam Ø.*
 1SG.PRO woman Kitanemuk be
 ‘Yo soy jamine woman. (I am a Kitanemuk woman.)’ (3.98.0065; Anderton 1988:381)
- b. *Akikitam Ø itsat\$.*
 Kitanemuk be 1PL.PRO
 ‘Nosotros somos jaminates. (We are Kitanemuks.)’ (3.98.0065; Anderton 1988:82)
- c. *Tsipk kavaawavi-t Ø ny7.*
 slightly deaf.one-ABS be 1SG.PRO
 ‘Estoy [un] poco sordo. (I’m a little deaf.)’ (3.98.0280; Anderton 1988:135)
- d. *Joa-t Ø pa-ta7.*
 snow-ABS be PROX2-ABS
 ‘It is snow.’ (3.98.0171; Anderton 1988:111)
- e. *Ni-niw Ø pa-ta7 oo-t\$.*
 1SG-possession be PROX2-ABS mesquite-ABS
 ‘That is my mesquite tree (That mesquite is mine).’ (3.99.0248; Anderton 1988:170)
- f. *A-koonaka7 a-pi\$a7 ahyng-t Ø, tsaa-t\$ Ø.*
 3SG-necklace 3SG-head eagle-ABS be healer-ABS be
 ‘His necklace is an eagle head, he is a brujo (wizard, healer).’ (3.98.0320)

The examples in (2) show identity clauses with the tense clitics =*mat* and =(u)*vu7*. Example (2a) has neither overt subject nor verb; it consists phonetically only of the copula complement and the future tense clitic.

- (2) KI a. \emptyset *Ni7-aatsit* = *mat* \emptyset .
 3SG 1SG-animal = FUT be
 ‘It will be my animal.’ (3.98.0372)
- b. *Pa-ta7* = *mat* *kiika7j* \emptyset .
 PROX2-ABS.EMPH(?) = FUT captain be
 ‘This man (that one) is going to be captain.’ (3.98.0447)
- c. *Taaka-t* = *uvu7* \emptyset *kutsi7*.
 person-ABS = PST be dog
 ‘El perro era gente. (The dog used to be a person.)’ (3.98.0061; Anderton 1988:511)
- d. *Ny7* = *vu7* *ni7-aatsit* \emptyset *pa-ta7* *ngaaty7*.
 1SG.PRO = PST 1SG-animal be PROX2-ABS cat
 ‘Era mi gato. (It used to be my cat / That cat used to be mine.)’ (3.98.0372; Anderton 1988:169)
- e. *Pa-ta7* = *vu7* *wary7* *pok-t* \emptyset .
 PROX2-ABS = PST truly trail-ABS be
 ‘That was a trail.’ (3.98.0391)

There is an interesting identity construction in KI where the complement is marked with an accusative suffix, indicating that an item in one function (a necklace, a pillow) is in fact an item of another function. The examples of this construction appear in (3). The translations are Harrington’s.

- (3) KI a. *Ni-koonaka7* *ni-\$yym-ivana7-t\$aj* \emptyset .
 1SG-necklace 1SG-scratch-instrument-ACC be
 ‘I wear my scratcher as a necklace.’ (3.98.0485; Anderton 1988:196)

- b. *Ni-kypyna7 kut\$aa-ta-j* \emptyset .
 1SG-pillow stick;wood-ABS-ACC be
 ‘lit. I have a palo for a pillow, I lie on the back with my head against the wall so it holds my head up. (I have a stick for my pillow.)’ (3.98.0467; Anderton 1988:196)

Some one-word identity clauses exhibit a final vowel *y*, as seen in (4). In all the examples found, this vowel follows a demonstrative. Anderton (1988:252) labels this a “predicator.” We suspect it may be a contrastive focus (CF) clitic, perhaps cognate with CU =*y*. This interpretation, however, must remain tentative because of the paucity of examples.

- (4) KI a. *Ama7=y* \emptyset .
 DIST = CF be
 ‘Ay mismo. (That’s the thing, right there.)’ (3.98.0131; Anderton 1988:252)
- b. *Pa-ta7=y* \emptyset .
 PROX2-ABS = CF be
 ‘Ay mismo. (That’s the thing.)’ (3.98.0207; Anderton 1988:252)
- c. *Ivi7=y* \emptyset .
 PROX = CF be
 ‘Éste es. (This is it.)’ (3.98.0207; Anderton 1988:252)
- d. *Ii-m=y* \emptyset .
 PROX-PL = CF be
 ‘Éstos son. (These are the ones.)’ (3.98.0207)

9.3.2. CLAUSES OF ATTRIBUTION. While most clauses expressing attribution are verbless, the examples in (1) show that KI, like TV, has a class of attributives in *-k*, derived from *k* class verbs, that can be supported with the predicate *kat\$* prefixed for subject. The examples in (1b,d), and also in (3c) below, show that the verb is optional with this predicate type, as in TV. Attribution clauses with other classes of attributives are always

verbless. Anderton (1988) labels these constructions as adjectives, and we follow her usage.

- (1) KI a. *Ruup-k a-kat\$.*
 straight-K.ADJZ 3SG-be
 ‘Está enfrente, the land is opposite Ventura,¹ or the house is opposite here.
 (It’s straight ahead.)’ (3.98.0215; Anderton 1988:131)
¹ “Ventura” refers to the California town of that name.
- b. *Uvea ruup-k Ø.*
 already straight-K.ADJZ be
 ‘Ya está derecho. (It is already straight.)’ (3.100.0475; Anderton 1988:493)
- c. *\$oojo7-k ni-kat\$.*
 bad.face-K.ADJZ 1SG-be
 ‘I make a bad face or a wry face.’ (3.98.0285; Anderton 1988:131)
- d. *\$oojo7-k Ø.*
 bad.face-K.ADJZ be
 ‘He makes a cara mala (bad face).’ (3.98.0285; Anderton 1988:505)
- e. *\$uin-k a-kat\$ hyyng-t.*
 coiled-K.ADJZ 3SG-be rattlesnake-ABS
 ‘The rattlesnake está enroscado (is coiled).’ (3.100.0382)
- f. *A-kat\$ = mat juah-k.*
 3SG-be = FUT be.hanging-K.ADJZ
 ‘Va a estar colgado. (It is going to be hanging.)’ (3.98.0360; Anderton
 1988:124)
- g. *Voi\$~voi\$k-pyy-kat\$.*
 DISTR~in.stinkbug.position-K.ADJZ 3PL.be
 ‘They are chinquechados. (They are doubled up.)’ (3.98.0282; Anderton
 1988:131)

Attribution clauses with complements not derived in *-k*, including clauses with quantifier complements, are always verbless, as in (2). Examples (2f,g) are not possessive clauses, which always have *kat\$*. Similarly, example (2h) can be distinguished from a locational clause by the fact that it lacks the verb *kat\$*.

- (2) KI a. *Ii-m kutsi7-ja-m kyh~ky\$a7* \emptyset .
 PROX-PL dog-AUG-PL PL~bad be
 ‘Estos perros no sirven. (These dogs are no good.)’ (3.98.0358; Anderton 1988:111)
- b. *Ny7 a-noo7ts-i7* \emptyset .
 1SG.PRO ADJZ-small-ADJZ be
 ‘I am small.’ (3.98.0254; Anderton 1988:270)
- c. *A-noh~no7ts-i7* \emptyset .
 ADJZ-PL~small-ADJZ be
 ‘Son chiquitos. (They are small.)’ (3.98.0254)
- d. *Putu7* \emptyset *ivi7 karnea*.
 tough be PROX meat
 ‘This meat is tough.’ (3.98.0252; Anderton 1988:111)
- e. *Ny7 a-ngyt\$k-i7* \emptyset .
 1SG.PRO ADJZ-cut.off-K-ADJZ be
 ‘Yo soy mocho. (I am maimed.)’ (3.98.0236; Anderton 1988:438)
- f. *Wyyr* \emptyset *a7-at\$y-m*.
 much;many be 3SG-head.lice-PL
 ‘Tiene muchos piojos. (Her head lice are many.)’ (3.98.0125)
 Anderton (1988:172) has ‘fleas’.
- g. *A-tсах~tsaaka wyyr* \emptyset .
 3SG-PL~foot much;many be
 ‘“muchas patas” centipede (“many feet”) (Its feet are many.)’ (3.99.0294; Anderton 1988:577)

- h. *Wyyr* \emptyset *atuutsi-t* *ni-hoona-pea*.
 much;many be flea-ABS 1SG-bed-LOC
 ‘Hay muchas pulgas en mi catre. (There are a lot of fleas in my cot.) (The fleas in my cot are many.)’ (3.100.0602; Anderton 1988:315)
- i. *Ky\$a7* *waravk* \emptyset *ni-kat\$y-7*.
 bad hard;truly be 1SG-condition-PSD
 ‘Tengo muy mala suerte. (I have very bad luck.) (My condition is really bad).’ (3.98.0465; Anderton 1988:357)

Verbless attributional clauses can consist of a single word as in (3), with the third person subject provided by context. These examples show no supporting verb *a-kat\$*.

- (3) KI a. *Pi\$a-7i7-m* \emptyset .
 sweet-ADJZ-PL be
 ‘Son dulces. (They are sweet.)’ (3.100.0460; Anderton 1988:132)
- b. *\$yvy7* \emptyset .
 cold be
 ‘Hace frío. (It is cold.)’ (3.100.0479; Anderton 1988:505)
- c. *Aaja7-k* \emptyset .
 white-K.ADJZ be
 ‘Está blanco. (It is white.)’ (3.100.0671; Anderton 1988:275)
- d. *Aaja7-k=yt* \emptyset .
 white- K.ADJZ=Q be
 ‘Is it white?’ (3.100.0435; Anderton 1988:275)

9.3.3. NEGATIVE CLAUSES OF IDENTITY AND ATTRIBUTION. The KI corpus includes only a few examples of negative identity and attributional clauses. In these clauses, the negative particle is *naw*. This particle is also found in SE, spelled *now*, where it used as an interjection meaning ‘no’. In KI it has generalized into a wide range of functions, with

the usual Takic negative, *qa(j)* (*kaj* in KI) restricted to a role as a prohibitive with imperative verbs. Examples with *naw* are given in (1).

- (1) KI a. **Naw** *pa-t* *\$u\$ava-t\$* \emptyset .
 NEG PROX2-ABS liar-ABS be
 ‘No es embustero. (He’s not a liar.)’ (3.100.0483; Anderton 1988:463)
- b. **Naw** *hami7* *taaka-t* \emptyset , *Wahi7* *pa-ta7* \emptyset .
 NEG INDF.HUMAN person-ABS be Coyote PROX2-ABS be
 ‘No es gente, es Coyote. (It’s not some person, that’s Coyote.)’ (3.98.0296; Anderton 1988:425)

9.3.4. INTERROGATIVE CLAUSES OF IDENTITY AND ATTRIBUTION. Interrogative identity and attribution clauses have the same verbless structure as declarative constructions. They appear with the interrogative clitic =*(y)t*. This clitic is cognate with the irrealis modal *t(a)* of SE.

- (1) KI b. *Hamina = t* *ama7* \emptyset .
 INDF.MANNER = Q DIST be
 ‘¿Qué es? (What is that?)’ (3.98.0132; Anderton 1988:219, 252)
- b. *Tyvapeatamy = t* *ymy7* \emptyset .
 Tübatulabal = Q 2SG.PRO be
 ‘Are you R.C. (Río Chiquito) gente? (Are you a Tübatülabal?)’ (3.98.0385; Anderton 1988:217)
- c. *Hami7 = t* *ivi7* \emptyset .
 INDF.HUMAN = Q PROX be
 ‘¿Quién es éste? (Who is this [man]?)’ (3.100.0825; Anderton 1988:331)
- d. *Hii-ta = t* *pa-ta7* \emptyset .
 INDF-ABS = Q PROX2-ABS be
 ‘¿Qué es? (What is it?)’ (3.98.0130; Anderton 1988:220)

- e. *Pa-my = t hini-m Ø.*
 PROX2-PL = Q INDF-PL be
 ‘¿Qué son esos? (What are those?)’ (3.98.0358; Anderton 1988:220)
- f. *Hini-my = t pa-m Ø.*
 INDF-PL = Q PROX2-PL be
 ‘¿Qué son esos? (What are those?)’ (3.98.0358; Anderton 1988:220)
- g. *Haminiki7 = t Ø kwashyp-k = yt Ø, jovo7-k = yt Ø,*
 INDF.KIND = Q be red-K.ADJZ = Q be black-K.ADJZ = Q be
aa7-k = yt Ø?
 white-K.ADJZ = Q be
 ‘¿Cómo es? red, black white? (What [color] is it, red, black, white?)’
 (3.100.0826; Anderton 1988:591)

9.3.5. CLAUSES OF LOCATION. Clauses expressing location, possession, and existence use the intransitive verb *kat\$*. Locational clauses are illustrated in (1).

- (1) KI a. *Pa7pi a-kat\$ paa-t\$a-j.*
 on.top 3SG-be water-ABS-ACC
 ‘Está encima del agua. (It is on top of the water.)’ (3.98.0271; Anderton 1988:195)
- b. *Pyy-kat\$ ooka-vea.*
 3SG-be sand;sandy.area-LOC
 ‘Están en el arroyo. (They are in the arroyo.)’ (3.100.0338)
- c. *Aa-p a-kat\$ a-tsya-vea.*
 DIST-LOC 3SG-be 3SG-corner-LOC
 ‘Ay está en la esquina. (It is there in the corner.)’ (3.98.0358)
- d. *Ni-kat\$ = myk aa-p.*
 1SG-be = CFAC DIST-LOC
 ‘¡Estuviera yo ay! (Would that I were there.)’ (3.100.0580; Anderton 1988:121)

- e. *Ii-p a-kat\$ = uvu.*
 PROX-LOC 3SG-be = PST
 ‘It was here.’ (3.98.0274; Anderton 1988:123)
- f. *Amuk a-kat\$.*
 over.there 3SG-be
 ‘Allá está. (It is over there.)’ (3.100.0560)

No examples of negative location clauses are attested. The interrogative forms of location clauses are of three types. The first, shown in (2), simply adds an interrogative clitic =*(y)t(a-)* to the first word. These interrogatives contain the verb *kat\$*.

- (2) KI a. *My-kat\$ = yt Ø.*
 2SG-be = Q be
 ‘¿Estás allí? (Are you there?)’ (3.100.0560; Anderton 1988:338)
- b. *Ymy7 = t = ne aa-p my-kat\$ hawkupit\$u7-j-vea.*
 2SG.PRO = Q = NEHE DIST-LOC 2SG-be meet-NMLZ-LOC
 ‘¿Estabas en la junta? (Were you at the meeting?)’ (3.98.0381)

In the second type of interrogative, in (3), an indefinite local-case base *haj-* ‘where/anywhere/somewhere’ appears with locative suffixes; examples appear both with and without *kat\$*. We include an embedded question in (3c). This construction is used only with inanimate subjects. There is no question clitic =*(y)t(a)* in (3a). Perhaps the question clitic cannot cooccur with the unidentified clitic =*7j*.

- (3) KI a. *Haj-pa7j = nehe Ø.*
 INDF-LOC = NEHE be
 ‘¿Ónde es? (Where is it?)’ (3.98.0482; Anderton 1988:121)
- b. *Haj-pea = t = ne a-kat\$.*
 INDF-LOC = Q = NEHE 3SG-be
 ‘Where was it?’ (3.98.0482; Anderton 1988:125)

- c. *Haj-pea=t my-kat\$.*
 INDF-LOC=Q 2SG-be
 ‘¿Ónde vives? (Where do you live?)’ (3.100.0383)
- d. *He7r-k-i, ajna=tsi haj-pea=t a-kat\$.*
 point-K-CAUS.IMP show.IMP=2>1SG INDF-LOC=Q 3SG-be
 ‘Point, show me where it is.’ (3.98.0469)

With animates, a special question word, *jyjt\$(a7)* ‘where’, is used, as in (5). *Kat\$* never appears in these interrogatives.

- (5) KI a. *Jyjt\$ (ama7) kutsi7 Ø.*
 where DIST dog be
 ‘¿Ónde está el perro? (Where is the dog?)’ (3.98.0268; Anderton 1988:221)
- b. *Jyjt\$a7 Visente7 Ø.*
 where Vicente be
 ‘¿Ónde está Vicente? (Where is Vicente?)’ (3.98.0268; Anderton 1988:221)
- c. *Ngwawpaa-ts jyjt\$a7 Ø.*
 koime-ABS where be
 ‘¿Ónde está el coime? (Where is the koime [peon game referee]?)’
 (3.99.0587; Anderton 1988:221)
- d. *Jyjt\$ ama7 ni-niw noohta-t Ø.*
 where DIST 1SG-possession old.woman-ABS be
 ‘¿Ónde está mi vieja? (Where is my wife?)’ (3.100.0611)
- e. *Jyjt\$a=ta=m Ø.*
 where=Q=1SG>2SG be
 ‘¿Ónde estás? (Where are you? – asking you where you are)’ (3.100.0833;
 Anderton 1988:195)

- f. *Jyjt\$ = my my-7ujk Ø.*
 where = 1SG > 2SG 2SG-girlfriend be
 ‘¿Ónde está tu novia? (Where is your girlfriend? – asking you where your girlfriend is)’ (3.98.0210; Anderton 1988:221)

9.3.6. CLAUSES OF POSSESSION. Clauses of possession are grammatically clauses of existence (see 9.3.7 below). They have the structure possessive prefix (A) + possessed noun (B) + predicate of existence (\emptyset or the verb *kat\$*) and mean roughly that A has a B (Anderton 1988:171). Unlike SE, which has *jaanym* ‘have’ as well as the expressions with *qat\$*, for KI no verb meaning specifically ‘have’ is attested. Like clauses of location (9.3.5), positive clauses of possession have the verb *kat\$* (1) and they are verbless in the negative (2) and interrogative (3).

- (1) KI a. *Uvea a-kat\$ a-maha7.*
 already 3SG-be 3SG-wing
 ‘Ya tiene alas (of ant). (It already has wings.)’ (3.98.0133; Anderton 1988:387)
- b. *A-jaa-hea a-kat\$.*
 3SG-carry-NMLZ 3SG-be
 ‘Tiene agarradero. (It has a handle.)’ (3.98.0249; Anderton 1988:171)
- c. *A-kat\$ a-wivav-ky-7.*
 3SG-be 3SG-point--K-PSD
 ‘Tiene punta. (It has a sharp point.)’ (3.98.0254)
- d. *a-kat\$ a-niw ku-t*
 3SG-be 3SG-possession fire-ABS
 ‘tiene lumbre (firefly) (it has fire)’ (3.98.0128; Anderton 1988:172)
- e. *a-kat\$ a-ki ku7a-t\$*
 3SG-be 3SG-house worm-ABS
 ‘animalito que tiene casa, for land snail (a worm [that] has a house)’ (3.98.0139)

Example (2) is the only example of a negated possessive clause we have found in the KI corpus. As mentioned above, it is verbless. With a postposed subject, we place the zero copula after the complement.

- (2) KI *Naw hii-t* \emptyset *a-oova7*.
 NEG INDF-ABS be 3SG-strength
 ‘No tiene fuerzas, he walks totteringly. (He doesn’t have any strength. [His strength is nothing.])’ (3.98.0256; Anderton 1988:445)

Interrogatives having to do with possession are verbless. The form *hami-ts* is the genitive of *hami7* ‘someone, anyone, who’.

- (3) KI a. *Hami-ts = yt* *ivi7 a-majr* \emptyset .
 INDF.HUMAN-GEN = Q PROX 3SG-child be
 ‘¿De quién es este hijo o hija? (Whose is this child?)’ (3.98.0350; Anderton 1988:218)
- b. *Hami-ts = yt* *a-ki* \emptyset .
 INDF.HUMAN-GEN = Q 3SG-house be
 ‘¿De quién es la casa? (Whose house is it?)’ (3.100.0389; Anderton 1988:119)
- c. *Hami-ts = yt* *a-hiintu7* \emptyset .
 INDF.HUMAN-GEN = Q 3SG-relative be
 ‘¿De quién es pariente? (Whose relative is he?)’ (3.98.0368; Anderton 1988: 218)
- d. *Hami-ts = yt = kaj* \emptyset .
 INDF.HUMAN-GEN = Q = DUB be
 ‘¿[De] quién será? (Who[se] can it be?)’ (3.98.0463; Anderton 1988:239)

9.3.7. CLAUSES OF EXISTENCE. In contrast to the rarity of negatives and the frequency of positives with clauses of possession, the corpus includes only three assertions of (non-

possessed) existence, but many examples of negation. The assertions appear in (1), with the verb *kat\$*. (1c) is given as a reply to the statement in (2e).

- (1) KI a. *Haam a-kat\$.*
 still;yet 3SG-be
 ‘Todavía hay. (There’s still some.)’ (3.100.0550; Anderton 1988:299)
- b. *Uvea a-kat\$ myaa-t\$.*
 already;now 3SG-be moon-ABS
 ‘The moon is new (cuando está chiquita todavía [when it is still small]).
 (Now there is a moon.)’ (3.98.0073)
- c. *A-kat\$.*
 3SG-be
 ‘Sí, hay. (Yes there is.)’ (3.100.0341)

Most existence clauses in the KI materials are negatives with *naw hiit* ‘nothing’ (‘not anything’), or *naw hami7* ‘nobody’ (‘not anyone’) seen in (2). Harrington often writes *naw hiit* as < nahwīt > and *naw haam* (in (2c)) as < nahwām >, sometimes with glottalization of the negative *naw* (*na7w* in (2a,e,h)). Again, we encounter the verbless pattern in negatives and interrogatives. No equivalent of the SE ‘be absent’ verb *ryyw7k* is attested.

- (2) KI a. *Na7w hii-t Ø kwa7jka-t.*
 NEG INDF-ABS be food-ABS
 ‘No hay comida. (There is no food.)’ (3.100.0355)
- b. *Naw hii-t Ø myaa-t\$.*
 NEG INDF-ABS be moon-ABS
 ‘No hay luna. (There is no moon.)’ (3.99.0046)
- c. *Naw haam hii-t Ø.*
 NEG still;yet INDF-ABS be
 ‘Todavía no hay. (There still isn’t any.)’ (3.100.0355; Anderton 1988:299)

- d. *Uvea naw hii-t Ø.*
 already;now NEG INDF-ABS be
 ‘[Now there is nothing.] said of seed having fallen from pod’ (3.98.0285;
 Anderton 1988:222)
- e. *Na7w hii-t uvea Ø kafee7.*
 NEG INDF-ABS already;now be coffee
 ‘Ya no hay café. (There’s no coffee now [Now the coffee is nothing].)’
 (3.98.0274; Anderton 1988:222)
- f. *Naw =ne hami7 kii-vea Ø.*
 NEG = NEHE INDF.HUMAN house-LOC be
 ‘No había naiden en la casa. (There was nobody in the house.)’ (3.100.0539)
- g. *Naw hami7 Ø Isabel.*
 NEG INDF.HUMAN be Isabel
 ‘Isabel no está ay. (Isabel is not here.)’ (3.98.0348)
- h. *Na7w hii-t Ø wakaa-t\$.*
 NEG INDF-ABS be feast-ABS
 ‘Ya se acabó la fiesta. (The feast is over [The feast is nothing].)’
 (3.100.0355)

We have found only one instance of an interrogative of an existence clause, given in (3). We conclude that it is an existence clause rather than a query on an attribution, because it is part of a little dialogue where the answer given is *naw hii-t* ‘nothing’, as in the examples in (2).

- (3) KI *Hii-ta = t amayt Ø.*
 INDF-ABS = Q new be
 ‘¿Qué hay de nuevo? (What’s the news?)’ (3.98.0387)

9.4. RELATIONAL CLAUSES IN CUPAN. The uniformities and differences among the Cupan languages, LU, AC, CU, and Desert and Mountain CA, are easier to understand if the materials are organized by function rather than by language.

9.4.1. *MIJ(A)X* AS PREFIXED *JAX* ‘DO, BE, SAY’. In the Cupan languages, most clauses of attribution and identity are verbless in the unmarked tenses (LU and CU present, AC and DCA nonfuture, MCA past and present) and mood (indicative). However, in LU, clauses in the unmarked tense with an overt verb are well attested, and some appear as well in AC. At least one example was recorded for CU. Only CA seems to have categorically verbless identity clauses in unmarked tense and mood. The verb that appears in such clauses, *mij(a)x* (LU and AC *mijx*, CU *mijax*), can also appear in locational, possessive, and existence clauses and can be considered to be a general-purpose copula.

We reconstruct the Proto-Cupan form of these verbs as **mijax*. Coastal Cupan (LU and AC) *mijx* results from vowel deletion. The origin of **mijax* is speculative. It may result from a combination of indefinite **mi* plus the light verb **jax* ‘happen, say’. The element *mi-* appears in diverse indefinite contexts in the Cupan languages. Examples include LU *micha7* ‘where, somewhere, what, whatever, how, sometime’, used in questions both direct and indirect, as well as in indicative expressions of indefiniteness, and *mijkinga* ‘sometime’ (AC *mijknga*); CU *mi-* ~ *miví-* as bases for adverbial case suffixes, as well as in *mikpuk* ‘somehow or other’, *haxmi7i* ‘someone’, *hishmi7i* ‘something’; and CA *mi7-* ~ *miví-*, which is found in the same contexts.

Elliott (1993) suggests that the Cupan indefinite prefix *mi-*, which seems not to have cognates outside the subgroup, is a Yuman loan word, presumably from one of the Diegueño languages, where a prefix *m-* appears initially in question words and indefinite expressions. Elliott proposes that the prefix-verb combination *mi-jax* is a calque on Diegueño verbs where the prefix appears before the auxiliary root *-juu* ‘be’. The calque is facilitated by the fact that the Diegueño word and Cupan *jax* both begin with *j*. Elliott’s evidence includes some intriguing similarities, like those in (1).

(1) a. Santa Ysabel Diegueño

<i>m-u-juu</i>	<i>p-u-juu</i>	<i>kinemi</i>
INDF-3SG-be	DEM-3SG-be	perhaps
‘somehow or other’ (Elliott 1993:154 (41))		

- b. CU *mi-jax-wy* *py-jax-wy*
 INDF-be-ST.PRS 3SG-be-ST.PRS
 ‘somehow or other’
- c. MCA *mi-ñiki* *pe-ñiki*
 INDF-kind DEF-kind
 ‘some relative or other’ (Elliott 1993:154 (40))

Both CU and CA have other similar expressions with contrasting *mi-... py-/pe-*, prefixed to adjectival bases (CU *mikpuk* ‘somehow or other’ is a fast-speech form of (1b)). Elliott points out that SE has similar expressions, with indefinite *h-* rather than *m-*, but that these consist of Uto-Aztecan materials, with sequences *ha-... i-...* as in *haiip iip* ‘somewhere or other’ (literally ‘somewhere here’), *hami7 ivi7*, pl. *haiim iim* ‘someone or other’ (literally ‘who this one’, ‘who (pl.) these’). The fact that Serran also has an indefinite element *-mi*, in *hami7* ‘someone, who’ and *hamin ~ hamiaa-* ‘how’, may be evidence that Cupan *mi-* is a loan blend rather than a simple borrowing.

The Cupan languages, LU, AC, CU, and CA, share a paradigm of prefixes on *jax*, shown in (2), adapted from Elliott (1993:146). The verbs in (2b,c,d) have causative forms in *-aan* meaning ‘do, happen’; we omit those derivations here. Also, since the verbs in (2a) and (2e) do not figure as relational predicates, we do not discuss them further in this section.

(2)	<i>jax</i> ‘do, say’ in Cupan	LU/AC	CU/CA
a.	unmarked be, say	<i>jax</i>	<i>jax</i>
b.	proximal be this way, the same	<i>ijx</i>	<i>ijax</i>
c.	distal be that way, resemble	<i>aax</i>	<i>jax</i>
d.	indefinite ₁ be some way	<i>mijx</i>	<i>mijax</i>
e.	indefinite ₂ say what	<i>hi(j)x</i>	<i>hijax</i>

The verb *jax* with proximal *i-* has evolved in the languages into some quite specialized usages, of which we treat only a few here. LU *ijx* means ‘be also’ (or with negatives, ‘be either’). LU *ijx* is fully inflected and appears in the same clauses as an additional inflected verb, without any subordinating apparatus, as in (3a). It also appears in identity and

attribution clauses in a copula-like function, as in (3b,c). Note the regular phonological loss of *x* before *q*, such that, for example, in (3a), *ij-qu\$* derives from theoretical *ijx-qu\$*. Similarly, AC *ijqal* ‘only, just, just this way’ (3d) looks like it could be from *ijx-qal* [be-NFUT.SG]. However, it should be noted that the inflectional suffix *-qal*, found in CU and CA, is not attested in LU and its status in AC still needs study.

- (3) LU a. *Pi7 awaa-lu-m ij-qu\$ punee-ji woltu-qu\$.*
 and dog-ABS-PL be.also-PST.IPFV 3SG.PRO.ANIM-ACC be.angry-PST.IPFV
 ‘And the dogs too were mad at it (a rattlesnake).’ (H&E 368)
- b. *Micha7=\$u ij-q po-7ex-maxwi po-wachxa.*
 INDF.MANNER=Q be.also-PRS.SG 3SG-dirt-full.of 3SG-shoe
 ‘How dirty are his shoes?’ (Elliott 1999:199)
- c. *Nanchami-sh : jawájiwi-sh pel-ax-i-sh ij-q.*
 (a.dance)-ABS beautiful-ABS dance-INTR-NMLZ-ABS be.also-PRS.SG
 ‘Nanchamish, that is a beautiful dance too.’ (H&E 43)
- AC d. *Ijqal tavanna.*
 just.this.way put.down.IMP
 ‘¡Déjalo así! (Leave it thus!)’ (3.123.0606)

In CU, a specialized use of *ijax* appears in *ijaxwyn amáj* ‘suddenly’, literally ‘it was this way now’ and *ijaxwy amáj* ‘definitely’, literally, ‘it is this way now’. The same expression also means ‘do it the same way’ as in (4a). Like the LU form for ‘also’ in (3), this creates the peculiar effect of two inflected verbs in the same sentence without subordination. However, as in LU, the verb can appear in copula-like environments, like the attribution clause in (4b).

- (4) CU a. *Tanin-wy ijax-wyn amáj pym-ny7y-m.*
 dance-PRS.PL be.this.way-ST.PST now 3PL-relative-PL
 ‘Their relatives dance the same way.’ (H&N 41[82] x.73)

- b. *Ymym = 7ymy juxush-wy ym-ju-j soap py-chi*
 2PL.PRO = 2PL.ERG wash.hair-PRS.PL 3PL-hair-ACC soap 3SG-INS
my py-ngax úm-ju ijax-wy.
 and 3SG-ABL 2PL-hair be.this.way-ST.PRS
 ‘You are washing your hair with soap, and that is why your hair is that way.’
 (H&N 50[100] xi.5)

In CA, forms of *ijax*, appropriately inflected, are common in time expressions, as in (5). As in (5a) there need not be any subordination, although there are two inflected verbs in the sentence. In (5b), a different-subject subordinating suffix appears in the “time” clause.

- (5) a. MCA *Jewi ijax-we7 pe7 pe peta7*
 long.ago be.this.way-ST.PST DET FOC there
ne-7ela-vi-ve mu7-qa7.
 3SG > 1SG-dress-put.on-REAL.SUB be.sick-PST.SG
 ‘Long ago my late father (the one who clothed me [?]) was sick.’ (S&E 693
 499)
- b. DCA *Huti naxaa-sh tataxasi-lj pe-chawaj-qal aj tami-t*
 well man-ABS lizard.SP-ABS CF-climb-NFUT.SG then sun-ABS
ijax-wen-epa7 wam.
 be.this.way-ST.DUR-DS INFR
 ‘Well, I guess it was about that time of day that the lizard man climbed up.’
 (Seiler 1970:51 153)

Similar expressions in CA have ordinary subjects, as in (6).

- (6) a. DCA *Ha, em-7ijax-nem pe hemu7 tu7 eme-ne-pase-m*
 ha 2PL-be.this.way-FUT FOC end just 2PL-1SG-OLBr-PL
eme-ne-qise-m.
 2PL-1SG-OLSS-PL
 ‘Ha, that’s what you will be like finally, [you who are] my older brothers
 and my older sisters.’ (Seiler 1970:55 218)

- b. DCA *Hem-7ijax-wen tuhájimanish.*
 3PL-be.this.way-ST.NFUT always
 ‘They were always in this state.’ (Seiler 1970:59 273)
- c. MCA *Pe7 pe iv7ax hem-7iva-7a exenuk kilj ijax-we.*
 DET FOC now 3PL-power-PSD thus NEG be.this.way-ST.PRS
 ‘But nowadays they do not have that power (their power is not this way).’
 (S&E 724.520)

Thus, alongside various specialized uses of forms of *i-jax*, all the Cupan languages also have this verb in attributive clauses, where the prefix *i-* ‘this way’ functions as the complement.

On the other hand, in identity clauses of the type *X ijax- Y* (‘X be.the.same.as Y’), the verb is barely attested. In CU, *ijaxwy amáj* is attested in a single identity example, (7), in a kind of clause that would usually be verbless. It is part of an argument between Fox and Cat about who is the better man. Roscinda Nolasquez translated this with ‘definitely’.

- (7) CU *Ny7=yn ijax-wy amáj atíra naxáni-sh.*
 1SG.PRO = 1SG.AB be.this.way-ST.PRS now very man-ABS
 ‘I am definitely more of a man.’ (H&N 70[140] xii.9)

A different construction, *a-jax*, appears in identity clauses, but it does not mean ‘be the same as’, but instead conveys something more like ‘resembles’. These clauses with *a-jax* always have the same structure: the item resembled, a complement or perhaps an adverbial depending on how we understand this verb, is marked for accusative. Examples from LU and AC, where the base is *aax*, appear in (8) (with *aax* reducing to *aa-* before *-q*).

- (8) a. LU *Anáma-t paj7wish aa-q.*
 fish-ABS just resemble-PRS.SG
 ‘It’s just like a fish.’ (Elliott 1999:102)

- b. LU *Kiika-tu-m paj7wish aláxwi-chu-m mo~mka-tu-m*
 small.one-ABS-PL just bad.one-ABS-PL PL~big-ABS-PL
aax-wun.
 resemble-PRS.PL
 ‘The little ones are as bad as the big ones.’ (Elliott 1999:102)

- c. AC *Aa-qa =p muuxa-la-q.*
 resemble-NFUT.SG = 3SG foam-FREQ-NFUT.SG
 ‘Parece que está echando espuma. (It looks like it is foaming.)’ (3.123.0294)

In CU, the prefix of *a-jax* ‘resemble’ has been lost (9) but it is retained in CA (10). The complement nouns have accusative case morphology though the verb is not transitive in that it never has object pronominals and is inflected with stative suffixes. This structure probably reflects the use of the accusative as a focusing suffix in Proto-CU-CA, a phenomenon described for CU in Hill (2005:439).

- (9) CU a. *Qaj py kumu achivy-t-i jax-wy.*
 NEG FOC like long.ago-ABS-ACC/FOC resemble-ST.PRS
 ‘It is not like long ago.’ (H&N 28[56] 33)
- b. *My atax7a-m axwá-7aw i~7indjo7-am qaj chymy-j*
 and person-PL DIST-LOC PL~Indian-PL NEG 1PL.PRO-ACC/FOC
pym-jax-wyn.
 3PL-resemble-ST.PST
 ‘And the Indian people there were not like us.’ (H&N 51[102] xiv.2)
- (10) a. MCA *Umu7 e-nga cheqe hicha-mivi wikikma7-lj-i*
 all.over PROX2-LOC just something-INDF.ACC/FOC bird-ABS-ACC/FOC
pangi-sh hen_hum-in-a-t ne-7ajax-we-7.
 new-ABS 1SG__cast.off.skin-CAUS-NMLZ-IPST 1SG-resemble-ST-PST
 ‘I just looked like a freshly plucked bird (I was all freshly plucked like I was some kind of bird).’ (S&E 694)

- b. DCA *Pe-nga chaqe weevu7u-j ajax-wen.*
 DIST-LOC just egg-ACC/FOC resemble-ST.PST
 ‘It was just like an egg.’ (Seiler 1970:39 10)

In summary, the reflexes of the prefixed light verbs *i-jax* and *a-jax* in the Cupan languages are generally somewhat specialized in their use. Along with diverse adverbial uses, *i-jax* appears exclusively in attribution clauses and *a-jax* appears in clauses expressing resemblance, which perhaps can be considered a special type of attribution or identity clause. In contrast with *i-jax* and *a-jax*, forms derived from **mi-jax* with the indefinite prefix *mi-* have diverse functions. In all the Cupan languages these verbs can be identified as true copulas in the sense advanced by Dixon (2010:160).

9.4.2. CLAUSES OF IDENTITY. Present-tense identity clauses are usually verbless, as in (1). Examples with zero subjects and evidential clitics, like those in (1d,e,f) are well attested in CU. In CA, verbless identity clauses like that in (1h) are common. However, third-person clauses with zero subject are not attested; these will usually have a demonstrative or other overt encoding of subject. The kind of elaboration of subject and complement seen in the MCA example in (1d) is common in the other languages as well. We have given shorter examples to save space. Inland Cupan has verbless identity and attribution clauses like the CU examples in (1e,f) and the CA examples in (1i,j) where the only lexical item is a complement, and other functions are filled by affixes or clitics. As for Coastal Cupan, we have not identified examples of this type in LU, where the subject in our corpus is overt, with an independent pronoun or full lexical element. However, the AC example in (1c), which is like the CU and CA examples in having only verbless complements, suggests that this may be an accidental gap in the LU data.

- (1) a. LU *Pawxi-t kulaawu-t Ø.*
 yellow.pine-ABS tree-ABS be
 ‘*Pawxit* is a tree (Yellow pine is a [kind of] tree).’ (H&E 90)
- b. AC *Noo = n wom7 naxanma-l Ø.*
 1SG.PRO = 1SG now old.man-ABS be
 ‘Ya estoy vieja [sic]. (I am an old man now.)’ (3.123.0351)

- c. AC *Je7i-ch=kon men7=kon \$angwaa-l Ø?*
 man-ABS = QUOT or = QUOT woman-ABS be
 ‘Is it male or is it female? (Is it a boy or a girl? [of new baby])’ (3.123.0450)
- d. CU *Ny7=yn ým-jy Ø.*
 1SG.PRO = 1SG.AB 2PL-mother be
 ‘I am your mother.’ (H&N 63[126] 11)
- e. CU *Isi-lj=am Ø.*
 Coyote-ABS = MIR be
 ‘It is Coyote!’ (Nolasquez Bird’s Church 28)
- f. CU *Isi-lj=\$y=py Ø.*
 Coyote-DUB = IRR be
 ‘It must be Coyote!’ (Nolasquez Kisilj Pywik 25)
- g. CU *Py7 nawíshma-l=am i7i Ø.*
 FOC girl-ABS = MIR PROX be
 ‘This is a girl!’ (Faye Kisilj Pywik 31)
- h. DCA *“Ivi qichi-lj i Ø,” jax-qal.*
 PROX money-ABS FOC be say--NFUT.SG
 ‘ “This is money,” he said.’ (Seiler 1970:57 254)
- i. MCA *Hicha-xi umu7 i-pa wel-i-sh iv7ax kul-7a*
 INDF-DEF all PROX-LOC grow-NMLZ-ABS today creation-PSD
jewi chemej_nuk-i-sh Ø.
 long-ago 3SG > 1PL__make-NMLZ-ABS be
 ‘Everything that grows here today is Our Lord’s [the one who made us]
 long-ago creation.’ (S&E 726)

In DCA, which has no past-present tense distinction, the domain of verbless clauses is simply the nonfuture, as in the clauses with past-tense readings in (2).

- (2) DCA a. *Puu-l* \emptyset *naxaa-sh*.
 doctor;wizard-ABS be man
 ‘The man was a wizard.’ (Seiler 1970:49 135)
- b. *Ay muk-i-sh tewlava-l* \emptyset .
 now die-NMLZ-ABS spirit-ABS be
 ‘It was the spirit of the dead man.’ (Seiler 1970:65 19)

In MCA, which does have the past-present distinction, past-tense identity clauses are often verbless as well, with past tense being marked by the special past-tense marker for non-verbs, *-7a*, as in (3), which illustrate the usage of Katherine Sauvel.

- (3) MCA a. *Pen ne7 hen_7a7avuwe-t-7a nawishma-l* \emptyset .
 and 1SG.PRO 1SG_old-ABS-PST girl-ABS be
 ‘And I was the oldest surviving daughter.’ (S&E 693)
- b. *Pe7e he-qa naxalu-ve-lj ku pe7* \emptyset
 DET 3SG-FaFa grow.old,of.man-REAL.SUB-ABS EMPH FOC be
man puni-va-sh-7a \emptyset .
 and eagle.dance-AGTV-ABS-PST be
 ‘His paternal grandfather was an old man and he was an eagle dancer.’
 (S&E 696)

However, in Harrington’s MCA materials from Adán Castillo, as in (4), the non-verb past-tense suffix does not appear, and a past-tense copula clause requires an overt copula verb to bear the past-tense suffix *-we7*, as in (4b).

- (4) MCA a. *Pe7 e-ki* \emptyset .
 3SG.PRO 2SG-house be
 ‘Aquél es tu casa. (That is your house.)’ (3.112.0125)
- b. *Ne-taxlo7 hé-tew mijax-we7 Francisco Estudillo*.
 1SG-friend 3SG-name be-ST.PST Francisco Estudillo
 ‘My friend’s name was Francisco Estudillo.’ (3.112.0017)

While most present-tense identity clauses are verbless, *mijax* is attested in a few, with examples in (5). Such examples, such as in (5a), are relatively frequent in LU. No example is attested in the sparse AC data. In CU, the present stative verb *mijaxwy* appears only in a poorly-documented construction containing the irrealis clitic =*py*, as in (5b). Paul-Louis Faye, in his notes from 1920 and 1921, translated these as futures, although the verb is present tense. Example (5c) shows a present-tense example from MCA. Copula structures DCA appear to be strictly verbless in the present tense.

- (5) a. LU *Pi7 po7 toomawu-t po7 mij-q tuvii-cha.*
 and DET thunder-ABS FOC be-PRS.SG cloud-ABS
 ‘Well thunder is a cloud.’ (H&E 199)
- b. CU *My=py i7i py-tyw-7a “Tyvyshi-lj Pux-vy”*
 and =IRR PROX 3SG-name-PSD white.oak-ABS dash.against-REAL.SUB
mijax-wy.
 be-ST.PRS
 ‘This (place’s) name is “Where he dashed them against the white oak”.’ (H&N 14[28] 205)
- c. MCA *Pen aj tukma-sh mijax-we.*
 and now night-ABS be-ST
 ‘And now it is night.’ (3.112.0425)

Identity clauses in tenses other than the present, and under subordination (6b,d,f), always have inflected forms of *mij(a)x*, as in (6).

- (6) a. LU *Po7 noo-t mij-qu\$.*
 3SG.PRO chief-ABS be-PST.IPFV
 ‘He was a chief.’ (H&E 55)
- b. LU *Ivi7 ij-q cham-\$ali-pi mij-qu\$, soldado-m*
 PROX be.also-PRS.SG 1PL-dress-IRR.SUB be-PST.IPFV soldier-PL
mijx-a-nik.
 be-ABLAUT-SS
 ‘This is the way we dressed when we were soldiers.’ (H&E 1231)

- c. CU *Tyvxa7-va7-chi-m py7-mijax-wyn.*
 work-AGTV-ABS-PL 3PL-be-ST.PST
 ‘They were workers.’ (H&N 24[48] 7)
- d. CU *Py-hiwchu-qal py-na7aqwa7a-j kima-l*
 3SG-know-PST.IPFV.SG 3SG-woman’s.child-ACC boy-ABS
py-mijax-wyn-i-vy-j.
 3SG-be-ST.PST-ABLAUT-REAL.SUB-ACC
 ‘She knew that her child was a boy.’ (H&N 9[18] 37)
- e. DCA *Hunwe-t mijax-we7ne pe7.*
 bear-ABS be-ST.NFUT.FCT FOC
 ‘He was a bear.’ (Seiler 1970:139 3)
- f. DCA *Man jax-qal-7e iv7i tema-l pish*
 and say-NFUT.SG-FCT PROX earth-ABS COMP
mijax-wen-i-ve i7 ta=l hunwe-te-m hem-pah.
 be-DUR-ABLAUT-REAL.SUB FOC EMPH-QUOT bear-ABS-PL 3PL-Mo.Ol.Si
 ‘And he said that the earth is the aunt of the bears.’ (Seiler 1970:141 13)
- g. MCA *Puu-l mijax-we-7.*
 doctor;shaman-ABS be-ST-PST
 ‘He was a shaman.’ (S&E 719)
- e. MCA *Tako-sh pishweli-sh mijax-wen-i-ve*
 prsn-ABS young.man-ABS be-ST.PST-ABLAUT-REAL.SUB
amu-qa7a pe-qe suple7.
 hunt-PST.SG 3SG-only one
 ‘When the Takwish was a young man, he would go hunting alone.’
 (3.112.0393)

Imperatives of identity and attribution clauses (9.4.3 below) are barely attested. The identity examples in (7) appear in Philip Sparkman’s notes, but Elliott’s consultant Villiana Hyde rejected them (Elliott 1999:533).

- (7) LU a. *Mijx om!*
 be.IMP 2SG.PRO
 ‘Be thou!’
- b. *Mijx-jam omom!*
 be-IMP.PL 2PL.PRO
 ‘Be ye!’

9.4.3. CLAUSES OF ATTRIBUTION. Like identity clauses, clauses with unmarked tense expressing attribution are usually verbless in the Cupan languages, as in (1). CU examples with zero verbless subjects and mirative evidentials like those in (1d,e) are well-attested. Note that the CA examples in (6c,f) have the special non-verbal past-tense suffix *-7a* (it also appears in 9.4.2 (2d) above).

- (1) a. LU *Jawájiwi-sh xwáj-a-a-t Ø pom-waa7.*
 beautiful-ABS white-INTR-ADJZ-ABS be 3PL-meat
 ‘Their meat was pure white.’ (Elliott 1999)
- b. AC *Cham-teela a-wa7wa-ch Ø.*
 1PL-language ADJZ-difficult-ABS be
 ‘Our lengua está trabajosa. (Our language is difficult.)’ (3.122.0169)
- c. CU *Atíra y7y¹ ahújaxaj aj7ani-sh Ø.*
 very 2SG.PRO very big-ABS be
 ‘You are much too big.’ (H&N 63[126] 13)
¹ Corrected from *Atíra py7y* ... ‘He is much ...’
- d. CU *Yl7l7i-ch = am Ø.*
 bad-ABS = MIR be
 ‘It is bad!’ (Faye Kisilj Pywik 110)
- e. CU *Juj = am Ø.*
 cold-MIR be
 ‘It is cold!’ (Faye Kisilj Pywik 23)

- f. DCA *Pe ñichi-lj amnawe-t wawuwe-t-7a Ø, chemewáva7 Ø.*
 DET woman-ABS big-ABS tall-ABS-PST be Chemehuevi be
 ‘That woman was solid and big, she was a Chemehuevi.’ (Seiler 1970:157 6)
- g. MCA *Pe7 pe7 iwja-k hespen Ø.*
 3SG.PRO FOC thorn-ADJ very be
 ‘They are very thorny.’ (S&E 722)
- h. MCA *Ne7 ne-juluk-7a mu7 waawuwe-t-7a Ø.*
 1SG.PRO 1SG-hair-PSD still;yet long-ABS-PST be
 ‘My hair was long.’ (S&E 693)
- i. MCA *Pe7i-j pish hen_wi-k Ø, ne-taxa-w acha7 Ø.*
 3SG.PRO-ACC COMP 1SG_fat-ADJ be 1SG-body-PSD good be
 ‘Por eso estoy gordo, está bueno mi cuerpo. (That is why I am fat, my body is good.)’ (3.112.0348)

Quantifiers pattern like other modifiers, with verbless clauses in unmarked tense or with marked-tense copula clauses as in (2a). The only AC example with a quantifier, in (2c) has a nonfuture-tense copula.

- (2) a. LU *Cham-waa7 mujuk mij-qu\$.*
 1PL-meat much be-PST
 ‘Our meat supply was plentiful.’ (H&E 29)
- b. LU *Choo7unu-m indio-m Ø.*
 all-PL Indian-PL be
 ‘They were all Indians.’ (K&G 140)
- c. AC *Mujja7k engnga-l mij-q.*
 much salt-ABS be-NFUT.SG
 ‘Muncha sal tiene, está muy salado. (It is very salty.)’ (3.121.0683)
- d. CU *Pa-l met7i-sh Ø.*

water-ABS much-ABS be
 ‘Water is plentiful.’ (H&N 24[48] 50)

- e. DCA *Hem-7i wih Ø.*
 3PL-leg two be
 ‘They have two legs. (Their legs are two.)’ (Seiler 1970:43 53)

An overt present-tense copula is more common in attribution clauses than in clauses of identity. Examples of present-tense copula verbs appear in (3); we have not found an example in the DCA corpus.

- (3) a. LU *Po-taava po7 mij-q aláxwi-sh.*
 3SG-skin FOC be-PRS.SG bad-ABS
 ‘Its skin is bad.’ (of an acorn) (H&E 34)
- b. AC *Eng-ma7-ch mij-q too-t.*
 salt-having-ABS be-NFUT.SG stone-ABS
 ‘Tiene sal la piedra. (The stone is salty.)’ (3.123.0496)
- c. CU *Ichaa7i=ku7ut mijax-wy.*
 good = QUOT be-ST.PRS
 ‘They say it is good news.’ (Faye field notes H 369)
- d. MCA *Pisilje-k mijax-we pe7.*
 sweet-ADJ be-ST.PRS FOC
 ‘It is sweet.’ (S&E 723)
- e. MCA *Mexenuk e7et wi-k e-mijax-we.*
 how 2SG.PRO fat-ADJ 2SG-be-ST.PRS
 ‘¿Cómo estás tan gordo? (How is that you are so fat?)’ (3.112.0348)

Non-present tense (and in DCA, non-past and non-present) (4a-e) and subordinated (4f) attribution clauses have overt copulas.

- (4) a. LU *Áv-a-a-t* *mijx-ma-an.*
 red-INTR-ADJZ-ABS be-HAB-FUT
 ‘It (*wiwish* ‘acorn mush’) will become red.’ (H&E 39)
- b. LU *Juvát-a-a-t* *choo7un mij-qu\$.*
 black-INTR-ADJZ-ABS all be-PST
 ‘Everything was black.’ (H&E 70)
- c. CU *Kawla~káwla7a-sh = ku7ut py-mijax-wyn.*
 DUR~crooked-ABS = QUOT 3SG-be-ST.PST
 ‘It was crooked.’ (H&N 61[122] 5)
- d. CU *Yva = \$y = py ichaaj mijax-wyny.*
 that = DUB = IRR good be-ST.FUT
 ‘I expect it will be all right.’ (H&N 1[2] 13)
- e. MCA *Jen chem pi-chem-7e7nan-we-7 kilj acha7i pish*
 but 1PL.PRO 3SG.OBJ-1PL-know-PL-PST not good COMP
mijax-wen-a-p.
 be-ST.DUR-ABLAUT-IRR.SUB
 ‘But we knew it was not a good idea.’ (S&E 691)

9.4.4. CLAUSES OF LOCATION. The copula verb *mij(a)x* has extended to other relational functions beyond identity and attribution in the Cupan languages. It appears in locational clauses with inanimate subjects when these are countable. Mass inanimate nouns tend to appear with reflexes of the positional verb PTak **wyny* (cf. TV *woo(n)*, SE *wyn*) and animates use the positional verbs derived from **hiu* and **kaLy*.

- (1) a. LU *O7na-qu\$ micha7 pe-t po-mij-qala.*
 know-PST.IPFV where bed-ABS 3SG-be-DS
 ‘He knew where the bed was.’ (H&E 1382)
- b. AC *Wona7 pa\$aa-nga mij-q na-7katta-la.*
 DIST.LOC outside-LOC be-NFUT.SG 1SG-hang-INS
 ‘Allá afuera hay mi colgadero. (My rack is outside there.)’ (3.123.0521)

- c. CU *Mu=ku7ut atira py7 myni-lj axwá-7aw tukuchi-7aw*
 and=QUOT very DET moon-ABS DISTAL-LOC high-LOC
py-mijax-wyn=ku7ut.
 3SG-be-ST.PST=QUOT
 ‘The moon was really up high there.’ (H&N 4[8] 26)
- d. DCA *I-ka pe-nga pe mijax-wen ne-nuk-7a ne-tav-7a.*
 PROX-DAT DIST-LOC FOC be-ST.NFUT 1SG-make-PSD 1SG-put-PSD
 ‘My creations are over there.’ (Seiler 1970:53 206)
- e. MCA *Pen pe-nga pe7 pe pe-tunga pe-nga pa7*
 and DIST-LOC 3SG.PRO FOC 3SG-under DIST-LOC where
mijax-we-7.
 be-ST-PST
 ‘And that’s where it was, under there.’ (S&E 714)

In Villiana Hyde’s LU speech, this locational use of *mij(a)x* is occasionally extended to animates, as in (2).

- (2) LU a. *Oonu po-7aash pi7 oonu i-va7 poo-tu mij-q.*
 PROX2 3SG-animal and PROX2 PROX-LOC 3SG-inside be-PRS
 ‘That’s his familiar, and it’s inside him.’ (H&E 163)
- b. *Pujaamangay paa-nga mij-qu\$.*
 always water- LOC be-PST.IPFV
 ‘(We) were always in the water.’ (H&E 107)

Verbless locational clauses are attested in the present tense. In LU these are barely attested, in a brief dialogue between Mrs. Hyde and her sister, and we suspect that they would be considered as clipped or fragmentary in most contexts; the code-switching in (3a) attests to the informality of the exchange. In the AC materials an apparent idiom with this structure is attested, seen in (3b). The CU sentence in (3c) is ‘high language’, with a ceremonial couplet for the place name and two parallel following clauses. Another ceremonial couplet, CA *nenuk7a netav7a* ‘my making my placing (my creations)’, is seen

in (1c) above. The verbless locational clause is the first clause, with the following two locational clauses being subordinate with overt verbs. Seiler (1970:10) says that the speaker in (3d), Genevieve McGee, is Mountain Cahuilla, but her materials as published show none of the distinctive features of that dialect as reported in Sauvel and Munro (1981) or attested in Sauvel and Elliott (2004).

- (3) a. LU *And then micha7 wuna7 Ø.*
 and then somewhere DIST.LOC be
 ‘And then, it’s somewhere there.’ (H&E 673)
- b. AC *Noo=n wani-k Ø.*
 1SG.PRO=1SG DIST-DAT be
 ‘Yo voy allá. (I’m going over there [I’m over to there].)’ (3.123.0489)
- c. CU *Wawam y-ki Kupa Pa-l Atíngvy Ø, y-paw-7a*
 far.away 2SG-house Cupa water-ABS hot be 2SG-water-PSD
py-wyn-í-vy, myqn-í-vy-li-m
 3SG-lie-ABLAUT-REAL.SUB kill-ABLAUT-REAL.SUB-ABS-PL
py-mijax-wyn-i-vy.
 3SG-be-ST-ABLAUT-REAL
 ‘Your home is far away at Cupa, Hot Spring, where your water lies, where they were killed.’ (H&N 10[20] 68)
- d. DCA *I7 qawi-sh i enga Kawíja-ngax-vi-sh Ø.*
 PROX mountain-ABS FOC here Cahuilla-LOC-place-ABS be
 ‘This mountain is in the region known as Cahuilla.’ (Seiler 1970:189 26)

9.4.5. CLAUSES OF POSSESSION. The copula verb *mij(a)x* appears in clauses expressing possession in Cupan languages. In LU and CA this usage is attested only when the possession is inanimate. It appears with animates in the CU speech of Roscinda Nolasquez, as in (1c,d), although perhaps (1d) should be analyzed as a clause of identity. Other possessive verbs are attested as well, and are generally preferred to the copula forms.

- (1) a. LU *Po-taava po7 mij-q.*
 3SG-skin FOC be-PRS
 ‘It (an acorn) has a skin.’ (H&E 34)
- b. LU *Pom-paa7aja-m mij-qu\$.*
 3PL-turtle.shell.rattle-PL be-PST.IPFV
 ‘They had turtle-shell rattles.’ (H&E 42)
- c. CU *Ashwy-ti-m py7-mijax-wyn.*
 animal-ABS-PL 3PL-be-ST.PST
 ‘They had cattle.’ (H&N 25[50] 23)
- d. CU *Y7y-t=ku7ut aja py7 py-na7aqwa-nim pah-chi-m*
 PROX2-ABS=QUOT now 3SG.PRO 3SG-child-PL three-ABS-PL
kika-ti-m py7-mijax-wyn.
 boy(pl.)-ABS-PL 3PL-be-ST.PST
 ‘That one now had three children, boys. (It is said that now her three children were boys).’ (H&N 20[40] 118)
- e. DCA *Pi-ka hem-ki mijax-wene.*
 DIST-DAT 3PL-house be-NFUT.PL
 ‘They have a house.’ (Seiler 1970:89 83)
- f. DCA *Juluk-7a ax_mijax-we-nem.*
 head-PSD AX_be-ST-FUT
 ‘It will have a head.’ (Seiler 1970:126 140)
- g. MCA *Pe7 pe yewi Ø pe7 pe Ø hem-eqi*
 3SG.PRO FOC long.ago be 3SG.PRO FOC be 3PL-own
hem-hawawaj-7a, hem-taxmu-7a pi-jik mijax-we-7.
 3PL-language-PSD 3PL-song-PSD 3SG-DAT be-ST-PST
 ‘Long ago they had their own language and their songs (It was long ago it was, and they had their own language and their songs for it).’ (S&E 720)

9.4.6. CLAUSES OF EXISTENCE. The verb *mij(a)x* also appears in existence clauses with both animates and inanimates, alongside the various positional verbs from **aaw*, **hiw*, **kaLy*, and **wyny*. For many inanimates appropriate intransitive non-positional verbs are preferred to encode existence: trees ‘stand’, plants ‘grow’, water ‘lies’ or ‘runs’, etc.

- (2) a. LU *Amu7=kunu7 mij-qu\$ cham-ka-m cham-piiwi-m.*
 long.ago=QUOT be-PST.IPFV 1PL-FaFa-PL 1PL-gr.grandparent-PL
 ‘Long ago it is said there were our grandfathers, our great grandfathers.’
 (K&G 183.4)
- b. LU *Tengal-i-sh mij-qu\$.*
 medicine-NMLZ-ABS be-PST.IPFV
 ‘There was medicine.’ (H&E 67)
- c. LU *Pi7 Kiimki Haraa\$a mij-q.*
 and plcn be-PRS.SG
 ‘And *Kiimki Haraa\$a* (San Clemente Island) exists.’ (H&E 155)
- d. AC *Mujja7k mesma-l mij-q.*
 much fog-ABS be-NFUT.SG
 ‘Hay muncha neblina. (There is a lot of fog.)’ (3.123.0387)
- e. CU *I7i=ku7ut jypá-sh py-mijax-wyn.*
 PROX=QUOT plain-ABS 3SG-be-ST.PST
 ‘There was this flat plain.’ (H&N 1[2] 27)
- f. DCA *Kilje ache-ma muk-wene-t kilj pe-mijax-wen-a-p.*
 not good-ADJ sick-NMLZ-ABS NEG CF-be-ST.DUR-ABLAUT-IRR.SUB
 ‘It’s not right that sickness should exist.’ (Seiler 1970:43 66)
- g. MCA *Hotel mijax-we-7 pe-nga pe7 kul-a-t pe7e Kupa-nga.*
 hotel be-ST-PST DIST-LOC FOC make-NMLZ-ABS FOC Kupa-LOC
 ‘There was a hotel [built there] at Cupa (Warner’s Hot Springs).’ (S&E 712)

9.4.7. OTHER CLAUSE TYPES WITH *mij(A)x*. Finally, the Cupan languages can use *mij(a)x* in clauses that express instrumentality, the ‘about’ relationship, and benefactive relationships, as in the examples in (1).

- (1) a. LU *Poo=kun po-7aamax mijx-uk kutupi-tal po-huu-tal*
 3SG.PRO=QUOT 3SG-hunting be-USIT bow-INS 3SG-arrow-INS
po-\$e7ax mijx-uk.
 3SG-shooting be-USIT
 ‘And it is said that his shooting used to be with bows, with arrows his shooting used to be.’ (K&G 181.2)
- b. CU *Ú-push mijax-wy py-chi y-tyw-a-pi.*
 2SG-eye be-ST.PRS 3SG-INS 2SG-see-ABLAUT-IRR.SUB
 ‘Your eyes are to see with.’ (H&N 66[132] 9)
- c. CU *My mijax-wy ku-t py-chi ni_syx=7y7-myn-pi.*
 and be-ST.PRS fire-ABS 3SG-INS 1SG.OBJ_burn=2PL-PL.TR-IRR.SUB
 ‘And there is fire for you to burn me with.’ (H&N 3[6] 120)
- d. MCA *Pi-jik mijax-we naxani-sh mu7-qal-ipa7.*
 3SG-DAT be-ST.PRS man-ABS die-DUR.SG-DS
 ‘There is one (song) for [it] when a man dies.’ (S&E 702.506)

Additional uses of *mij(a)x* include its function in encoding past perfect with subordinate verbs with the realis subordinator *-(i)vy and necessitative modality with the irrealis subordinator *-(a)pi. These are discussed in chapters 10 and 12.

9.4.8. INTRANSITIVE POSITIONAL VERBS IN CLAUSES OF LOCATION, POSSESSION, EXISTENCE. Several gossamer-light verbs that appear in clauses expressing location, possession, and existence are not candidates for classification as copulas, but we illustrate them briefly in order to compare them with similar verbs in TV and Serran. In all the languages these

verbs have a wide range of meanings, including ‘dwell, stay’ as well as more “bleached” positional expressions.

LU and AC have a special verb not found in CU and CA: *aaw*, used with singular animate subjects in expressions of location, possession, and existence. as in (1). The AC verb is attested as *aa7qw*, as in (1c,d).

- (1) a. LU *Tuupa-nga aaw-qu\$ po7.*
 heaven-in be.SG.ANIM-PST.IPFV 3SG.PRO
 ‘He was in heaven.’ (H&E 59)
- b. LU *Pi=kunu pa7 iij-qu\$ too\$axi-t aaw-qu\$.*
 and=QUOT there be.thus-PST.IPFV cottontail-ABS be.SG.ANIM-PST.IPFV
 ‘And long ago they say it was there that lived a cottontail.’ (K&G 189.6.1)
- c. AC *Pajaamonga aa7qw kii-nga.*
 always be.SG.ANIM.NFUT.SG house-LOC
 ‘Todo el tiempo está en la casa. (He is always in the house.)’ (3.123.0309)
- d. AC *Noo nechkan aa7qw.*
 1SG.PRO near be.SG.ANIM.NFUT.SG
 ‘Estoy cerquita sentado. (I am seated nearby.) (3.123.0536)

CU and CA instead use *hiw-*, which also appears as a root meaning ‘stand’, in location and existence clauses. *Hiw-* is the present tense (or, in DCA, the nonfuture) base for animate singular subject, as in (2).

- (2) a. CU *Axwá-7aw=am hiw-qa.*
 DIST-LOC=MIR be-PRS.SG
 ‘He is over there.’ (H&N 17[34] 48)
- b. DCA *He-7ash awa-l hiw-qal pe7 te7ajawa.*
 3SG-animal dog-ABS be-NFUT.SG DET power
 ‘He had a dog as his spirit familiar.’ (Seiler 1970:65 8)

The Cupan languages use *qal* with animate plurals, as in (3), and in LU and AC, the plural tense suffix *-wun*, *-won* (< **wyny*) is used in the present tense (3c,d).

- (3) a. LU *Weh-chu-m no-qeesu-m qal-qu\$.*
 two-ABS-PL 1SG-OLsS-PL be-PST.IPFV
 ‘I had two older sisters.’ (H&E 14.2)
- b. AC *Miisa-nga qal-qwa\$ ataax-a-m.*
 mass-LOC be-PST.IPFV person-AUG-PL
 ‘The Indians were at mass.’ (3.122.0219)
- c. LU *Kiika-tu-m qal-wun ataax-u-m.*
 little-ABS-PL be-PRS.PL person-AUG-PL
 ‘Little people do exist.’ (H&E 191)
- d. AC *Chaam-ta7=pom nechkan qal-won.*
 1PL.PRO-LOC = 3PL near be-NFUT.PL
 ‘Están cerca con nosotros. (They are close to us.)’ (3.123.0536)

With inanimates, *qal* is used with singulars (4).

- (4) a. LU *Qal-uk pe-t.*
 be-USIT path-ABS
 ‘There was a path.’ (H&E 246)
- b. AC *Wona7 qaal.*
 DIST.LOC be
 ‘Allá está. (It is over there.)’ (3.123.0629)

This contrasts with reflexes of **wyny*, usually with plural inanimates or mass nouns, in the same types of clauses (5).

- (5) a. LU *Won-qu\$ awoo po-mix mo~mka-t wam7*
 be-PST.IPFV other 3SG-property PL~big-ABS then
pom-poj-i-la.

3PL-pound-TR-IMPERS

‘She had other big ones which were used for pounding.’ (H&E 159)

- b. AC *Pahaaj too-t won7-q.*
 three stone-PL be-NFUT.SG
 ‘Tres piedras están. (Three stones are there.)’ (3.123.0629)

CU and CA share the suppletive set of animate positional verbs *hiw* ~ *qal* ~ *wyn/wen* ~ *max*. *Max* is the future of this set, which is barely attested. *Max* may be the source verb for the LU and AC future imperfective suffix *-maxan* ~ *-maan*, but it is not an independent verb in those languages.

Qal is for past tense and plurals, as in (6).

- (6) a. CU *Ku7ut ni~nishljyvy-li-m kilma-ngax pym-qal.*
 QUOT PL~old.woman-ABS-PL outside-ABL 3PL-be.PST
 ‘They say the old women were outside.’ (H&N 9[18] 19)
- b. DCA *Met7e-che-m pali-lje-m pe-nga pem-qal.*
 many-ABS-PL bat-ABS-PL DIST-LOC 3PL-be
 ‘There were many bats there.’ (Seiler 1970:151 8)
- c. MCA *I-pa7 jewi supule-m hem-qal-7e a~7amiva-m.*
 PROX-LOC long.ago other-PL 3PL-be-FCT PL~old.person-PL
 ‘Long ago there used to be other old-timers here.’ (S&E 717)

**wyny* (LU *won*, CU *wyn*, CA *wen*) appears with inanimates, as in (7).

- (7) a. LU *Pi7 po7 waxám pitóowili po-mix won-qu\$*
 and 3SG.PRO recently still 3SG-possession be-PST.IPFV
 ‘And her things were still there recently.’ (Elliott 1999:1069)
- b. CU *Pal=7yp atíngvy chym-ki-7aw pý-wyn.*
 water=REAL hot 1PL-house-LOC 3SG-be
 ‘There was hot water at our homes.’ (H&N 46[92] 6)

- c. DCA *Et pe-wen pa-l e-nga7.*
 that 3SG-be water-ABS PROX2-LOC
 ‘The water is here.’ (Seiler 1970:133 10)
- d. MCA *Pe hichaxi pe-nga pa7 wen pe7e, hem-chij-7a.*
 FOC something DIST-LOC FOC be 3SG.PRO 3PL-cerem.wand-PSD
 ‘Their *chijat* (ceremonial wand made out of feathers) is in there.’ (S&E 735)

Lacking the verb **wyny*, AC shows *qaal*, as in (8), for examples equivalent to those of (7).

- (8) AC a. *Awkala-ch ex-nga qaal.*
 saliva-ABS land;ground;floor-LOC be
 ‘There is some spit tirado (cast, spat) on the floor. (3.123.0309)
- b. *Woná7 qaal too-nga.*
 DIST.LOC be rock-LOC
 ‘Allá está en la piedra/las piedras. (It’s there on the rock/among the rocks.)’
 (3.123.0629)

9.4.9. NEGATIVES WITH COPULA AND POSITIONAL VERBS. Negatives of verbless clauses, clauses with the copula *mij(a)x* and the intransitive positional verbs have no special properties; they use the regular indicative negative, *qaj* in LU, AC, and CU, *kilj* in CA. Examples of negative clauses of identity are given in (1).

- (1) a. LU *Omu=p qaj naxánma-l Ø, awoo-lu=p Ø.*
 2SG.PRO=2SG NEG old.man-ABS be youth-ABS=2SG be
 ‘You are not an old man, you are a young man.’ (H&L 215 1 (16b))
- b. LU *Qaj waxáwki-la Ø.*
 NEG frog-ABS be
 ‘It is not a frog.’ (H&E 57)
- c. CU *Py7=y qaj chým-jy Ø.*
 3SG.PRO=CF NEG 1PL-mother be
 ‘He is not our mother.’ (H&N 63[126] 12)

Examples of negative clauses of attribution are given in (2).

- (2) a. AC *Avi a-püisa-v qaj iiv-t Ø.*
 PROX ADJZ-rot-ADJZ NEG new-ABS be
 ‘This rot is not new.’ (3.123.0377)
- b. CU *Qaj = am ichaa i7i Ø.*
 NEG = MIR good PROX be
 ‘This is not good.’ (H&N 2[4] 65)
- c. DCA *Eléle-ma Ø e-t e-kul-a-m kilje ache-ma Ø.*
 bad-ADJ be PROX2-ABS 2SG-make-NMLZ-PL NEG good-ADJ be
 ‘Your creatures are bad, not at all good (It is bad, your creatures are not good).’ (Seiler 1970:43 49)
- d. MCA *Ne7 kile7 ingki-sh ne-mijax-we7.*
 1SG.PRO NEG like.something-ABS 1SG-be-ST.PST
 ‘Yo no era así. (I was not like that.)’ (3.112.0156)

In most existence statements, the use of the negative entails also the use of an indefinite demonstrative, an *h-* word, analogous to the *wh-* words of English, such that in CU, for example, *qaj hax* is used for humans and *qaj hish* for inanimates. Both *qaj hax* and *qaj hish* mean ‘not any’. Examples of clauses of existence with negative-plus-indefinite demonstrative are given in (3). Note that there can be no more than one negative particle in a clause.

- (3) a. LU *Qaj hax aaw-qu\$ Momngaa-sh.*
 NEG INDF.HUMAN be.SG-PST.IPFV White.person-ABS
 ‘There were no White people there.’ (H&E 107)
- b. CU *Qaj hi-sh pa-l juji-sh pý-wyn ami7yn.*
 NEG INDF-ABS water-ABS cold-ABS 3SG-be.PST near
 ‘There was no cold water nearby.’ (H&N 50[100] XI.1)

- c. DCA *I-pa kilj hi-che7a wen.*
 PROX-LOC NEG INDF-ABS be
 ‘In those days there was nothing here.’ (Seiler 1970:149 4)

- d. MCA *Kilj hax7i hiw-qa puu-l.*
 NEG INDF.HUMAN be-PRS.SG healer-ABS
 ‘There are no more shamans.’ (S&E 724)

An example of a negated existence clause with the verb base *i-jax* has been noted, in (4).

- (4) MCA *Exenuk kilj ijax-we.*
 this.way NEG be.this.way-ST.PST
 ‘That (word) doesn’t exist.’ (S&E 939)

LU and AC have prohibitives, LU *tu\$u*, AC *tu\$\$a ~ tu\$xa*, which appear in the negative imperative mood as in (5).

- (5) a. LU *Tu\$u mijx-ma koj~koojewu-t, tu\$u mijx-ma naanuqvi-sh.*
 PROH be-HAB.IMP PL~liar-ABS PROH be-HAB.IMP naughty-ABS
 ‘Do not be a dissembler, do not be heedless.’ (K&G 201 4)
- b. AC *Tu\$\$a chaaja7.*
 PROH strain
 ‘¡No lo cueles! (Don’t strain it [coffee]!) (3.123.0575)
- c. AC *Tu\$xa huqq-a a7-aach-a.*
 PROH run;race-TR 3SG-animal;horse-ACC
 ‘¡No corras tu caballo! (Don’t race your horse! [Don’t make your horse run in the races!])’ (3.122.0222)

In addition to the negative clauses with negative particles, all the Cupan languages have special negative verbs that mean ‘be absent’, which are especially common in existence clauses with negative readings. These are illustrated in (6). LU has two such verbs, *jaawa* for inanimates and *oma* for animates. For AC a verb, *jat* and an apparent

adjective, *qaa7ch*, are attested in this sense. CU has a similar contrast, with *kikis*-documented only with inanimates, *jaq-jax*- with animates. This may be cognate with TV *jaxaa*; the root *kis* may be related to the CA negative particle *kilj*. CA has *sawaa-* for both animates and inanimates. These verbs do not cooccur with negative particles. This is apparent in (6d), where we might expect initial *qaj hax*, but only *hax* appears. The initial *qaj* in (6f) is part of the expression *qaj mijqnga* ‘never, not ever’. A nominalization is sometimes employed in AC, as in (6f,g).

- (6) a. LU *Pom-ki7 jaawa-qu\$.*
 3PL-house be.absent-PST
 ‘They had no permanent home.’ (H&E 94)
- b. LU *Jaawa-q pitoo paa-la.*
 be.absent-PRS now water-ABS
 ‘Now the water is gone.’ (H&E 108)
- c. LU *Mom-ja-m oma-qu\$.*
 White.person-AUG-PL be.absent-PST
 ‘There were no White people.’ (H&E 109)
- d. LU *Hax oma-q po-heelax-pi.*
 INDF.HUMAN be.absent-PRS.SG 3SG-sing-IRR.SUB
 ‘There is no one left to sing.’ (H&E 109)
- e. AC *Jat-q = ap na-sinval.*
 be.absent-NFUT.SG = 3SG 1SG-money
 ‘Me falta dinero. (I lack money.)’ (3.123.0547)
- f. AC *Qaj noo mijqnga na-sinva-ka qaa7-ch Ø.*
 NEG 1SG.PRO ever 1SG-money-PSD absent-ABS be
 ‘No me falta a mí dinero. (I never lack money.)’ (3.123.0546)
- g. AC *Ne-jo-k qaa7-ch Ø.*
 1SG-mother-PSD absent-ABS be
 ‘No tengo mamá. (I have no mother.)’ (3.124.0281)

- h. CU *Qaj mipa chimi_py7-max, pijámanga kikis-wyny.*
 NEG ever 1PL.OBJ_3PL-give always be.absent-ST.CUST
 ‘They never gave us anything, still there is nothing.’ (H&N 21[42] vii.15)
- i. CU *Hachyw=\$y pa-l kikis-wy.*
 yes = DUB water-ABS be.absent-ST.PRS
 ‘Oh yes, there is no water’. (H&N 13[26] 166)
- j. CU *Jaqjax-wyn=myl.*
 be.absent-ST.PRS = 3PL.ABS
 ‘They have all gone (died).’ (H&N 10[20] 59)
- k. CU *My y-ny7y-m pytá7a-nim amáj aja jaqjax-wy,*
 and 2SG-relative-PL all-PL today now be.absent-ST.PRS
pytá7a-nim-i mi_pym-chixni.
 all-PL-ACC 3PL.OBJ_3PL-kill(pl.obj)
 ‘And your relatives are all gone now, they killed them all.’ (H&N 18[36] 29)
- l. DCA *Kahvéé sawaa-qa.*
 coffee be.absent-NFUT.SG
 ‘There was no coffee.’ (S&H 177)
- m. MCA *Pe7 iv7ax ay hem-sawaa-we.*
 FOC now already 3PL-be.absent-PRS.PL
 ‘But now they (old-time Cahuillas) are all gone.’ (S&E 717)

9.4.10. INTERROGATIVES WITH COPULA AND POSITION VERBS. Interrogatives pattern like the declarative sentences, with interrogative particles substituting for the complement in clauses with *mijax*, and for the adverbial extensions in clauses with positional verbs.

LU interrogatives are always attested with the dubitative/interrogative particle, LU *\$u* or *su*, as in (1). The interrogative particle almost always occurs cliticized, though example (1a) shows a rare instance of sentence-initial *\$u*. Cliticized =*\$u* also occurs as in (1a) in the second clause.

- (1) LU a. $\$u = p = ku$ *mij-q eng-la wuna7, mij-qa = \\$u?*
 Q = 3SG = INFR be-PRS.SG salt-ABS DIST.LOC be-PRS.SG = Q
 ‘There is salt there, isn’t there?’ (Elliott 1999:532)
- b. $Pi7 = su$ *hax po7 mij-qat?*
 and = Q INDF.HUMAN FOC be-RPST
 ‘Who was it?’ (Elliott 1999:311)
- c. $Axi-m = \$u = m$ *Ø?*
 INDF.HUMAN-PL = Q = 2PL be
 ‘Who are you pl.?’¹
¹ Given as ‘Who are they?’ in Elliott (1999:311).
- d. $Hax = \$u$ *po-ji7jila tuuj-la-x-pi-sh Ø ivi7?*
 INDF.HUMAN = Q 3SG-top spin-FREQ-INTR-IRR.SUB-ABS be PROX
 ‘Whose top is this?’ (Elliott 1999:311)
- e. $Hij-cha = \$u$ *oonu Ø?*
 INDF-ABS = Q PROX2 be
 ‘What’s that?’ (Elliott 1999:340)
- f. $Micha7 = \$u$ *om aaw-qat?*
 INDF.LOCATION = Q 2SG.PRO be(sg)-RPST
 ‘Where have you been?’ (H&E 121)

The corresponding element in AC is the clitic = \$(o).

- (2) AC a. $Hii-t = \$$ *mij-q?*
 INDF-ABS = Q be-NFUT.SG
 ‘¿Qué es? (What is it?)’ (3.123.0606)
- b. $Hax = \$$ *oona?*
 INDF.HUMAN = Q PROX2
 ‘¿Quién es ése? (Who is that?)’ (3.123.0259)

- c. *Haxi-m = \$o = m?*
 INDF.HUMAN-PL = Q = 3PL
 ‘¿Quiénes son? (Who are they?)’ (3.123.0259)

The corresponding element in CU is the clitic = \$y.

- (3) CU *Wy = \$y = 7yt hi-cha-m py-mijax-wyn?*
 or = Q = 3SG.AB what-ABS-PL 3SG-be-ST.PST
 ‘I wonder what these were?’ (H&N 49[98] IX.11)

Questions with indefinites in CU are also found with no question particle or clitic, as in (4).

- (4) CU a. *Hax = y maas nawika-t Ø?*
 INDF.HUMAN = CF more woman be
 ‘Who is more of a lady?’ (H&N 74[148] 17)
- b. *Hi-ch = y wa7i-sh Ø?*
 INDF-ABS = CF meat-ABS be
 ‘What kind of meat is this?’ (Hill 2005:378)

The CA examples in (5) show the question proclitic (and sometimes separate particle) *qa*, which has a function similar to LU \$u, AC = \$(o), and CU = \$y.

- (5) DCA a. *Qa_7eme[m] haxi-m Ø?*
 Q_2PL.PRO INDF.HUMAN-PL be
 ‘Who are you?’ (Seiler 1970:79 54)
- b. *Qa_hi-che7a he7tum i Ø?*
 Q_INDF-ABS EMPH(?) PROX be
 ‘What in the world is it?’ (Seiler 1970:123 125)

In CA, as in CU, questions with indefinites are also formed using no question particle, as seen in (6).

- (6) a. DCA *Mivi-ka hi-che7a Alwe-t Ø?*
 where-DAT INDF-ABS Crow-ABS be
 ‘Is Crow here?’ (Seiler 1970:135 64)
- b. MCA *E-t hax7i taxmu-7a Ø?*
 PROX2-ABS INDF.HUMAN song-PSD be
 ‘Whose song is that?’ (S&E 721 518)

9.4.11. CAHUILLA VERBLESS CLAUSES WITH PRONOMINAL PROCLITICS. Verbless clauses in CA with no overt nominal subject and in the unmarked tenses (DCA nonfuture, MCA past and present), the subject argument is encoded by a pronominal proclitic (8.3.6) preposed to the first word of the complement, as in (1).

- (1) CA a. *Ne7 hen_7awa-l Ø.*
 1SG.PRO 1SG_dog-ABS be
 ‘I am a dog.’ (Seiler 1977:76)
- b. *Esh_ [chex-Ø-che-m] Ø.*
 1PL_sick/dead(pl.)-NMLZ-ABS-PL be
 ‘We are sick/dead.’ (Seiler 1977:96)
- c. *Eme_ ne-nesi-m Ø.*
 2PL_1SG-YoSiCh-PL be
 ‘You are my nieces.’ (Seiler 1977:77)

The third person pronominals are zero, such that examples like (2), consisting of but a single overt word, can be understood as a complete sentence.

- (2) CA a. *Ø Awa-l Ø.*
 3SG dog-ABS be
 ‘He/it is a dog.’ (Seiler 1977:76)
- b. *Ø Ø-Nesi-m Ø.*
 3PL 3SG-YoSiCh-PL be
 ‘They are her nieces.’ (Seiler 1977:78)

This structure is also found in Nahuatl, as illustrated in (3).

- (3) Nahuatl a. *Ni_tēuc-tli* \emptyset .
 1SG_lord-ABS be
 ‘I am a lord.’ (Andrews 1975:147)
- b. *Ti_tē~tēuc-tin* \emptyset .
 1PL_PL~lord-ABS.PL be
 ‘We are lords.’ (Andrews 1975:147)
- c. *Ah_ni_tīci-tl* \emptyset .
 NEG_1SG_doctor-ABS be
 ‘I am not a doctor. (Andrews 1975:148)
- d. *Ca ahmō* \emptyset *tīci-tl* \emptyset .
 indeed NEG 3SG doctor-ABS be
 ‘He is indeed not a doctor.’ (Andrews 1975:148)

The third person pronominal whether singular or plural, is zero. Further, singular and plural are not distinguished for most inanimate nouns. This means that there are multiple possible readings of an example like (4), which if not in a predication, is simply a noun.¹⁰¹

- (4) Nahuatl \emptyset *Cuahui-tl* \emptyset .
 3SG/3PL tree;stick;wood be
 ‘It is a tree/a stick/a piece of wood. / They are trees/sticks of wood/
 pieces of wood.’ (Andrews 1975:148)

9.5. SUBORDINATE CLAUSES OF IDENTITY AND ATTRIBUTION. There is no separate marking of subordinate copula clauses of identity or attribution. However, granted the verbless nature of such clauses, most or perhaps all instances of noun plus noun-like modifier

¹⁰¹ Because he did not distinguish between prefixes and proclitics, Andrews (1975) developed a remarkable and influential analysis whereby every seemingly unmarked noun is a predicate complement with a zero subject prefix. In the second edition of his grammar (Andrews 2003), zeros proliferate and pretty much dominate the description.

should be understood as involving subordinate clauses of identity, i.e., unmarked copula complements embedded within a noun phrase, with the modified noun as underlying subject. The difference in English between “a tall man” and “a man that is tall” is not available in Takic.

In (1), the sequence *ama7 ... ny-ka7 wyt*si7vy^Rt** ‘that old grandfather of mine’, the noun *wyt*si7vy^Rt** might be analyzed as being from a subordinate copula clause ‘3SG was an old man’: “my grandfather who was an old man.”¹⁰²

- (1) SE *Ama7=vy-7 ny-ka7 wyt*si7vy^Rt* a-hiintu7a7 qat\$.*
 DIST = 3SG-PST 1SG-FaPa old.man-ABS.GEN 3SG-wife be
 ‘My old (paternal) grandfather had a wife.’ [= 9.2.8 (1a)]

In (2), the adjective *numuat\$* ‘good’ that modifies the noun *naahat\$* ‘girl’ may represent an embedded copula clause ‘3SG was good’: “a girl who was good.”

- (2) KI *Ni-hiu naaha-t\$a-j numua-t\$.*
 1SG-see girl-ABS-ACC good-ABS
 ‘I saw a good girl.’ (3.100.0760; Anderton 1988:133)

Similarly in (3), with a noun and two modifiers, the accusative sequence *amaj ... tymyti vaa^Rchkati atiy^R7at\$*i** may represent an embedded predication *ama7 tymyt vaa^Rchka7 atiy^R7a7* ‘that rock was a large flat one’ or it may involve a pair of embedded copula clauses, ‘3SG was a flat one’ and ‘3SG was large’. This is a structural detail that we do not address.

- (3) SE *Ama-j=kwyn pichuu-t\$u7 tymy-t-i vaa^Rch-ka-ti*
 DIST-ACC = QUOT.3SG > 3SG arrive.at-MOT rock-ABS-ACC flat-K.CHAR-ACC
a-tiy^R7a-t\$i.
 ADJZ-large-ABS-ACC
 ‘She came to that large flat rock.’

¹⁰² The underlying copula clauses are given in English with a (grammatically required) tensed copular verb. This is misleading in that the underlying structures proposed are tenseless.

Case marking may be applied to the components of the embedded clause as in (3) or only to part of the whole noun phrase, i.e., phrasal marking of case, as in (1) and (2)

CHAPTER 10

VERB CLASSIFICATION AND THE DERIVATION OF THE VERB BASE

10.0. INTRODUCTION. Derivation of the verb base is similar across the languages. Base-deriving elements are all suffixes, with the exception of suppletion (nearly always for number) in a few verbs, and left-edge copying in some types of reduplication. Valence-changing derivation, such as causative and benefactive marking, is roughly comparable across the languages where this is documented, although there are differences in the forms of the relevant affixes. All of the languages except TV and KI have motion suffixes, and all except SE have a desiderative derivation. In the Cupan languages these suffixes exhibit to at least some degree a non-fixed order, suggesting a syntax internal to the verb construction.

All of the Takic languages have a small set of non-conforming verbs. Although the member verbs differ somewhat, as does the nature of the irregularity, these sets include one or more basic verbs of motion like ‘go’, ‘come’, positional verbs like ‘stand’, ‘lie’, ‘dwell’, ‘stay’, and light verbs like ‘do’.

10.0.1. THE K-CLASS. While verb classification systems differ somewhat among the Takic languages, all of them retain reflexes of the Uto-Aztecan “k-class”, contrasted with a set of athematic verbs that lack the k-class thematic suffix *-k*. The Serran languages SE and KI retain the largest suite of inherited k-class features. TV shows a number of k-class features though the relatively scant TV corpus does not allow for a satisfactory analysis. The Cupan languages retain a k-class, but with some innovations, and have developed some new thematic classes. In the Cupan languages CU, LU, and AC, verbs of the k-class divide into an intransitive group, which retains a reflex of the thematic suffix **-ky*, and a causative/transitive group which retains only reflexes of the k-class causative suffix **-ina*. Verbs of the athematic class are both transitive and intransitive and feature a

different causative suffix. In CA, transitivity marking plays a smaller role, with most verbs falling into a large athematic class.

The k-class was first defined for Hopi (Whorf 1946:171). We review here the major properties of these verbs in Hopi as a background for a discussion of developments of the class in Tactic.

Hopi k-class verbs share a canonical root CVCV. When a suffix is added, the root is extended by a thematic suffix *-k* (underlyingly *-ky*, as also in SE), which occurs before the suffix. Thematic *-k* is labeled the “singulary” in the Hopi Dictionary (1998:882).¹⁰³ The suffix *-k* may be replaced by the “augmentative” *-m-* “when reference is made to multiples or to magnified action, especially when it is sudden or unexpected” (ibid.). This suffix *-m-*, labeled the “inner plural” by Whorf (1946:175), appears with the perfective suffix *-ti*, pl. *-toti*, as well as in other contexts.

Overall, the various forms of Hopi k-class verbs are tightly constrained to a set of canonical shapes. In the k-form of the verb, the vowel of the first syllable is lengthened by a dialect-appropriate feature: aspiration in First Mesa and Musangnuvi (Second Mesa) Hopi, simple vowel lengthening in the Second Mesa Hopi of Songòpavi and Supawlavi, and falling tone at Third Mesa.¹⁰⁴ If the medial consonant is a non-obstruent (or *s* in Musangnuvi Hopi), the feature is not available for elaborating the vowel of the first syllable but that first vowel is stressed anyway, as though governed by vowel length. These verbs then, with stress on an initial short syllable, are exceptional to the regular stress pattern (and orthographically marked accordingly). An example is the verb for ‘slide down’ in (1). With the *-m-* suffix, the first syllable of the verb is not elaborated and remains short, and the stress is in its normal position, namely on the syllable containing the second mora, i.e., on the second syllable of the short-first-syllable root. A sample of Third Mesa Hopi verbs is provided in (1) with the underline indicating stress placement. (The falling tone in the intransitive plural verbs in (1) is governed by the suffix *-ti*.)¹⁰⁵

¹⁰³ The term “singulary” was coined K. Hill within the Hopi Dictionary Project. The Project was funded in large part by the National Endowment for the Humanities (grants RT-20713-86 and RT-21344).

¹⁰⁴ Hopi falling tone, orthographically indicated by grave accent, can be understood as phonetically (and probably historically) a “voiced *h*,” i.e., a postvocalic murmur [f]. The letter *h* is used as an orthographic representation of falling tone in Wycliffe Bible Translators 1972.

¹⁰⁵ Our normalization departs from orthographic Hopi by using the letter *j* for Hopi <y>, *y* for Hopi <u> and *ʔ* for the Hopi apostrophe.

(1) Hopi	intransitive subject		transitive object	
	singular	plural	singular	plural
turn over	<i>tàaky</i>	<i>takỳ-m-ti</i>	<i>tàaky-k-na</i>	<i>taky-m-na</i>
adhere flatly	<i>pùita</i>	<i>pità-m-ti</i>	<i>pùita-k-na</i>	<i>pità-m-na</i> ‘apply patches’
get poked in	<i>jòotsi</i>	<i>jotsì-m-ti</i>	<i>jòotsi-k-na</i>	<i>jotsì-m-na</i>
get ignited	<i>ywi</i>	<i>ywì-m-ti</i>	<i>ýwi-k-na</i>	<i>ywì-m-na</i> ‘light fires’
topple over	<i>wá7ö</i>	<i>wa7ò-m-ti</i>	<i>wá7ö-k-na</i>	<i>wa7ò-m-na</i>
slide down	<i>sìro</i>	<i>sìro-k-ja</i>	<i>sìro-k-na</i>	<i>sìro-m-na</i>

In Hopi, the suffix *-k* does not appear in word-final position. It appears only if the verb takes a following suffix. For example, the future of *tàaky* ‘turn over’ is *tàaky-k-ni*, the imperative of *jama* ‘come out’ is *jáma-ky-7y*.

The simplex forms of the *k*-class verbs with *-k-* are “usually intransitive and [...] always perfective” (Hopi Dictionary 1998:882). Derived forms within this class follow rigid canonical templates. Thematic *-k* does not occur before aspect suffixes. Imperfective forms with motion suffixes can express ‘go along doing’ (*-ima*), ‘go around doing’ (*-inuma*). Reduplication of the root may be left-edge, C_1V_1- , or right-edge, $-C_2V_2$. Right-edge reduplication encodes repetitive, which is specified by the aspect suffix as perfective (*-jky*) or imperfective (*-ta*). A “tardive” or intermittent repetition is formed by reduction of the root to $C\bar{V}C$, which is followed by the imperfective suffix *-ta* (Hopi Dictionary 1998:884).

The clearest instantiation of the *k*-class in Takic appears in SE, which retains the thematic suffix as *-k(y)*, along with the perfective or punctive sense seen in Hopi. Whorf (1946:173) suggested that *k*-class verbs share certain semantic properties, having to do especially with what he called “eventive” states. The semantics of the SE *k*-class is rather similar to that of Hopi, including verbs for processes affecting inanimate objects such as ‘open’, ‘break’, ‘flash’, ‘crack’, etc., with causatives in *-ina* encoding an agentive imposition of such processes (or sometimes simple transitivity). In Hopi, all *k*-class verbs have disyllable roots, CVCV. In contrast, in SE and KI the *k*-class verbs show a range of shapes, but they are constrained to end in a consonant or consonant cluster, radically unlike the canonical forms of Hopi. In Hopi, the augmentative *-m-* is quite productive while in Serran the forms in *-m-* are relatively uncommon.

10.0.2. TENSE AND ASPECT. A major difference with Hopi is aspectual. Hopi verbs are either perfective or imperfective while Takic verbs lack a clear binary aspectual classification. A correlate of the aspectual difference is found in the tense system. Hopi has but two tenses, future and nonfuture (unmarked). Nonfuture perfectives are construed as past, while imperfectives are either present or past, depending on context.¹⁰⁶ The Takic tense systems vary, marking future, nonfuture, past, present in various arrays in the different languages, allowing for much less rigid aspectual distinctions in the verbs.

10.0.3. TRANSITIVITY. Heath (1978) suggested that in Cupan, LU verbs with transitivity alternations *-ax/-i*, CU verbs with *-jax/-in*, and perhaps CA verbs with *-i/-in* (where the first of the pair is intransitive, the second transitive) are reflexes of the k-class. In LU and CU these are differentiated from an athematic class for which transitivity is not marked in the theme. In CA a fairly large number of intransitive verbs with final *-i* are apparently descended from k-class verbs, but the athematic class is also large, comprising the majority of verbs. Thematic *-k* (reflected in thematic suffixes with final *-x*) has become a marker of the intransitive in LU and CU, with *-i(n)* from causative **-ina* encoding transitivity. The CU reflex of the k-class “inner plural” suffix **-m-* appears with plural subjects of past tense transitive verbs with thematic *-in*. CA also retains this suffix; it marks the distributive or plural with intransitive verbs with thematic *-i* and with causatives derived from those verbs.

10.0.4. SOME TERMINOLOGY. The following terminology will be used in the discussion of verb constructions. The term “root” refers to the minimal unit to which affixes can be attached. “Stem” is a more inclusive term. While an unmodified root can be regarded as a (simple, underived) stem, the term “stem” is more often used to refer to a root extended by derivational affixation, to a compound verb or one with noun incorporation, to a root with special prefixation (such as the contrastive focus prefixes of CA), or to a reduplicated form. A derived stem can be the basis for further stem derivation. The term “theme” is

¹⁰⁶ This is sort of a mirror image the tense system of colloquial Mexican Spanish, where the past is marked and distinguishes perfective and imperfective while the unmarked verb may serve as present or future, with aspect not morphologically differentiated. (Note that the future *can* be marked, but it is quite rare in our experience.)

used where a stem is derived with a thematic suffix. The thematic suffixes usually have some semantic content, such as nonfuture in TV, aspect in Serran, or transitivity in the other languages. The term “base” is used for any entity – root, stem, theme – to which inflection may be attached.

While denominal verbs are noted occasionally in this chapter, the main account of these constructions is found in 14.15.

10.1. THE VERB BASE IN TONGVA. Nearly all of the documentation on TV was collected by John Peabody Harrington early in the 20th century. There are many gaps in the data, and many questions about the language may never be resolved. Our discussion here and in other chapters on the verb construction builds on the important work of Munro (2012) and her colleagues with the Harrington materials.

10.1.1. VERB CLASSES. Munro (2012) distinguishes four major classes of verbs, which are defined by four nonfuture suffixes, listed in (1), plus a minor class of athematic verbs, which take no nonfuture suffix. These suffixes are replaced by the future suffix *-ro*, and they are not present in the imperative, except for the *-no* of *-nok*.

- (1) TV
- a. Class I *-k*
 - b. Class II *-nok*
 - c. Class III *-ax*
 - d. Class IV *-nax*

While Munro’s analysis may work well for her pedagogical purpose, our study of comparative Takic and of abstract Takic phonology leads to a rather different analysis.

First we notice that the final consonant of all the Munro class markers is a velar obstruent, *x* after *a* and *k* elsewhere (nearly always *o* or *u* ~ *w*; we have identified only three exceptions). Both *x* and *k* are from PTak **k* and their distribution in (1) is exactly in accord with the results of the regular sound changes leading to TV. In our analysis, if the vowel is *a*, the nonfuture suffix is *-x*. There is only one apparent exception to this generalization in the entire corpus of TV verbs: *mo7aak*, which may be an athematic verb ‘be piled up’ with root-final *-k* (or an adjective ‘piled up’); see the discussion in 11.1.1. After any other stem-final element, the nonfuture is *-k*. Thus final *-x/-k* is the nonfuture

marker. In future-tense verbs, it is replaced by the future suffix *-ro*. What precedes is other material, separate from the tense inflection. This nonfuture suffix consonant seems not to reflect the thematic suffix of the k-class; more likely it is historically related to the nonfuture suffixes with initial *-q* in the Cupan languages: AC *-q* and DCA *-qal* ‘nonfuture singular’ and LU *-q* and CU/MCA *-qa* ‘present singular’.

The *-na-* of (1d) represents the causative morpheme. It is nearly always preceded by *e* or *j*. There are only 6 exceptions, like (2i,j) below, among 52 forms. Thus, instead of *-na*, we segment *-ena*, *-jna* and recognize this as a reflex of the k-class causative suffix **-ina*. It seems to remain underlyingly *-ina* in TV, though it should probably be posited as having a variant *-na* to account for the exceptions mentioned above. Underlying *-ina* appears as *-ena* after consonants (2a-d) and *-jna* after most vowels (2e-g). After the vowel *e* it almost appears as *-na* (2h), but we find both *hopee-na-x* and *hopee-jna-x* for ‘paint the body’ (3.104.0100). (No appropriate example with stem-final *i* has been found.) Although there are maybe a half dozen TV verbs in *-ena-x* that are not obviously causative, like ‘dance’ (2h), the suffix productively derives many causatives (see 10.1.4).

(2) TV		nonfuture	imperative	
a.	slice	<i>araak-ena-x</i>	<i>araak-e</i>	(3.105.0106)
b.	make a hole	<i>horoopk-ena-x</i>	<i>horoopk-e</i>	(3.103.0497)
c.	step on	<i>koor-ena-x</i>	<i>koor-e</i>	(3.105.0144)
d.	smash	<i>poot\$-ena-x</i>	<i>poot\$-e</i>	(3.105.0152)
e.	feed	<i>kwa7aa-jna-x</i>	<i>kwa7aa-jna</i>	(3.104.0498)
f.	cause to drink	<i>pavaa-jna-x</i>	<i>pavaa-jna</i>	(3.104.0498)
g.	paint s.th	<i>e\$aa-jna-x</i>	<i>e\$aa-j-noo</i>	(3.105.0130)
			<i>ee\$a</i>	(3.105.0147)
h.	dance	<i>jakee-na-x</i>	<i>jakee</i>	(3.104.0092)
i.	kill	<i>mokaa-na-x</i>	<i>mokaa</i>	(3.105.0160)
j.	help	<i>ovoo-na-x</i>	<i>ovoo</i>	(3.103.0462)

As seen in (2), *-na* is nearly always lost in the imperative. (2e,f) are the only exceptions; they were collected together and may be in error. The final lengthened *-noo* of the imperative of (2g) is unusual. Note also that (2g) has an alternative imperative

form with *-jna* dropped entirely and the stress (and consequent length) assigned to the initial syllable. The same stress/length pattern is also seen in (2j).

The phonological environment cannot be the explaining factor for the imperative deletion of *-na*. The fact that *-no* of *-ino* (*-nok* in (1)) is not lost implies that the loss of *na* in the imperative is a morphologically sensitive loss, a case of truncation. In fact, the *-na* of this suffix is lost in the imperative (as well as in certain other morphological contexts) in Serran in k-class verbs and in the Inland Cupan languages. This truncation of the k-class causative in the imperative may have been an innovation in Proto-Takic; it does not occur in Hopi.

In (3), where we present verbs in each of Munro’s classes, showing nonfuture, future and imperative.

(3) TV	nonfuture	future	imperative
Class I			
a. bathe (intr.)	<i>aa\$-k</i> (3.105.0076)	<i>aa\$-ro</i> (3.105.0076)	<i>aa\$o</i> (3.105.0076)
Class II			
b. burn (tr.)	<i>to-iino-k</i> (3.105.0078)	<i>to-ii-ro</i> (3.105.0078)	<i>to-iinoo</i> (3.105.0078)
c. take out (tr.)	<i>pe\$-iino-k</i> (3.103.0332)	<i>pe\$-ii-ro</i> (3.105.0123)	<i>pe\$h-iino</i> (3.105.0123)
Class III			
d. speak, talk (intr.)	<i>\$eraaw7a-x</i> (3.105.0329)	<i>\$eraaw7-ro</i> (3.105.0329)	<i>\$eraaw7a</i> (3.105.0329)
Class IV			
e. break (tr.)	<i>toaajk-ena-x</i> (3.105.0084)	<i>toaajk-e-ro</i> (3.105.0084)	<i>toaajk-e = 7aa</i> (3.105.0084)
f. send, order (tr.)	<i>hoo7-ena-x</i> (3.103.0164)	<i>hoo7-e-ro</i> (3.103.0567)	<i>hoo7e</i> (3.103.0164)

Munro’s analysis of the nonfuture suffixes is motivated by the fact that before the future suffix *-ro*, the entire sequences *-na-x* and *-no-k*, not just the final consonants, are lost. However, these losses seem to be strictly phonological; vowel syncope creates a consonant cluster *nr*, and this cluster reduces to just *r* by regular rule. The sequence *nr* is

avoided in TV. Either *r* is simply lost before *n* or a *d* is inserted to facilitate the phonetic transition between *n* and *r* (see 3.2.7).

To-iino-k ‘burn s.th’ (3b) (or *tuu-jno-k* (3.103.0076)) is the causative of *too-k* ‘get burned’ (future *too-ro*) (3.105.0048). This shows that we can identify *-ino* in at least some instances as a causative suffix. But it is unlike causative *-ina* in that the untruncated form of the suffix is retained in the imperative, as noted by Munro, above, and as seen in (4). The fact that *-ino* loses its *no* component in the future may also be because of the combination of syncope and *nr* cluster reduction, as mentioned above.¹⁰⁷

(4) TV		nonfuture	future	imperative
a.	make	<i>maa-jno-k</i> (3.103.0164)	<i>maa-j-ro</i> (3.103.0514)	<i>maa-jno</i> (3.104.0419)
b.	take out	<i>pe\$-iino-k</i> (3.103.0332)	<i>pe\$-ii-ro</i> (3.105.0093)	<i>pe\$-iino</i> (3.105.0123)
c.	pass	<i>mop-iino-k</i> (3.105.0145)	<i>mop-ii-ro</i> (3.104.0402)	<i>mop-iino</i> (3.104.0402)

However, there may be something special going on with *-no* as evidenced by the imperatives with final *-no* seen in (4). These forms suggest that there may be a lengthening of this morpheme in the imperative, hence its retention word-finally. Its lengthening must be secondary; it can't be long in underlying form because then it would not be lost by syncope in the future. The form *toiinoo* ‘burn it’ in (3b) seems to answer this question. We take this form as evidence that imperatives show lengthening of the final vowel, which blocks apocope. *Maajnoo* ‘make it!’ (3.105.0562) is also attested, in a song, and recall the aberrant *e\$aajnoo* ‘paint it!’ in (2g) above. TV shares with the rest of the Tadic languages a strong tendency to shorten final unstressed long vowels, but they do sometimes remain as part of the actual phonetic form, especially when affected by imperative prosody.

The etymological status of *-no* remains unclear. The forms *-iino/-jno*, seen in (4) and (5), point to a source **-iny*, but we have found no likely cognate in the verb morphology of any other Tadic language. Examples with *-iino/-jno* suggest a relation with causative

¹⁰⁷ But see 11.1.4 for evidence that the deletion of *-no* is morphologically triggered.

*-ina but -iino/-jno appears also with many intransitive verbs like those in (5). The form usually seems to attract stress; no examples exist of -eno exist except as part of the desiderative suffix, underlying -i\$uminu or -it\$aminu (see 10.1.5 below). Some LU causative suffixes have this stress-attracting property, but none are obviously cognate with -iino/-jno.

- (5) TV
- a. *hom-iino-k* ‘drown’ (3.105.0093)
 - b. *jam-iino-k* ‘run, flow’ (3.103.0536)
 - c. *jo7oo-jno-k*~*jo7-iino-k* ‘vomit’ (3.105.0047, 3.105.0066)
 - d. *jop-iino-k* ‘drown’ (3.105.0042)
 - e. *kov-iino-k* ‘be hungry’ (3.104.0096)
 - f. *nong-iino-k* ‘walk about’ (3.105.0121)
 - g. *pah-iino-k* ‘dawn, become light’ (3.102.0599)
 - h. *t\$aa-jno-k* ‘be sick’ (3.103.0168)
 - i. *t\$or-iino-k* ‘wake up (intr.)’ (3.105.0121)
 - j. *t\$uu-jno-k* ‘drip’ (3.105.0151)

Overall, we have no sense as to what meaning attaches to -ino. For the time being, we gloss it simply as [-INO] or [-NO].

We conclude that the verbs of TV divide into but two classes, a thematic class which takes the nonfuture suffix from *-k, i.e. -k ~ -x, and a very small athematic class with a zero marking for nonfuture.

Examples of thematic verbs marked for nonfuture appear in (6).

- (6) TV
- a. *Noo = n = 7e* *t\$aaro-k*.
1SG.PRO = 1SG = IND dance.patada-NFUT
‘I am dancing the *patada*.’ (3.103.0183)
 - b. *Noo = n = 7e* *hevuut\$o-k*.
already = 1SG = IND wait.for-NFUT
‘Lo estoy esperando. (I am waiting for it.)’ (3.103.0301)

- c. *T\$aa-jno-k = mo = j.*
 be.sick-INO-NFUT = 3PL = IND
 ‘Están enfermos. (They are sick.)’ (3.104.0417)
- d. *Noo = n = 7e maa-jno-k kwa7-iive-t.*
 1SG.PRO = 1SG = IND make-INO-NFUT eat-NMLZ-ABS
 ‘Estoy haciendo comida. (I am fixing food.)’ (3.103.0164)
- e. *Heaa = 7e pe\$aa-x taame-t.*
 already = IND go.out-NFUT sun-ABS
 ‘Ya salió el sol. (The sun has come out.)’ (3.103.0644)
- f. *Noo = n = 7e wo\$aa7a-x wo\$ii7-a.*
 1SG.PRO = 1SG = IND look.at-NFUT dog-ACC
 ‘Estoy mirando el perro. (I am looking at the dog.)’ (3.103.0166)
- g. *Heaa = n = 7e xamee7-ena-x.*
 already = 1SG = IND bury-CAUS-NFUT
 ‘Ya lo enterré. (I already buried it.)’ (3.103.0544)
- h. *To~took-ra-m = e7 jakee-na-x.*
 PL~woman-ABS-PL = IND dance-CAUS-NFUT
 ‘The women are dancing.’ (3.104.0092)

For two athematic verbs the final *-x* is part of the verb root, seen in (7). As such, it is not lost in the future and thus cannot be identified as a thematic nonfuture suffix.

(7)	TV		nonfuture	future	root	
a.	leach acorn meal	<i>waax</i>	<i>waax-ro</i>	<i>waax</i>		(3.103.0620)
b.	eat pinole	<i>aax</i> ^{* 1}	<i>aax-ro</i>	<i>aax</i>		(3.103.0596)

¹ The root *aax* ‘eat pinole’ is attested only in its future form and in the derived noun *aaxey* ‘pinole’ (<’áaxe > 3.103.0596). Its cognates in the other languages also show **k* as part of the root, cf. SE *aak(y)* ‘eat a flour-like substance’.

10.1.2. LONG AND SHORT VERB BASES IN TONGVA. Alongside the large verb class defined by the nonfuture suffix, and the two athematic verbs in 10.1.1 (7), there are four verbs which appear in the nonfuture without any inflectional suffixes, and are defined as a class by having two base forms, long and short. These appear in (1). For these verbs, the short base constitutes the nonfuture, and the long base appears with the future suffix and in the imperative, and with a nominalization in *-t*, discussed below.

(1) TV		short base	long base	
	go	<i>mii</i>	<i>meaa</i>	(3.102.0552)
	come	<i>kii</i>	<i>kemaa</i>	(3.103.0335)
	be, dwell	<i>xaa</i>	<i>xaroo</i>	(3.103.0167)
	be, dwell, exist	<i>woo</i>	<i>woon</i>	(3.103.0363)

Note that short forms of the two verbs of being, *xaa* and *woo*, in context are often stressless and pronounced *xa*, *wo*. Similarly with *mii* ~ *me* 'go'. Harrington wrote them both ways. Examples of the base-changing verbs in the short, nonfuture, form appear in (2), with (2a) and (2b) showing stressed/long *mii* and unstressed *me* respectively. Stressless *wo* appears in (2e). In most examples throughout this study we write these short forms of verbs in their stressed/lengthened form.

- (2) TV a. *Heaa7mo = ne mii Jaa-ng7aro.*
 now = 1SG go.NFUT Los.Angeles-DAT
 'Ya me voy para L.A. (Now I'm going to Los Angeles.)' (3.104.0146)
- b. *Me = ne = 7 Jaa-ng7aro.*
 go.NFUT = 1SG = IND Los.Angeles-DAT
 'Voy para L. A. (said when already andando [going along])' (I'm going to Los Angeles.)' (3.104.0146)
- c. *Heaa7mo kii a-paahe-n.*
 now come.NFUT 3SG-dawn-PSD
 'Ya viene amaneciendo. (Now the sunrise is coming./Now comes the dawning [of the day].)' (3.103.0644)

- d. *Noo = n = 7e xaa ne-nuuno7.*
 1SG.PRO = 1SG = IND be.NFUT 1SG-alone
 ‘Estoy solo yo. (I am here alone.)’ (3.104.0414)
- e. *Ajoo7en = 7e wo toraana-t.*
 much = IND be.NFUT money-ABS
 ‘Hay mucho dinero. (There is a lot of money.)’ (3.104.0095)

10.1.3. THE K-CLASS IN TONGVA. While the suffix *-ena* discussed above is a reflex of the k-class causative, otherwise TV exhibits the least robust survival of the k-class of any of the Takic languages. K-class behaviors are hinted at by a few examples such as those in (1a-c), which contrast with other examples in which an apparent stem-final *k* is stable, like those in (1d,e). In the latter cases, the *k* is a derivational suffix that yields adjectives in *-k(o)*.

- | | | | | |
|-----|----|----|--|---|
| (1) | TV | a. | <i>horoop-k-ena-x</i> ‘poke a hole’
(3.103.0497) | <i>horoop-e7</i> ‘having holes, a hole’
(3.103.0497) |
| | | b. | <i>horoor-k-ena[-x]</i> ‘empty s.th’
(3.105.0156) | <i>horoor-en-mo-k</i> ‘rush out, of water’
(3.103.0546) |
| | | c. | <i>weraar-k-ena-x</i> ‘circle in the
dance’ (3.104.0170) | <i>weraar-en-mo-k</i> ‘revolve’ (3.104.0170) |
| | | d. | <i>toaaj-k-ena-x</i> ‘lo quebró (he broke
it)’ (3.105.0084) | <i>toaaj-ko-mo-k</i> ‘se quebró (it broke)’
(3.105.0084) |
| | | e. | <i>araa-k-ena-x</i> ‘slice’ (3.105.0106) | <i>araa-k-mo-k</i> ‘split (by itself)’ (3.105.0106) |

An example has been found of a verb in *-k-ena-x* that corresponds to an adjective in *-ke*, shown in (2). In Serran, adjectives in *-ki7* derive from k-class verbs. This may be true of TV as well, at least diachronically. However, it is unclear whether the verb in (2a) really represents a true k-class verb formation or whether it is deadjectival, based directly on the adjective in (2b).¹⁰⁸

¹⁰⁸ It also seems possible that adjectives in *-ke* derive from underlying intransitive k-class verbs as they do in SE, but no evidence on this has been found.

- (2) TV a. *Xahuut-k-ena-x = no = j.*
 straight-K-CAUS-NFUT = 1SG > 3SG = IND
 ‘Lo estoy enderezando. (I’m straightening it.)’ (3.104.0553)
- b. *Xahuut-ke xaa.*
 straight-ADJZ be
 ‘Está derecho. (It’s straight.)’ (3.104.0517)

Another example of a derived verb in *-k-ena-x* is *t\$ot\$uut\$-k-ena-x* ‘play peon’ (3.103.0188), related to the noun *t\$ot\$uut\$-ke* ‘peon game’ (3.104.0017) (also called *tavij*, literally, “the putting” (3.102.0612)). The derivational source of *t\$ot\$uut\$-ke* is unknown.

The paucity of examples like those above do not allow the conclusion that the k-class has an active status in TV.

A suffix *-mo* appears before nonfuture *-k* in (1b-e). In examples (1b,c), this suffix, with a progressive or continuative meaning, displaces the *-k* of the left-hand column and occurs after the causative morpheme *-ina*, not before it like *-k-*. Considering this distribution, it seems most unlikely that *-mo* might be a reflex of the k-class pluralizing/repetitive/augmentative suffix **-my-*. A more likely relationship is with the Cupan motion suffix in *m* which appears in LU as *-mun* (10.4.2.2 (2)). Motion suffixes add a sort of progressive color which is often lost in translation. If we have identified this correctly, we see in TV the sense of **-myn* having changed from motion to progressivity or durativity. This is parallel to the change in the sense of **-Lu7a*, with reflexes meaning “purposive motion” in other Takic languages, from motion to future tense, TV *-ro*. We label the TV suffix *-mo* tentatively as PROG. In addition to its progressive sense, TV *-mo* seems also to function as a general intransitive-verb-deriving suffix. (The suffix *-n-* that precedes *-mo* in (3) remains unidentified.)

- (3) TV a. *\$eraaw7a-x* ‘speak’ *\$e~\$iiro7a-n-mo-k* ‘be speaking’ (3.103.0361)
 [speak-NFUT] [CONT~speak(?) -PROG-NFUT]
- b. *mii ~ meaa* ‘go’ *me~meaa-n-mo-k* ‘go repeatedly, customarily’
 (3.102.0552) (3.104.0417)

The suffix *-mo* also derives verbs from adverbs and adjectives with the suffix *-k(o)* (see 13.15.4.1), as in (4).

- (4) TV a. *aawm-ko* ‘dark’ (3.103.0151) *aawm-ko-mo-k* ‘be dark, be getting dark’
(3.103.0151)
b. *moriiv-ko* ‘sad’ (3.103.0097) *moriiv-ko-mo-k* ‘be sad’ (3.105.0491)
c. *karuu-k* ‘parado (standing)’ (3.103.0671) *karuu-k-mo-k* ‘stand up, stop’
(3.103.0109)

The root *avaak-* ‘fly’ is attested only with *-mo*, seen in (5). Example (5c) shows a rare element *-me-*, which Harrington remarks is “very imp’t.” – without saying why. It seems to mark plurality of subject, perhaps making it a candidate for a reflex of the k-class **-m-* suffix. Note that the two etymological motion suffixes, *-mo* and *-ro*, can cooccur, as in (5b).

- (5) TV a. *avaak-mo-k* ‘se voló (it flew away)’ (3.105.0024)
b. *avaak-mo-ro* ‘va [a] volar (will fly)’ (3.105.0024)
c. *avaak-me-mo-k* ‘several fly’ (3.105.0024)

The examples in (6) were initially thought to contain further instances of *-me*, but in fact the syllable *me* contains a morpheme break, with *-m-* from progressive *-mo* and *-e* the beginning of agentive *-e7a(-r)* (cf. Serran *-i7a(-t\$)*). (6a) relates to (5a,b) and (6b) to the verb in (6c). (6d) is provided to show the same verb root with the causative *-ina* (see 10.1.4), which displaces *-mo*. This may be further evidence that *-mo* is an intransitive-stem-forming element, in contrast with transitivizing *-ina*.

- (6) TV a. *avaak-m-e7a-r* ‘flier’ (3.105.0024)
[fly-PROG-AGTV-ABS]
b. *xamaak-m-e7a-r* ‘heavy drinker’ (3.105.0056)
[inebriated-PROG-AGTV-ABS]
c. *xamaak-mo-k* ‘está borracho (he’s drunk)’ (3.104.0554)
[inebriated-PROG-NFUT]

- d. *xamaak-ena-x = no = j* ‘lo estoy emborrachando (I’m getting him drunk)’
 (3.104.0554)
 [inebriated-CAUS-NFUT = 1SG = IND]

10.1.4. CAUSATIVES. Many TV causatives are derived with *-ena/-jna* (1) or *-iino/-jno* (2). *-ena* is from **-ina*, which is widely attested in other Takic languages as well as in wider Uto-Aztecan, including Hopi and Tübatulabal. Voegelin (1935:100) says of the Tübatulabal suffix, which he cites as *-(i)n*, “*-(i)-* vowel increment [...], *-n* suffix proper.” Heath (1977, 1978) echoes Voegelin and analyzes **-ina* as a sequence of ablaut vowel **-i* and causative **-na*. (For ablaut vowels, see 4.5.3.)

(1)	TV	intransitive	causative
	a.	<i>araak-mo-k</i> ‘be sliced’ (3.105.0091)	<i>araak-ena-x</i> ‘slice s.th’ (3.105.0106)
	b.	<i>xamaak-mo-k</i> ‘be drunk’ (3.104.0554)	<i>xamaak-ena-x</i> ‘make sbdy drunk’ (3.104.0554)
	c.	<i>ee\$a-x</i> ‘paint, paint self’ (3.103.0091)	<i>e\$aa-jna-x</i> ‘paint s.th’ (3.105.0130)
	d.	<i>hooje7a-x</i> ‘shake (intr.)’ (3.105.0142)	<i>hooj-ena-x</i> ‘shake s.th’ (3.105.0477)
	e.	<i>horoop-e7</i> ‘a hole’ (3.103.0497)	<i>horoop-k-ena-x</i> ‘poke a hole in s.th’ (3.103.0497)
	f.	<i>juu-ke</i> ‘cry’ (3.104.0332)	<i>juu7-ena-x</i> ‘play instrument’ (3.103.0703)
	g.	<i>kwa7aa-x</i> ‘eat’ (3.103.0773)	<i>kwa7aa-jna-x</i> ‘feed’ (3.104.0498)
	h.	<i>xaa, xaroo</i> ‘be, stay’ (3.103.0167)	<i>xaraa-jna-x</i> ‘make stay’ (3.104.0506)
(2)	TV		
	a.	<i>pe\$a-x</i> ‘go out’ (3.102.0676)	<i>pe\$-iino-k</i> ‘take s.th out’ (3.103.0332)
	b.	<i>poh-no-k</i> ‘be full’ (3.104.0346)	<i>puu-jno-k</i> ‘fill s.th’ (3.103.0334)
	c.	<i>too-k</i> ‘burn (intr.)’ (3.105.0048)	<i>to-iino-k</i> ‘burn s.th’ (3.105.0078) ~ <i>too-jno-k</i> (3.103.0076)

Not all verbs with **-ina* or **-ino* are causative or transitive. For instance, with *-ena-x* we find *ngoaaqj-ena-x* ‘be dull, of blade’, *vo7aa7-ena-x* ‘be rolling’. With *-iino-k* we find *nong-iino-k* ‘walk around’, *morii-no-k* ‘be sad’, *pahii-no-k* ‘dawn’, and *por-iino-k* ‘fall’. Other verbs in **-ina*, like *t\$e7ee-na-x* ‘sing’, *jakee-na-x* ‘dance’, and *t\$et\$ut\$k-ena-x* ‘play peon (a gambling game)’ seem to be intransitive, but further cultural knowledge might reveal

that they are transitive after all.¹⁰⁹ Nonetheless, it seems clear that something like a k-class causative derivation survives in TV, if only marginally. Example (1e) is particularly suggestive, since it has a consonant-final root, and a sequence *-k-ena-x*, where *-k-* may represent the thematic suffix of the k-class.

10.1.5. THE DESIDERATIVE. The attested desiderative verbs are listed in (1).

- | | | | | |
|-----|----|----|--|--|
| (1) | TV | a. | <i>hekaaj-\$meno-k</i> ‘want to be windy’
(3.105.0126) | <i>hekaajo-k</i> ‘be windy’
(3.103.0036) |
| | | b. | <i>jakee-\$meno-k</i> ‘want to dance’ (3.104.0370) | <i>jakeena-x</i> ‘dance’
(3.104.0092) |
| | | c. | <i>kwa7-ii\$meno-k</i> ‘want to eat’ (3.104.0096) | <i>kwa7aa-x</i> ‘eat’ (3.103.0773) |
| | | d. | <i>max-ii\$meno-k</i> ‘want to give’ (3.103.0462) | <i>maxaa-x</i> ‘give’ (3.104.0499) |
| | | e. | <i>mii-\$meno-k</i> ‘want to go’ (3.104.0370) | <i>mii</i> ‘go’ (3.105.0343) |
| | | f. | <i>mokaa-\$ameno-k</i> ‘want to kill’ (3.104.0099) | <i>mokaana-x</i> ‘kill’ (3.105.0150) |
| | | g. | <i>o-ii\$meno-k</i> ‘want’ (3.105.0344) | <i>uu-k*</i> ‘take’ (only future <i>uu-ro</i>
and imperative <i>uu7</i> attested)
(3.104.0389) |
| | | h. | <i>paa-j\$meno-k</i> ‘want to drink’ (3.104.0107) | <i>paa-x</i> ‘drink’ (3.103.0773) |
| | | i. | <i>\$e~\$ii-\$meno-k</i> ‘want to urinate’
(3.105.0041) | <i>\$e~\$ii-k</i> ‘urinate’
(3.105.0041) |
| | | j. | <i>wiik-\$omeno-k</i> ‘want to suck’ (3.105.0392) | <i>wiiko-k</i> ‘suck, draw on (a
pipe)’ (3.105.0365) |

The attested forms of ‘want to kill’ (1e) are various and are given in (2).

- | | | | | |
|-----|----|----|--|-------------------------|
| (2) | TV | a. | <i>Noo = n = a = 7</i> | <i>mokaa-\$amino-k.</i> |
| | | | 1SG.PRO = 1SG = 3SG.OBJ = IND | kill-DES-NFUT |
| | | | ‘Yo lo quiero matar. (I want to kill him.)’ (3.104.0099) | |

¹⁰⁹ The Cupeño verb ‘dance’, *tan-in*, also shows transitive morphology though it appears to be intransitive in usage.

- b. *Noo = n = a = 7* *xaj7* ***mokaan-\$amino-k***
 1SG.PRO = 1SG = 3SG.OBJ = IND NEG kill-DES-NFUT
 ‘Yo no lo quiero matar. (I don’t want to kill him.)’ (3.104.0099)
- c. *Noo = n = 7a* ***moka-\$amiino-k***
 1SG.PRO = 1SG = 3SG.OBJ kill-DES-NFUT
 ‘Yo lo quiero matar. (I want to kill him.)’ (3.105.0161)
- d. *Xaj = no = j* ***mokaa-\$amì-t***
 NEG = 1SG > 3SG = IND kill-DES-ABS(?)
 ‘No lo quiero matar. (I don’t want to kill him.)’ (3.105.0161)
- e. *Noo = n = 7a* ***mokan \$amiino-k***
 1SG.PRO = 1SG = 3SG.OBJ kill DES-NFUT
 ‘Yo lo quiero matar. (I want to kill him.)’ (3.105.1051)
- f. *Xaj = no = j* ***mokaan \$amì-t***
 NEG = 1SG > 3SG = IND kill DES-ABS(?)
 ‘No lo quiero matar. (I don’t want to kill him.)’ (3.105.0151)

Harrington elicited these forms in pairs on three different occasions, (2a,b, 2c,d, 2e,f), with quite inconsistent results, no speaker providing the same combining form of the verb *mokaana-x* ‘kill’ in both elicited sentences. One speaker broke the compound verb into what Harrington transcribed as two words (2e,f). Example (2b) provides the only example of word-internal *-n\$-* in the Harrington TV corpus. Stress is variously distributed. Examples (2d,f) have a predicate complement, *\$amit*, that looks like an immediate past form, but that identification is incompatible with the translation provided – on both occasions. And that element is transcribed with what we understand to be secondary stress. This is highly unusual. There are very few examples in the Harrington notes with secondary stress indicated.

Regardless though of the analytic problems here, the forms in (2) indicate that the vowel *a* is, for some speakers at least, part of the underlying form of the desiderative suffix: *-i\$aminU*. On the other hand, *wiik-\$omeno-k* ‘want to suck’ (1i) points to an alternative underlying form *-i\$uminU*, with our postulated *u* here based on the likelihood

that the TV desiderative is related to the KI desiderative in *u* cited below. However, we find no evidence regarding whether the final *U* of *-i\$uminU/-i\$aminU* relates to *o* or to *u*.

It might seem that the desiderative suffix is a grammaticization of the verb *oii\$meno-k* ‘want, like’. But *oii\$menok* is itself a desiderative form, derived from *uu-k* ‘take’, as already indicated above in (1f). Examples with this verb are given in (3).

- (3) TV a. *He-taa = 7a* *o-ii\$meno-k*.
 INDF-ABS:ACC = 2SG take-DES-NFUT
 ‘¿Qué quieres? (What do you want?)’ (3.104.0370)
- b. *Xaaj = n = a = j* *o-ii\$meno-k* *mejaa* *tokoo-ra*.
 NEG = 1SG = 3SG.OBJ = IND take-DES-NFUT PROX woman-ABS:ACC
 ‘No quiero a esta mujer. (I don’t like this woman.)’ (3.104.0370)

Oii\$menok seems related to KI *uujuun* and SE *uii7wyn(a)* ‘want’, with *uu7* ‘take’ as its first element. TV *-ii\$m-* probably represents a distortion of **-i\$uuna*, which appears in KI as *-juun ~ -ihuun*, with regular Serran **\$ > h*. The SE sequence *-iwyn(a)* represents a different distortion of **-i\$uuna*, which may be from **\$uuna* ‘heart’.

10.1.6. BASE DERIVATION WITH REDUPLICATION. In other Tactic languages some aspectual distinctions, especially for repetitives and distributives, are encoded through reduplication. Evidence for this derivational process in TV is limited. A few of the rare examples appear in (1).

- (1) TV a. *Oee* *taame-ta = no = j* *me~meaa-n-mo-k*.
 all day-ABS = 1SG = IND DISTR-go-(?)-PROG-NFUT
 ‘Todos los días yo iba. (I used to go every day.)’ (3.104.0417)
- b. *Pa~vaaw7-en-mo-k = mo = j*. (*paaw7-ena-x* ‘shout’)
 CONT~shout-CAUS-PROG-NFUT = 3PL = IND
 ‘Están gritando. (They are shouting.)’ (3.105.0068)

- b. *chypk(y)* ‘be lost, get lost’
Chypky-j = vy-7. *Kwyny chypk.*
 get.lost-IND = 3SG-PST QUOT.3PL get.lost
 ‘It got lost.’ ‘They got lost, it is said.’
- c. *hyiĩn-t\$u7(a)* ‘go hunting’
Hyiĩn-t\$u7a-j = kwyny wyt\$y^Rha-m. Qaj hyiĩn-t\$u7.
 hunt-MOT-IND = QUOT.3PL man-PL NEG hunt-MOT
 ‘The men went hunting.’ ‘He didn’t go hunting.’
- d. *oo^R\$an(a)* ‘write’
Oo^R\$ana-j = n. Oo^R\$an = t\$.
 write-IND = 1SG write = 2SG.IMP
 ‘I am writing.’ ‘Write!’

There are some examples of verbs followed by an auxiliary but with no suffix *-j*. This is found most often with the verb *qat\$(y)* ‘exist, be there’, as in (2a), with the indicativized form *qat\$y* attested only with animate subjects and in its “heavier” meanings ‘be alive’, ‘dwell’, as in (2b,c), rather than just in the “light” meaning ‘be’ as in (2a).

- (2) SE a. *Uviht qat\$ kwyny = vy-7 hii-ta-7a7 ivi7 wyt\$y^R\$-t\$*
 long.ago be QUOT = 3SG-PST INDF-ABS-UNCERT PROX man-ABS
jaraa-7n-ka7 hii-t-i ooro7-ti ngaan-i7a-t\$,
 white-ST-K.CHAR INDF-ABS-ACC gold-ACC seek-AGTV-ABS
\$yrii-7n-ka7 tymy-t-i.
 red-ST-K.CHAR rock-ABS-ACC
 ‘Long ago there was something, this White man who was a gold prospector.’
 <‘Uviht qac kwenevu’ hita’a’ ‘ivi’ wecerc yarra’nka’ xhiiti’ oorro’ti’ ngaani’ac, sherri’nka’
 teme’ti’.> (R&E 442)
- b. *Qat\$y-j = m amaj7 jangky = m iihkwp jaraa-7n-ka-m.*
 be;live-IND = 3PL now but = 3PL half white-ST-CHAR-PL
 ‘They (my relatives) are living now but they’re half White.’

- c. “*Qat\$y-j = m qaii-v pajykja7 pyjaan hiñi-my-7 –*
 be; dwell = 3PL mountain-LOC away far INDF-PL-UNCERT
ahy^Rnga-m, majha-m,” ky-j = kwyn py-my-kja7.
 eagle-PL child; young-PL say-IND = QUOT.3SG 3-PL-DAT
 ‘“Far away on the mountain live some beings – eagles, young ones,” she said
 to them.’

Verbs in *-a7* seemingly lack any underlying final vowel and the indicative suffix follows the glottal stop of the stem. With such verbs, a theoretical stem-final vowel *a* is lost after *a7* and the indicative suffix vocalizes: *-j > -i* (cf. 4.2.12.2). This contraction is reminiscent of the *V-j* contraction to *-i* with the accusative case (4.2.12.1). Verbs of this sort include the roots of *kwa7-i* ‘eat (tr.)’, *ja7-i* ‘run’, *maaja7* ‘ask’, and *aarsa7* ‘pray’ (< Spanish *rezar*), as well as denominal verbs derived with the suffix *-7a* (see 13.15.3) such as *paa-7* ‘drink’ (from *paa-7a*, cf. *paa-t\$* ‘water’) and *majha-7* ‘give birth’ (from abstract *majHa-7a*, cf. *ny-majr* ‘my child’, *ny-majha-m* ‘my children’), and *oo^Rva-7* ‘be strong’ (< *oo^Rva-7a*, cf. *oo^Rva-v-k(y)* ‘get stronger’). The examples in (2), show verbs with indicative *-i* (2a,c) and without it (2b,d).

- (3) SE a. ***Paa-7-i = ny-7.***
 water-VBLZ-IND = 1SG-PST
 ‘I drank.’
- b. *Acham = ch paa-t\$i paa-7.*
 1PL.PRO = 1PL > 3SG water-ABS-ACC water-VBLZ
 ‘We’re drinking water.’
- c. ***Oo^Rva-7-i = n.***
 strong-VBLZ-IND = 1SG
 ‘I am strong.’
- d. *Hakup = my-7 oo^Rva-7.*
 very = 3PL-PST strong-VBLZ
 ‘They were very strong.’
 < *hakupmu* ‘ervra’. > (R&E 178)

The indicative suffix is also present on indicative verbs with question intonation (cf. 8.3.2.3), as in the examples in (4).

- (4) SE a. *Maa. Qaj=t ymi7 maamt\$y-j ?*
 listen.IMP.SG NEG = IRR:2SG > 3SG 2SG.PRO hear-IND Q
 ‘Listen! Don’t you hear it?’ [= 8.3.2.1 (1)]
- b. *Muum-t ta = vy-7 muumu7-ky-j ?*
 owl-ABS IRR = 3SG-PST hoot-K-IND Q
 ‘Did the owl hoot?’

But question intonation with non-indicative verb forms does not trigger the presence of *-j*, as in (5), where the potential modal *kwy7* requires that the verb be in the imperative form rather than the indicative. (5a-c) and (5d) show two phonetic strategies for imperative verb forms to accommodate question intonation, an inserted echo vowel after the glottal stop in (5a-c) and secondary lengthening in (5d).

- (5) SE a. *Acham kwy7=ch tyy7-y ? (< tyy7(a))*
 1PL.PRO POT = 1PL > 3SG roast-ECHO Q
 ‘Can we roast it?’
- b. *Kwy7=t\$ uu7-u ? (< uu7(a))*
 POT = 2 > 3SG.IMP get-ECHO Q
 ‘Could you get it?’
- c. *Kwy7=t\$=py joo^R7-o^R ? (< joo^R7(a))*
 POT = 2 = 2 > 3PL dry-ECHO Q
 ‘Can you dry them?’
- d. *Kwy7=t\$ iich ? (< icha-j < ichaa + -j)*
 POT = 2 > 3SG.IMP dip Q
 ‘Could you dip it?’

Some indicative verbs require the suffix regardless of syntactic position. That is, these verbs take the indicative suffix regardless of whether or not they appear with a following cliticized AUX or with question intonation, again, except in imperatives. An example of a sentence with a verb with indicative morphology but not in a pre-auxiliary position is given in (6a). Compare the corresponding imperative in (6b).

- (6) SE a. *Tum hii-t-i=kwyn my^Rka^Rn, ami7=kwyn*
 DISTR INDF -ABS-ACC = QUOT.3SG > 3SG kill(sg.obj.) and = QUOT.3SG > 3SG
chei7-p tavy-j ama-j.
 bush-LOC put-IND DIST-ACC
 ‘Whenever he killed something, he left it on a bush.’
- b. *Wachkich tav.*
 beside put.IMP
 ‘Set it beside!’

The verbs that take the suffix *-j* in the indicative mood regardless of context that have been identified are listed in (7, 8, 9). In terms of underlying forms, this set includes the monosyllabic verbs (7) and the disyllabic verbs with short initial syllables (8). The exceptions are the five common light verbs in (9). The immediate future and imperative are provided in (7, 8) because they are useful in establishing underlying forms. A few of these verbs lack an attested immediate future and for several there is no imperative.

(7) SE	indicative	imm. future	imperative	underlying form
catch	<i>je-j</i>	<i>jaay-ka7</i>	<i>ja ~ jaay7</i>	<i>jaay</i>
go	<i>mi-j</i>	<i>miaa-qa7</i>	<i>mia</i>	<i>miaa</i>
say	<i>ky-j</i>	<i>ky-ka7</i>	(?)	<i>ky</i>
see	<i>hi-j</i>	<i>hiy-ka7</i>	<i>hiy7</i>	<i>hiy</i>
shoot	<i>mu-j</i>	<i>mua-qa7</i>	<i>mu(u=)</i>	<i>mua</i>
snow	<i>ju-j</i>	<i>jua-qa7</i>	(?)	<i>jua</i>

(8) SE	indicative	imm. fut.	imperative	underlying form
arrive	<i>pichy-j</i>	<i>pichyy-ka7</i>	(?)	<i>pichyy</i>
be (sg.inan.)	<i>wyny-j, wyn</i>	(?)	(?)	<i>wyny</i>
bring	<i>pina-j</i>	<i>pina-qa7</i>	(<i>jaa7</i>) ¹	<i>pina</i>
burn (intr.)	<i>hu7a-j</i>	<i>hwa7-qa7</i>	(?)	<i>hu7a</i>
get cooked, ripen	<i>kwahy-j</i>	(?)	(?)	<i>kwahy</i>
die (pl.)	<i>qo^R7a-j</i>	<i>q^Ra7-qa-m</i>	(?)	<i>qo^R7a</i>
dip	<i>icha-j</i>	<i>ichaa-qa7</i>	<i>ich</i>	<i>ichaa</i>
do	<i>ñiha-j</i>	<i>ñiaa-qa7</i>	<i>ñia</i>	<i>ñihaa</i>
eat (tr.)	<i>kwa7-i</i>	<i>kwa7-qa7</i>	<i>kwa7</i>	<i>kwa7a</i>
gather, pick	<i>chawe-j</i>	<i>chawyy-ka7</i>	<i>chaw</i>	<i>chawyy</i>
gather firewood	<i>kut\$a-j</i>	<i>kut\$a-ka7</i>	(?)	<i>kut\$a</i>
gather from ground	<i>chi7a-j</i>	<i>chia7-qa7</i>	<i>chia7</i>	<i>chi7a</i>
get, take	<i>aje-j</i>	<i>aja-qa7</i>	<i>aj(a=)</i>	<i>aja</i>
give	<i>maqa-j</i>	(?)	<i>maq(a=)</i>	<i>maqa</i>
lie (anim.)	<i>yky-j</i> ²	<i>yky-ka7</i>	(?)	<i>yky</i>
pound	<i>tu7a-j</i>	<i>tua7-qa7</i>	(?)	<i>tu7a</i>
pulverize	<i>pinga-j</i>	(?)	<i>ping</i>	<i>pinga</i>
put (pl.obj.)	<i>wiha-j</i>	<i>wihaa-qa7</i>	<i>wir</i>	<i>wiHaa</i> ³
put (sg.obj.)	<i>tavy-j</i>	<i>tavy-ka7</i>	<i>tav</i>	<i>tavy</i>
run	<i>ja7-i</i>	<i>ja7-qa7</i>	<i>ja7</i>	<i>ja7a</i>
sew	<i>ho^R7a-j</i>	<i>ho^Ra7-qa7</i>	<i>ho^R7</i>	<i>ho^R7a</i>
skin	<i>hikwe-j</i> ⁴	(?)	(?)	<i>hikwa</i>
steal	<i>yjy-j</i>	<i>yjy-ka7</i>	<i>yj</i>	<i>yjy</i>
throw, drop	<i>puka-j</i>	<i>puka-qa7</i>	(?)	<i>puka</i>

¹ The imperative of *pinaj* 'bring', expected **pin*, is not used. Instead the verb *jaa7* is substituted.

² *Ykyj* is used for animate subjects; cf. inanimate *yk* 'be in a location (sg.)' (8b).

³ "H" in underlying form represents the consonant that undergoes the *h ~ r* alternation.

⁴ *hikwej* is attested only in Ramón & Elliott 2000, spelled <*hikway*> (p. 76) and <*hiqway*> (p. 887).

The exceptional short verbs are shown in (9). *Qat\$* (9a), as mentioned above, usually takes no indicative suffix even when preceding AUX.

(9) SE		unmarked	with -j	imm. fut.	imper.	UF
a.	be (anim.)	<i>qat\$</i>	<i>qat\$y-j =</i>	<i>qat\$yka7</i>	<i>qat\$</i>	<i>qat\$y</i>
b.	be (inan.sg.)	<i>yk</i>	<i>yky-j</i>	(?)	(?)	<i>yky</i>
c.	be (inan.pl.)	<i>wyn</i>	<i>wyny-j</i>	(?)	(?)	<i>wyny</i>
d.	come	<i>kim</i>	<i>kima-j</i>	<i>kimaqa7</i>	<i>kiva</i>	<i>kima</i>
e.	walk	<i>nym</i>	<i>nymy-j</i>	<i>nymy-ka7</i>	<i>nym</i>	<i>nymy</i>

In earlier stages of our work on Takic, it seemed as though the suffix *-j* might be regarded as a “focalizing” morpheme because of its obligatory occurrence at the end of a clause-initial verb before a following AUX. Since Takic syntax is underlyingly verb-final, a verb in clause-initial position may be presumed to have been moved to a focal position. However, the putative “focal” element must appear before an overtly expressed AUX even when the verb is the only word in the clause, i.e., in a context where the verb which happens to begin the clause cannot be construed as moved, as in (10).

- (10) SE *Mii\$-k-ina-j = n.*
 moisten-K-CAUS-IND = 1SG > 3SG
 ‘I’m wetting it.’

Further, compare (11), where the verb is in the same position as in (9) but with a zero AUX in the one-word clause. Here the verb cannot be marked with *-j* though it is surely no less “in focus” than the verb of (10).

- (11) SE *Mii\$-k-in* \emptyset .
 moisten-K-CAUS 3SG > 3SG
 ‘He’s wetting it.’

A verb following AUX but preceding its object is theoretically promoted to clause-initial position, and thus “in focus.” However, with the alternative placement of AUX before rather than after the clause-initial verb, as in (12), the putative “focus” suffix does not appear.

- (12) SE a. *Kwyn piivi7 ama-j Miingah-t-i.*
 QUOT:2SG > 3SG throw.at DIST-ACC Gopher-ABS-ACC
 ‘She threw things at Gopher.’
- b. *Kwyny = vy ngaan a-majha-m.*
 QUOT = 3SG > 3PL look.for 3SG-child;son-PL
 ‘She looked for her children.’
- c. *Kwyny = vy-7 tiy^Rha-t\$u7 ama-j naash-t a-na7n-i.*
 QUOT = 3SG > 3SG-PST tell-MOT DIST-ACC girl-ABS.GEN 3SG-father-ACC
 ‘She went and told the girl’s father.’
- d. *Kwyn jaa7 ama-j a-wy^Rt\$yhav-ti aa-ngkwa7 ama-ch*
 QUOT.3SG > 3SG take DIST-ACC 3SG-husband-ACC DIST-DAT DIST-GEN
tymy-t py-jykja7.
 rock-ABS.GEN 3SG-DAT
 ‘She took her husband there, to the rock.’

A clause-initial verb followed by adverbial material is similarly unmarked when AUX precedes.

- (13) SE *Kwyny kuuman aa-p paah-i a-tuuk.*
 QUOT.3PL sleep DIST-LOC three-times NMLZ-at.night
 ‘They slept there three nights.’

Our “indicative” analysis, then, rather than “focus,” is based on the two observations that (a) *-j* is found only on indicative verbs, on some regardless of syntactic position, and (b) when governed by syntactic position, it is the location of AUX (or question intonation) that triggers the occurrence of *-j*, not the position of the verb with respect to its clausemates.

10.2.2. VERB CLASSES. The great classificatory division in SE verbs is between k-class and the athematic class.

Verb roots which can appear with the thematic suffix *-k(y)* constitute the k-class. The basic form for this class is a consonant-final verb root plus a thematic suffix *-k(y)*. This combination has a mainly perfective sense. The resultative suffix *-y7* (with allomorphs *-y^R7*, *-u7*) can be added to make it imperfective. Since the resultative suffix precedes thematic *-k(y)*, this shows that *-k(y)* in itself is aspect neutral. Many derived forms within this class have endings other than *-k(y)*, but their adherence to special canonical shapes reveals them as k-class formations.

The athematic verbs are the other verbs of the language, the non-k-class verbs. They are all underlyingly vowel-final. Many of them are denominal or otherwise-derived forms.

10.2.2.1. K-CLASS VERBS. Examples of k-class verbs ending in thematic *-k(y)* appear in (1). Nearly all verbs in this class are basically intransitive and form corresponding transitives with the causative *-in(a)* (as seen below in (3)).

- (1) SE *hiiñ7-k* 'fly' (also heard as *hiiñi7-k*)
hioo^Rch-k 'go up'
huch-k 'fall (sg.)'
kur-k 'fall (pl.)'
moo^Rq-k 'fold'
myyj7-k 'hide'
puraq-k 'exit, go out (sg.)'
typiñ-k 'stumble'
wajaq-k 'exit, go out (pl.)'
ychyyv-k 'get cold, of weather'

A few k-class verbs are lexically transitive. Some examples of k-class transitives are given in (2).

- (2) SE *dheeve7-k* 'owe' (< Spanish *debe* '3SG owes')
hwaa^Rt\$-k 'climb'

<i>k^Rijij-k</i>	‘hate’
<i>mamajyv-k</i>	‘help’
<i>umi7-k</i>	‘forget’ (takes <i>-huun</i> ‘heart’ as subject)

Most commonly, transitive forms of k-class verbs are formed by the addition of a causative suffix *-in(a)*, added after the thematic *-k*. A few examples are given in (3).

(3)	SE	intransitive	transitive
		<i>atiy^R7av-k</i> ‘get bigger’	<i>atiy^R7av-k-in</i> ‘make bigger’
		<i>cha^Rna^Rn-k</i> ‘wake up’	<i>cha^Rna^Rn-k-in</i> ‘wake sbdy up’
		<i>kumu7-k</i> ‘turn over’	<i>kumu7-k-in</i> ‘turn s.th over, dump’
		<i>mana7-k</i> ‘return home’	<i>mana7-k-in</i> ‘take s.th home’
		<i>mii\$-k</i> ‘get wet’	<i>mii\$-k-in</i> ‘moisten, make wet’
		<i>moo^Rq-k</i> ‘fold’	<i>moo^Rq-k-in</i> ‘fold s.th’
		<i>myraq-k</i> ‘come loose’	<i>myraq-k-in</i> ‘make loose’
		<i>na^Rch-k</i> ‘get stuck together’	<i>na^Rch-k-in</i> ‘stick together, put a patch on, glue’
		<i>ngyryh-k</i> ‘move over’	<i>ngyryh-k-in</i> ‘move s.th over’
		<i>pit-k</i> ‘fill (re filler)’	<i>pit-k-in</i> ‘fill s.th’

The transitive verbs of (2) entail no change in the behavior of the object whereas those of (3), with the causative *-in(a)*, do. The examples in (4) illustrate the difference in the transitivity of forms of the verb ‘climb’.

(4)	SE	a.	<i>Ama-j</i>	<i>qaii-ch-i=m</i>	<i>hwaa^{Rt}\$-k.</i>
			DIST-ACC	hill;mountain-ABS-ACC = 3PL > 3SG	climb-K
			‘They climbed the hills.’		
		b.	<i>Ii-piu7=ny</i>	<i>hwaa^{Rt}\$-k-in</i>	<i>ii-p.</i>
			PROX-ABL = 1SG > 3PL	climb-K-CAUS	PROX-LOC
			‘Here I had them (the girls) climb up from here.’		

In (4a), the hills get climbed while in (4b), the girls are caused to do the climbing. The verb *hwaa^{Rt}\$k(y)* ‘climb’ in (4a) is clearly transitive with an accusative-case object, but (4b), with the causative *hwaa^{Rt}\$kin(a)* ‘have someone climb’ shows no overt object

referring to what got climbed. The addition of *-in(a)* in (4b) has created what in principle should be a ditransitive verb, but unfortunately the overt expression of two overt accusative objects within a clause, as with *maqaj* ‘give’ in (5), is extremely rare and no such example is attested for the causative of any verb like those in (2).

- (5) SE *Qaj = kwyn* *hami-j* *hii-t-i* *maqaj-j.*
 NEG = QUOT.3SG > 3SG > 3SG INDF.HUMAN-ACC INDF-ABS-ACC give-IND
 ‘She never gave anything to anybody.’

All verb stems in the k-class, including the resultatives, end in consonants. In many cases, the final consonant seems to be metathesized from a position before a vowel. However, examples demonstrating this pattern are hard to find. An unusual, clear example is k-class *kout-k* ‘get cut’, which is related to athematic *katu7* ‘cut up, cut into several pieces’.

An intriguing diachronic example of k-class metathesis is found in the verb *hwaa^{Rt}t\$-k* ‘climb’, examples of which are seen above in (4). *Hwaa^{Rt}t\$-k* seems to be related to LU *hilaalax/i*, of the same meaning. Both *hwaa^{Rt}t\$-* and *hilaa-* may be from PTak **hoLaa*. In SE, **hoLaa* > **ho^{Rt}t\$aa*, which metathesizes to **ho^Raat\$*, which then adjusts in rhotacism to *hwaa^{Rt}t\$*; in LU, **hoLaa* > **hela* > *hilaa*.

Synchronic relationships between k-class and athematic verbs like *koutk* ‘cut’ and *katu7* ‘cut’ (same meaning?) are quite rare. Both of these forms appear to be derived: *kout-k(y)* is derived by metathesis (and then **au* > *ou*) and adds of the thematic suffix *-k(y)*; *katu7(a)* is derived from the root *katu* by the addition of the derivational suffix *-7a*. The suffix *-7a* was mentioned above, cf. *paa-7* ‘drink’, from *paa-7a*, based on *paa-t\$* ‘water’. The abstract root *katu* which underlies both *koutk* and *katu7* is not separately attested. The k-class verb *katu7~katu7-k* ‘break, of several things such as of strings’ shows no metathesis and seems to be derived from the already-derived athematic *katu7*.

A complication with the root *katu* is that the initial sound *k* seems to be influenced by the derivational interrelationship between *katu7* and *koutk*. The normal development of PUA **ka* in SE is *qa*. If the athematic verb ‘cut’ was the expected **qatu7*, then the related metathesized, k-class verb would be expected to be **qoutk*. However, the sequence *qou* does not occur in SE. Analogical restructuring of the stem as *katu* allows the derivational relationship to work smoothly.

SE k-class verbs take an element in *-m-* having to do with multiplicity. It is the same element as the “inner plural” *-m-* of Hopi.¹¹⁰ This *-m-* replaces thematic *-k-*, but in SE (and in CU) it is found only with a following causative *-in(a)*. In this context, the k-class verb root ends in a vowel and it seems to be in unmetathesized form. Examples are given in (6).

(6)	SE	single	multiple
	a.	<i>ching-k-in</i> ‘kick’	<i>chingi-m-in</i> ‘kick repeatedly’
	b.	<i>jup-k-in</i> ‘extinguish’	<i>jupu-m-in</i> ‘extinguish several’
	c.	<i>mo^Rch-k-in</i> ‘tie up’	<i>mo^Rcho^R-m-in</i> ‘tie up several’
	d.	<i>na^Rch-k-in</i> ‘stick together’	<i>na^Rcha-m-in</i> ‘apply patches’
	e.	<i>nyv-k-in</i> ~ <i>nyvyh-k-in</i> ‘bury’	<i>nyvy-m-in</i> ‘bury several’
	f.	<i>pit-k-in</i> ‘fill s.th’	<i>piti-m-in</i> ‘fill several containers’
	g.	<i>vur-k-in</i> ‘escape’	<i>vuru-m-in</i> ‘escape repeatedly’

The repetitive suffix *-av(a)* ‘do repeatedly, keep on doing’ displaces both thematic *-k(y)* and the causative *-in(a)*. Whether or not multiple *-m-* is also displaced by this suffix is unknown. The examples in (7) show related forms in *-kin(a)* and *-av(a)*. Post-consonantal glottal stop disappears before vowel-initial *-av* (7a,d).

(7)	SE		repetitive
	a.	change	<i>manum7-k-in</i> <i>manum-av</i>
	b.	clean	<i>jaruk-k-in</i> <i>jaruk-av</i>
	c.	dump, overturn	<i>kamu7-k-in</i> <i>kamu7-av</i>
	d.	gather, meet	<i>pijum7-k</i> <i>pijum-av</i> ‘meet in several places’
	e.	loosen, untie	<i>myraq-k-in</i> <i>myraq-av</i>
	f.	make	<i>ichu7-k-in</i> <i>ichu7-av</i>
	g.	meet	<i>anga7-k-in</i> <i>anga7-av</i> ‘meet repeatedly’
	h.	select	<i>chaja7-k-in</i> <i>chaja7-av</i>
	i.	show	<i>chi7aa7-k-in</i> <i>chi7aa7-av</i>
	j.	touch	<i>ngidhi7-k-in</i> <i>ngidhi7-av</i>

¹¹⁰ In the Hopi Dictionary (1998:882), this element is labeled the “augmentative.” It encodes not only multiplicity, as in *kwalà-m-ti* ‘come to a boil (pl.), as in many containers’, but also suddenness or force of action, as in *horà-m-ti* ‘give a sudden kick, as by reflex, give a big kick’.

The suffix *-7n(a)* replaces *-k(y)* to form statives, as in (8). These constructions are almost always reduplicated; (8l) is the unexplained exception. Some forms, such as (8g-i), are found only with reduplication. The root-final consonant is lost in these constructions.

(8)	SE	non-stative	stative
	a.	<i>hwaa^Rn-k</i> ‘jump’	<i>hwa~hwaa^Rna-7n</i> ‘be jumping’
	b.	<i>munan-k</i> ‘boil’	<i>munaa~na-7n</i> ‘be boiling’
	c.	<i>ruma7-k</i> ‘get dark’	<i>rumaa~ruma-7n</i> ‘be dark’
	d.	<i>vyrav-k</i> ‘talk, speak’	<i>vyraa~vyra-7n</i> ‘talk, speak a language’
	e.	<i>jaruk-k</i> ‘get clean’	<i>jaruu~ru-7n</i> ‘be clean’
	f.	<i>myjy7-k-in</i> ‘cause to shimmer’	<i>myjyy~myjy-7n</i> ‘shimmer’
	g.	<i>hawa~hawah-k</i> ‘whisper’	<i>hawa~hawa-7n</i> ‘be whispering’
	h.	<i>ngaljaa~ngaljah-k</i> ‘get loose’	<i>ngaljaa~ngalja-7n</i> ‘be loose’
	i.	<i>jy7aa~jy7ah-k</i> ‘become beautiful’	<i>jy7aa~jy7a-7n</i> ‘be beautiful’
	j.	<i>ty^Rnaa^R7-k</i> ‘turn black’	<i>ty^Rnaa^R~na^R-7n</i> ‘be black’
	k.	<i>pivo^R7n-k</i> ‘turn gray’	<i>pivoo^R~vo^R-7n</i> ‘be gray’
	l.	<i>rou7-k</i> ‘turn green’	<i>rou-7n</i> ‘be green’
	m.	<i>\$yrii7-k</i> ‘turn red’	<i>\$yrii~ri-7n</i> ‘be red’
	n.	<i>jaraa7-k</i> ‘turn white’	<i>jaraa~ra-7n</i> ‘be white’
	o.	<i>\$at\$ii7-k</i> ‘turn yellow’	<i>\$at\$ii~t\$i-7n</i> ‘be yellow’

The root *rou7-* ‘green’ (8l) represents a metathesis and reduction of underlying *ra7up*, as in (9c) (cf. the relation between *kout-k* and *katu-7* above). The full forms of the color roots seem to be revealed, oddly enough, by the words having to do with the off colors, as seen in (9), where these are in the resultative form. The derived ‘turn (some color)’ verbs are repeated from (8).

(9)	SE	turn (color)	be off (color)
	a.	black <i>ty^Rnaa^R7-k</i>	<i>ty^Rnaa^Rp-y^R7-k</i> ‘be very black’
	b.	gray <i>pivo^R7n-k</i>	<i>pivo^Rch-y^R-k</i> ‘be grayish’
	c.	green <i>rou7-k</i>	<i>ra7up-u7-k</i> ‘be greenish, blue’
	d.	red <i>\$yrii7-k</i>	<i>\$yriip-y7-k</i> ‘be reddish, pink’

- e. white *jaraa7-k* *jaraap-y7-k* ‘be whiter’
 f. yellow *\$at\$ii7-k* *\$at\$ii7-k* ‘be yellowish, orange’

While most of the color roots in (9) end in *p*, the root for ‘gray’ (9b) ends in *ch*. This indicates that the root-final *p* in the other forms is probably, at best, of sub-morphemic status. The word for ‘turn gray’ is also different in having a short vowel in the second syllable before *-7n-k*. Monosyllabic *rou7k* ‘turn green’ is unique within this set.

Some k-class verbs show a -VC reduplication to indicate multiplicity. This reduplication replaces a second VC of the root, as seen in (10). The pattern is also found in at least one athematic verb (10h), but seemingly with an intensive sense. The verbs underlying the nominalizations of (10a,b) are not attested.

(10) SE	single	multiple
a. beady things	–	<i>pys~ys-ka7</i>
b. hole	<i>ky^Rv-ka7, ky^Rvy^{Rh}-ka7</i>	<i>ky^Rv~y^Rv-ka7</i>
c. be leaning	<i>yjy7-y7-k</i>	<i>yj~yj-y7-k</i>
d. move over	<i>ngyryh-k</i>	<i>ngyr~yr-k</i>
e. be pointed	<i>wisip-y7-k</i>	<i>wis~is-y7-k</i>
f. spherical thing	<i>put\$up-ka7</i>	<i>put\$~ut\$-ka7</i>
g. stand, stop	<i>cho^Rnu7-k</i>	<i>cho^Rn~o^Rn-k</i>
h. split, crack open	<i>\$ara7 (vt.)</i>	<i>\$ar~ar-k</i>

10.2.2.2. ATHEMATIC VERBS. The mere presence of the phonetic shape *-k(y)* at the end of a verb does not make it a k-class verb. As in TV, there are athematic verbs with root-final underlying *ky*. The verbs shown in (1) do not show the requisite consonant before thematic *-k(y)* and none of the verbs participate in k-class morphology.

- (1) SE a. *aak(y)* ‘eat a flour-like substance (tr.)’, *aak-ka7* ‘be going to eat a flour-like substance’
 b. *chaak(y)* ‘get tired of, be tired of’
 c. *eik(y)* ‘lick (tr.)’, *eik-ka7* ‘be going to lick’
 d. *waak(y)* ‘get dry, dry out’, *waak-ka7* ‘be going to dry out (intr.)’, causative *waaq-an(a)* ‘dry out (tr.)’

Examples of other athematic verbs are given in (2).

- (2) SE
- | | | |
|----|---|------------------------------|
| a. | <i>aav(y)</i> | ‘tell a true story, history’ |
| b. | <i>hu7a-j</i> | ‘burn (intr.)’ |
| c. | <i>hi-j</i> | ‘see’ |
| d. | <i>kim(a)</i> | ‘come’ |
| e. | <i>maahwa7n(a)</i> | ‘burn (tr.)’ |
| f. | <i>maat\$(y)</i> | ‘hear’ |
| g. | <i>mi-j</i> | ‘go’ |
| h. | <i>mo^Rka^Rn(a)</i> | ‘kill (sg.obj.)’ |
| i. | <i>paa7</i> | ‘drink’ |
| j. | <i>qoo^Rn(a)</i> | ‘kill (pl.obj.)’ |
| k. | <i>ynan(a)</i> | ‘know’ |

10.2.3. VERB DERIVATIONAL MORPHOLOGY.

10.2.3.1. CAUSATIVES. Verbs take a variety of causative suffixes, all ending in *-n(a)*, as seen in (1). The suffix shape *-in(a)* is restricted to k-class verbs.

- (1) SE
- | | | | | |
|----|------------------|------------|------------|----------------------|
| | | components | | |
| a. | <i>-n(a)</i> | | | <i>-na</i> |
| b. | <i>-an(a)</i> | | <i>-a</i> | <i>-na</i> |
| c. | <i>-in(a)</i> | | <i>-i</i> | <i>-na</i> [k-class] |
| d. | <i>-nin(a)</i> | <i>-na</i> | <i>-i</i> | <i>-na</i> |
| e. | <i>-ia7n(a)</i> | | <i>-i7</i> | <i>-a</i> <i>-na</i> |
| f. | <i>-nia7n(a)</i> | <i>-na</i> | <i>-i7</i> | <i>-a</i> <i>-na</i> |

All these suffixes share a final component *-na*. The suffixes *-nin(a)* and *-nia7n(a)* seem to be doubly marked as causative. We have no synchronic account of these elaborations. (1d) *-nin(a)* shows regular vowel replacement: *-na -i -na* > *-n-i-na*; (1e) *-ia7n(a)* shows regular glottal stop metathesis: *-i7-a-na* > *-i-a7-na*; (1f) *-nia7n(a)* shows both: *-na -i7 -a -na* > *-n-i7-a-na* > *-n-i-a7-na*.

The short form *-n(a)* is not common. One environment for its occurrence is after the inchoative suffix *-vy* (10.2.3.5), as in *pi\$ei7-vy-n* ‘sweeten’ (cf. *pi\$a7i7* ‘sweet’). It seems

to be fossilized in *my^Rka^Rn* ‘kill (sg.obj.)’, for which there is no synchronic derivational source. The corresponding intransitive is the k-class verb *mymy7k* ‘die (sg.subj.)’. Both verbs are said to represent PUA **mukki* (Stubbs 2011 #655a).

Most athematic verb roots attested with causative suffixes have *-an(a)* or *-nin(a)*. Examples with *-an(a)* appear in (2).

- | | | | | |
|-----|----|----|---|--|
| (2) | SE | a. | <i>waak(y)</i> ‘get dry’ | <i>waaq-an</i> ‘make dry’ |
| | | b. | <i>pü(ha-)</i> ‘nurse (of a baby)’ | <i>püh-an</i> ‘nurse a baby’ |
| | | c. | <i>tiy^Rmq(a)</i> ‘be afraid’ | <i>tiy^Rmq-an</i> ‘scare away’ |

The suffix *-nin(a)* seems to be found only after stems whose last consonant is a glottal stop, as exemplified in (3). Example (3d) shows causative *-nin(a)* after a verb stem formed with *-tu7(a)*, which derives a verb from a noun or adjective. The example is based on the underlying adjective *luumish* ‘lame’.

- | | | | | |
|-----|----|----|------------------------------|--|
| (3) | SE | a. | <i>juu7</i> ‘cry’ | <i>juu7-nin</i> ‘play music, as a flute’ |
| | | b. | <i>\$yy7</i> ‘bloom’ | <i>\$yy7-nin</i> ‘make bloom’ |
| | | c. | <i>naacha7</i> ‘be crowded’ | <i>naacha7-nin</i> ‘make crowded’ |
| | | d. | <i>luumish-tu7</i> ‘be lame’ | <i>luumish-tu7-nin</i> ‘make lame’ |

The loss of the stem-final vowels (always *a* after a glottal stop) before *-nin(a)* remains unexplained. For example, if (3a) were to follow the regular rule, the expected form would be **juaa7nin* (cf. *juaa7qa7* ‘be going to cry’, with regular glottal stop metathesis; see 4.2.6). The loss of the stem-final vowel in these examples cannot be accounted for by reference to syncope. As presently understood, a vowel is subject to syncope in SE only if the following consonant is an obstruent, which *n* is not. Thus, the vowel simply disappears; it is unknown what motivates this.

The suffix *-ina* is restricted to k-class verbs. See 10.2.3.8.

The causative suffix *-ia7n(a)* is poorly attested and appears in a variety of derivational roles.¹¹¹ In (4a) *-ia7n(a)* appears to be a straightforward causative. In (4b) it is denominal. The verb in (4c) is exceptional in that the construction is intransitive; its

¹¹¹ The cognate KI causative *-ea7(n)* is much better attested; see 10.3.2.

derivation is also made unclear by the fact that the only identified related vocabulary item exhibits a unique reduplicative pattern and is also intransitive. In (4d,e) the intransitive stem is formed with *-iina*, which is replaced by *-ia7n(a)*. In (4f,g) *-ia7n(a)* appears with reduplicated roots which, unreduplicated, participate in k-class constructions with causative *-in(a)*.

- | | | | | |
|-----|----|----|---|---|
| (4) | SE | a. | <i>kuuman</i> ‘sleep’ | <i>kuuman-ia7n</i> ‘put to sleep’ |
| | | b. | <i>ku-t</i> ‘fire’, cf. <i>kut\$-aa-t</i> ‘wood, firewood’ | <i>kut\$-ia7n</i> ‘make a fire’ |
| | | c. | <i>a^Rt\$a^R7k-t\$a^R7n</i> ‘be tiring, tiresome’ | <i>a^Rt\$a^R7k-ia7n</i> ‘get tired, be tired’ |
| | | d. | <i>ky^Rm-iin</i> ‘spill (intr.)’ | <i>ky^Rm-ia7n</i> ‘spill (tr.)’ |
| | | e. | <i>num-iin</i> ‘break, of a long stick-like thing’ | <i>num-ia7n</i> ‘break a long object’ |
| | | f. | <i>puut-k</i> ‘fill with liquid (intr.)’, <i>puut-k-in</i>
‘fill s.th with liquid’ | <i>pu-puut-ia7n</i> ‘fill several containers’ |
| | | g. | <i>wilj-k-in</i> ‘make a line on s.th’
(intransitive <i>wilj-k*</i> not attested) | <i>wi-wilj-(i)a7n</i> ‘make lines, keep on
making lines’ |

The suffix *-nia7n(a-)* is also uncommon but derivations with this form of the causative are straightforward, as in (5).

- | | | | | |
|-----|----|----|---|---|
| (5) | SE | a. | <i>hiik(y)</i> ‘breathe’ | <i>hiiky-nia7n</i> ‘cure’ |
| | | b. | <i>naam(u(a))</i> ‘fight’ | <i>naamu-nia7n</i> ‘make fight’ |
| | | c. | <i>raakw(y)</i> ‘eat’ | <i>raakwy-nia7n</i> ‘feed’ |
| | | d. | <i>tiy^Rmq(a)</i> ‘be afraid’ | <i>tiy^Rmqa-nia7n</i> ‘make afraid’ |
| | | e. | <i>woo^Rng(a)</i> ‘rain’ | <i>woo^Rnga-nia7n</i> ‘make rain’ |

10.2.3.2. K-CLASS RESULTATIVES. The subject of a non-causative k-class verb can be described as having undergone the process of the verb by using a resultative form of the verb. Examples of resultatives are given in (1). The resultative suffix *-y7* precedes the k-suffix and appears in no other environment. The vowel of this suffix assimilates to the preceding vowel in rhoticity or in rounding. The resultative suffix *-wyn(a)*, which displaces the *-k* suffix, is unique to verb *cho^Rnu7-k* ‘stand, stop’ (1h) and its plural form

cho^Rn~o^Rn-k (1i). (Here and in the following sections, we often omit writing the parenthetic final vowels.)

(1)	SE	resultative
	a. <i>myraq-k</i> ‘loosen’	<i>myraq-y7-k</i> ‘be loosened, untied’
	b. <i>nyyp-k</i> ‘sit down’	<i>nyyp-y7-k</i> ‘be sitting down, seated’
	c. <i>ho^Rto^R7-k</i> ‘kneel’	<i>ho^Rto^R7-y^R7-k</i> ‘be kneeling’
	d. <i>moo^Rch-k</i> ‘get tangled’	<i>moo^Rch-y^R7-k</i> ‘be tangled’
	e. <i>chu7-k</i> ‘squat down’	<i>chu7-u7-k</i> ‘be squatted down’
	f. <i>kout-k</i> ‘get cut’	<i>kout-u7-k</i> ‘be cut’
	g. <i>kumu7-k</i> ‘turn over’	<i>kumu7-u7-k</i> ‘be turned over’
	h. <i>cho^Rnu7-k</i> ‘stand, stop (sg.)’	<i>cho^Rnu7-wyn</i> ‘be standing (sg.)’
	i. <i>cho^Rn~o^Rn-k</i> (pl.)	<i>cho^Rn~o^Rn-wyn</i> (pl.)

10.2.3.3. BENEFACTIVES. The benefactive suffix *-ichuna* ‘do s.th for the benefit of someone’ occurs with both k-class (1a-d) and athematic verbs (1e-j). With k-class verbs, the benefactive suffix completely displaces the causative *-ina* and the syncope of the *i* of *-ichuna* leaves its trace in palatalized *ky*. In athematic verbs, the causative ending remains (1j), and in environments other than after *k*, the syncope of *i* leaves no trace (1h-j).

(1)	SE	benefactive
	a. <i>ichu7-k-in</i> ‘make’	<i>ichu7-kj-chun</i> ‘make for someone’
	b. <i>chynyn-k-in</i> ‘roll s.th’	<i>chynyn-kj-chun</i> ‘roll s.th for’
	c. <i>moo^Rq-k-in</i> ‘fold’	<i>moo^Rq-kj-chun</i> ‘fold for’
	d. <i>jaraa7-k-in</i> ‘make white’	<i>jaraa7-kj-chun</i> ‘make s.th white for’
	e. <i>eik</i> ‘lick’	<i>eik-chun</i> ‘lick for’
	f. <i>icha-j</i> ‘dip’	<i>ich-ichun</i> ‘dip for’
	g. <i>kuuhan</i> ‘call, invite’	<i>kuuhan-ichun</i> ‘call, invite for’
	h. <i>naat\$u7</i> ‘get ready’	<i>naat\$u-i7chun</i> ‘get ready for’
	i. <i>mamq</i> ‘laugh’	<i>mamq-chun</i> ‘laugh for’
	j. <i>ngaan</i> ‘look for s.th’	<i>ngaan-chun</i> ‘look for s.th for’
	k. <i>kut\$-ia7n</i> ‘make a fire’	<i>kut\$-ia7n-chun</i> ‘make a fire for’

In (1g), the benefactive form *naat\$ui7chun* shows glottal stop metathesis, from underlyingly *naat\$u7-ichuna*, in turn from still more abstract *naat\$u7a -ichuna*.

10.2.3.4. THE MOTION SUFFIX. The SE motion suffix *-t\$u7(a)* (or “associated motion suffix” as per Guillaume 2016) encodes prior or concurrent motion. While it can often be translated as ‘go’, its directionality can shift. In (1) it can be read as ‘coming’.

- (1) SE *pichy-j* ‘arrive, get somewhere’ *pichuu-t\$u7* ‘arrive, in motion’

In (2), the activities specified imply leaving a starting point.

- (2) SE *hi-j* ‘catch sight of’, *hii~hi* ‘see’ *hiu-t\$u7* ‘go see’
icha-j ‘dip’ *ichaa-t\$u7* ‘go dip’
kut\$a-j ‘gather firewood’ *kut\$ou-t\$u7* ‘go get firewood’
ngaan ‘look for’ *ngaan-t\$u7* ‘go look for’

Directionality is often not at issue, as in (3).

- (3) SE *mi-j* ‘go’ *miaa-t\$u7* ‘go along’ (cf. imperative *mia*)

Many examples with *-t\$u7(a)* can be read variously, depending on context, as in (4).

- (4) SE *hyiĩn* ‘hunt’ *hyiĩn-t\$u7* ‘go hunting, go along hunting’
chawe-j ‘gather, harvest’ *chawyy-t\$u7* ‘go gather, pick while moving along’

Thus we gloss it simply as “MOT” in SE rather than “GO&” or the like as Guillaume’s convention would have it.

With k-class verbs, the motion suffix can attach directly after thematic *-k*, as in (5).

- (5) SE *cho^Rnu7-k* ‘stand, stop (sg.)’ *cho^Rnu7-k-t\$u7* ‘go stand, stop (sg.)’
cho^Rn~o^Rn-k (pl.) *cho^Rn~o^Rn-k-t\$u7* (pl.)
huch-k ‘fall’ *huch-k-t\$u7* ‘go and fall, fall while moving along’
yym7-k ‘end’ *yym7-k-t\$u7* ‘come to an end’

With k-class verbs, the causative suffix *-ina* reduces to just the palatalizing feature on thematic *-k*, i.e., *-ky*, when preceding the motion suffix, as in (6). This reduction is also found with benefactives (10.2.3.3) and with the imperative (11.2.4).

- | | | | |
|-----|----|--|---|
| (6) | SE | <i>kout-k-in</i> ‘cut’ | <i>kout-kj-t\$u7</i> ‘go cut, go along cutting’ |
| | | <i>piim-k-in</i> ‘scoop up’ | <i>piim-kj-t\$u7</i> ‘go scoop up’ |
| | | <i>tymyh-k-in</i> ‘close, lock s.th’ | <i>tymyh-kj-t\$u7</i> ‘go close up, lock someone in jail’ |
| | | <i>yym7-k-in</i> ‘finish, get done with’ | <i>yym7-kj-t\$u7</i> ‘go finish, finish or finish off while moving along’ |

The SE motion suffix *-t\$u7(a)* corresponds to the purposive motion suffix *-lu(7)* of Cupan. The “purposive” component is quite optional in the meaning of the SE suffix, as can be seen in (7), where the subject is the inanimate *po^Rqt* ‘road’.

- | | | | | | |
|-----|----|------------------------------------|----------------|------------------|-------------------------------------|
| (7) | SE | <i>Po^Rq-t</i> | <i>qaii-ch</i> | <i>a-hyyvi-v</i> | <i>cho^Rnu7-k-t\$u7</i> . |
| | | road-ABS | mountain-ABS | 3SG-edge-LOC | stand;stop-K-MOT |
| | | ‘The road stops at the mountains.’ | | | |

-t\$u7(a) is the only motion suffix in SE; in contrast, the Cupan languages all have several associated motion suffixes that distinguish directionality as well as other parameters (see 10.4.2.2, 10.5.2.1, 10.6.2.1).

10.2.3.5. INCHOATIVE. Verb stems can derive from adjectives with the inchoative suffix *-vy* ‘become’ (and see 3.15.4.2). With k-class verbs, this suffix, in the reduced form *-v*, occurs before the thematic *-k* suffix, as seen in (1). Note that none of these adjectival stems show k-class vowel metathesis.

- | | | | | |
|-----|----|----|---|--|
| (1) | SE | a. | <i>a7aj</i> ‘good’ | <i>a7ajy-v-k</i> ‘get better’ |
| | | b. | <i>a-tiy^R7a7</i> ‘big’ | <i>a-tiy^R7a-v-k</i> ‘get bigger, grow up’ |
| | | c. | <i>a-tuchyni7</i> ‘older’ | <i>a-tuchyni-v-k</i> ‘grow older’ |
| | | d. | <i>ychy</i> ‘cold’ | <i>ychyy-v-k</i> ‘get cold (re the weather)’ |
| | | e. | <i>chuka7</i> ‘salty, sour’ | <i>chuka7-v-k</i> ‘go sour’ |
| | | f. | <i>kwiicha7</i> ‘tough’ | <i>kwiicha-v-k</i> ‘get tough’ |
| | | g. | <i>mychani7</i> ‘having a strong taste’ | <i>mychani-v-k</i> ‘get a strong taste’ |

- h. *nama7i7* ‘soft’ *namai7-v-k* ‘get soft’
 i. *puchu7* ‘hard’ *puchu-v-k* ‘get hard’

There are a few examples in which the inchoative is not formed directly from the corresponding adjective, as in (2).

- (2) SE a. *ky^R\$a7-n-i-ch* ‘bad one’ (cf. adj. *ky^R\$a7* ‘bad’) *ky^R\$a7-n-i-v-k* ‘get worse’
 b. *paa-t\$* ‘water’ *paa^R-v-k* ‘get wet, watery’

Some k-class inchoative verbs form the causative on the derived k-class stem, as in (3).

- (3) SE intransitive transitive
 a. *paa^R-v-k* ‘get wet, watery’ *paa^R-v-k-in* ‘make wet, watery’
 b. *puchu-v-k* ‘get hard’ *puchu-v-k-in* ‘make hard’

There is also an athematic inchoative, with causative *-n(a)* following the inchoative *-vy*, as in (4). It is unclear why (4b,c) show metathesis while (4a) does not.

- (4) SE inchoative transitive
 a. *huwa7i7* ‘different’ *huwa7i-vy-n* ‘change’
 b. *nama7i7* ‘soft’ *namai7-vy-n* ‘soften’
 c. *pi\$a7i7* ‘sweet’ *pi\$ei7-vy-n* ‘sweeten’

For the inchoative verbs of (4), the only intransitive attested is k-class *namai7-v-k* ‘get soft’, which could maybe serve as the basis for a different transitive form, *namai7-v-k-in**.

10.2.3.6. INSTRUMENTAL CAUSATIVE SUFFIX. The instrumental causative *-ivana* is attested only with athematic verb stems. This suffix apparently adds the valence of an instrument, which is not itself mentioned. However, the instrumental case form of the distal demonstrative, *ama-tunga7*, can collocate with these verbs. It appears to be the same suffix that forms possessed deverbal nouns of instrument in KI, such as *-heer-k-in-ivana-7* ‘finger’ from *heer-k-in* ‘point at’ (see 14.7). (1a,b) are metathesized forms, with the suffix

absorbing the glottal stop of the root, and in (1a), the length feature as well. (1c) seems to be based on *vyraavyra7n*, which looks like a stative form.¹¹²

- | | | | |
|-----|----|---|--|
| (1) | SE | | instrumental causative |
| | a. | <i>nyy7</i> ‘make a basket’ | <i>ny-ii7van</i> ‘make a basket using s.th’
<ney’van> (R&E 586) |
| | b. | <i>tuhtu7</i> ‘dance’ | <i>tuhtu-i7van</i> ‘dance with s.th (feathers)’
<tuhtwivan> (R&E 133) |
| | c. | <i>vyraa~vyra-7n</i> ‘talk, be speaking’,
cf. <i>vyrav-k</i> ‘talk, speak’ | <i>wyra-7n-ivan</i> ‘speak of s.th, talk about s.th’
<werra’nivan> (R&E 115) ¹ |

¹ Dorothy Ramón’s *wyra-* corresponds to Sarah Martin’s *wyra-*.

10.2.3.7. COOCCURRENCE OF SUFFIXES WITHIN THE VERB. The sequence *-m-in* ‘distributive-causative’ and the causative suffix *-ia7n* may co-occur with benefactive *-ichun*, as seen in (1). There is no evidence that the grammar of SE permits diverse orders of the derivational suffixes constrained by a verb-internal syntax, as in the Cupan languages (cf. 10.4.2.5).

- | | | | | |
|-----|----|----|---|--|
| (1) | SE | a. | <i>piti-m-in-chun</i> | <i>piti-m-in</i> ‘fill multiple containers’ |
| | | | fill-DIST-CAUS-BEN | |
| | | | ‘fill multiple containers for somebody’ | |
| | | b. | <i>na^Rcha-m-in-ichun</i> | <i>na^Rcha-m-in</i> ‘put on patches’ |
| | | | patch-DIST-CAUS-BEN | |
| | | | ‘mend for, put on several patches for somebody’ | |
| | | c. | <i>raakwy-nia7n-chun</i> | <i>raakwy-nia7n</i> ‘feed someone’ |
| | | | eat-CAUS-BEN | |
| | | | ‘feed someone for someone’ | |

¹¹² Could the apparently reduplicated *vyraavyra-7n* be based on Spanish *palabra* ‘word’? If so, then we would have to treat the rest of the examples as back-formed from the loan word. If the difference between Sarah Martin’s *wyra-* and Dorothy Ramón’s *wyra-* (1c) is for real, then this is further support of the idea that it may be a loan word, treated somewhat differently in different parts of the Serrano-speaking world.

- d. *kut\$-ia7n-chun* *kut\$-ia7n* ‘light a fire’
 fire-CAUS-BEN
 ‘light a fire for someone’

10.2.3.8. TRUNCATION OF -K-IN(A). As mentioned above (10.2.3.3-4), the sequence *-k-ina* contracts to *-k-i* before the benefactive (*-ichuna*) (1) and motion (*-t\$u7a*) (2) suffixes and the *-i* remaining from the contraction of *-ina* is replaced by the suffix-initial *-i* of *-ichuna*. In turn, derived *-k-i* reduces by syncope to *-kj*.^{113 114}

- (1) SE a. *mii\$-kj-chun* ‘moisten for someone’
 mii\$-k-in ‘moisten, make wet’; cf. *mii\$kj* ‘moisten it!’
 mii\$-k ‘get wet’
- b. *kwyyt\$-kj-chun* ‘get someone up for someone’
 kwyyt\$-k-in ‘get someone up’; cf. *kwyyt\$kj* ‘get him up!’
 kwyyt\$-k ‘get up’
- c. *kout-kj-chun* ‘cut s.th for’
 kout-k-in ‘cut s.th’; cf. *koutkj* ‘cut it!’
 kout-k ‘get cut’
- d. *qaa^R7-kj-chun* ‘burp a baby for someone’
 qaa^R7-k-in ‘burp a baby’; cf. *qaa^R7kj* ‘burp the baby!’
 qaa^R7-k ‘burp (intr.)’
- (2) SE a. *yym7-kj-t\$u7* ‘go finish, finish while moving along (tr.)’
 yym7-k-in ‘finish (tr.)’; cf. *yym7kj* ‘finish it!’
 yym7-k ‘end (intr.)’
 (cf. intransitive *yym7-k-t\$u7* ‘come to an end’ with *-k-*, not *-kj-*)
- b. *jaruk-kj-t\$u7* ‘go clean s.th.’
 jaruk-k-in ‘clean s.th.’
 jaruk-k ‘get clean’
 <yaruhki’cu’> ‘clean up’ (R&E 364)

¹¹³ We don’t divide it ...*k-j*... because *kj* represents a unitary sound in SE.

¹¹⁴ Elliott’s (in Ramón & Elliott 2000) transcription of *kj* is <ki’>, as seen in (2b,c).

- c. *huur-kj-t\$u7* ‘go peek in on/out at someone’
huur-k-in ‘peek in on/out on at’
huur-k ‘peek out, come up over the horizon, sprout up through the ground’
 <huurki’cu’> ‘peeked in on’ (R&E 364)

The truncation of *-ina* to *-i* also takes place in the imperatives of verbs in *-k-in* (3), with the derived word-final *-ki* reducing also to *-kj* but as the result of apocope (11.2.4).

- (3) SE *puraq-kj* ‘take it out!’ < *puraq-k-in* ‘take s.th out’
puraq-k ‘go or come out, exit’ (indicative = imperative)
puraq ‘having come out’ (completive) (see 10.2.3.10)

10.2.3.9. INCORPORATING AND COMPOUNDING. Two base-derivational processes, i.e., incorporation and compounding, are rare and unproductive in SE verbs (the same is true for noun compounding, cf. 13.12.2).

Some clear examples of incorporation occur in verbs for ways of singing about particular animals or other creation-time beings (1). Note that *chaat\$u7* ‘sing’ is a denominal verb with *-t\$u7* from *chaat\$* ‘song’.

- (1) SE a. *hukah-cha-t\$u7* ‘sing deer songs’
hukah-t ‘deer’, *chaat\$u7* ‘sing’
 b. *paa7-cha-t\$u7* ‘sing bighorn sheep songs’
paa7-t ‘bighorn sheep’, *chaat\$u7* ‘sing’
 <Pa’ca’cu’aym.> ‘They would sing Bighorn Sheep songs.’ (R&E 198)

Among the compound verbs are constructions with *-mymy7k* ‘be sick, die’, as in (2), which are also found in other Tadic languages.

- (2) SE *hakwaan-mymy7k* ‘be very hungry’
hakwaan ‘be hungry’, *mymy7k* ‘die, suffer’

The verb *kiinym* ‘visit’, in (3), based on the noun *kii-ch* ‘house’, must be an ancient combination, probably at least of Proto-Northern Uto-Aztecan age: Hopi has cognates of *kiinym* (e.g. *kiikinymto* ‘go visiting’, *kiikinymma* ‘have been to visit’) and also a productive

“circumgressive” suffix *-(i)nyma*, but the cognates of *kiinym* are treated morphologically and semantically differently from the verbs with the circumgressive suffix. Further, the Hopi circumgressive does not derive verbs from nouns.

- (3) SE *kii-nym* ‘visit’
kii-ch ‘house’, *nym* ‘walk’

Another diachronically complex verb is *paa^Rho^Rq* ‘boil (tr.)’, from *paa^R-*, a combining form of *paa-t\$* ‘water’, plus *-ho^Rq*, a root also found in *ho^Rqa^Rn* ‘boil (intr.)’. The derivation of neither of these verbs of boiling represents a productive pattern.

The verb *cho^Rnu7-wyn(a)* ‘be standing’ looks like a compound, of *cho^Rnu7-k* ‘stand up’ plus *wyn(y)*, but with a changed final vowel. *Cho^Rnu7-wyn(a)* functions as the resultative of *cho^Rnu7-k*, in lieu of expected *^xcho^Rnu7-u7-k*. (See discussion of this construction above at 10.2.3.2 (1).) A problem with the treatment of *cho^Rnu7-wyn(a)* as a synchronic compound is the senses of the contemporary verb *wyn(y)*, ‘lie (anim.pl.)’ and ‘be in a place (inan.pl.)’, are wrong for the meaning of this verb.

However, as a diachronic matter, the use of an elements derived from the verbs *nym* (in *kiinym* in (3)) and *wyn* (above) does not seem unreasonable. This raises the possibility of the morphologization of other verbs into suffixes. The set of short verbs which that may appear unmarked for indicative, cited in 10.2.1 (8), all seem to represent possibilities for the diachronic origin of a various SE verb suffixes.

(4)	SE	verb	suffix	status
	a.	<i>qat\$(y)</i> ‘be (anim.)’	<i>-qa7, -qa-</i>	immediate future (inflection)
	b.	<i>yk(y)</i> ‘be (inan.sg.)’	<i>-y7(-k(y))</i>	k-class resultative (derivation)
	c.	<i>kim(a)</i> ‘come’, <i>kiva</i> (imp.)	<i>-iv</i>	future (inflection)
	d.	<i>nym(y)</i> ‘walk about’	<i>-nym(a)</i>	in <i>kii-nym(y)</i> ‘visit’
	e.	<i>wyn(y)</i> ‘be (inan.pl.)’	<i>-wyn(a)</i>	in <i>cho^Rnu7-wyn(a)</i> and pl. <i>cho^Rn~o^Rn-wyn(a)</i> ‘be standing’

All the verbs of (4) have been phonologically restructured. *Qat\$(y)* (4a) (< **kaLy*) has been truncated; *yk(y)* (4b) has had its *k* replaced by glottal stop, though the k-class combination that it finds itself in, *-i7-k(y)* sounds very much like the putative original

verb *yk(y)*; the final vowel of *wyn(y)* and *nym(y)* has changed; and *kiva*, the imperative of *kim* ‘come’, has lost both its initial consonant and final vowel in becoming the future suffix *-iv*.

The development of the immediate future from **kaLy* is also seen in Cupan and in TV as well (11.1.4); it may be of Proto-Takic age. There is an interesting semantic consistency: both the verbs from **kaLy* and the immediate future suffix tend to be used with animate subjects.

A future form derived from *kim(a)* ‘come’ may also be found in KI but within AUX, not as a verb suffix as in SE: the *ma-* component of the KI future particle *mat* (8.3.3) may represent the second syllable of *kim(a)*. If so, then the KI future relates to indicative *kim(a)* rather than to imperative *kiva* as in SE. The final *t* of KI *mat* likely corresponds to the SE irrealis modal *t(a)*. SE *t(a)*, like KI *mat*, is an element within the auxiliary complex and it is also strongly associated with the future verb.

10.2.3.10. ASPECTUAL DISTINCTIONS. Aspectual distinctions are highly elaborated in SE though they are not grammatically organized in as systematic a way as they are in the cognate languages Hopi and Tübatulabal. Thus far we have seen aspectual distinctions registered by suffixes that appear mixed with other base-derivational suffixes, including perfectives, continuatives, statives, and resultatives. However, non-suffixal processes also encode aspect. Especially important in the aspect system is a series of reduplications. These are highly productive and relatively regular in their form-meaning association. This contrasts with the situation in the Cupan languages, where reduplication processes have a wide range of meanings irregularly related to the shape of the copy of the reduplicated material.

The first of the non-suffixal processes in the domain of aspect is truncation, which derives completives and past perfects. While verbs of the k-class (1) lose the thematic suffix *-k*, as in (1a,b) and *-ina* as well in the causative (1c,d), the athematic verbs reduplicate. The suffix *-t\$u7* ‘go along doing’ truncates to *-t\$* in final position, as in (1e), but when followed by this suffix, there is no loss of thematic *-k*, but equally well, as a k-class verb, it shows no reduplication in the completive.

(1)	SE	indicative	completive	
	a.	<i>churup-k</i>	<i>churup</i>	‘enter’
	b.	<i>hwaa^Rn-k</i>	<i>hwaa^Rn</i>	‘jump’
	c.	<i>kout-k-in</i>	<i>kout</i>	‘cut’
	d.	<i>jaruk-k-in</i>	<i>jaruk</i>	‘clean’
	e.	<i>yym7-k-t\$u7</i>	<i>yym7-k-t\$</i>	‘end, finish, disappear’

Some athematic verbs (2) lose root-final elements, as in (2a,b). The length feature in reduplicated completive forms shows various irregularities and the roots are subject to a range of modifications, including, in (2o), a remarkable spread of rhotacization.¹¹⁵

(2)	SE	indicative	completive	
	a.	<i>kuuman</i>	<i>ku~kum</i>	‘sleep’
	b.	<i>oo^R\$ana7</i>	<i>o^R7~o^R\$an</i>	‘write (tr.)’
	c.	<i>mi-j</i>	<i>mii~m</i>	‘go’ (UF <i>miaa</i>)
	d.	<i>hi-j</i>	<i>hi~hiy7</i>	‘catch sight of, see’ (UF <i>hiy</i>)
	e.	<i>ñiha-j</i>	<i>ñi~ña</i>	‘do’ (UF <i>ñihaa</i>)
	f.	<i>kwa7-i</i>	<i>kwa~kwa7</i>	‘eat (tr.)’
	g.	<i>kyy^R7</i>	<i>kyy^R~ky^R7</i>	‘bite’
	h.	<i>hu7a-j</i>	<i>hu~hu7</i>	‘burn (intr.)’
	i.	<i>maat\$</i>	<i>ma~maat\$</i>	‘hear’
	j.	<i>paa7</i>	<i>pa~paa7</i>	‘drink’
	k.	<i>raakw</i>	<i>ra~rakw</i>	‘eat (intr.), dine’
	l.	<i>aje-j</i>	<i>a7~aj</i>	‘collect (mass or pl.obj.)’ (UF <i>aja</i>)
	m.	<i>tuhtu7</i>	<i>tu~tuhtu7</i>	‘dance’
	n.	<i>maahwa7n</i>	<i>ma~mahwa7n</i>	‘burn (tr.)’
	o.	<i>chiky^Rn</i>	<i>chi~chy^Rky^Rn</i>	‘poke, stab, stick in’

The completives behave more like past participles than verbs. In a rare example of a completive preceding AUX (3), there is no indicative suffix *-j*. This shows that the completive is not treated as a verb, or at least not as an indicative verb. (The adverb *uvia* ‘already’ provided a useful frame for eliciting the completive.)

¹¹⁵ Example (2o) also shows that **i* must be counted among possible diachronic sources of SE **y^R*.

- (3) SE *Ra~rakwy=m7* *ymi7* *uvia*.
 COMPL~eat(intr.)=2SG 2SG.PRO already
 ‘You (sg.) have eaten.’

For the sense of the completive, consider the examples in (4). Example (4a), with the verb *kuuman*, reports an event while (4b) has to do with an on-going situation.

- (4) SE a. *Nyy7=ny-7* *kuuman*.
 1SG.PRO = 1SG-PST sleep
 ‘I went to sleep.’ (= ‘I slept.’)
- b. *Añii7chi7* *uvia* *ku~kum*.
 baby already CMP~sleep
 ‘The baby went to sleep (and is still asleep).’ (= ‘The baby has gone to sleep.’)

The examples in (5) show a transitive k-class verb and its completive. The completive in (5b) has lost both suffixes, thematic *-k* and the causative.

- (5) SE a. ***Muraq-k-ina-j***=*ny-7*.
 loosen;untie-K-CAUS-IND = 1SG > 3SG-PST
 ‘I untied it.’
- b. *Uvia=n* ***muraq***.
 already = 1SG > 3SG loosen;untie
 ‘I’ve untied it.’

Another important type of reduplication is CVh- reduplication. Here the CV of the first syllable is copied with a following *h*, as seen in (6). Phonologically, CVh-reduplication entails removing the vowel length feature from the following syllable, with consequent syncope where phonologically appropriate. (Note the merger of the CVh-forms of (6i,j) with the loss of vowel length in (6j).) This forms repetitives and continuatives. This reduplicative process appears with athematic verbs and with at least one k-class intransitive (6o). This type of reduplication does not co-occur with the continuative suffix *-av(a-)* that forms continuatives of transitive k-class roots. Example

(6e) shows that if the root begins with *h*, the final *h* of the reduplicative prefix is lost with compensatory lengthening of the preceding vowel. Verbs which in their unreduplicated form take the indicative suffix do not have it in their CVh- reduplicated forms (6e-i).

- (6) SE
- a. *chah~cht\$u7* ‘be singing continually or repeatedly’
chaat\$u7 ‘sing’
 - b. *qah~qt\$* ‘be staying repeatedly’
qat\$ ‘be, dwell’
 - c. *wo^Rh~wo^Rng* ‘rain persistently, be raining and raining’
woo^Rng ‘rain’
 - d. *nyh~nym* ‘be walking around’
nym ‘walk, move about’
 - e. *hii~hi* ‘see, have in sight’
hi-j ‘see, catch sight of’
 - f. *jah~ja7* ‘be running continuously, repeatedly’
ja7-i ‘run’
 - g. *yh~yj* ‘steal repeatedly’
yjy-j ‘steal’
 - h. *yh~yk* ‘lie down repeatedly’
yk ~ yky-j ‘lie, be lying’
 - i. *qo^Rh~qo^R7* ‘die on separate occasions’
qo^R7a-j ‘die (pl.)’
 - j. *qo^Rh~qo^R7* ‘be aching persistently’
qoo^R7 ‘ache’
 - k. *pih~pi7* ‘be throwing one thing at a time, throw repeatedly’
pui7 ‘throw’
 - l. *qo^Rh~qo^Rn* ‘be killing (pl.obj.)’
qoo^Rn ‘kill (pl.obj.)’
 - m. *wih~wi7n* ‘shout repeatedly’
wii7n ‘shout’
 - n. *nah~na7uu7* ‘marry (on separate occasions)’
na7uu7 ‘marry’
 - o. *q^Rih~q^Ri7mu7-k* ‘be coughing’
q^Ri7mu7-k ‘cough’

Events distributed according to subject may be encoded by replacing the final VC of a k-class root by reduplication of its first vowel and medial consonant, as in (7). Example (7c) shows the irregular resultatives corresponding to (7b); the *-wyn* forms are used instead of expected *^xcho^Rnu7-u7-k*, *^xcho^Rn~o^Rn-y^R7-k*. (7f) is a nominalization based on unattested *put\$up-k**, *put\$~ut\$-k** ‘become spherical’.

(7)	SE		singular subject	plural subject
	a.	be sharp-pointed	<i>wisip-y7-k</i>	<i>wis~is-y7-k</i>
	b.	stand up	<i>cho^Rnu7-k</i>	<i>cho^Rn~o^Rn-k</i>
	c.	be standing	<i>cho^Rnu7-wyn</i>	<i>cho^Rn~o^Rn-wyn</i>
	d.	move over	<i>ngyryh-k</i>	<i>ngyr~yr-k</i>
	e.	be a hole/holes	<i>ky^Rvy^Rh-y^R7-k</i>	<i>ky^Rv~y^Rv-y^R7-k</i>
	f.	spherical one(s)	<i>put\$up-ka7</i>	<i>put\$~ut\$-ka7</i>
	g.	be leaning	<i>yjy7-y7-k</i>	<i>yj~yj-y7-k</i>

An example of -VC reduplication which seems to have no reference to plurality of subject is found in *\$ar~ar-k* ‘split or crack open’. This is related to the athematic transitive verb *\$ara7* ‘split’. No unreduplicated k-class form of the verb is attested.

Events distributed according to object may exhibit reduplication of the first CV of the root (8). In these verbs, the causative suffix *-ia7n(a-)* replaces the causative complex *-k-in(a-)*. Again, we encounter a difference between k-class and athematic verbs regarding vowel length in the reduplicated syllable.

(8)	SE	sg. object	plural object
	a.	fill	<i>puut-k-in</i> <i>pu~puut-ia7n</i> ‘fill several containers’
	b.	pull	<i>voo^Rh-k-in</i> <i>vo^R~voo^Rh-ia7n</i> ‘pull on several objects’
	c.	carry	<i>jaa7</i> <i>jaa~ja7, jeej~ja7</i> ‘carry several objects’

Some k-class transitives form object distributives with *-m-in(a-)*, as in (9), with no reduplication; the difference between the two constructions is not clear. Note that *puutkin* (8a) has to do with the filler of the container while *pitkin* (9c) has to do with the container that gets filled.

(9)	SE	sg. object	plural object
	a.	patch	<i>na^Rch-k-in</i> <i>na^Rcha-m-in</i> ‘mend, patch, applying several patches’
	b.	bury	<i>nyv-k-in</i> <i>nyvy-m-in</i> ‘bury pl. obj.’
	c.	fill	<i>pit-k-in</i> <i>piti-m-in</i> ‘fill several containers’
	d.	close	<i>tym-k-in</i> <i>tymy-m-in</i> ‘close pl. obj. or close s.th several times’
	e.	escape	<i>vur-k-in</i> <i>vuru-m-in</i> ‘escape several times’

Reduplication of the root with the thematic suffix *-k(y-)* may express a repetitive or distributive sense, as in (10) and (11).

(10)	SE		repetitive, distributive
	a.	fly	<i>hiĩĩ7-k</i> <i>hiĩ7~hiĩ7-k</i> ‘fly repeatedly’
	b.	stand up	<i>cho^Rnu7-k</i> <i>cho^Rn7~cho^Rn7-k</i> ‘stand up repeatedly (as of a baby starting to walk)’
	c.	be marked with a line	<i>wilj-y7-k</i> <i>wilj~wilj-y7-k</i> ‘be marked with lines’
	d.	be open	<i>aa^Rny^R7-k</i> <i>aa^Rn7~aa^Rn7-k</i> ‘be open in several places’
	e.	fill (subj fills up a space)	<i>pit-k</i> <i>pit~pit-k</i> ‘fill several spaces’

(11)	SE	<i>Chymy-7</i>	<i>man7~man7-k-t\$u7</i> .
		1PL-PST	DISTR~go.home-K-MOT
		‘We headed for home (to our respective homes).’ (At School)	
		(cf. <i>mana7-k-t\$u7</i> ‘go along towards home (to a single location)’)	

A different sort of reduplication, in derivations based on k-class verbs, with lengthened second vowel and with the stative suffix *-7n(a)*, expresses continuative or durative, as in (12).

(12)	SE		continuative, durative
	a.	<i>vyrav-k</i> ‘speak’	<i>vyrāa~vyra-7n</i> ‘be chatting’
	b.	<i>ruma7-k</i> ‘get dark’	<i>rumāa~ruma-7n</i> ‘be dark, be night’
	c.	<i>myjy7-k</i> ‘disappear’	<i>myjyy~myjy-7n</i> ‘be shimmering’

Some verbs show lengthened second vowel reduplication in all forms, such as those in (13). The morphemic status of *-h-* in these verbs is unclear. It might be inserted simply to complete the consonant-final canonical form of the k-class stem.

- | | | | |
|------|----|---|-------------------------------------|
| (13) | SE | | continuative, durative |
| | a. | <i>jy7aa~jy7a-h-k</i> ‘become beautiful’ ¹ | <i>jy7aa~jy7a-7n</i> ‘be beautiful’ |
| | b. | <i>ngaljaa~ngalja-h-k</i> ‘become loose’ | <i>ngaljaa~ngalja-7n</i> ‘be loose’ |

CV- reduplication may encode durativity, repetition, and plurality, as in the examples in (14).

- | | | | | |
|------|----|----|-----------------------------------|--|
| (14) | SE | a. | <i>ja7-i</i> ‘run’ | <i>ja~ja7</i> ‘run around’ |
| | | b. | <i>miaa-t\$u7</i> ‘go along’ | <i>mi~miaa-t\$u7</i> ‘be going along’ |
| | | c. | <i>wilj-k-in</i> ‘make a line on’ | <i>wi~wilj-a7n</i> ‘make lines, be making lines’ |

10.2.3.11. SUPPLETIVE VERBS. SE has a short list of verbs that are suppletive for number. In the case of intransitives, the suppletion encodes subject number. In the case of transitives, it encodes object number. (Mass noun subjects and objects select plural verbs though they show singular pronominal agreement.) The list of these verbs appears in (1). Note that for ‘die’ (13a), the singular subject verb is a k-class verb while the plural is athematic.

- | | | | | |
|-----|----|---------------------------------------|--------------------------------------|---------------------------|
| (1) | SE | | singular subject | plural subject |
| | a. | die | <i>mymy7-k</i> | <i>qo^R7a-j</i> |
| | b. | fall | <i>huch-k</i> | <i>kur-k</i> |
| | c. | go out | <i>puraq-k</i> | <i>wajaq-k</i> |
| | d. | be in a location (inan.), lie (anim.) | <i>yk ~ yky-j</i> | <i>wyn ~ wyny-j</i> |
| | | | singular object | plural object |
| | e. | get, gather, collect | <i>uu7</i> | <i>aje-j</i> |
| | f. | kill | <i>my^Rka^Rn</i> | <i>qoo^Rn</i> |
| | g. | put, put in | <i>tavy-j</i> | <i>wiha-j</i> |

One pair of verbs is suppletive for animacy.

- | | | | | |
|-----|----|--------------------|-----------------|-----------------------------------|
| (2) | SE | | animate subject | inanimate subject |
| | | ‘be in a location’ | <i>qat\$</i> | <i>yk</i> (sg.), <i>wyn</i> (pl.) |

Though the prototypical and general use of *qat\$* is that of (2), there is some slippage. A few examples of *qat\$* are found with inanimate subjects as in (3). As for (3a), it seems not unlikely that landscape features like hills could be endowed with animacy, but attributing animacy to a gate, as in (3b), seems a stretch. (Could its movability cause it to be treated as animate?) Note that *oup* in (3a) is a variant of *aap*, which is seen in (3b).

- | | | | | | | | | |
|-----|----|----|-------------|---|-----------------------|------------------|------------|---------------|
| (3) | SE | a. | <i>Ou-p</i> | <i>qaii-ch</i> | <i>qat\$</i> , | <i>añii7chi7</i> | <i>qaj</i> | <i>puchuk</i> |
| | | | DIST-LOC | mountain;hill-ABS | be | little | not | very |
| | | | | <i>mita-7i7</i> . | | | | |
| | | | | long;tall-ADJZ | | | | |
| | | | | ‘There were hills there, low ones, they weren’t very high.’ | | | | |
| | | b. | <i>Aa-p</i> | <i>akicham</i> | <i>qat\$</i> . | | | |
| | | | DIST-LOC | door;gate | be | | | |
| | | | | ‘There was a gate there.’ | | | | |

The inanimate singular locational verb *yk* (1d, 2) is homophonous with the animate verb *yk(y-j)* ‘lie’. These two verbs are both used only in the singular and both have a plural in *wyn(y-j)*. They are most likely from the same origin. The long form *ykyj* is attested only with animate subject while the long plural form *wynyj* has been found with both animate and inanimate subjects.

In (4a), the posture verb “stand” given in the English was probably motivated by the tall shape of the basket *ho^Rrupii7vyt\$*. Similarly with “lying” in (4b). The position of the ring in (4c) corresponds to no simple posture word in English. (The function of the absolutive(?) suffix in (4c) is unclear. Perhaps one’s ring, in SE, is “the thing on one’s finger”.)

- | | | | | | |
|-----|----|----|--|------------------|--------------------|
| (4) | SE | a. | <i>Ho^Rrupii7vy-t\$</i> | <i>tyyvy-va7</i> | <i>yk</i> . |
| | | | deep.basket-ABS | ground;floor-LOC | be(inan.sg.) |
| | | | ‘The basket is standing on the floor.’ | | |

- b. *Tyyvy-va7 yky-j.* or *Tyyvy-va7 yk.*
 ground-LOC be(inan.sg.)-IND ground-LOC be(inan.sg.)
 ‘It’s lying on the ground.’
- c. *Ny-maa-via-Ø-t ny-maa-v yk.*
 1SG-hand;finger-LOC-NMLZ-ABS(?) 1SG-hand;finger-LOC be(inan.sg.)
 ‘My ring is on my finger.’

The animate verb *yk*, in (5), means specifically ‘lie’ and, unlike inanimate *yk*, above, it may be used with the immediate future (5c). Example (5c) is remarkable in that the verb is used transitively, ‘lie on’.

- (5) SE a. *Ama7=kwyn aa-p yk, kwyny-vy chamaqaan.*
 DIST=QUOT.3SG DIST-LOC lie QUOT-3SG>3PL think;listen.to
 ‘He lay there and listened to them.’
- b. *Ani uvia tuuk=kwyn aa-p yky-j.*
 and.then already at.night=QUOT.3SG DIST-LOC lie-IND
 ‘He lay there in the dark.’
- c. *Py-hpa7=kwyny=n yky-ka7 hoowkp-i ni-taqa=n*
 3SG-LOC=QUOT=1SG>3SG lie-IFUT one-ACC 1SG-REFL=1SG
pakup-k-ina-qa7 huwa-n ky-j=n.
 cover-K-CAUS-IFUT other-INS say-IND=1SG
 ‘I was going to lie on one and cover myself with the other I said.’

The plural of both animate and inanimate *yk(y)* is *wyn(y)*, though the few examples found so far for animate usage are unclear. The two people referred in (6) are deceased. This fact may trigger the use of an inanimate verb.

- (6) SE *A-nan-chui7v-t wo^Rha^Rna=m wyn pa-pia.*
 3SG-father-deceased-GEN both=3PL lie PROX2-LOC
 ‘Both she and her dead father lay there.’

An example of inanimate plural *wyn(y)* is given in (7).

- (7) SE *Pajykja7 wyn paa-t\$ a-huuna-v paaqa-t\$.*
 over.there be(inan.pl.) water-ABS.GEN 3SG-inside-LOC reed-ABS
 ‘Over there in the water there are reeds.’

Liquids and other mass nouns are treated lexically as if plural and select *wyn(y)*, but they show singular agreement. Examples are given in (8).

- (8) SE a. *Paa-t\$ =kwyn kiti aa-p wyn.*
 water-ABS = QUOT.3SG a.little DIST-LOC be(inan.pl.)
 ‘A little bit of water was there.’
- b. *Y^Rt\$-ch paa^Rchq-p wyn.*
 blood-ABS rifle-LOC be(inan.pl.)
 ‘Some blood is on the rifle.’
- c. *Wyny-j kuchaara7-p.*
 be(inan.pl.)-IND spoon-LOC
 ‘It’s there in the spoon.’
- d. *Qaj =kwyn hii-t a-raakw wyn.*
 not = QUOT.3SG > 3SG INDF-ABS 3SG-food be(inan.pl.)
 ‘He had nothing to eat. (None of his food existed.)’

As with *qat\$(y)* (cf. (3) above), there is some semantic slippage with *wyn(y)*, as seen in (9). The sun (9a) is not plural, neither is the tree (9b) or the horse (9c). Further, though the horse (9c) is animate, it not lying down. Since these examples seem to represent good SE usage, there remains much more to be understood about the sense and use of *wyn(y)*.

- (9) SE a. *Taamia-t tuku^hpa-v wyn.*
 sun-ABS up.above-LOC be(inan.pl.)
 ‘The sun is up in the sky.’

- b. *Kwyn wama-t oup wyn.*
 QUOT.3SG tree-ABS there be(inan.pl.)
 ‘A tree stood there.’
- c. *My7-aachi7 wyny-j aa-p. Haam-t-i kwa7-i.*
 2SG-animal;horse be(inan.pl.)-IND DIST-LOC grass-ABS-ACC eat-IND
 ‘Your horse is there. He’s eating hay.’
 <Me’achi’ weny ‘ap. Haampiti’ qwa’i’.> (R&E 371)

10.3. THE VERB BASE IN KITANEMUK. KI and SE may have been mutually intelligible. However, alongside many similarities in the verb class system and in base-derivational processes, there are interesting differences. One of the most noticeable is the extension of truncation, which has yielded the loss of causative *-ina* in the k-class transitive verbs in nearly all contexts where the suffix is final. Recognition of this process motivates an analysis of the verb class system and base derivation in KI that is somewhat different from that suggested by Anderton (1988). Problems posed by the limited corpus are particularly acute because we have only scattered examples of derivational paradigms for the verbs. For instance, KI appears to lack the stative suffix *-7n(a)* that replaces thematic *-k(y)* with SE k-class roots. This absence might reflect simply a gap in the documentation rather than a fact about the language.

Examples are referenced to the Harrington field notes in the Smithsonian archive, and also to Anderton (1988) when they appear there. The Harrington notes include typed verb paradigms (usually partial) in reel 3.100; where these include the forms cited they are referenced. Otherwise, we normally reference the first useful example.

10.3.1. VERB CLASSES. KI has two large classes of verbs, of approximately equal size. The first is the k-class. In KI the thematic *k* of this class has split into two suffix types: *-yk*, with stative, middle, and other types of intransitive interpretations, and *-k-in-* with transitive and causative interpretations. The causative suffix *-in-* in *-k-in-* appears only in non-final position when followed by other suffixes. Anderton (1988) describes this situation as a contrast between intransitive *-yk* and transitive *-k*, the latter being a form

where the causative has been elided. Anderton's analysis leads to problems of interpretation when the causative suffix does surface, which will be discussed below.

The second large verb class is the athematic class, with roots that do not appear with either of the k-class suffixes. These verbs include transitives and intransitives. There is limited overlap; a very few verbs have both athematic and k-class base formations, and it is possible that many roots permit both kinds of suffixation. The athematic class also has some sub-classes, to be discussed below.

About 50 verb roots are attested with both k-class suffixes, *-yk* and *-k*. The examples appearing in (1) illustrate the range of intransitive and transitive types. The unsuffixed citation forms of the transitives lose *-in-*, which is given in parentheses.

- | | | |
|--------|---|--|
| (1) KI | intransitive | transitive |
| a. | <i>hakwivah-yk</i> 'get hurt of body part' (3.100.0347) | <i>hakwivah-k(-in-)</i> 'hurt someone' (3.100.0347) |
| b. | <i>hamut-yk</i> 'climb down' (3.100.0347) | <i>hamut-k(-in-)</i> 'get s.th down' (3.100.0348) |
| c. | <i>hii7n-yk</i> 'float along' (3.100.0354) | <i>hii7n-k(-in-)</i> 'push along floating' (3.100.0354) |
| d. | <i>hyj-yk</i> 'swing' (3.98.0054) | <i>hyj-k(-in-)</i> 'swing, carry swinging' (3.98.0356) |
| e. | <i>hoop-yk</i> 'leak, drip' (3.100.0359) | <i>hoop-k(-in-)</i> 'make a ditch run' (3.100.0359) |
| f. | <i>kuhj-yk</i> 'fall over of s.th tall' (3.100.0392) | <i>kuhj-k(-in-)</i> 'knock over, fell (of s.th tall)' (3.100.0392) |
| g. | <i>ngykw-yk</i> 'get worn out' (3.100.0443) | <i>ngyw-k(-in-)</i> 'wear s.th out' (3.100.0443) |
| h. | <i>puut-yk</i> 'get full' (3.100.0470) | <i>puut-k(-in-)</i> 'fill' (3.100.0470) |
| i. | <i>riihv-yk</i> 'lose' (3.99.0514) | <i>riihv-k(-in-)</i> 'win (cause to lose)' (3.100.0474) |
| j. | <i>tso7n-yk</i> 'stop, be standing up' (3.100.0511) | <i>tso7n-k(-in-)</i> 'erect, stand up (tr.)' (3.100.0511) |
| k. | <i>tsu7m-yk</i> 'close one's eyes' (3.98.0234) | <i>tsu7m-k(-in-)</i> 'close someone's eyes' (3.98.0234) |
| l. | <i>tsurup-yk</i> 'enter' (3.100.0514) | <i>tsurup-k(-in-)</i> 'put in' (3.98.0272) |
| m. | <i>wo7n-yk</i> 'nod head' (3.100.0532) | <i>wo7n-k(-in-)</i> 'make nod head' (3.100.0532) |

A few forms suggest that the intransitive bases can be secondary derivations with a roughly passive or resultative reading, as shown in (2). This, however, may be simply a

problem with the translations; the derived nature of the transitive would be revealed by recognizing that an English concept like “pierce” in (2a) is encoded as “cause to be pierced.”

(2) KI	intransitive	transitive
a.	<i>horok-yk</i> ‘be pierced’ (3.100.0359)	<i>horoh-k(-in-)</i> ‘pierce, bore holes in’ (3.98.0252)
b.	<i>ngak-yk</i> ‘choke, stop up (intr.)’ (3.98.0350)	<i>ngah-k(-in-)</i> ‘choke (tr.)’ (3.98.0350)
c.	<i>py\$ak-yk</i> ‘break (intr.)’ (3.98.0237)	<i>py\$ah-k(-in-)</i> ‘break (tr.)’ (3.98.0237)

Phonologically the roots in (2) show an alternation between prevocalic *k* and preconsonantal *h*. This may be a result of the collapse of the *k* : *q* contrast in KI. Harrington transcribed the root-final *h* in the examples in (2) as <q>, his symbol for [x] at the time of his KI work. This could equally well be treated either as a lenited allophone of /k/ or as a fortified allophone of /h/. Anderton (1988) opted for the representations with *h*.¹¹⁶ The verbs in (2) can be contrasted with the verbs in (3), where, in a slightly different phonetic environment from the examples in (2), the roots apparently end in unlenited *-k*, which with the transitive *-k(-in-)* suffix, yields “double-articulated word-final stops” (Anderton 1988:327). “Double-articulated” refers to the fact that in word-final *kk*, the first *k* is released before the second *k* is articulated. The same phonetic treatment of word-final *kk* is found in SE.

(3) KI	a. <i>hiyk-yk</i> ‘get lost’ (3.98.0251)	<i>hiyk-k(-in-)</i> ‘lose s.th’ (3.98.0251)
	b. <i>muahk-yk</i> ‘take steam bath, be smoky’ (3.100.0422)	<i>muahk-k(-in-)</i> ‘smoke s.th’ (3.100.0442)
	c. <i>purahk-yk</i> ‘come out, go out’ (3.100.0469)	<i>purahk-k(-in-)</i> ‘put out, stick out’ (3.100.0469)

More than 90 verb stems are attested with only one *k*-class suffix. Usually these exhibit the expected transitivity. However, in this group there are examples of transitive verbs in *-yk*, as seen in (4), including cases where a verb in *-yk* has both transitive and

¹¹⁶ In SE, the corresponding configuration is treated as *qk*. This has a phonetically fricativized *q*, and *qk* is quite distinct from *hk*, and in prevocalic position, the *q* here is realized as a stop.

intransitive meaning, as in (4b,f,h). (4g) is peculiar in having a transitive meaning with *-yk*, but an intransitive meaning in the apparent causative form.

- (4) KI
- a. *hahv-yk* ‘widow someone (by dying)’ (3.98.0367)
 - b. *muuts-yk* ‘be tight for (tr.)’ (3.98.0468); ‘be crowded, not fit (intr.)’ (3.100.0692)
 - c. *myt\$-yk* ‘have pity on (tr.)’ (3.100.0621)
 - d. *myj\$7-yk* ‘miss someone (tr.)’ (3.100.0373)
 - e. *na7r-yk* ‘help (tr.)’ (3.98.0384)
 - f. *pyhn-yk* ‘pass over to other side (tr.)’ (3.98.0257), (intr.) (3.100.0455)
 - g. *tohv-yk* ‘spit on, spit out (tr.)’ (3.98.0214), cf. (5c) *tohv-k* ‘spit’
 - h. *woh-yk* ‘bark (intr.)’ (3.98.0280), ‘bark at (tr.)’ (3.100.0700)
 - i. *ytah-yk* ‘climb, go up (tr.)’ (3.98.0249)

There are also examples of intransitive verbs with *-k* not preceded by *y*, as in (5). It seems unlikely that any of the verbs in (4) and (5) are athematic verbs that happen to end in *-yk* or *-k*. In both SE and Hopi, all verbs that technically look like k-class verbs are in fact k-class verbs. The same situation is likely to be true of KI as well. In any case, the forms in (5) are attested with subject prefixes, which shows that they are not adjectives, which are sometimes identical in form to the corresponding k-class verb (see 14.14.3 (5, 6)).

- (5) KI
- a. *kwea7-k* ‘lie down, be laid down, lay down’ (3.98.0284)
 - b. *pyt\$-k* ‘be on one side’ (3.98.0257)
 - c. *tohv-k* ‘spit’ (3.99.0254)
 - d. *wa7n-k* ‘scratch in ground’ (3.98.0450)

The athematic verbs, of which nearly 200 are attested, divide into several subclasses.

The smallest subclass has two verbs that correspond to TV base-alternating verbs. In KI these exhibit irregular imperatives, distinct from any of the other imperative types discussed below. Of the base-alternating verbs as seen in the other languages, **kaLy* ‘be, dwell’ shows no alternation in Serran: it is KI *kat\$* and SE *qat\$*. In KI, the verb *wyn* ‘be, lie’, used with inanimates, has almost disappeared. It appears in an unusual verb-adjunct construction *wyn tsono7k* ‘be stopped’ (cf. SE *cho^Rnu7wyn*, with the same meaning). It

also appears in an object nominalization, *wyn-i-ts* ‘Sunday’ (literally, ‘s.th stopped’, presumably referring to stopping work on the Sabbath). In KI the verb ‘put, put in’, documented in the other Takic languages as *tav* ~ *tavan* (cf. SE *tavy-j*), is the third irregular form in the athematic class, as seen in (6).

(6) KI	indicative	imperative	root for derived forms
a. come	<i>kim</i>	<i>kiva</i> (3.100.0388)	<i>kim-</i> (<i>a-kim-ivana7</i> ‘where it comes out’) (3.98.0074)
b. go	<i>mi</i> (3.98.0055)	<i>mea(h)</i> (3.98.0270)	
c. put	<i>ta</i> ~ <i>ta7</i>	<i>tah</i> ~ <i>ta7</i> ~ <i>tav</i> (3.100.0484)	<i>tav-</i> (<i>ni-tav-ivana7</i> ‘my trunk, shed’) (3.98.0054)

Verbs with the denominalizing suffix *-tu7* ~ *-t\$u7* ~ *-tsu7* (see also 13.15.1.2) belong to the athematic class and include the examples in (7). The suffix is cognate with SE *-tu7(a)* ~ *-t\$u7(a)* ~ *-chu7(a)*, and is probably more productive in KI than the limited data suggest.

- (7) KI
- a. *hakwa-t\$u7* ‘be hungry’ (3.98.0273)
 - b. *huunay-tu7* ‘play tag’ (3.98.0473) (cf. *huunay-t* ‘bear’ (3.98.0104)) (In tag, “it” is the bear.)
 - c. *kumijin-tu7* ‘call on guardian spirit’ (3.98.0375)
 - d. *kuruveen-tu7* ‘take an emetic’ (3.98.0482) (< Spanish *cruento*(?))
 - e. *kwyj-wii-tu7* <-kwiwitu’> ‘grind acorns’ (3.98.0348) (cf. *kwyjja-t\$* ‘oak sp.’ (3.99.0137), *wii-ts* ‘acorn mush’ (3.98.0275))
 - f. *paavuha-t\$u7* ‘plant a crop’ (cf. SE *paavuha-t* ‘a planted plant’)
 - g. *wip-tsu7* ‘get fat’ (3.99.0596) (cf. *wip-t* ‘fat’ (3.99.0250))

A third subclass of the athematic verbs includes intransitives which correspond to transitive forms with a causative suffix *-an*. Some of these are shown in (8). Though SE has the verb ‘know’ in the causative form *ynan* ‘know’ and non-causative *yn* ‘learn’, CA has only the causative base, *e7nan* ‘know’. Comparative Takic is full of such cases, where the limited documentation records only one possible base of a verb that appears across the subgroup with several different base-forming increments. This *-a* causative suffix,

unlike the k-class causative *-ina*, is not lost in word-final position and does not truncate in imperatives.

- (8) KI a. *aar* ‘take a bath’ (3.98.0164) *aah-an* ‘bathe someone, baptize’ (3.98.0157)
 b. *kwar* ‘get cooked’ (3.98.0253) *kwah-an* ‘cook’ (3.98.0234)
 c. *naa7ak* ‘separate (intr.)’ (3.98.0475) *naa7k-an* ‘separate, divide (tr.)’ (3.98.0475)
 d. *o\$ivak* ‘get hot’ (3.98.0455) *o\$iv-an* ‘heat’ (3.98.0455)
 e. *piir* ‘suck (of baby)’ (3.98.0094) *piih-an* ‘suckle (tr.)’ (3.98.0094)
 f. *waak* ‘be dry’ (3.100.0625) *waak-an* ‘dry (tr.)’ (3.100.0520)
 g. *yn* ‘know’ (3.98.0255) *yn-an* ‘inform’ (3.98.0357)

The main subclass of athematic verbs is large and heterogeneous, and includes many common basic verbs. Some old derivational processes may be fossilized in this class. All vowels can apparently appear finally. Final consonants include *ʔ, j, k, m, n, ng, r, \$, ts, t\$, v, w*; athematic verbs with final *h, kw, p, s, t* have not been found. Some examples are given in (9).

- (9) KI V *tyhty7a* ‘be big’ (3.100.0491)
mu ‘shoot and hit, throw, grind’ (3.100.0421)
7 *ho7* ‘sew, string beads’ (3.98.0028)
hu7 ‘burn (intr.)’ (3.100.0361)
ihama7 ‘tease, joke’ (3.98.0272)
ja7 ‘fly’ (3.98.0461)
junu7 ‘praise, admire, respect’ (3.98.0288)
kwa7 ‘eat’ (3.100.0341)
kyry7 ‘toast (tr.)’ (3.99.0111)
kyy7 ‘bite’ (3.100.0384)
paa7 ‘drink’ (3.100.0448)
tsi7 ‘pick up’ (3.98.0256)
j *typuj* ‘play peon’ (3.98.0472)
k *muk* ‘be sick, die, wane of moon’ (3.100.0423)
m *hukum* ‘smell s.th’ (3.98.0454)
nym ‘walk (intr.)’, ‘walk on (tr.)’ (3.98.0107)
n *ajn* ‘show someone s.th’ (3.98.0380)

	<i>koon</i> ‘kill (pl.obj.)’ (3.100.0669)
	<i>nahwin</i> ‘deposit at shrine’ (3.98.0327)
	<i>ngaan</i> ‘look for, miss’ (3.98.0466)
	<i>potin</i> ‘scrounge for food’ (3.98.0107)
	<i>rio7in</i> ‘cut, shear’ (3.98.0283)
<i>ng</i>	<i>tsuung</i> ‘itch (intr./tr.)’ (3.98.0379)
<i>r</i>	<i>aar</i> ‘take a bath’ (3.100.0339)
<i>\$</i>	<i>pui\$</i> ‘vomit’ (3.99.0258)
<i>ts</i>	<i>its</i> ‘ladle out water’ (3.98.0359)
<i>t\$</i>	<i>kat\$</i> ‘be, dwell’ (3.100.0382)
<i>v</i>	<i>\$iiv</i> ‘plane, carve’ (3.98.0359)
<i>w</i>	<i>yjiw</i> ‘rob, steal s.th’ (3.100.0342)

A small number of verb roots are attested in both the k-class and the athematic class, as in (10). It is possible that many more roots shared this property.

(10) KI	a.	<i>kyha7</i> ‘spoil, hinder’ (3.98.0217)	<i>kyhah-yk</i> ‘be spoiled, sad’ (3.98.0248)
	b.	<i>jamkam</i> ‘remind’ (3.98.0232)	<i>jam-k(-in-)</i> ‘remember’ (3.98.0232)
	c.	<i>mana7j</i> ‘roll over (as of horse)’ (3.98.0193)	<i>manam-k(-in-)</i> ‘roll (tr.)’ (3.98.0274) ¹¹⁷
	d.	<i>mavi7</i> ‘do’ (3.98.0477)	<i>mavi7-k(-in-)</i> ‘do’ (3.98.0477)
	e.	<i>pong</i> ‘hit with fist or stone’ (3.100.0464)	<i>po7ng-yk</i> ‘bump into s.th’ (3.100.0464)
	f.	<i>tsingim</i> ‘kick someone’ (3.98.0284)	<i>tsing-k(-in-)</i> ‘kick’ (3.98.0251)
	g.	<i>wira7-wira7j</i> ‘spin, revolve’ (3.98.0277)	<i>wirahr-yk</i> ‘turn over’ (3.98.0033) <i>wirahr-k(-in-)</i> ‘crank’ (3.98.0277)

The examples in (10c,g) have athematic verb bases in *-7j*. The *-j* suffix is found also in the Cupan languages, where it seems to be an expressive or phonaesthetic element. There are other examples that are attested only in the *-7j* form, seen in (11). It is possible that this increment was at some stage of the language used in a productive derivation. In any case, the meanings of the items with *-7j* seem to invite phonaesthetic elaboration, a property also suggested by the fact that many of these have reduplicated stems.

¹¹⁷ Plus *manahamak* ‘go rolling (intr.)’ (3.98.0274 and 3.100.0409), whose internal structure remains unknown. *Manahamak* is probably not a k-class verb since there is no consonant before final *k*.

- (11) KI a. *haakwakwa7j* ‘yawn’ (3.98.0234)
 b. *kwavy7j* ‘bawl out suddenly in anger’ (3.98.0215)
 c. *tyjy7j* ‘drizzle’ (3.98.0083)
 d. *waatsatsa7j* ‘stretch oneself’ (3.100.0523)
 e. *ytsaka7j* ‘owe someone money’ (3.98.0379)

10.3.2. CAUSATIVES AND THE EVOLUTION OF THE K-CLASS VERBS. Data on valence-changing suffixes in KI are sparse. However, it is clear that the major causative suffix in KI, appearing with k-class verbs, is *-in*, familiar from other Tactic languages. A different causative suffix, *-an*, appears with athematic verbs (see 10.3.1 (8)). The suffix *-in* does not appear in word-final position. It surfaces only when other suffixes (but not clitics) follow it, including subordinating and nominalizing suffixes, causative *-ea*, passive *-hea*, and desiderative *-ihuun*.

Anderton (1988:157) regarded *-in* when followed by other suffixes as a meaningless increment. However, although there are some inconsistencies in the data, the most likely account is that it is simply a k-class causative, identical to that seen in SE. The universal loss of *-in* in final position in KI, which is reminiscent of the loss of the thematic *-k* in final position in Hopi, can be seen as an extension of the grammatical truncation of *-ina* in certain contexts in SE.

The examples in (1) show *-in* before desiderative *-ihuun* and passive *-(h)ea*.

- (1) KI a. *pikw-k-in-ihuun* ‘want to scrape or wipe s.th’ (3.98.0251)
 b. *vaan-k-in-ihuun* ‘want to sweep’ (3.100.0781)
 c. *man-k-in-ea* ‘be put back, returned’ (3.98.0388)
 d. *ngahk-in-ea* ‘get choked, stopped up’ (3.98.0350)

The examples in (2) show *-in* before the immediate future suffix *-ik*, Anderton’s (1988:226) “unrealized infinitive.”

- (2) KI a. *huur-k-in-ik* ‘to peek out’ (3.98.0256)
 b. *tsong-k-in-ik* ‘to wash clothes’ (3.100.0512)
 c. *tu7m-k-in-ik* ‘to make quiet’ (3.100.0502)

The examples in (3) show *-in* before nominalizing suffixes.

- (3) KI a. *kwii\$uka7-k-in-7a* ‘molote, hair knot’ (3.98.0025) *kwi\$uka7-k(-in-)* ‘wind hair in molote’ (3.98.0025)
 b. *myn-k-in-ivana7* ‘esophagus’ (3.98.0359) *myn-k(-in-)* ‘swallow’ (3.98.0359)
 c. *ngyt\$k-in-i-ts* ‘s.th cut’ (3.100.0442) *ngyt\$k(-in-)* ‘cut’ (3.100.0442)
 d. *tym-k-in-ihwa7-t* ‘key’ (3.98.0238) *tym-k(-in-)* ‘close, shut’ (3.98.0238)
 e. *wits-k-in-i* ‘finishing irrigating’ (3.98.0285) *wits-k(-in-)* ‘irrigate’ (3.98.0285)

The examples in (3) can be compared to examples derived from intransitive k-class verbs where transitive *-in* is not present, as in (4).

- (4) KI a. *hyj-k-ihwa7-t* ‘swing’ (3.99.0532) *hyj-yk* ‘swing (intr.)’ (3.99.0532)
 b. *a-horoky-pea* ‘smoke hole’ (3.99.0429) *horok-yk* ‘be pierced’ (3.100.0359)
 c. *ra7wh-k-ihwa7-t* ‘chair’ (3.100.0473) *ra7wh-yk* ‘be sitting’ (3.100.0472)

A few examples do not have *-in* where it might be expected, as in (5). However, note that the verbs in (5) are non-causative transitives that look formally like intransitives (see 10.3.1 (4)). A causative suffix with verbs of this sort would yield meanings like ‘make someone widow someone’ and ‘make someone climb’.

- (5) KI verb stem derived form
 a. *hahvyk* ‘widow someone (by dying)’ (3.98.0367) *hahvk-i-ts* ‘widower, widow’ (3.98.0367)
 b. (same) *hahvk-ea7* ‘be widowed’ (3.98.0367)
 c. *ytahyk* ‘climb, go up’ (3.99.0486) *yta7k-ihwa7-t* ‘stairs’ (3.99.0486)

There are also a few examples where *-in* and even *-kin* appear in final position, seen in (6). None of the examples appear with objects (and (6a,b,c,e) are attested in several examples each), so these may be athematic intransitives.

(6) KI verb stem	derived form
a. <i>haanin</i> ‘winnow by air’ (3.98.0208)	<i>haanin-i-ts</i> ‘winnowed’ (3.98.0208)
b. <i>hi7rikin</i> ‘snuff up nose’ (3.98.0478)	
c. <i>joorin</i> ‘plow a field’ (3.98.0282)	<i>joorin-ihwa7-t</i> ‘a plow’ (3.98.0282)
d. <i>tsatsakin</i> ‘winnow by tossing’ (3.98.0056)	<i>tsatsakin-ihwa7-t</i> ‘winnowing basket’ (3.98.0055)
e. <i>tsitsi7aakin</i> ‘tell story’ (cf. SE <i>chi7aa7kin</i> ‘make s.th show’) (3.98.0464)	<i>tsitsi7aakin-i-ts</i> ‘story’ (3.98.0464)

In summary, the KI k-class verbs exhibit a contrast marked by suffixes *-yk* ‘K intransitive/transitive’ and *-k-in-* ‘K transitive/causative’, although the surface contrast in unsuffixed verb themes is *-yk* vs. *-k*. The situation in KI probably evolved along with the extension of truncation involving the causative suffix *-in*. Causative k-class verbs would have been suffixed with *-in*, as is the case in SE (and in Hopi); intransitives and underived transitives would have been unsuffixed. In the SE imperative, the final syllable *-na* of the underlying suffix *-ina* is lost, but the effect of the underlying suffix-initial *i* remains on the preceding *-k*. Then when this *i* deletes, as all short final vowels normally do, it leaves its trace in *ky* (see 10.2.3.8).¹¹⁸ In the KI k-class imperative, the suffix *-in-* truncates in the same way, losing *-na*, but the *i* is lost without a trace in final position in non-imperative k-class forms.

In the intransitive k-class verbs, when no derivational material follows thematic *-k*, a vowel *y* precedes the *-k*. Various sources for this vowel can be suggested. It might be an underlyingly final vowel in the verb root. This would mean that all k-class verbs would coincidentally have the same final vowel. It could be an epenthetic vowel, required at some stage of phonological evolution. But since KI permits quite complex final consonant clusters, the insertion of an epenthetic vowel seems unlikely. We suggest a third

¹¹⁸ It seems possible that **kj* may have been an intermediate stage along the way to KI, which synchronically shows only *k* and *kw*, a remarkably simple system of back obstruents compared to the exuberance found in the other Takiic languages.

possibility, which we think is more likely, that *-yk* is metathesized from word-final **-ky* as part of canonical k-class reshaping.¹¹⁹

Also with the k-class verbs, the final *-k*, from causative *-k(-in-)*, is sometimes lost before future =*mat* and before =*nehe* (an auxiliary clitic of uncertain meaning; see 8.3.3). No other *k*, such as root-final *k* or the *k* of immediate-future *-ik(a)* (cf. 12.3.3), exhibits this behavior. This is probably a residue of the nonfuture or perfective sense of *-k*, otherwise not apparent in KI. Recall that in TV the thematic nonfuture suffix *-k ~ -x* is replaced by the future suffix *-ro* (cf. 10.1.1). Intransitive *-yk* is retained before these clitics. This is illustrated with future forms in (7).

(7)	KI	transitive	future
	a.	pierce, bore holes in	<i>horoh-k(-in-)</i> (3.100.0360) <i>horoh=mat</i> (3.100.0360)
	b.	extinguish a fire or lamp	<i>jup-k(-in-)</i> (3.98.0250) <i>jup=mat</i> (3.98.0250)
	c.	swallow (tr.)	<i>myn-k(-in-)</i> (3.998.0359) <i>myn=mat</i> (3.998.0359)
	d.	put up	<i>oot\$-k(-in-)</i> (3.100.0448) <i>oot\$=mat</i> (3.100.0448)
	e.	erect, stand s.th up	<i>tso7n-k(-in-)</i> (3.100.0512) <i>tso7n=mat</i> (3.100.0512)
	f.	irrigate	<i>wits-k(-in-)</i> (3.98.0285) <i>wits=mat</i> (3.98.0285)
		intransitive	
	g.	jump	<i>hwahn-yk</i> (3.100.0367) <i>hwahn-yk=mat</i> (3.100.0367)
	i.	be crowded, fit (tr./intr.)	<i>muuts-yk</i> (3.98.0468) <i>muuts-yk=mat</i> (3.100.0425)
	j.	go up, go on horseback	<i>oot\$-yk</i> (3.98.0212) <i>oot\$-yk=mat</i> (3.100.0448)
	k.	spit up, spit up on	<i>tohv-yk</i> (3.98.0214) <i>tohv-yk=mat</i> (3.98.0357)
		climb up	<i>ytah-yk</i> (3.98.0463) <i>ytah-yk=mat</i> (3.98.0249)

Some exceptions have been found. Examples where *-k* remains before future =*mat* are given in (8). Harrington (3.100.0573) remarks of one of the examples, *juah-k=mat* ‘will hang s.th up’ in (8a), that the “k [is] very light.”

(8)	KI	future
	a.	hang (tr.)
		<i>juah-k(-in-)</i> (3.100.0375) <i>juah-k=mat</i> (3.100.0375)
	c.	set down
		<i>ra7wh-k(-in-)</i> (3.98.0230) <i>ra7wh-k=mat</i> (3.98.0230)

¹¹⁹ Canonical reshaping of k-class verbs is understood quite well for Hopi and slightly less well for SE, but so far it has been barely explored for KI.

- | | | |
|-------------------------------|----------------------------------|----------------------------------|
| d. stick together (tr.), mend | <i>nap-k(-in-)</i> (3.98.0185) | <i>nap-k = mat</i> (3.98.0185) |
| e. wash clothes | <i>tsong-k(-in-)</i> (3.98.0352) | <i>tsong-k = mat</i> (3.98.0133) |
| f. lean against (tr.) | <i>y7j-k(-in-)</i> (3.98.0282) | <i>y7j-k = mat</i> (3.98.0282) |
| g. put up out of reach | <i>y7v-k(-in-)</i> (3.100.0545) | <i>y7v-k = mat</i> (3.100.0545) |

The causative suffix for the athematic class is *-an* ~ *-n*. For many verbs the causative verb itself is not attested. Instead, the suffix appears only in nominalizations and other types of derived forms. This causative behaves quite differently from the *-in* causative of the *k*-class. It is not lost in word-final position, and it does not truncate in the imperative. Examples appear in (9). (9a,b,c) show the alternation between final *r* and non-final *h*. It is unclear why the glottal stop is sometimes lost before the causative, as in (9f,g); it seems unlikely that this is a transcription error since Harrington recorded it this way, without the glottal stop, for (9g) at least three times (3.98.0237, 3.98.0238, 3.100.0353). Note that the same loss of 7 occurs in (10b,c).

- | | |
|---|--|
| (9) KI | causative |
| a. <i>aar</i> ‘take a bath’ (3.98.0250) | <i>aah-an</i> ‘bathe (tr.), baptize’ (3.98.0157) |
| b. <i>kwar</i> ‘be cooked’ (3.98.0253) | <i>kwah-an</i> ‘cook’ (3.98.0234), <i>kwah-an</i> . ‘Cook it!’ (3.98.0234) |
| c. <i>piir</i> ‘suck (of baby)’ (3.98.0094) | <i>piih-an</i> ‘suckle (tr.)’ (3.98.0094) |
| d. <i>ookwa7</i> ‘have s.th caught in the throat’ (3.98.0212) | <i>ookwa7-n</i> ‘jerk fishline, make hook catch’ (3.100.0444) |
| e. <i>pi\$ka7</i> ‘be rotten’ (3.98.0168) | <i>pi\$ka7-n</i> ‘bury a reed in black mud to dye it’ (3.98.0289) |
| f. <i>wiro7j</i> ‘play instrument (intr.)’ (3.98.0206) | <i>wiroj-n</i> ‘play an instrument’ (3.98.0383) |
| g. <i>hihinitu7</i> ‘worry’ (3.100.0758) | <i>hihinitu-n</i> ‘hurry (tr.), annoy (tr.)’ (3.98.0237) |
| h. <i>yn</i> ‘know’ (3.98.0357) | <i>yn-an</i> ‘inform’ (3.98.0357) |
| i. <i>kym</i> ‘make’ (3.98.0185) | <i>kym-an</i> ‘cause to make’ (3.98.0466) |
| j. <i>naa7ak</i> ‘separate (intr.)’ (3.98.0475) | <i>naa7k-an</i> ‘separate, divide (tr.)’; <i>Naa7k-an</i> . ‘Divide [it]!’ (3.98.0475) |
| k. <i>o\$ivak</i> ‘get hot’ (3.98.0455) | <i>o\$iv-an</i> ‘heat’ (3.98.0210) |
| l. <i>waak</i> ‘be dry’ (3.100.0521) | <i>waak-an</i> ‘dry (tr.)’; <i>Waak-an</i> . ‘Dry [it]!’ (3.100.0520) |

For most athematic verbs, the causatives are documented only in nominalized forms, such as those in (10).

- | | | |
|---------|--|---|
| (10) KI | | nominalized causative |
| a. | <i>kua7</i> ‘call someone’ (3.98.0270) | <i>kuha-n-i-m</i> ‘people invited to ceremony’ (3.98.0050) |
| b. | <i>a-kwoha7</i> ‘it’s foaming’ (3.98.0231) | <i>ni-kwoha7-n-i-m</i> ‘I made it foam. (things that I caused to foam)’ (3.98.0231) |
| c. | <i>majha7</i> ‘give birth’ (3.98.0087) | <i>majha-n-i7a-t\$</i> ‘midwife’ (3.98.0048) |
| d. | <i>purikaw</i> ‘string beads’ (3.99.0419) | <i>purikaw-n-i-ts</i> ‘string of beads’ (3.99.0420) |
| e. | <i>tsiu7</i> ‘be ashamed’ (3.98.0391) | <i>tsiu7-n-i7a-t\$</i> ‘person ashamed of s.th’ (3.98.0391) |

A few apparently athematic verbs have the *-ina* causative, which appears only where other suffixes follow the causative, as in (11), where *-ina* reduces to *-in* before the nominalizing suffix *-i*. In the case of (11c), the suffix *-m* (or *-ym*) may be the distributive that replaces thematic *-k*. However, this is not well attested in the KI data.

- | | | | |
|---------|----|--|--|
| (11) KI | a. | <i>t\$yk</i> ‘stick, stab, spur’ (3.98.0380) | <i>t\$yk-in-ik</i> ‘spur a horse’ (3.100.0586) |
| | b. | <i>tut\$</i> ‘grow up’ (3.98.0087) (<i>tut\$a7</i> ‘raise a child’ (3.98.0448)) | <i>tut\$-in-i-t</i> ‘an older child, older boy’ (3.98.0367) |
| | c. | <i>ngyt\$ym</i> ‘pay visiting chiefs at a ceremony’ (3.98.0226) | <i>ngyt\$ym-in-i-ts</i> ‘the money and objects given to visiting chiefs at a ceremony’ (3.98.0225) |

A few athematic-verbs have a causative in *-nin*, seen in (12).

- | | | | |
|---------|----|--|---|
| (12) KI | a. | <i>kwa7</i> ‘eat’ (3.98.0093) | <i>kwa7-nin</i> ‘feed s.th’ (3.100.0341) |
| | b. | <i>paa7</i> ‘drink’ (3.98.0209) | <i>paa7-nin</i> ‘give someone drink’ (3.100.0341) |
| | c. | <i>tuhtu7</i> ‘dance (generic)’ (3.100.0500) | <i>tuhtu7-nin</i> ‘make someone dance’ (3.100.0567) |

Causative *-ea7(n)* is like its SE cognate *-ia7n(a-)*, which appears only with athematic verbs (whether derived from k-class verbs or not). When *-ea7(n)* is final, the *n* is

truncated. The *n* appears finally in the imperative (13a) and non-finally, as with the passive suffix (13b) and in nominalizations, such as instrumentals (13c) and gerunds (13d).

- (13) KI a. *kam-ea7n* ‘bury it!’ (3.100.0379)
 b. *a-kam-ea7n-ea* ‘it is buried’ (3.100.0379)
 c. *kah-ea7n-ivana* ‘pin to fasten with’ (3.98.0062)
 d. *a-tsing-ea7n-a7* ‘rooster’s comb’ (lit. ‘its pounded meat’) (3.99.0258)

Causative *-ea7(n)* seems to contribute a variety of meanings, as in (14).

- (14) KI a. *juuv-k(-in-)* ‘boil or cook s.th in water’ (3.98.0234) *juuv-ea7(n)* ‘fry s.th’ (3.98.0234)
 b. *kym* ‘spill, empty (intr.)’ (3.98.0276) *kym-ea7(n)* ‘pour, empty (tr.)’ (3.98.0062)
 c. *ty7uur* ‘count’ (3.98.0231) *ty7uuh-ea7(n)* ‘finish counting’ (3.100.0417)

A number of verbs, like those in (15), are attested only with *-ea7(n)*. Anderton (1988:99) suggests that at least some of these may be underived monomorphemic verbs. This is probably incorrect, at least from a diachronic perspective. Where attested, these verbs when suffixed exhibit the expected full form of the causative suffix, *-ea7n* (in (15b,c,g,i)). Furthermore, comparative evidence suggests that some may be complex. For instance, **puh...* ‘blow’ and **wa7a/i* ‘roast’ are widely attested in Uto-Aztecan languages. (15h) may include a reflex of **tyнна* ‘chase, hunt’, seen in Numic and Hopi.

- (15) KI a. *hynea7* ‘step on’ (3.98.0484)
 b. *kamea7* ‘bury s.th, roast in buried coals, shower people with chia at fiesta’ (3.100.0379); *kam-ea7n* ‘bury it!’, *kam-ea7n-ea* ‘it is buried’ (3.100.0379)
 c. *kwat\$ea7* ‘start or stoke fire’ (3.100.0638); *kwat\$-ea7n* ‘light the fire!’ (3.100.0638)
 d. *kwitea7* ‘bewitch, kill by witchcraft’ (3.98.0452)
 e. *nat\$ea7* ‘splice rope together’ (3.98.0470)
 f. *nihnea7* ‘do s.th as a custom’ (3.98.0245)
 g. *puhea7* ‘blow on, blow out’ (3.98.0211); *puh-ea7n* ‘blow it out!’ (3.98.0291)

- h. *tymea7* ‘drive cattle on horse as cowboys do’ (3.98.0462)
- i. *tsingea7* ‘pound meat’ (3.98.0352); *a-tsing-ea7n-a* ‘comb of rooster’ (3.99.0258)
- j. *wahea7* ‘singe, roast’ (cf. *waw* ‘roast’) (3.98.0214)

The behavior of KI *-nea7(n)* is better attested than is its SE cognate *-nia7n(a)*. Examples are given in (16). This suffix usefully provides a context in which the underlying final vowel of the verb stem is revealed.

- (16) KI
- | | | |
|----|---|--|
| a. | <i>huts-k(-in-)</i> ‘drop, let fall’
(3.98.0275) | <i>huts-ky-nea7(n)</i> ‘knock over’ (3.100.0366) |
| b. | <i>jangam</i> ‘believe in’
(3.100.0371) | <i>jangami-nea7n-a</i> ‘believe in completely’
(3.100.0371) |
| c. | <i>kuum</i> ‘sleep’ (3.98.0233) | <i>kuuma-nea7(n)</i> ‘put to sleep’ (3.100.0394) |
| d. | <i>paamuku-n</i> ‘drown (tr.)’
(3.100.0336) | <i>paamuku-nea7(n)</i> ‘drown (tr.)’ (3.98.0079) |
| e. | <i>wanak</i> ‘run’ (3.98.0379) | <i>wanaka-nea7(n)</i> ‘make someone run’ (3.98.0380) |
| f. | <i>wyv</i> ‘get well’ (3.98.0232) | <i>wyva-nea7(n)</i> ‘cure someone’ (3.98.0232) |
| g. | <i>yk</i> ‘lie’ (3.98.0239) | <i>yky-nea7(n)</i> ‘set s.th somewhere’ (3.98.0452) |

This construction is found with k-class verbs as well, as in (17).

- (17) KI
- | | | |
|----|--|---|
| a. | <i>wawt-yk</i> ‘be tired’ (3.98.0269) | <i>wawt-ky-nea7(n)</i> ‘tire someone out’ (3.98.0269) |
| b. | <i>jam-k(-in-)</i> ‘remember’
(3.98.0232) | <i>jam-ky-nea7(n)</i> ‘remind’ (3.98.0232) |

10.3.3. PASSIVE AND IMPERSONAL VERBS. KI has an impersonal construction with *-hea* ~ *-ea*, labeled “passive” by Anderton (1988:99). We retain her terminology. The prefix on verbs in *-(h)ea* encodes the experiencer. The subject is nowhere represented: in clauses with such verbs, the subject-object clitics do not appear. Examples of passives appear in (1). Following verb stems ending with causative *-ea7n-* (1c,d), or *-in-* with k-class verbs (1e,f), the passive suffix exhibits the *-ea* allomorph. The *-an-* causative (1h), however, takes the *-hea* allomorph.

- (1) KI
- | | |
|---|--|
| | passive |
| a. <i>ni-pii7</i>
1SG-bewitch;throw.stone.at
'I bewitched him/her.' ¹ (3.98.0358) | b. <i>ni-pii7-hea</i>
1SG-bewitch;throw.stone.at-PASS
'estoy hechizado (I was bewitched)'
(3.98.0452) |
| ¹ Also: 'I threw a stone at it (says nothing about whether [I] hit it or not).' | |
| c. <i>ni-kam-ea7</i>
1SG-bury-CAUS
'lo enterré (I buried it)' (3.100.0379) | d. <i>uvea a-kam-ea7n-ea</i>
already 3SG-bury-CAUS-PASS
'ya está enterrado (it's already buried)' (3.100.0379) |
| e. <i>ni-nap~nap-k</i>
1SG-REP~stick.together-K.CAUS
'lo remendé, I mended the tear'
(3.98.0382) | f. <i>a-nap-k-in-ea</i>
3SG-stick.together-K-CAUS-PASS
'el remiendo, the piece that is sewed on (it (the patch) is sewed on)'
(3.98.0382) |
| g. <i>ni-tyw=mat</i>
1SG-name=FUT
'I am going to name him (baby)'
(3.98.0270) | h. <i>my-tyw-an-hea</i>
2SG-name-CAUS-PASS
'you are named' (3.98.0270) |

The contrasting examples in (2) illustrate the syntax of the KI passive. In (2a), a transitive sentence, the subject-object relation is encoded in the pronominal clitic =*vyn* '3 > 1SG', and the subject prefix on the verb is *a-* '3SG'. In contrast, in the passive sentence in (2b), there is no pronominal clitic, and the subject prefix on the verb is *ni-* '1SG'.

- (2) KI a. *A-jaaw=vyn ni-kopo-j.*
3SG-grab=3 > 1SG 1SG-hair-ACC
'Me agarró de mi cabello. (He grabbed me by the hair.)' (3.98.0248; Anderton 1988:182)

- b. *Ni-muu-hea ni-maa-j.*
 1SG-shoot-PASS 1SG-hand-ACC
 ‘I am shot in the arm.’ (3.98.0208; Anderton 1988:123)

In contrast to example (2b), impersonal constructions not marked with passive have the full array of subject-object clitics and subject prefixes, as in (3).

- (3) KI *Ivi-t\$y=vyn a-mak ni-paameatu7-i.*
 this ABS = 3 > 1SG 3SG-give 1SG-thirst-ACC
 ‘Me da sed. (It makes me thirsty.)’ (3.98.0381; Anderton 1988:229)

10.3.4. THE DESIDERATIVE. The desiderative suffix in KI is *-ihuun* ~ *-jhuun*, as in (1).

- (1) KI a. *ni-kuuman-ihuun* ‘quiero dormir (I want to sleep)’ (3.100.0782)
 b. *naw ni-no7mkin-ihuun* ‘no lo quiero comprar (I don’t want to buy it)’
 (3.100.0624)
 c. *ni-ha7tsi7k-ihuun* ‘quiero estornudar (I want to sneeze)’ (3.100.0349)
 d. *naw ni-nanak\$a-jhuun* ‘I don’t want to wrestle (3.98.0344)
 e. *a-ja7-jhuun* ‘he flaps his wings preparatory to flying (he wants to fly)’
 (3.98.0454)

In contrast, SE has no desiderative suffix. All SE desiderative constructions are periphrastic, consisting of a main verb *uii7wyn(a)* ‘want’ plus a complement in irrealis *-ik*, as in (2). In (2a), the main clause subject and the prefix *a-* in the complement are coreferential. In (2b), complement prefix *ny-* is coreferential with the main clause object.

- (2) SE a. *Aa-p qaj=kwyn uii7wyn tyvy-nu7 a-kuuman-ik-t\$i.*
 DIST-LOC NEG = QUOT.3SG > 3SG want down-ABL 3SG-sleep-IRR.SUB-ACC
 ‘He didn’t want to sleep down below.’
 b. *Uii7wyna-j=vyn hawawa7n ny-ñi-ik-t\$i.*
 want-IND = 3SG > 1SG light.weight 1SG-be-IRR.SUB-ACC
 ‘He (the doctor) wants me to lose weight.’

KI, however, uses a periphrastic construction only when there is a change of subject. The main verb in such constructions is *uu7huun* ‘want’. When there is no subject change, a desiderative suffix *-ihuun/-jhuun* appears in final position in the verb construction (seen above in (1)). The suffix may be seen as a grammaticalized form of *uu7huun*, but *uu7huun* itself seems to be a desiderative construction from *uu7* ‘take, grasp’ plus *-ihuun*. This was Harrington’s analysis (3). *Uujhuun* is transcribed only with short vowels in the Harrington notes. Though this misses the vowel length feature, it attests to the vowels’ being of the same length in both syllables. Similarly Harrington never wrote KI *uu7* ‘grab’ with a long vowel; we assume it had a long vowel on the basis of the SE and TV evidence.

- (3) KI ni’u’ lo agarré, but ni’ujhun lo quiero agarrar
 (ni7uu7 ‘I grabbed it’, but ni7uu7huun ‘I want to grab it’),
 the ’ is evidently slurred out before the j. (3.98.0353)

This is also a possible analysis of SE *uui7wyn* ‘want’; it seems to be from *uu7* ‘take’ plus an unidentified element *-iwyn*. This SE element *-iwyn* in *uui7wyn* might be a remnant of a once-productive desiderative suffix, probably the cognate KI *-ihuun*.

Desiderative *-ihuun* probably relates to the noun KI *-huun* ‘heart’ (< PTak *\$uuna*). ‘Heart’ is used widely in Takic for the expression of mental states. It is tempting to propose a Proto-Takic reconstruction **-i\$uuna*, from PTak **\$uuna* ‘heart’. The addition of prothetic *i* is typical of derived suffixes (and is perhaps related to the Cupan ablaut vowel *i*). However, comparing the KI suffix *-ihuun* with the TV desiderative suffix, *-i\$uminU* or *-it\$aminU* (see 10.1.5 above), we find that while the forms in the two languages agree in having a consonant from **\$* and a following nasal consonant, the difference is too much to be accounted for by a straightforward reconstruction **-i\$uuna*. Thus the best reconstruction that can reasonably be proposed at this point is at the Proto-Serran level. Proto-Serran **-ihuun* remains unchanged in KI but loses **h* and vowel length in SE. This results in the awkward **-iun*, which restructures as *-iwyn*. This in turn combines with *uu7* ‘take’: *uu7-iwyn* > *u-ii7wyn*.

The synchronic connection with the verb *uu7* ‘grab’ seems to have become somewhat attenuated. In some examples with *uu7huun* ‘want, love’ as a main verb, the first syllable was heard as *yyj* rather than expected *uu7*, as in (4).

- (4) KI a. *Ni7-yyjhuun*.
 1SG-want
 ‘Yo lo quiero. (I want it.)’ (3.98.0092)
- b. *A7-yyjhuun = uvu7 a-majha-j* (or *a-majha-j-7ivy-j*).
 3SG-want = PST 3SG-son-ACC 3SG-son-ACC-DEC-ACC
 ‘She loved her dead son.’ (3.98.0091)

Examples of the periphrastic construction with subject change appear in (5). (5a) contains both the verb *uujuun* and an example of the desiderative suffix. Note that the complement in the periphrastic construction in (5a) has an accusative-case suffix *-i*. This case-marking was not written for (5b), probably for not being phonetically salient enough; we insert it. The subordinated verbs in these KI constructions have personal prefixes just as do their SE counterparts as in (2). They may be gerunds. In KI gerunds are distinguished from main verbs only by nominalizing and subordinating suffixes, since main verbs always have subject prefixes. Note that, unlike SE as in (2b), there are never pronominal clitics in the main clause of the periphrastic sentences; evidently the object is considered to be third singular, which yields a zero in the clitic complex.

- (5) KI a. *Pyy7-uujuun ni-kym-an-i, ty naw ni-kym-an-ihuun*.
 3PL-want 1SG-make-CAUS-ACC but NEG 1SG-make-CAUS-DES
 ‘They made me make it (They wanted to make me do it), but I did not want to.’
 (3.98.0466; Anderton 1988:138)
- b. *Naw a-w7~uujuun ni-mi[-j], mutu = mat ni-mi*.
 NEG 3SG-(?)~want 1SG-go-ACC still = FUT 1SG-go
 ‘Él no quiere que yo vaya pero siempre voy ir. (He doesn’t want me to go, but I’m going to go anyway.’ (3.98.0353; Anderton 1988:101)
 The *-w-* in *aw7uujuun* may represent an anticipatory articulation of the *u* of the verb. The glottal stop is the normal transitional glottal stop between a vowel-final prefix and a vowel-initial stem.

The examples in (6) show the same-subject constructions with the desiderative suffix *-ihuun*. Although Anderton (1988:231) states that the data for KI include no examples of

a sentence with *-ihuun* and a noun object, the materials in fact include such a sentence in (6c). Unfortunately, the argument structure 3 > 3SG has a zero clitic.

- (6) KI a. *Naw ni-namu-jhuun ny7.*
 NEG 1SG-fight-DES 1SG.PRO
 ‘No quiero pelear. (I don’t want to fight.)’ (3.100.0781; Anderton 1988:207)
- b. *Ni-huuna-ny ni-nom-k-in-ihuun.*
 1SG-heart-INS 1SG-buy-K-CAUS-DES
 ‘Mi corazón lo quiero comprar. (I want to buy it with all my heart.)’ (3.100.0625; Anderton 1988:321)
- c. *A-pits = ne paat\$uk a-paa-jhuun paa-t\$a-j.*
 3SG-arrive = NEHE man 3SG-drink-DES water-ABS-ACC
 ‘Llegó un hombre y quiso tomar agua. (A man arrived and wanted to drink some water.)’ (3.100.0540; Anderton 1988:237)

The only other example we have found that might provide a test of whether *-ihuun* constructions with transitive verbs can occur with object clitics, in (7), unfortunately has a dative object.

- (7) KI *A-tuhtutu7-jhuun ni-jyk.*
 3SG-play-DES 1SG-DAT
 ‘Quiere jugar conmigo. (She wants to play with me.)’ (3.100.0501; Anderton 1988:175)

Evidently dative objects are not represented by pronominal clitics. This is also seen in a non-desiderative example in (8). Example 10.3.5 (1b) below further attests to this pattern for dative objects.

- (8) KI *Ni-tuhtutu7 ymy-jyk.*
 1SG-play 2SG-DAT
 ‘Juego contigo. (I am playing with you.)’ (3.100.0501; Anderton 1988:88)

10.3.5. REDUPLICATION AND ASPECTUAL DISTINCTIONS. The data are sparse on aspectual distinctions encoded in reduplication in KI. In the absence of a clear understanding, we label most reduplicands in this section simply as imperfective (IPFV) or plural (PL), ignoring potential differences such as repetitive, durative, distributive, and the like.

Anderton (1988:95) notes that reduplication on verbs can create a progressive or repetitive aspect, as in (1).

- (1) KI a. *Ni-7a7~ajk*.
 1SG-IPFV~lick
 ‘Lo estoy lambiendo. (I am licking it.)’ (3.98.0357; Anderton 1988:59)
ajk ‘lick, lap with the tongue’ (cf. SE *ei7-k*)
- b. *Ni-hu~hungu7 ymy-jyk*.
 1SG-IPFV~talk 2SG-DAT
 ‘Estoy hablando contigo. (I’m talking with you.)’ (3.100.0631)
hungu7 ‘talk’
- c. *Ni-kuh~kuru7 kaa-t\$a-j*.
 1SG-IPFV~poke rat-ABS-ACC
 ‘I am poking stick into rata (rat) nest.’ (3.100.0394)
kuru7 ‘poke into’
- d. *A-muh~muna7 = vychym*.
 3SG-IPFV~cheat = 3 > 1PL
 ‘He is cheating us’ (3.100.0419)
muna7 ‘cheat’
- e. *Ni-nah~namu ymy-jyk*.
 1SG-IPFV~fight 2SG-DAT
 ‘Estoy peleando contigo. (I’m fighting with you.)’ (3.98.0279)
naamu ‘fight’
- f. *A-pih~pii\$ kutsi7*.
 3SG-IPFV~vomit dog
 ‘The dog is vomiting.’ (3.99.0258)

pii\$ ‘vomit’

g. *Ni-wih~winikaw.*

1SG-IPFV~think

‘Estoy pensando de cosas. (I’m thinking of things.)’ (3.98.0233)

winikaw ‘remember’

Other aspectual distinctions also appear to be encoded by this process. For instance, examples with plural subjects or objects (2) may be plurals or distributives. In (2a), the sense may be that the agent gives one item to each of several recipients, but this is not certain. In (2b) the reference is obviously to many trees, not to some mass. In (2c) the men are probably being rounded up one by one (the sentence probably refers to recruitment to the military, work, or prison).

(2) KI a. *A-mah~maka = vy.*

3SG-IPFV~give = 3 > 3PL

‘The man at the fiesta is giving property to the people. (He is giving it to them.)’

(3.98.0447)

mak ‘give’

b. *A-woh~woro.*

3SG-PL~be.sparse

‘The trees no están tupidos (are not dense), they are far apart.’ (3.98.0468)

woro ‘be sparse’

c. *Pyy-ja~jaw pa~paat\$uka-my-j.*

3PL-IPFV~seize PL~man-PL-ACC

‘Están agarrando hombres. (They are rounding up men.)’ (3.100.0372)

jaw ‘seize, catch’

Recall that SE distinguishes CV- reduplication from CVh- reduplication, with distinctive aspectual meaning (10.2.3.10). It is likely that (1c-g) and (2a,b), with CVh-, conveyed a different sense from those with CV- in (1a,b) and (2c), but these differences cannot be retrieved from the data available.

The examples in (3) show full root reduplication. Most of these appear to have a repetitive sense.

- (3) KI a. *A-hwan~hwahn-yk hawkup a-tsaka-j.*
 3SG-IPFV~jump-K one 3SG-leg-ACC
 ‘He hops on one leg.’ (3.98.0214)
hwahn-yk ‘jump’
- b. *A-manu7m~manu7m-k a-uva-t\$a-j.*
 3SG-IPFV~turn-K.CAUS 3SG-eye-ABS-ACC
 ‘He is rolling his eyes from side to side.’ (3.100.0410)
manu7m-k(-in-) ‘turn s.th’
- c. *Myyt\$~myyt\$k-i.*
 IPFV~pull-K-CAUS.IMP
 ‘¡Jala, jala! (Pull, pull!)’ (3.98.0289)
myyt\$k(-in-) ‘pull s.th taut’, *myyt\$-yt\$k(-in-)* ‘pull hard’
- d. *A-po7ng~po7ng-k.*
 3SG-IPFV~pound-K.CAUS
 ‘(The blacksmith) is pounding (the iron).’ (3.100.0464)
pong ‘hit with the fist’, *po7ng-yk* ‘bump into s.th (body part hit is obj.)’
- e. *Ni-rukut~rukut-k hama-ta-j.*
 1SG-IPFV~pull.out-K.CAUS weed-ABS-ACC
 ‘I am weeding (my garden).’ (3.98.0230)
rukut-k(-in-) ‘pull out’
- f. *A-tuah~tuah-yk.*
 3SG-IPFV~walk-K
 ‘Él anda. (He is walking.)’ (3.100.0499; Anderton 1988:60)
tuah-yk ‘walk’
- g. *Ni-vy7j~vy7j-k.*
 1SG-IPFV~touch-K.CAUS

‘I am feeling of it, laying my hand on a thing and feeling of it.’ (3.98.0387)
ni-vy7jk ‘lo tenté, I touched it or felt of it’ (3.98.0352)

The examples in (4) seems to be completives (CMP), a sense encoded by reduplication in SE athematic verbs (see 10.2.3.10). Completives in KI apparently involve full stem reduplication with athematic verbs.

(4) KI a. *A-kyy~kyy7-ivy.*

3SG-CMP~bite-DEC

‘The palo (stick) is rat-gnawed.’ (3.98.0215)

kyy7 ‘bite’

b. *Uvea ni-tsyk~tsyk.*

already 1SG-CMP~stab

‘Ya lo puñaleé. (I already stabbed him.)’ (3.100.0687)

tsyk ‘stick or stab’; *tsyh~tsyk* ‘spur a horse’

The forms in (5) are translated like completives. But the reduplication of the athematic verb in (4a) does not involve full stem copy. If (4b) is a completive reduplication, it takes place with a theme of the k-class, which does not exhibit completive reduplication in SE, where instead, such verbs form the completive by truncation (10.2.3.10).

(5) KI a. *A-muh~muna7=vyn.*

3SG-CMP~cheat = 3 > 1SG

‘She cheated me.’ (3.100.0596) ¹

muna7 ‘engañar (deceive)’

¹ This example lacks a specific gloss but elsewhere Harrington translated this construction “está engañando (3SG is deceiving).”

b. *Ni-nap~nap-k.*

1SG-CMP~mend-K.CAUS

‘Lo remendé, I mended the tear.’ (3.98.0382)

nap-k(-in-) ‘paste, glue, mend’

10.3.6. CUSTOMARY *NAH-* WITH VERBS. Another apparent pattern of reduplication is seen in (1). Harrington noted of example (1a): “not *nahnamu* at all” (3.100.0430). The translation suggests fighting over a long period of time (Harrington did this fieldwork during World War I). A second example, (1b), suggests that this may not be a reduplicated form at all. Instead, *naha-* may be a form of the “customary” prefix *nah-* (see 14.12.9), which appears in *nahwin* ‘deposit at a shrine’, from a Serran verb *wiin* ‘throw down on ground’. The superscript *a* in (1b) is in Harrington’s rendition of the word.

- (1) KI a. *Pyy-naha-namu*.
 3PL-CUST?-fight
 ‘They are fighting at the war.’ (3.100.0430)
namu ‘fight’; compare *nah-namu* (25e)
- b. *Nah^a-wiin = mat ny7*.
 CUST-throw.down = FUT 1SG.PRO
 ‘I am throwing chia in fire, or putting money at shrine in hills.’ (3.99.0678)

The derivational prefix *nah-*, which may be the source of *naha-* in the examples in (1), is attested mainly on deverbal nouns such as *nah-ky7hji-t* ‘s.th that bites, such as a bedbug or an aggressive dog’ (3.98.0132), from *kyy7* ‘bite’, and *nah-mona7ji-t* ‘deceiver, deceitful person’ (3.100.0419), cf. *mohmona7* ‘deceive’. However, a few verbs are probably derived with this prefix, as in (2). The prefix seems to signal a “customary” action or behavior. Note that in (2a) the probable source verb *wiin* has changed its meaning in KI.

- (2) KI a. *nah-wiin* ‘deposit at a shrine’ (cf. SE *wiin* ‘throw down on the ground’; the only gloss attested for KI *wiin* is ‘have diarrhea’)
- b. *nah-juu7* ‘sing deer songs, dirges’ (*juu7* ‘cry’)
- c. *nah-tyhtyng* ‘be chief, be in charge’ (cf. SE *nahtyhtyji7at\$* ‘the one in charge, the boss’, an agentive noun based on the verb *tyhtyj(y)* ‘work’)

10.3.7. INCORPORATION. The final type of verb-base derivation in KI is incorporation (Anderton 1988:156). This does not appear to have been a very productive process and

many examples are probably fixed forms, but the process is better attested than in SE, and (1e) suggests that it was active in fairly recent times, since chiles were unknown before contact with the Spanish. The most common type of incorporation involves the verb *muk* ‘be sick’, as in (1d,e). Unfortunately, the data are insufficient to determine the function of incorporation. The incorporated noun appears in its root form, without an absolutive suffix or a case suffix, and precedes the verb root. Examples (1a) and (1b) show a contrasting pair of sentences, (1a) with an object noun in the accusative case, and (1b) with the same noun incorporated. Incorporated nouns of course are all third person objects, so would not require a transitive clitic in any case. No incorporation of a plural is attested, and singular third person objects have zero transitive clitics. When aspectual distinctions are encoded through reduplication, the incorporated noun is reduplicated, not the verb stem (1c,d).

- (1) KI a. *A-kym a-ho-j.*
 3SG-make 3SG-hole-ACC
 ‘He digs his hole.’ (3.98.0280)
- b. *A-hoo-kym.*
 3SG-hole-make
 ‘Está haciendo cueva. (He is hole-making.)’ (3.98.0280)
- c. *My-ho~hoo-kym = yt?*
 2SG-PL~hole-make = Q
 ‘¿Estás haciendo cuevas? (Are you making holes?)’ (3.98.0354)
- d. *A-ngah~ngajka-muk.*
 3SG-PL~thigh[groin?]-die;suffer
 ‘El tiene potros. (He has a hernia(?)/cramp(?).)’ (3.98.0257; Anderton 1988:156)
 (Cf. SE *-ngajka7* ‘hip, upper leg, thigh’.)¹
¹ Anderton was not sure what this meant; ‘hernia’ is her guess. We suspect it means ‘have cramps’; *potro* is literally ‘colt’ and there may be a parallel with English “charlie horse.”
- e. *Ni-tsiira-muk.*
 1SG-chile-die;suffer
 ‘I made it hot (with chile).’ (3.98.0454)

f. *Ni-tykwaka-jaw.*

1SG-shade-grab

‘Me voy a sombread en la sombra. (I’m going to shade myself in the shade [I’m going to take some shade].)’ (3.98.0457)

g. *Ni-pyt\$y-huuna7 ymy-j.*

1SG-weight-embrace 2SG.PRO-ACC

‘Estoy atendido a Vd. (I am dependent on you.)’ (said when one is very indebted, behind on debt) (3.98.0480)

h. *Ni-wivy-kym.*

1SG-string-make

‘I make cats-cradle figures.’ (3.98.0057)

Example (2) shows an incorporated adjective.

(2) KI *ky\$a7-n-i-hungu7*

ugly-CAUS(?)-RSLT-talk

‘speak Ventureño Chumash’ (3.98.0066)

ky\$a7n-i-t\$ ‘ugly one’

Anderton (1988:155) states that the only compound verb in KI is *jaaw-nym* ‘bring’ (‘grab-walk’). In the Harrington notes this verb always appears as *jaanym* (e.g. 3.98.0126, 3.99.0288), the same as SE *jaanym* ‘have’. It is unclear whether SE *jaa-* should be regarded as an irregular combining form of *je-j* (< *jaay* + *-j*) ‘take, seize’ or of *jaa7* ‘take, bring, carry’ – or of neither.

10.3.8. SUPPLETIVE VERBS. While SE has several roots that have suppletive variants for intransitive subject and transitive object number, KI has apparently lost most of this system. The only example of such suppletion found is that of the verb *koon* ‘kill several’, which takes only plural objects. However, its suppletive partner *myk*, with cognates in

other Takic languages restricted to singular objects, can appear with either singular or plural objects in KI. An example with a plural object is seen in (1).

- (1) KI *My-myk = yvy.*
 2SG-kill = 2 > 3PL
 ‘Los matatis. (You killed them.)’ (3.100.0413; Anderton 1988:403)

While the verb ‘die’ is suppletive in most of the Takic languages, in KI it has only one form, *muk* ‘die, be sick’ (3.98.0353). KI also lacks the contrasts of animacy and number with **kaLy* and **wyny* found in the other Takic languages, with *kat\$* ‘be’ (3.100.0580) used in all contexts.

10.4. THE VERB BASE IN COASTAL CUPAN. Most LU and AC verb roots have two syllables, with the first syllable bearing stress. There are a few monosyllabic roots. Most roots with more syllables than two are probably historically complex, including frozen derivational suffixes and reduplications.

10.4.1. VERB CLASSES. The verbs of LU fall into two classes, thematic and athematic. Most thematic verbs are cited in the dictionaries of both Bright (1968) and Elliott (1999) with *a/i* following the verb stem. This represents the fact that the thematic verb can take either of the two thematic suffixes *-ax* or *-i*, which usually specify transitivity: intransitive *-ax* and transitive *-i*.

The treatment of the verbs that show thematic *-ax* or *-i* as a single class is at variance with Elliott’s (1999) treatment which treats the thematic verbs as belonging to two separate classes, defined by thematic suffix. Our broader grouping is parallel to the situation in Hopi, where the “k-class” – the thematic class of Hopi – encompasses a set of verbs that show a rich but class-constrained set of stem modification patterns (Hill & Black 1998:882-884), well beyond just the forms that take the thematic suffix *-k*. However, considering the importance of Elliott’s (1999) work, and that of Kroeber and Grace (1960) before him, we distinguish among their five verb classes below.

Elliott (1999), following Kroeber and Grace (1960), classifies the LU verbs according to their patterns of cooccurrence with the diverse suffixes of the past perfective (also called the “simple past” in Hyde 1971 and Elliott 1999). These suffixes are *-ja* for verbs

of “Class I” (intransitives with thematic *-ax*), *-jax* for verbs of “Class II” (transitives with thematic *-i*), *-x* for athematic verbs with stem-final vowels, and *-ax* for athematic verbs with stem-final consonants (see Table 11.4.1 for an overview of inflectional suffixes on LU verbs). The irregular verbs vary in the representation of the past perfective. The AC corpus documents intransitive thematic *-ja*, transitive thematic *-ax*, and vowel-final athematic *-x* past tense suffixes; no past tense of a consonant-final athematic verb was recorded.

Kroeber and Grace (1960:129) discuss a sample of 600 LU verbs. In their account, a pair of thematic verb classes, with the thematic suffixes intransitive, stative, passive *-ax* and transitive, causative *-i* constitute the overwhelming majority of verbs in their material. Harrington’s much smaller AC sample is also dominated by thematic roots. In both LU and AC these are all consonant final in surface realization due to vowel replacement (rule 1 in 4.4), though their final vowels are revealed in some types of reduplication. With the loss of this vowel they can have one or two syllables. As can be seen from the lists in (1) and (2), many verbs in this class share a semantic tendency to encode processes affecting inanimate objects. This is reminiscent of Whorf’s (1946:173) Hopi “eventive” k-class verbs.

Elliott (1999) represents the thematic suffix of Class I as *-a*, with *x* following in some contexts. We prefer to represent the suffix as *-ax*, with *-x* being lost in specifiable environments. This brings the behavior of the suffix into line with CU *-jax*, which also derives intransitives. This verb class is probably a reflex of the intransitive k-class.

In LU, as mentioned above, the *-x* of the intransitive is lost in a number of environments. It is truncated in the past perfective and is also lost before suffixes with initial *n*, *ng*, *q*, *u*, and *a* (yielding unstressed long *a*). It is also lost before frequentative *-la*, but not before immediate future singular *-lu-t*.

In AC, where more complex final consonant clusters are permitted, the *a* of the intransitive suffix is lost and the AC thematic suffix is simply *-x*. Further, intransitive thematic *-x* is lost before *q*, as in LU, but it remains elsewhere.

Elliott’s (1999) Class II verbs are the thematic transitives. In LU, their thematic suffix *-i* probably derives from the k-class causative suffix **-ina*. In AC, unstressed *i* becomes *a*, so that the two classes contrast intransitive *-x* with transitive *-a*.

Both Class I and Class II lose the entire thematic suffix by truncation in the past perfective. It seems likely that the past perfective *-(y)ax* of the transitive thematic verbs (again see Table 11.4.1) represents a residue of the original thematic *-k*, protected by the causative **-ina*, of which the **-n* has been lost. While in Serran the thematic *k* suffix is usually the innermost derivational layer, preceding the causative and other base-forming suffixes, in LU and AC this order has modified to permit recursive derivations.

Examples of LU thematic verbs are seen in (1), of AC in (2). Many derived verbs are thematic, as in (1b,e,f,g, 2d,f,j).

(1) LU	transitive theme <i>-i</i>	intransitive theme <i>-ax</i>
a.	<i>pidh-i</i> ‘break a long object’	<i>pidh-ax</i> ‘be broken (of long object)’
b.	<i>\$am-k-i</i> ‘collect herbs, greens’	<i>\$am-k-ax</i> ‘be collected (of herbs, greens)’
c.	<i>wich-i</i> ‘throw down, leave behind, bless (pl.obj.)’	<i>wich-ax</i> ‘be thrown down, lie (pl.subj.)’
d.	<i>kar-i</i> ‘make climb or go up’	<i>kar-ax</i> ‘climb, go up’
e.	<i>haruuq-i</i> ‘make a hole, perforate’	<i>haruuq-ax</i> ‘have a hole’
f.	<i>havách-i</i> ‘make swell up’	<i>havách-ax</i> ‘swell up’
g.	<i>nav-k-i</i> ‘search for prickly pears’	<i>nav-k-ax</i> ‘be searched for (of prickly pears)’

Most AC verbs were collected only in a single inflection, the nonfuture singular in *-q*, with intransitive *-x* being lost before this suffix.¹²⁰ However, the intransitives can be identified because they lack the transitive *-a*. In (2), we have chosen verbs where inflections that attest the intransitive *-x* are attested; these appear in the right-most column. A root-final postconsonantal glottal stop metathesizes to follow the *-a* transitive suffix (2b,c,j,j) Compare (2e,g), with postvocalic glottal stop and no metathesis.

(2) AC	transitive theme <i>-a</i>	intransitive theme	intransitive theme <i>-x</i>
a.	<i>charr-a-q</i> ‘tear, break’ (3.123.0253)	<i>char~chár-q</i> ‘be torn’ (3.123.0427)	<i>char-x-an7-t</i> ‘torn’ (3.123.0427)
b.	<i>hojj-a7-q</i> ‘give one a shake’ (3.123.0619)	<i>hoj7-q</i> ‘shake once’ (3.123.0619)	<i>hajoo~hoj7-x-on</i> ‘they are shaking’ (3.123.0619)

¹²⁰ This is a morphologically sensitive rule since root-final *x* remains before *q*, as in *wax-q* ‘dry (tr.)’ (3.123.0307), *ax-qap* ‘está sabroso (it’s tasty)’ (3.123.0263).

c. <i>inn-a7-q</i> ‘take off’ (3.123.0608)	<i>in7-q</i> ‘be taken off’ (3.123.0608)	<i>in7-x</i> ‘get out!’ (3.123.0612)
d. <i>jamaak-a-q</i> ‘soften’ (3.123.0403)	<i>jamaa-q</i> ‘be soft’ (3.123.0402)	<i>jamaak-x-lat</i> ‘it will get soft’ (3.123.0402)
e. <i>karii7-a-q</i> ‘climb s.th’ (3.123.0642)	<i>karii7-q</i> ‘be high’ (3.123.0492)	<i>karii7-x-an7-t</i> ‘high, steep’ (3.123.0492)
f. <i>laww-a-q</i> ‘make a hole’ (3.123.0528)	<i>law-q</i> ‘it is a well, a big hole’ (3.124.0354)	<i>law-x-an7-t</i> ‘having a single hole’ (3.124.0049)
g. <i>maqá77-a-q</i> ‘lay s.th down’ (3.123.0458)	<i>maqá7-q</i> ‘lie down’ (3.123.0458)	<i>maqá7-x-lat</i> ‘will lie down’ (3.123.0578)
h. <i>miich-a-q</i> ‘strangle’ (3.122.0185)	<i>miich-q</i> ‘be strangled’ (3.123.0283)	<i>a-miich-x</i> ‘strangled’ (3.123.0283)
i. <i>\$uvv-a7-q</i> ‘scorch’ (3.123.0368)	<i>\$uv7-q</i> ‘be scorched’ (3.123.0367)	<i>\$uv7-x-lat</i> ‘will get scorched’ (3.123.0367)
j. <i>wann-a7-q</i> ‘frighten’ (3.123.0300)	<i>wan7-q</i> ‘be scared’ (3.123.0431)	<i>a-wan7-x</i> ‘scared’ (3.123.0300)

Some verbs are attested with only one thematic suffix, such as those in (3). In LU, their status as thematic can be determined by examining their truncated past perfective forms, which have *-ja* with intransitives (3a), *-jax* or *-ax* with transitives (3b), in contrast to *-x* (or glottal infixation or reduplication) with past perfective athematic verbs.

(3) LU		past perfective
a. arrive, come	<i>wuko7-ax</i>	<i>wuko7-ja</i>
b. fight	<i>neqp-i</i>	<i>neqp-ax</i>

Elliott’s (1999) Class III includes the vowel-final athematic roots. Elliott separates out the LU athematic roots with final *-a* (our *-ax* – see above). Once it is recognized that the thematic suffix of the intransitive is *-ax*, with loss of *x* in certain environments, it is not necessary to distinguish an athematic class with final *-a* from other vowel-final athematic roots. However, given the Elliott classification, we list a few of these athematic *-a* final roots and stems in (4), and list athematic roots with other final vowels in (5). Note that in inflection these athematic roots appear with *-wun* ‘present plural’ and *-wunu-t* ‘same

subject’, rather than with the special suffix allomorphs *-an* and *-a-t* that are attested only with thematic *-ax* verbs.

- (4) LU
- | | | |
|----|-----------------|-------------------------------------|
| a. | <i>avá-la-</i> | ‘turn red’ – cf. <i>avaa-</i> ‘red’ |
| b. | <i>hatii7a-</i> | ‘accompany (intr.)’ |
| c. | <i>hamooja</i> | ‘be ashamed, shy’ |
| d. | <i>lo7xa-</i> | ‘make, prepare’ |
| e. | <i>ma7ma-</i> | ‘like, want’ |
| f. | <i>naqma-</i> | ‘hear, listen’ |
| g. | <i>ngaa-</i> | ‘weep for someone, cry (tr.)’ |
| h. | <i>samsa-</i> | ‘buy’ |

LU athematic roots and stems ending in *-e*, *-o*, and *-u*, and verbs ending in *-i* that do not participate in *-i* ~ *-ax* pairs, are shown in (5). This class includes denominal verbs with *-tu* ~ *-chu* ~ *-lu* (see 14.15.1.3).

- (5) LU
- | | | |
|----|-----------------|---|
| a. | <i>ngee-</i> | ‘go away, leave’ (< <i>ngeem</i>) |
| b. | <i>loovi-</i> | ‘be good or correct’ |
| c. | <i>maamaju-</i> | ‘help’ |
| d. | <i>mom-tu-</i> | ‘rise, of tide; be sea-sick’ < <i>mooma-t</i> ‘ocean’ |
| e. | <i>an-tu-</i> | ‘be stung by ants in ritual, sting with ants in ritual, do the ritual’
< <i>aana-t</i> ‘a kind of ant’ |
| f. | <i>kii-chu-</i> | ‘build a house’ < <i>kii-cha</i> ‘house’ |
| g. | <i>peew-lu-</i> | ‘marry (generic, and of a man)’ |
| h. | <i>pa\$-lu-</i> | ‘become an older brother to someone’ < <i>-paa7a\$</i> ‘older brother’ |
| i. | <i>push-lu-</i> | ‘bear fruit’ < <i>push-la</i> ‘seed, fruit’ |

The verb *ngee-* (5a) is interestingly irregular (see 10.4.2.2) and perhaps does not belong in (5). Equally well it does not fit in with the irregular verbs of (7) below. This verb shows a final *m* when unsuffixed in the past perfective and in the imperative. Kroeber and Grace (1960:141) understood the underlying form of the verb to include a final *m*.

Class IV consists of athematic roots and stems ending in a consonant.

- (6) LU
- | | | |
|----|------------------|---------------------|
| a. | <i>uu7-</i> | ‘carry’ |
| b. | <i>aa\$-</i> | ‘bathe’ |
| c. | <i>na7jawun-</i> | ‘accuse, blame’ |
| d. | <i>kup-</i> | ‘sleep’ |
| e. | <i>toonav-</i> | ‘make a basket’ |
| f. | <i>jaw-</i> | ‘grab, catch’ |
| g. | <i>hatiis-</i> | ‘sneeze repeatedly’ |

The only difference between the verbs of (5) and (6) is phonological: the suffixes show their postvocalic and postconsonantal allomorphs. Vowel-initial inflectional suffixes lose their vowel when preceded by a stem vowel, and the motion suffix is *-j(m)* after a vowel and *-ngi(m)* after a consonant (or after its cognate verb *ngee(m)*; see 10.4.2.2). This is illustrated by forms of *nawvu* ‘fight’ and *uho7van* ‘believe’ in (7) (from Elliott 1999:59-60).

- (7) LU
- | | | | |
|----|-----------------|----------------|--------------------|
| a. | past perfective | <i>nawvu-x</i> | <i>uho7van-ax</i> |
| b. | future | <i>nawvu-n</i> | <i>uho7van-an</i> |
| c. | usitative | <i>nawvu-k</i> | <i>uho7van-uk</i> |
| d. | motion (GO&) | <i>nawvu-j</i> | <i>uho7van-ngi</i> |

Finally, LU has a small group of athematic irregular verbs, including those in (8). These verbs behave somewhat like the CU stressless roots, shifting stress to some suffixes as indicated below.

- (8) LU
- | | |
|----|---|
| a. | <i>won</i> ‘be, have (inanimate plural subject)’: <i>wo7un</i> (PST.PRV), <i>wunón</i> (FUT), <i>wunúk</i> (USIT) |
| b. | <i>qal</i> ‘be, have’ (inanimate singular subject): <i>qaa7al</i> (PST.PFV), <i>qalun</i> ~ <i>qalón</i> (FUT) |
| c. | <i>mon</i> ‘travel, come, arrive, walk, pass by’: <i>munáa</i> (PRS.SG and PRS.PL), <i>munmúk</i> (PST.PFV) <i>moo7un</i> (PST.PFV), <i>mónmaan</i> (FUT) |
| d. | <i>jaw</i> ‘have, catch, etc.’: <i>jawún</i> (FUT), <i>jawúk</i> (USIT) |
| e. | <i>jax</i> ‘say’: <i>jaquísh</i> (PST.IPFV), <i>jaxún</i> ~ <i>jaxán</i> (FUT), <i>jawúk</i> (USIT) |

Only a few AC athematic verbs appear in the Harrington notes. Vowel-final examples appear in (9), consonant-final ones in (10). The attested irregular verbs are given in (11).

- (9) AC a. *aama-q* 'hunt' (3.123.0285)
 b. *naqma-q* 'hear' (3.122.0197)
 c. *kung-la-q* 'marry (of a woman)' (3.124.0180) < *kuung* 'husband' (Woodward 2007:195)
 d. *topii-q* 'follow tracks' (3.123.0478)
 e. *we7eqla-q* 'quarrel' (3.124.0016)
- (10) AC a. *awo7x-lat* 'go to work' (3.123.0307)
 b. *aj-q* 'hold' (3.123.0547)
 c. *chalúj7-won* 'speak Spanish (pl.)' (3.123.0439)
 e. *haal7-q* 'search' (3.123.0634)
 d. *pachxam-q* 'wash' (3.123.0609)
- (11) AC a. *aaw7-* 'be, dwell (anim.sg.): *aa7qw* 'is there' (3.123.0536), *pa-7aw7-la-pa* 'so he will live there' (3.123.0355)
 b. *jaqa* 'say' (3.123.0305), *jaqaa-lat* 'will say' (3.124.0175)
 c. *mon-* 'come, walk': *monaa* 'comes' (3.123.0387) ~ *manaa* (3.123.0288), *moon-maxan* 'will come' (3.123.0286), *mon-ma!* 'come!' (3.123.0508)
 d. *qaal* 'be (there) (inan.sg, anim.sg.)' (3.123.0524), *qal-won* 'be there (anim.pl.)' (3.123.0629)
 e. *won7-q* 'be (there)' (inan.pl.)' (3.123.0629)

10.4.2. DERIVATION OF THE VERB BASE. A system of suffixes derives extended bases of diverse types. These are much better attested in LU than in AC, but AC examples are provided when they have been found.

10.4.2.1. FREQUENTATIVE -LA. The suffix *-la* has several meanings, including frequentative, distributive, or continuative, as in (1). It occurs with the thematic verbs. This suffix does not cooccur with continuative reduplication, seen below in 10.4.2.7.1 (6). This is exactly what is also seen in SE, where *-av*, the continuative suffix for k-class verbs, does not cooccur with reduplication. While many LU suffixes that derive complex stems shift stress away from the first syllable of the verb stem, with frequentative *-la*, stress remains on the initial syllable. Verbs with this suffix belong to the athematic,

vowel-final class with past perfective suffix *-x*, as seen in the past perfective example in (1a). In example (1b), the *a* of the suffix is lost by regular rule before usitative *-uk*.

(1) LU a. *Pa7 muuj-a-la-x paa-la po-jk.*
 then rise-INTR-FREQ-PST.PFV water-ABS 3SG.PRO-DAT
 ‘And then the water began to rise up to him.’ (H&E 1273)

b. *Huu-tal \$e7-l-uk pumoom-i.*
 arrow-INS shoot-FREQ-USIT 3PL.PRO-ACC
 ‘He would always shoot them with arrows.’ (H&E 30)

AC c. *Nge-lla-nga-q ijkch.*
 go-FREQ-GO&-NFUT.SG just
 ‘Es andariego no más. (He is just always wandering around.)’ (3.116.0195)

10.4.2.2. MOTION SUFFIXES. The set of motion suffixes includes *-ngi(m) ~ -j(m)* ‘go back’, *-mu(n)* ‘movement along, keeping doing’, *-lu(7)* ‘purposive movement toward a goal’, and *-la* ‘be doing while moving, go and do’.

10.4.2.2.1. -NGI(M) ~ -J(M) ‘GO BACK’. The suffix *-ngi(m) ~ -j(m)* ‘go away, go back to point of origin’ encodes prior or concurrent motion. Following a convention introduced by Guillaume (2016) it can be glossed as ‘go&’ for ‘go and do’. The final *m* occurs when there is no following suffix, as in the past perfective. The allomorphs *-ngi-*, *-ngim* appear after consonants, as in (1).

(1) LU a. *Pi7 Taakwi-sh mon-ngi-q pujaamangay.*
 and prsn-ABS travel-GO&-PRS.SG always
 ‘But the Taakwish travels around all the time.’ (H&E 52)

b. *Qaj hax jaw-ngim.*
 NEG INDF.HUMAN take-GO&-PST.PFV
 ‘No one took it.’ (H&E 157)

-j(m) appears in the syllable coda, with intervocalic loss of *ng* and devocalization of *i*, as seen in (2), with *-j-* in (2a), *-jm* in (2b,c).

- (2) LU a. *Oonu axáinik noo po-j hot-i-j-k.*
 that like 1SG.PRO 3SG.PRO-ACC take.away-TR-GO&-USIT
 ‘And so I would take her away.’ (H&E 260)
- b. *Puné-j=s=il=ax ku\$án-i-jm.*
 3SG.INAN-ACC = Q = REAL = (?) take-TR-GO&.PST.PFV
 ‘They must have gotten it (taken it away).’ (H&E 828)
- c. *Ne-j nuul-i-jm i-jk.*
 1SG.PRO-ACC push-TR-GO&-PST.PFV PROX-DAT
 ‘They pushed me there (in a wheelchair, to the bus stop to catch a bus).’ (H&E 610)

Kroeber and Grace (1960:142), following Sparkman, analyze *-jm* as a separate “progressive” motion element *-im*, with one of its possible interpretations being ‘do and then go’. This would be a rare and highly marked type of associated motion in the typology introduced by Guillaume, but there is little evidence for Kroeber and Grace analysis.

Examples with the final *m* retained in the imperative singular are given in (3). Examples (3a,b) are consecutive in a text; the speaker is exhorting a dangerous spirit to leave a sick child alone.

- (3) LU a. *Tu\$u po-j hakán-i-jm.*
 PROH 3SG.PRO-ACC lift-TR-GO&.IMP
 ‘Don’t take her!’ (H&E 792)
- b. *Nol-i-jm i-va7.*
 leave-TR-GO&.IMP PROX-LOC
 ‘Leave her here!’ (H&E 792)
- c. *Ne-j hot-i-jm.*
 1SG.PRO-ACC take.back-TR-GO&.IMP

‘Take me back!’ (H&E 748)

The imperative plural, as a suffixed form, lacks the final *m*, as in (4). No example with the *-j-* allomorph has yet been identified in the imperative plural; that combination should produce *-j-jam**.

- (4) LU *Qal-**ngi-jam** omóm.*
 be-GO&-IMP.PL 2PL.PRO
 ‘Be, remain ye (far off)!’ (K&G 142)

In the imperative singular, the final *m* of the *-ngi(m)* allomorph seems not to appear. Kroeber and Grace (1960:142) report the examples in (5). These lack the expected word-final *m* and all appear to be imperatives. Example (5f) seems doubly exceptional (if *-ngi* is correctly identified here); the expected form would be *wiiki-jm**.

- (5) LU a. *wuko7-ax-**ngi*** ‘go and get there’
 b. *samsa-**ngi om*** ‘go and buy’
 c. *jax-**ngi om*** ‘go and tell!’
 d. *kuláw7-**ngi*** ‘go get firewood!’
 e. *paw-**ngi*** ‘bring water!’
 f. *wiiki-**ngi*** ‘gather Indian hemp’

The underlying verb *ngeem* ‘go back’ also retains its *m* in word-final position, in the imperative singular (6a). The only non-imperative example of word-final *-ngi* – with no *m* – is found in the reduplicated form *ngee~ngi*, in (6b,c), which serves as the irregular past perfective for this verb.

- (6) LU a. “**Ngeem** o-ki-jk,” jaa po-j qa\$í-la.
 go.back.IMP 2SG-house-DAT say.PST.PFV 3SG.PRO-ACC lizard-ABS
 ‘ “Go home,” the lizard told him.’ (H&E 1324)
- b. **Ngee-*ngi*** chaam wunáj airplane-ik wam7.
 PFV~go.back 1PL.PRO DIST.ABL airplane-DAT already
 ‘So we left for the airport.’ (H&E 611)

- c. *A\$un-nga = kunu7 pulúch-a-jm* *ngee~ngi*
 3.INAN-LOC = QUOT go.out-INTR-GO&.PST.PFV PFV~go.back
hiqw-a-jm.
 run-INTR-GO&.PST.PFV
 ‘He came out of there running in order to go back home.’ (K&G 142)

The LU plural imperative of *ngeem* ‘go away’ is regular, and as a suffixed form, it shows no final *m*, as in (7).

- (7) LU *Ngee-jam,* *hatii7-ax-am.*
 go.away-IMP.PL go-TR-IMP.PL
 ‘Go away, leave (pl.)!’ (H&E 774)

In AC, this suffix appears as *-nga(m)*, with the vowel *a* since it is always in unstressed position. Examples are given in (8) (see also 10.4.1 (1c) above).

- (8) AC a. *Tee = \$ = p = a* *hii-ngaj* *che-jk* *hatii7-x-nga-q.*
 DUB = Q = 3SG = DPST.INDF INDF-ABL this.way-DAT go-INTR-GO&-NFUT.SG
 ‘Yo no sé porqué vino. (I don’t know why he came/Who knows why he came this way.)’ (3.123.0565) [= 8.3.4 (1f)]

- b. *Xamu~xxam7-x-nga-q.*
 CONT~smile-INTR-GO&-NFUT.SG
 ‘He goes very smiling all the time.’ (3.123.0562)
 This example reveals the final vowel of the root. There are too few examples of AC reduplication to specify their form-function relationships; we assume that they are much like those of LU.
 (“Very smiling” appears to be the equivalent of Spanish *muy risueño*.)

Just as in LU, the AC suffix shows *m* in the imperative (9). Example (9b), with *-ngam* following a vowel-final stem, shows that AC has not developed an equivalent of the reduced postvocalic *-jm* allomorph of LU.

- (9) AC a. *Kaleq-tal hatii7k-ngam.*
 fast-INS go-GO&.IMP
 ‘¡Pronto vente! (Come soon!)’ (3.123.0626)
- b. *Che-jk xakkwo-ngam na-naawa7-ka pa7a7qwa-ng-wa7-ch-a.*
 here-DAT bring-GO&.IMP 1SG-dress-PSD on.top-LOC-GENT-ABS-ACC
 ‘¡Trae pacá mi nagua de encima! (Bring me my outer dress!)’ (3.123.0557)

AC has a nominalization *-ng-a-ch* (see 14.1.4 (7)) with the sense ‘come from doing s.th’, which provides further exemplification of “subsequent action” with this suffix.

10.4.2.2.2. -MU(N) ‘MOVEMENT ALONG, KEEPING DOING’. The motion suffix *-mu(n)* ‘movement along, keeping doing’ is illustrated in (1). It is derived from the irregular verb *mon* ‘travel, go along’ (seen in (1d)). Kroeber and Grace (1960:32) call it “andative.”¹²¹ They state that the suffix appears as *-ma* before *-qat*, *-qal*, *-qanuk*, *-qala*, and *-qu\$*. Hyde and Elliott (1994) record *-mu* (their <-mo>) before *-qu\$*, as in (1a). These short forms reflect the regular loss of suffix-final *n* before *q*, which occurs in CU as well (cf. 4.5.4.2). Other tense-aspect inflections for *-mu(n)* are identical to those for the verb itself (though with *o > u* vowel reduction), as seen in (1c,d) (see Table 11.4.1 for the conjugation of *mon*). This suffix encodes only concurrent motion, and since it can be read as motion ‘hither’ or ‘thither’, we use the simple gloss MOT (‘motion’) for this suffix as we do for the SE motion suffix of the same generalized meaning.

- (1) LU a. *Wil-ax-mu-qu\$, put-ax-mu-qu\$ po-ki-jk*
 hop-INTR-MOT-PST.IPFV jump-INTR-MOT-PST.IPFV 3SG-house-DAT
po-paaw-jik.
 3SG-water-DAT
 ‘He went hopping and jumping along back to his own house, to his water.’ (H&E 1242)

¹²¹ The term “andative” is also used by Freeland (1951:61) for a suffix of much the same meaning in Sierra Miwok.

- b. *Pa7 mas wam7 aláxwi-mu-qu\$.*
 then more already bad-MOT-PST.IPFV
 ‘And then it got even worse.’ (H&E 741)
- c. *Wehma-l-i pijaamangaj \$ili-i-mun-aa paa-l iitaan-t-i*
 little-ABS-ACC always pour-TR-MOT-IMP water-ABS:ACC cold-ABS-ACC
a\$un-nga, qaj mujuk-i.
 3.INAN-LOC NEG much-ACC
 ‘You’ve always got to keep pouring a little cold water onto it, but not too much.’
 (H&E 39)
- d. *Waal-i-mun-aa o-7iiva-tal a\$un-tal.*
 stir-TR-MOT-IMP 2SG-spoon-INS 3.INAN-INS
 ‘You keep on stirring it with your spoon.’ (H&E 39)

The suffix appears as *-man* in AC (2).

(2) AC *Hajoo~hoj7-x-man.*

CONT~shake-INTR-MOT

‘Ellos vienen huilos.¹ (They come unsteady on their feet.)’ (3.123.0619)

¹ *Huilo* ‘unsteady, shaky’ is an *aztequismo* (Cabrera 1974:82); cf. Nahuatl *vila* [= *huila*] ‘perfora tollida [= tullida] que anda agatas (crippled person who walks on all fours)’ (Molina 1571:II.157v)

10.4.2.2.3. MOTION SUFFIXES IN L. The remaining two motion suffixes are not obviously derived from independent verbs of motion. These suffixes apparently encode prior motion with a sense of purpose. We gloss them as MOTPR for ‘prior motion’.

The suffix *-lu(7)* ‘purposive movement toward a goal’ (MOTPR) is found in CU and CA and is cognate with Serran *-t\$u7(a)* (see 10.2.3.4). It is found in Kroeber and Grace (1960:142-43) as *-lun*, with a segmentation different from ours (1a), and *-lu*, in (1b), which they treat as an allomorph of the motion suffix *-la* (see below). Mrs. Hyde apparently did not use this form of the suffix, though it is possible that this suffix is the source of *-lu* in LU *-lu-t*, AC *-la-t* ‘FUT.SG’, which is often translated as ‘going to ...’ (as with the verb *lo7xa-lut* in (3b) below).

- (1) LU a. *Noo = nu = pu po-j nechi-ni-lu-n.*
 1SG.PRO = 1SG = IRR 3SG.PRO-ACC pay-CAUS-MOTPR-FUT
 ‘I’m going in order to make him pay.’ (K&G 142)

- b. *Noo = n jax-lu-q.*
 1SG.PRO = 1SG say-MOTPR-PRES.SG
 ‘I am going in order to tell.’ (K&G 143; they translate ‘I went and told.’)

This suffix is *-la* in AC, as in (2).

- (2) AC *Noo = n po-j aama-la-xa-q.*
 1SG.PRO = 1SG 3SG.PRO-ACC hunt-MOTPR-CAUS-NFUT.SG
 ‘Yo le estoy mandando que vaya a cazar. (I am sending him to go to hunt.)’
 (3.123.0289)

The motion suffix *-la* signals movement during or before an action: ‘be doing while moving, go and do’. This suffix is homophonous with the frequentative or continuative suffix *-la* illustrated in 10.4.2.1 (1), and like that suffix, it creates verbs in the athematic *-a* class. It seems possible that these two are a single suffix and in any case they would phonologically fall together in AC. LU examples appear in (3).

- (3) LU a. *Pa7 pi7 po-j tengal-la-x po-j po-maacha-nga.*
 then and 3SG-ACC doctor-MOTPR-PST.PFV 3SG-ACC 3SG-back-LOC
 ‘And so he went and doctored her back.’ (H&E 1076)
- b. *Pi7 = su oonu om hi-sh lo7xa-lut wa7án-i-la-q*
 and = Q that 2SG.PRO INDF(INAN)-ABS:ACC do-IFUT.SG carry-TR-MOTPR-PRS.SG
che-jk?
 here-DAT
 ‘What did you bring that for, what are you going to do with those here?’ (H&E 1260)

10.4.2.3. VALENCE-CHANGING SUFFIXES. Valence-changing suffixes include a set of causatives. The most common are two suffixes, *-ni* and *-ní7-i*. Verbs with *-ní7-i* behave

like athematic, vowel-final bases with past perfectives with final *-ax* instead of *-ja* (as in (1a)). Both causatives permit further suffixation with intransitive *-ax* in *-ní7-ax*, yielding an intransitive thematic base (see (2)). This pair of suffixes derives transitives from intransitive verbs, as well as causatives from transitives. The causative suffix *-ní7i* causes a shift of stress, to the suffix itself if the glottal stop of the suffix is present, as in (1a-c); otherwise to the syllable before the suffix (1d,e).

- (1) LU a. *Pa7=kuna7 wax-ní7-ax puné-j tuuku-t po-taava-j.*
 then = QUOT dry-CAUS-PST.PFV 3SG.PRO.INAN-ACC wildcat-ABS 3SG-skin-ACC
 ‘And then he dried the wildcat’s skin.’ (H&E 1292)
- b. *Pi7 oonu pitoo no-wol-ní7-pi trigo.*
 and PROX2 now 1SG-grow-CAUS-IRR.SUB wheat
 ‘And now I have to raise wheat.’ (H&E 1363)
- c. *Pa7 po-j iixmaqanik wiita-ní7i-k.*
 then 3SG.PRO-ACC finally stand-CAUS-USIT
 ‘And then finally they’d have to stop him.’ (H&E 835)
- d. *Hi-sh=su om hiqw-í-ni-q i-va7?*
 INDF(INAN)-ABS:ACC=Q 2SG.PRO run-TR-CAUS-PRS.SG PROX-LOC
 ‘What are you up to here?’ (i.e., ‘What are you running here?’) (H&E 1398)
- e. *Po7 hingeema-l hiqw-í-ni-qu\$ no-paa7a\$ po-jk.*
 DET boy-ABS run-TR-CAUS-PST.IPFV 1SG-Older 3SG.PRO-DAT
 ‘The boy would make my older brother drive.’ (H&E 834)

In AC, the best-documented causative is *-(a)na*, seen in (2). Unlike LU *-ni* ~ *-ní7i*, it has no effect on stress placement. Examples (2c,d) have both a transitivizing suffix and a causative.

- (2) AC a. *Noo=n liww-ana-q.*
 1SG.PRO = 1SG be.cold-CAUS-NFUT.SG
 ‘Yo lo enfrié, I cooled it.’ (3.123.0540)

- b. *Noo = n na-7aach-a mara7-na-q.*
 1SG.PRO = 1SG 1SG-horse-ACC sweat-CAUS-NFUT.SG
 ‘I made my horse sweat.’ (3.123.0584) (cf. intransitive *mará7-x* ‘sweat’)
- c. *Noo = n po-j ngool-a7-na-q.*
 1SG.PRO = 1SG 3SG.PRO-ACC drunk-TRS-CAUS-NFUT.SG
 ‘Yo lo emborraché. (I got him drunk.)’ (3.123.0330)
- d. *Noo = n po-j heel-a7-na-q.*
 1SG.PRO = 1SG 3SG.PRO-ACC sing-TRS-CAUS-NFUT.SG
 ‘I made him sing.’ (3.123.0540)

Some causatives with LU *-ni*, *-ní7i* and AC *-na* are attested with secondary intransitives or passives in *-ni7-ax* ~ *-n-ax*, as in (3). Note that the final vowels of *-ni*, *-ní7i* behave like stem-final vowels and are lost before thematic intransitive *-ax*. The source of the *i* that precedes the causative suffix in (3b) is obscure; the basic verb is *uwo7a-x* ‘work (intr.)’/‘work on (tr.)’ (<owo’a> Elliott 1999:216-217) is athematic.

- | | | | | | | |
|-----|----|----|------------------|------------------------------------|--------------------|---|
| (3) | LU | a. | <i>a\$-ni7i</i> | ‘bathe, baptize (tr.)’ | <i>a\$-ni7-ax</i> | ‘be consecrated’ |
| | | b. | <i>uwo7-i-ni</i> | ‘make s.th work, activate’ | <i>uwo7-i-n-ax</i> | ‘be activated’ |
| | | c. | <i>loovi-ni</i> | ‘correct (make good)’ | <i>loovi-n-ax</i> | ‘be corrected, forgiven’ |
| | AC | d. | <i>hoot-a-q</i> | ‘pull-TRS-NFUT.SG’
(3.122.0189) | <i>hoot-a-n-ax</i> | ‘lead an animal by a lead!’
(3.123.0599) |

When the intransitive verb of the first thematic class in *-ax* is passive, stative, or inchoative, the transitive thematic suffix *-i* in LU, *-a* in AC, has a causative function (4a-c,e,f). However, there are occasional examples of causatives on thematic transitives, as in (4d,g).

- | | | | | | | |
|-----|----|----|-----------------|------------------------|------------------|---------------------|
| (4) | LU | a. | <i>haq-ax</i> | ‘be inhaled’ | <i>haq-i</i> | ‘inhale’ |
| | | b. | <i>av-ax</i> | ‘be red’ | <i>av-i</i> | ‘make red’ |
| | | c. | <i>juvát-ax</i> | ‘be black, turn black’ | <i>juvát-i</i> | ‘make turn black’ |
| | | d. | <i>naam-i</i> | ‘run a race’ | <i>naam-i-ni</i> | ‘make someone race’ |

AC	e.	<i>chut-q</i>	‘go down’ (3.123.0471)	<i>chutt-a</i>	‘take down!’ (3.123.0470)
	f.	<i>jun-q</i>	‘join together, assemble’ (3.123.0409)	<i>junn-a-q</i>	‘make join together’ (3.123.0409)
	g.	<i>naaw-a7</i>	‘write, draw!’ (3.123.0459)	<i>naaw-a7-na</i>	‘photograph someone’ (3.123.0374)

Elliott (1999) reports repetitive constructions on LU verbs of the thematic *-ax/-i* classes with *-ni* as a causative of transitives, where *-ni* is reduplicated along with the verb root, as in (5). In these reduplicated causatives, the thematic transitivizer *-i* is usually reduplicated along with the causative suffix, although there are a few exceptions, as in (5d). In the repetitive without the causative (5e), the thematic suffix *-i* is not copied.

- (5) LU
- | | | |
|----|------------------------------|---|
| a. | <i>chipeqi-ni~chipéqi-ni</i> | ‘make someone glue repeatedly’ |
| b. | <i>ami-ni~7ámi-ni</i> | ‘make someone put down a load repeatedly’ |
| c. | <i>ko7i-ni~kó7i-ni</i> | ‘repeatedly make bite’ |
| d. | <i>jawa7~jawá7-ni</i> | ‘repeatedly cause pl. obj. to take s.th’ |
| e. | <i>chulup~chulúp-i</i> | ‘put in more than once’ |

This repetitive construction appears in the work of Pablo Tac from the late 1830s Tac cited verbs as “infinitives” with final *-s*; this is probably the *-sh* of the resultative *-i-sh* derivation, which in LU also derives action nominalizations (see 14.1).

- (6) LU
- | | | |
|----|----------------------------------|--|
| a. | <i>aja7li-ni~aja7li-ni7i-s</i> | ‘to order many times that one know’
(Haas 2012:217) |
| b. | <i>kajaawi-ni~kajaawi-ni7i-s</i> | ‘to order many times that one wash’
(Haas 2012:230) |

Philip Sparkman, working at the beginning of the twentieth century, reported causatives with verbs of the thematic *-ax/-i* classes in *-kixa*, *-kixani*, and *-xani ~ -xeni* (Kroeber & Grace 1960:136). Kroeber and Grace (1960:144) suggest that *-kixa(ni)* has two parts, causative *-ki* and benefactive causative *-xa(ni)* (see below). We have found none of these attested in Hyde and Elliott (1994). Unlike causatives *-ni* and *-ni7i*, the

suffix *-ki* replaces the thematic vowel. Examples are seen in (7). With these causatives, in contrast to those in (5), the thematic suffix is not present.

- (7) LU a. *nech-ax/-i* ‘be paid for, pay’ *nech-kixani* ‘have s.th paid for’
 b. *et-ax/-i* ‘hurry, hurry someone’ *et-kixa* ‘get someone to hurry’
 c. *chip-ax/-i* ‘break’ *chip-kixi* ‘have broken’
- d. *Samsa-xa-ni* *po-j.*
 buy-BEN.CAUS-CAUS 3SG.PRO-ACC
 ‘Make him buy.’ (K&G 144)

Triple causatives with *-ki-xa-ni* are attested:

- (8) LU a. *Noo = n* *po-j* *nech-ki-xa-ni-q.*
 1SG.PRO = 1SG 3SG.PRO-ACC pay-CAUS-BEN.CAUS-CAUS-PRS.SG
 ‘I got him (A) to make him (B) pay up.’ (K&G 144)
- b. *Noo = n* *nech-ki-xa-ni-lut* *po-j.*
 1SG.PRO = 1SG pay-CAUS-BEN.CAUS-CAUS-IFUT.SG 3SG.PRO-ACC
 ‘I will send some one to order him to pay.’ (K&G 144)

Pablo Tac in the 1830s (Haas 2012) reported only *-ni*, *-niʔi* causatives on verbs recorded by Elliott (1999) as thematic verbs of the *-ax/-i* class, in (9). There are no examples of causatives in *-ki-xa*, etc., in the Tac materials. Tac came from *Quech*, San Luis Rey, on the Pacific coast, while Sparkman’s materials (and Mrs. Hyde’s usage) represent the speech of Rincon, 40 miles away in the mountains.

- (9) LU a. *chip-í-niʔi-s* ‘to have or command that s.th be broken’ (Haas 2012:125)
 b. *ajaali-niʔi-s* ‘to command that s.th be fixed’ (Haas 2012:217)
 c. *qamí-niʔi-s* ‘to command that one leave’ (Haas 2012:229)
 d. *qajaawi-niʔi-s* ‘to order that one wash’ (Haas 2012:230)
 e. *chapáqi-niʔi-s* ‘to order that one unite’ (Haas 2012:238)

Mrs. Hyde also used constructions of this type, as in (10), but these are infrequent.

- (10) LU a. *Pumoom-i naam-i-ni-k.*
 3PL.PRO-ACC race-TR-CAUS-USIT
 ‘We would make them race.’ (H&E 695)
- b. *Po7 o-j muj-i-ni-n, meeja-nik a\$un-nga.*
 3SG.PRO 2SG.PRO-ACC vomit-TR-CAUS-FUT smoke-SS 3SG.INAN-LOC
 ‘It would make you vomit, if you fumigated (yourself) in it.’ (H&E 505)

A causative suffix *-xa* is recorded for AC, as seen in (11).

- (11) LU a. *Noo=n po-j kari7-a-xa-q*
 1SG.PRO=1SG 3SG.PRO-ACC climb-TRS-CAUS-NFUT.SG
 ‘I am making the boy climb (the tree).’ (3.123.0643)

There appears to be no benefactive suffix in LU. Only periphrastic constructions with the postpositions *-(y)max* and *-kwaan* ‘for the benefit of, sake of’, with a pronominal prefix encoding the benefactive object, are attested. The apparent postposition *-jmax* in (9a) is the same as the CU benefactive suffix *-max*.

- (12) LU a. *Noo=nu=pu o-j nech-i-xa-xa-n ne-jmax.*
 1SG.PRO=1SG=IRR 2SG.PRO-ACC pay-TR-BEN.CAUS-BEN.CAUS 1SG-BEN
 ‘I will make you pay for me.’ (K&G 144)
- b. *Pi7 pumóm luvi7-ax \$aawuki-sh po-kwaan.*
 and 3PL.PRO make-TR.PST.PFV bread-ABS 3SG-sake
 ‘And they made bread for him.’ (H&E 1364)

While there is no specifically benefactive suffix on the verb, a pair of causative-benefactive suffixes, *-xa* and *-xam-* ‘cause/ask/persuade to do for someone else’, are documented by Kroeber and Grace (1960:143, 144). Jacobs (1975) does not mention these suffixes, and they do not appear in Hyde and Elliott (1994). There are no clear examples in the AC data. However, they do appear in Sparkman’s examples in Elliott

(1999), the source of the examples here. The benefactive suffix *-xa* is also found in CU and CA, so it is probably a Proto-Cupan feature.

Some of the sentences attesting *-xa* appear to have been elicited from Mrs. Hyde in order to check Sparkman materials. She understood sentences with the suffixes and was able to improve on Sparkman's translations, as in (13). As will be seen below, *-xam-* is a thematic base, with variants *-xam-i* and *-xamax*. Verbs with these suffixes behave like thematic verbs, while verbs with *-xa* behave like vowel-final athematic verbs.

- (13) LU *Noo=n* *nech-xam-i-lut* *po-j* *po-nechi-pi-j* *ne-jk*.
 1SG.PRO = 1SG pay-BEN.CAUS-TR-IFUT.SG 3SG.PRO-ACC 3SG-pay-IRR-ACC 1SG-DAT
 'I am going to make him pay me.' (Sparkman, cited in Elliott 1999:601)
 'I make him pay so he will pay me.' (Hyde, in Elliott 1999:601)

The examples of constructions with *-xa* and *-xam* in the LU data in Kroeber and Grace (1960) and Elliott (1999) are sufficient for us to make a stab at working out how the argument structures set up by these derivational elements are managed. First, if the beneficiary of the benefactive-causative is the speaker, apparently only the object of the causative must be present, marked with the accusative, and there is no overt representation of the speaker as beneficiary. A speaker beneficiary can be represented with a pronominal prefix and a postposition, as with *ne-jmax* in (12a).

- (14) LU a. *Noo=n* *samsa-xa-q* *po-j*.
 1SG.PRO = 1SG buy-BEN.CAUS-PRS.SG 3SG.PRO-ACC
 'I asked him to buy it for me.' (K&G 144)
- b. *Noo=n* *nech-i-xa-q*.
 1SG.PRO = 1SG pay-TR-BEN.CAUS-PRS.SG
 'I told him to pay (for me).' (K&G 144)

In imperatives with *-xa*, second person beneficiaries can be unmarked, as in (15).

- (15) LU a. *Samsa-xa*.
 buy-BEN.CAUS.IMP
 'Tell him to buy it (for you)! (K&G 144)

- b. *Aa7alvu-xa* *po-j*.
 tell.story-BEN.CAUS.IMP 3SG.PRO-ACC
 ‘Make him tell (you) a story!’ (K&G 144)

If the beneficiary is not the speaker, there are diverse options for marking the arguments. All of the attested examples are probably elicited sentences, with the subject always present. Although zero subject is common in LU discourse, there are no such examples with these suffixes. Zero object never occurs with simple transitives in LU. These always have accusative-marked pronominals or nouns expressing the object. (This is unlike SE, which may have zero object as well as zero subject; cf. *kwa7i*) Examples with the same marking pattern appear in (16a-e). In constructions with *-xa* and *-xami* two marked accusatives can appear, rather than the expected shift of one argument to the dative (as in (16i,j) where the beneficiary is dative), both benefactive and causative object can be marked with the accusative, as in (16a-d). Note that in (16d) only the determiner of the transitive object ‘work’ is marked with accusative. However, in (16h,i,j) the transitive object nouns have no case markers. With these more complex argument structures, we do find examples of zero objects, as in (16f) (the beneficiary), and (16g,h) (the causative object).

- (16) LU a. *Noo=n* *o-j* *punee-ji* *ja7aa-ch-i* *maamaju-xami-q*.
 1SG.PRO=1SG 2SG.PRO-ACC 3SG.ANIM-ACC man-ABS-ACC help-BEN.CAUS-PRS.SG
 ‘I have you help that man (so someone else doesn’t have to help him).’ (Elliott 1999:484)
- b. *Noo=n* *o-j* *punee-ji* *ja7aa-ch-i* *nech-xami-q*.
 1SG.PRO=1SG 2SG.PRO-ACC 3SG.ANIM-ACC man-ABS-ACC pay-BEN.CAUS-PRS.SG
 ‘I have you pay the man for someone else (instead of someone else having to pay the man).’ (Elliott 1999:601)

- c. *Noo = n* *o-j* *punee-ji* *ja7aa-ch-i*
 1SG.PRO = 1SG 2SG.PRO-ACC 3SG.ANIM-ACC man-ABS-ACC
piivan-xami-q.
 throw.stones-BEN.CAUS-PRS.SG
 ‘I have you throw stones at that man (so that the person who normally throws stones doesn’t have to).’ (Elliott 1999:716)
- d. *Noo* *o-j* *puné-j* *uwo7ax-ish* *luvi7-i-vichu-xami-q.*
 1SG.PRO 2SG.PRO-ACC 3SG.INAN.DET-ACC work-ABS do-TR-DES-BEN.CAUS-PRS.SG
 ‘I want you to do the work for him.’ (Elliott 1999:471)
- e. *Noo = nu = pu* *toonav-xa-xa-n* *no-to7ma-j.*
 1SG.PRO = 1SG = IRR make.basket-BEN.CAUS-FUT 1SG-wife-ACC
 ‘I will have my wife make baskets.’ (K&G 144)
- f. *Uwo7ax-i-sh* *luvi7a-xami-q.*
 work-NMLZI-ABS do-INTR-BEN.CAUS-PRS.SG
 ‘The work is being done (for someone else).’ (Elliott 1999:470)
- g. *Noo = n* *o-j* *a\$-xami-q.*
 1SG.PRO = 1SG 2SG.PRO-ACC take.bath-BEN.CAUS-PRS.SG
 ‘I have someone come and bathe you.’ (Elliott 1990:134)
- h. *Noo = n* *lo7xa-xa-lut* *nadhúngdhuma-l.*
 1SG.PRO = 1SG make-BEN.CAUS-IFUT.SG pot-ABS
 ‘I am going to order a water-carrying jar made.’ (K&G 144)
- i. *Noo = n* *Tishma-l-i* *hi-sh* *naachaxani-sh*
 1SG.PRO = 1SG prsn-ABS-ACC INDF(INAN)-ABS:ACC food-ABS
lo7xa-vichu-xami-q *po-kwaan-i.*
 make-DES-BEN.CAUS-PRS.SG 3SG-sake-ACC
 ‘I want to have Tishmal make some food for her.’ (Elliott 1999:464)

- j. *Pi7 noo Wiskun-i kulaawu-t po-tu7 po-kú-jk*
 and 1SG.PRO prsn-ACC wood-ABS 3SG-MoMo 3SG-fire-DAT
choor-xami-lut.
 saw-BEN.CAUS-IFUT.SG
 ‘And I’m going to have Wiskun saw some wood for his grandmother’s fire.’
 (Elliott 1999:271)

Like the causative *-ni*, *-ní7i*, which have secondary intransitives *-n-ax*, *-ni7-ax*, *-xami* has a secondary intransitive *-xam-ax* (with replacement of *i*, hinting that that element might be the transitive thematic suffix). Sentences with *-xam-ax* are passives of benefactives, with the benefactive object in the unmarked nominative case. The sentences in (17) can be compared with those in (16) with the same verbs.

- (17) LU a. *Po7 jaa7a-sh nech-xam-ax-lut.*
 DET man-ABS pay-BEN.CAUS-INTR-IFUT.SG
 ‘The man is going to be paid by someone else (so that the person expected to pay doesn’t have to).’ (Elliott 1999:601)
- b. *Oom a\$-xam-a-q.*
 2SG.PRO take.bath-BEN.CAUS-INTR-PRS.SG
 ‘You are bathed by someone (so the person who normally bathes you doesn’t have to).’ (Elliott 1999:135)
- c. *O-jo7 po-\$uun hengcha-maan [naachaxani-sh*
 2SG-mother 3SG-heart happy-FUT.IPFV food-ABS
lo7xa-xam-a-an-t-i ku\$áni-nik].
 make-BEN.CAUS-INTR-ADJZ-ABS-ACC get-SS
 ‘Your mother will be glad to get some food already made for her.’ (Elliott 1999:464)
- d. *Po7 ja7á-sh maamaju-xam-a-q.*
 DET man-ABS help-BEN.CAUS-INTR-PRES.SG
 ‘That man is helped (by someone else so the person who normally helps him doesn’t have to).’ (Elliott 1999:484)

- e. *Po7 ja7á-sh piivan-xam-a-q.*
 DET man-ABS throw-BEN.CAUS-INTR-PRES.SG
 ‘Stones are thrown at that man (That man gets stones thrown at him).’ (Elliott 1999:716)

10.4.2.4. MODAL SUFFIXES. There are two modal suffixes that derive stems: *-vichu* ‘desiderative’, and *-luta ~ -vuta* ‘potential’ (referring to the ability of the subject to do something). Only the desiderative, *-vacha*, is documented for AC. The LU potential suffixes *-luta ~ -vuta* are “completely synonymous” (Elliott 1999:1010). These suffixes create bases that behave like athematic vowel-final verbs.

- (1) LU a. *Pa7 tiigri-j wam7 qaj tiw-i-vichu-qu\$ waxáwki-la.*
 then tiger-ACC already NEG see-TR-DES-PST.IPFV frog-ABS
 ‘But the frog no longer wanted to see the tiger again.’ (H&E 1241)

- b. *O-j no-na7 mokna-vichu-lut pominik.*
 2SG.PRO-ACC 1SG-father kill-DES-IFUT.SG really
 ‘My father is really going to try to kill you.’ (H&E 1368)

- AC c. *Ni-j pumm-a-vacha-q.*
 1SG.PRO-ACC kiss-TR-DES-PRES.SG
 ‘Él me quiere besar. (He wants to kiss me.)’ (3.122.0196)

- d. *Noo = n qaj hatí77-a-v7cha-q.*¹
 1SG.PRO = 1SG NEG go-TR-DES-NFUT.SG
 ‘No quiero ir. (I don’t want to go there.)’ (3.123.0532)

¹ The origin of the glottal stop (which Harrington notes as “ch.” clearly heard) in the desiderative suffix here is obscure.

Verb constructions with *-luta ~ -vuta* are exceptional in that they must have a subject prefix, even though they are main-clause finite verbs that inflect for tense and aspect. Examples given by Kroeber and Grace (1960:145-46) suggest that the grammaticalization of *-luta ~ -vuta* as was still not complete at the beginning of the twentieth century. Their example sentences include examples with a third person subject clitic, =*p*, that appears to be the subject of the potential predicate, under which the apparent main verb is

subordinated, as in (2). Of special interest is that in (2b) the present-tense suffix on the verb is singular *-q*, agreeing with the 3SG subject *=p*, and not the expected plural *-wun*, agreeing with the 1PL different-subject *cham-* of the apparent main verb: “it can be [that we pay].” In summary, although Kroeber and Grace’s transcriptions suggest that the phonological integration of the *-luta ~ -vuta* constructions was identical to that with *-vichu* ‘desiderative’, the syntactic structure may be something like [3SG., *luta* [DS-V-INTR/TR]], with the subordinate verb having the typical gerundial structure with a possessive prefix.

- (2) LU a. *Noo = p* *no-nech-i-luta-q*.
 1SG.PRO = 3SG 1SG-pay-TR-POT-PRS.SG
 ‘I can pay.’ (K&G 145)
- b. *Chaam = p* *cham-nech-i-luta-q*.
 1PL.PRO = 3SG 1PL-pay-TR-POT-PRS.SG
 ‘We can pay.’ (K&G 145)
- c. *Qaj = p* *no-7uwo7-ax-luta-q* *o-jk*.
 NEG = 3SG 1SG-work-INTR-POT-PRS.SG 2SG-DAT
 ‘I cannot work for you.’ (K&G 145)
- d. *Noo = p = il* *no-nech-i-vuta-muk*.
 1SG.PRO = 3SG = REAL 1SG-pay-TR-POT-REC.PST
 ‘I could (was able to) pay (yesterday).’ (K&G 146)
- e. *Noo = p = il* *no-nech-i-luta-qu\$*.
 1SG.PRO = 3SG = REAL 1SG-pay-TR-POT-PST.IPFV
 ‘I could (was able to) pay.’ (K&G 151)

Structures like those in (2) are not attested in Mrs. Hyde’s speech. In the example sentences in her pedagogical grammar (Hyde 1971), she prescribed agreement of the subject clitic with the subject expressed in the prefix on the verb construction, as in (3a), and, similarly, on agreement of the tense-aspect suffix with the subject, as in (3b). The possessive prefix on the verb is the only residue of the former structure. The remaining

examples in (3) are from Mrs. Hyde's texts in Hyde and Elliott (1994). The sentence in (3d) is a bit peculiar in that it shows that a verb well established as a member of the intransitive class (it has simple past *tila7ja*) can appear with a cognate object.

- (3) LU a. *Noo = n no-pokw-ax-vuta-q*
 1SG.PRO = 1SG 1SG-run-INTR-POT-PRS.SG
 'I can run.' (Hyde 1971:107)
- b. *Chaam cham-\$e7-i-vuta-wun.*
 1SG.PRO 1SG-shoot-TR-POT-PRS.PL
 'We can shoot.' (Hyde 1971:107)
- c. *Wam7 qaj noo po-jk no-qewi-luta-qu\$.*
 now NEG 1SG.PRO 3SG-DAT 1sg-shout-POT-PST.IPFV
 'I couldn't shout to her' (H&E 742)
- d. *Qaj chaam cham-teela-j cham-tila7-ax-vuta-qu\$.*
 NEG 1PL.PRO 1PL-language-ACC 1PL-speak-INTR-POT-PST.IPFV
 'We weren't allowed to speak our language.' (H&E 22)
- e. *Pa7 po-j po-mokna-vuta-q.*
 then 3SG.PRO-ACC 3SG-kill-POT-PRS.SG
 'It could kill him.' (H&E 207)

10.4.2.5. THE ORDERING OF SUFFIXES. Kroeber and Grace (1960:155) have a table giving the order of the stem-derivational suffixes, but Jacobs (1975:82) observed that these suffixes can appear in diverse orders, according to the sense of the verb construction. Elicited examples published by Jacobs (1975:85) appear in (1).

- (1) LU a. *Noo = n = il [[wuqál-a-ni]-vichu]-muk Xwaan-i.*
 1SG.PRO = 1SG = REAL walk-INTR-CAUS-DES-PST.PFV Juan-ACC
 'I wanted to make Juan walk.' (Jacobs 1975:85)

- b. *Noo = n* *no-[[[[[wuqál-ax-lu]-ni]-vichu]-ni]-vuta]-muk* *Xwaan-i.*
 1SG.PRO = 1SG 1SG- arrive-INTR-GOPR-CAUS-DES-CAUS-POT-PST.PFV Juan-ACC
 ‘I was able to make Juan want to make her go there to walk.’ (Jacobs 1975:85)
- c. *Noo = n* *po-j* *[[[[heel-ax-ngi]-vichu]-ni]-vichu]-q.*
 1SG.PRO = 1SG 3SG.PRO-ACC sing-INTR-GO&-CAUS-DES-PRS.SG
 ‘I want to make him want to go away singing.’ (Jacobs 1975:85)

It is clear that the system permits this type of verb-internal syntax (constructions with derivational suffixes in variable order appear in CU and CA as well). A few examples of order variation can be retrieved from the corpora of texts for these languages. However, in the published texts collected by investigators other than Jacobs, examples at the level of elaboration seen in (1b,c) simply do not occur. Constructions with more than two derivational suffixes almost never occur in text, where speakers prefer to use periphrastic constructions, or adjoin two or three clauses.

Jacobs does not discuss examples with *-xa* and *-xam-* ‘cause/ask/persuade to do for someone else’, which apparently were not used by his consultants. There are examples in the data of the sequence *-vichu-xam-i*, seen in (2). These examples challenge the hypothesis advanced by Jacobs, because in this case the subject of *-vichu* ‘want’ is the outer-most argument of the sentence, and the object of *-xam-i* is the object of the verb. Given the Jacobs hypothesis, these sentences should mean ‘I persuade X to want to make something for someone’, with *-xam-i* having as its subject the subject of the sentence, as in the examples in 10.4.2.3 (12) where only *-xam-i* is suffixed. This suggests that the sequence *-vichu-xami* may have been in fixed order, but data to resolve this question may never become available.

- (2) LU a. *Noo* *o-j* *puné-j* *uwo7ax-ish* *luvi7-i-vichu-xami-q.*
 1SG.PRO 2SG.PRO-ACC 3SG.INAN.DET-ACC work-ABS do-TR-DES-BEN.CAUS-PRS.SG
 ‘I want you to do the work for him.’ (Elliott 1999:471)
- b. *Noo = n* *Tishma-l-i* *hi-sh* *naachaxani-sh*
 1SG.PRO = 1SG prsn-ABS-ACC INDF(INAN)-ABS:ACC food-ABS
lo7xa-vichu-xami-q *po-kwaan-i.*
 make-DES-BEN.CAUS-PRS.SG 3SG-sake-ACC

‘I want to have Tishmal make some food for her.’ (Elliott 1999:464) [= 10.4.2 (14i)]

10.4.2.6. STRESS SHIFT WITH CERTAIN SUFFIXES. An important feature of base derivation in LU is a large series of suffixes that, like the causative *-níʔi*, shift the stress to a position before the suffix. Most of these are unproductive and inconsistent in meaning; traces of these appear in other Takic languages as well, in inexplicable base alternations, some of which survive in a given language in one form, but are attested with a different suffix in another. In LU, it is most likely that all verb bases with more than two syllables, and all bases with second syllable stress, are historically derived. Some examples of LU derivations of this type, where more than one of these fossilized suffixes are attested on the same root, appear in (1). Many of these suffixes derive thematic verbs and have *-ax* ‘transitive’ and *-i* ‘intransitive’ themes; we give only a single theme here.

- (1) LU
- | | | |
|----|---|------------------------------------|
| a. | <i>uláʔ-na</i> ‘make clothes, do dressmaking’ | <i>uláʔ-q-ax</i> ‘sew, stitch’ |
| b. | <i>palxwá-ʔa</i> ‘be watery’ | <i>palxwá-m-ax</i> ‘become watery’ |
| c. | <i>tavá-j-ax</i> ‘be spread-eagled’ | <i>taváa-j</i> ‘be bow-legged’ |
| d. | <i>kwa\$á-p-ax</i> ‘dry up’ | <i>kwa\$á-l-ax</i> ‘shriveled’ |

10.4.2.7. PHONOLOGICAL MODIFICATION OF VERB ROOTS.

10.4.2.7.1. REDUPLICATION. In addition to the suffixes, modification of verb roots by vowel lengthening, consonant alternations, and, especially, reduplication, are important in the derivation of verb bases in LU. Of these processes, reduplication is the most productive, and is very well documented in Elliott (1999). The distinctions among the various reduplications of verb roots are not perfectly predictable, but most examples follow the generalizations below. We give AC examples of each phonological template where they exist, but we have no way of determining their exact meaning. We assume that AC reduplications are functionally as well as formally very similar to LU reduplications. We give the glosses provided by Harrington.

The first reduplication, glossed by Elliott as ‘now and then’, is quite regular and attested with many verbs. It involves a prefixed copy of the first CVC of the root. This copy is stressed. If the first vowel of the root is long, as in (1c), the copied vowel is long

as well, but the root vowel becomes short, given a constraint in LU prohibiting long vowels in successive syllables. Examples appear in (1). Where verbs are members of the *-ax/-i* class, we give only one of the thematic variants. It is unclear whether or not the basic *e* or *o* in the unstressed part of these forms reduce to *i* or *u*; they may have secondary stress. We follow Elliott's spelling here. The similar AC examples are all multiplicative, rather than with the "now and then" meaning of the LU forms. They also have a different stress pattern from that of the LU reduplications.

- | | | | | |
|-----|----|----|---|--|
| (1) | LU | a. | <i>nak-i</i> 'close, block' | <i>nak~nak-i</i> 'close now and then' |
| | | b. | <i>oov-i</i> 'give, administer' | <i>oov~7ov-i</i> 'give now and then' |
| | | c. | <i>char-i</i> 'tear (cloth) once' | <i>char~char-i</i> 'tear s.th now and then' |
| | | d. | <i>eem-i</i> 'cover from the rain' | <i>eem~7em-i</i> 'cover (as from rain)' |
| | AC | e. | <i>chi77-a-q</i> 'pick up' (3.123.0394) | <i>cha7~chí77-a-jam</i> 'pick them up!' (3.123.0394) |
| | | f. | <i>law-q</i> 'be a big hole' (3.123.0529) | <i>law~láv-q</i> 'be full of holes' (3.124.0049) |
| | | g. | <i>luk[-q]</i> 'have a dent' (3.123.0280) | <i>luk~lúkka-q</i> 'be dented with several dents' (3.123.0280) |
| | | h. | <i>char-q</i> 'tear' (3.123.0253) | <i>char~chár-q</i> 'be torn in pieces' (3.123.0359) |

LU verbs with fossil derivational suffixes and stress shifting often have irregular "now and then" patterns of reduplication, as in (2).

- | | | | | |
|-----|----|----|--|---|
| (2) | LU | a. | <i>aján-i</i> 'take several objects' | <i>ajan~7aján-i</i> 'take several objects now and then' |
| | | b. | <i>hamóoja</i> 'be ashamed of (intr.)' | <i>hamo~hamóoja</i> 'be ashamed now and then (tr.)' |
| | | c. | <i>harúur-ax</i> 'have a hole' | <i>harúu~hur-ax</i> 'have a hole now and then' |
| | | | <i>harúur-i</i> 'make a hole' | <i>harúu~hur-i</i> 'make a hole now and then' |
| | | d. | <i>hatís</i> 'sneeze once' | <i>hatis~hatís</i> 'sneeze once now and then' |
| | | e. | <i>ulá7na</i> 'make clothes' | <i>ú~7ula7na</i> 'do dressmaking now and then' |

The second reduplication is a repetitive. In repetitive reduplication, the prefix copy is CVCV(C), and the stress remains on the stressed syllable of the root. If the root vowel is long, as in (3b,d,e), the copied vowel is short. In the case of bisyllabic *-ax/-i* verbs, the second vowel in the copy is often *a*, even if the verb is transitive, as in (3c,d). However, there are many irregularities. (3b), from *oov-ax/i* 'be given/give', shows a different

pattern. (3f) shows an example where, in a transitive theme, *-i* is reduplicated, not *-a*. (3g,h) shows a verb that seems to reduplicate with a copy of *-i*, not *-a*, in both intransitive and transitive themes. In these cases, *i* is probably the root-final vowel; evidently reduplication of this type does not trigger the loss of this vowel. The underlying root is probably *li7i*. In contrast, both intransitive *-ax* and transitive *-i* displace the root-final vowel.

- | | | | | |
|-----|----|----|--|--|
| (3) | LU | a. | <i>nak-i</i> ‘close, shut’ | <i>naka~nák-i</i> ‘close repeatedly’ |
| | | b. | <i>oov-i</i> ‘give, administer’ | <i>ovo~7óov-i</i> ‘repeatedly give’ |
| | | c. | <i>char-i</i> ‘tear (cloth) once’ | <i>chara~chár-i</i> ‘tear repeatedly’ |
| | | d. | <i>eem-i</i> ‘cover from the rain’ | <i>ema~7éem-ax</i> ‘be covered from the rain (pl.subj.)’ |
| | | e. | <i>ajjal-i</i> ‘fix, repair’ | <i>ajal~7ajáal-i</i> ‘fix repeatedly’ |
| | | f. | <i>pech-i</i> ‘drip’ | <i>pechi~véech-i</i> ‘repeatedly make drip slowly’ |
| | | g. | <i>li7-ax</i> ‘have an article of clothing on untidily’ | <i>li7i~lí7-ax</i> ‘be dressed like a slob’ |
| | | h. | <i>li7-i</i> ‘make an article of clothing hang untidily’ | <i>li7i~lí7-i</i> ‘dress someone like a slob’ |

Repetitive reduplication with verbs with the stress-shifting suffixes reduplicates the full stem, as in (4). The AC form (4e) shows a different stress pattern.

- | | | | | |
|-----|----|----|--|---|
| (4) | LU | a. | <i>chikwáj-ax</i> ‘be selected’ | <i>chikwaj~chikwáj-ax</i> ‘be selected repeatedly’ |
| | | b. | <i>kwa\$ál-ax</i> ‘be shriveled’ | <i>kwa\$al~kwa\$ál-ax</i> ‘repeatedly be shriveled’ |
| | | c. | <i>qapulúup-ax</i> ‘slowly be cut into pieces’ | <i>qapulup~qapulúup-ax</i> ‘repeatedly be cut slowly into pieces’ |
| | | d. | <i>hichéep-ax</i> ‘sneak’ | <i>hichep~hichéep-ax</i> ‘sneak around repeatedly’ |
| | AC | e. | <i>wakalla7</i> ‘walk!’ (3.123.0616) | <i>wakal7~wakala7-q</i> ‘take steps’ (3.123.0616) |

The repetitive pattern can encode distribution over plural subjects or objects, as well as temporal repetition, as illustrated in (5). (5a) illustrates the common lenition of *p* to *v* in intervocalic position while (5b) seems to show the corresponding lenition of *t* to *l*. However, (5b) is more likely an instance of *l*-reduplication, found also in CU, since, as has been observed elsewhere (3.5.1), the lenition of *t* to *l* has become non-productive

and synchronically is confined to forms of the absolutive suffix. The AC examples (5d,e) show other complications.

- | | | | |
|-----|----|--|--|
| (5) | LU | a. <i>pom-i</i> ‘make firm’ | <i>pomu~vóm-i</i> ‘make firm (pl.obj.)’ |
| | | b. <i>tach-ax</i> ‘spark once, crackle’ | <i>tacha~láach-ax</i> ‘throw off sparks (pl.subj.)’ |
| | | c. <i>eem-ax</i> ‘be covered from the rain’ | <i>ema~7éem-ax</i> ‘be covered from the rain (pl.subj.)’ |
| | AC | d. <i>cheve7-q</i> ‘be cut once (of long object)’ (3.123.0435) | <i>cheve~dhév-q</i> ‘be cut in several pieces (of long object)’ (3.123.0435) |
| | | e. <i>heedh-q</i> ‘be open’ (3.123.0513) | <i>hadha~héedh-q</i> ‘be wide open’ (3.123.0513) |

The last of the relatively regular reduplicative patterns with bisyllabic verb themes is a continuative reduplication. This is much the same as the repetitive, but the stress falls on the second syllable of the first copy of the root. There are many irregularities, but we can see that if the first vowel of the LU root is long, that length feature is transferred to the stressed, second syllable as in (6b,c). However, the length feature that appears under reduplication in (6e,f,g) does not relate to any length feature in the input root.

- | | | | |
|-----|----|--|--|
| (6) | LU | a. <i>char-i</i> ‘tear (cloth) once’ | <i>chará~char-i</i> ‘tear continually’ |
| | | b. <i>nak-i</i> ‘close, block’ | <i>naká~nak-i</i> ‘close continually’ |
| | | c. <i>eem-i</i> ‘cover from the rain’ | <i>emée~7em-i</i> ‘continually cover (as from rain)’ |
| | | d. <i>oov-i</i> ‘give, administer’ | <i>ovóo~7ov-i</i> ‘give continually’ |
| | | e. <i>ix-ax</i> ‘cough once’ | <i>ixíi~7ix-ax</i> ‘cough continually’ |
| | | f. <i>kum-ax</i> ‘have a headache’ | <i>kumáa~kum-ax</i> ‘have a severe headache continually’ |
| | | g. <i>uv-i</i> ‘daze’ | <i>uvíi~7uv-i</i> ‘daze someone continually’ |
| | | h. <i>chuj-i</i> ‘light a fire’ | <i>chujú~chuj-i</i> ‘burn continually’ |
| | | i. <i>chip-ax</i> ‘shatter’ | <i>chipí~chip-ax</i> ‘be shattered continually (sg.subj.)’ |
| | AC | j. <i>hoj7-q</i> ‘shake once (intr.)’ (3.123.0619) | <i>hajoo~hoj7-q</i> ‘shake back and forth (intr.)’ (3.123.0619) |
| | | k. <i>kalám7-q</i> ‘fall (sg.)’ (3.123.0623) | <i>kalám7~kalam7-q</i> ‘be falling (sg.) (bit by bit, pieces from a bank or cliff)’ (3.123.0623) |
| | | l. <i>qar7-q</i> ‘fall (pl.)’ (3.123.0640) | <i>qará~qqar7-q</i> ‘be falling (pl.) (from several places, fruit from trees)’ (3.123.0640) |

- m. *xiim[7]-q* ‘smile’ (3.123.0560) *xamú~xxam7-q* ‘be smiling all the time’ (3.123.0562)
- n. *miila-q* ‘touch’ (3.123.0346) *malá~mmala-q* ‘touch gropingly’ (3.122.0178)
- o. *silla7-q* ‘throw out water’ (3.123.0366) *salí~ssala[7]-q* ‘be spilling’ (3.123.0365)
- p. *tun7-q* ‘limp’ (3.123.0452) *tanú-ttan[7]-q* ‘be walking lame’ (3.123.0256)
- Examples (6j,m-p) show regular unstressed vowel reduction: *i, o, u* > *a*; examples (6l-p) show regular posttonic consonant gemination.

Ad hoc reduplications for colorful narrative effects are also possible, as in (7). These use CVC copies, with stress, in these examples at least, on the antepenult, a pattern not noted elsewhere in LU. In these examples we gloss the first copy as the root. The patterns of *l-* reduplication, mentioned above (and see 10.5.2.5 (3) for CU), and reduplications with other consonant modifications (10.4.7.3) support the identification, in a full-root reduplicative series, of the first as the root and the following as its copies.

- (7) LU a. *Oonu axáninik xal~xal~xál-a-qu\$.*
 that like rattle~REP~REP-INTR-PST.IPFV
 ‘It just kept on rattling like that.’ (H&E 869)
- b. *Qawii-sh lom~lom~lóm~lom-ax.*
 hill-ABS knock.down~REP~REP~REP-INTR.PST.PFV
 ‘She knocked down the hill.’ (H&E 1357)
- c. *Kiw~kiw~kíw~kiw-ax: kwoot-ax punee-ji*
 brush.off~REP~REP~REP-TR.PST.PFV revive-TR.PST.PFV 3SG.ANIM-ACC
ja7aa-ch-i.
 man-ABS-ACC
 ‘She brushed him off and revived the man.’ (H&E 172)

10.4.2.7.2. VOWEL LENGTHENING. Vowel lengthening can create aspectual effects with thematic verbs, as in (1).

(1)	LU	short	long
	a.	<i>ix-ax</i> ‘cough once’	<i>iix-ax</i> ‘cough more than once’
	b.	<i>kit-ax</i> ‘drip fast once’	<i>kiit-ax</i> ‘leak, flow out’
	c.	<i>uv-ax</i> ‘be dazed’	<i>uuv-ax</i> ‘be dazed more than once’
	d.	<i>ho\$-ax</i> ‘leak’	<i>hoo\$-ax</i> ‘leak a lot’
	e.	<i>kum-ax</i> ‘have a headache’	<i>kuum-ax</i> ‘have a severe headache’
	f.	<i>han-ax</i> ‘be winnowed’	<i>haan-ax</i> ‘be winnowed high and repeatedly’
	g.	<i>chut-ax</i> ‘fall, slide, jump down’	<i>chuut-ax</i> ‘slide down slowly’
	h.	<i>chulúp-ax</i> ‘go in’	<i>chulúup-ax</i> ‘go inside slowly’
	i.	<i>xiv-ax</i> ‘make a racket (sg.subj.)’	<i>xiiv-ax</i> ‘talk loud (pl.subj.)’
	j.	<i>lom-ax</i> ‘collapse’	<i>loom-ax</i> ‘break, of wave; to collapse, of part of structure’
	k.	<i>chidh-ax</i> ‘rattle for a short while (of snake)’	<i>chiidh-ax</i> ‘rattle for a long time’
	l.	<i>pav-ax</i> ‘be split’	<i>paav-ax</i> ‘be repeatedly split’
AC	m.	<i>lom-q</i> ‘fall down’ (3.123.0624)	<i>loom-q</i> ‘break, of waves’ (3.124.0209)
	n.	<i>chajja7-q</i> ‘sift dry material’ (3.123.0412)	<i>chaajja7-q</i> ‘strain liquid’ (3.123.0575)
	o.	<i>hedhdh-a7</i> ‘open it!’ (3.123.0536)	<i>heedh-q</i> ‘be open’ (3.123.0513)
	p.	<i>kivva-q</i> ‘shoo away, e.g. chicken’ (3.123.0643)	<i>kiiva-q</i> ‘herd’ (3.123.0643)
	q.	<i>luk[-q]</i> ‘have a dent’ (3.123.0280)	<i>luuk[-q]</i> ‘frown’ (3.124.0355)
	r.	<i>morra-q</i> ‘wrap s.th, roll cigarette’ (3.123.0338)	<i>moora-q</i> ‘roll (be rolling?) cigarette’ (3.123.0456)
	s.	<i>ngavva7-q</i> ‘grind, sharpen’ (3.123.0316)	<i>ngaava7-q</i> ‘be sharpening’ (3.123.0316)
	t.	<i>xal-q</i> ‘make a noise’ (3.123.0334)	<i>xaala</i> ‘make noise!’ (3.123.0645)

The interaction of vowel lengthening and the various types of reduplication yields complex aspectual paradigms. The attested variants for the theme for ‘close’ are shown in (2). (There are also transitive themes in *-i*.) (2e) shows reduplication with a change in vowels, an infrequently attested process.

(2) LU		singular subject	plural subject
a.	be closed	<i>nak-ax</i>	<i>naak-ax</i>
b.	be closed now and then	<i>nak-nak-ax</i>	<i>naak-nak-ax</i>
c.	be closed repeatedly	<i>nak-nák-ax</i>	–
d.	be closed continually	<i>naká-nak-ax</i>	<i>nakáa-nak-ax</i>
e.	be closed all over	–	<i>naki~ník-ax</i>

AC has examples where lengthening is involved in transitivity, as in (3). Note that the vowel differences in *chave7-* and *cheeva7-* in (3a) do not represent a vowel interchange but rather the result of unstressed vowel reduction (*e* > *a*) from underlying *cheve7*.

- (3) AC a. *chave7-q* ‘get cut, of long object’ *cheeva7-q* ‘cut (tr.), e.g. a stem of fruit’
(3.123.0435)
b. *xaw-q* ‘drag (intr.)’ *xaaw-a-q* ‘drag s.th along, harrow’ (3.123.0523)
(3.123.0578)

10.4.2.7.3. CONSONANT MODIFICATIONS (SOUND SYMBOLISM). A final complication in LU reduplication is the occasional change in a consonant, with apparent sound-symbolic effects, a phenomenon also discussed in the section on noun derivation (14.13). Some alternations follow regular rules and are not sound-symbolic, such as *-v-* from *-p-* in reduplicated forms, or *-l-* from *-t-*, as seen in (1).

- (1) LU a. *paká~vak-ax* ‘be divided into several parts’
b. *pata~vát-i* ‘shoot a gun continually’
c. *tapa~láp-ax* ‘be torn to pieces’
d. *tucháa~lach-ax* ‘be tied here and there’
AC e. *paru~vvara-q* ‘make lumpy’ (3.123.0630)
f. *taka~llaka* ‘tickle someone’ (3.123.0413)

However, other consonantal changes appear to be meaning-bearing, as in (2). Clearly these are not predictable from the shape of the original root-initial consonant.

- (2) LU a. *chaxwa~laxw-ax* ‘be spotted’
 b. *chunga~rang-ax* ‘kiss all over’
 c. *\$a7á~la7-ax* ‘defecate now and then’
 d. *\$ava~ráv-ax* ‘be rough or coarse’
 e. *chipé~dhep-i* ‘paste, glue, nail (pl.obj.)’
 f. *chipí~lip-ax* ‘broken into several pieces’;
 cf. *chipi~líp-ax* ‘keep on being broken (pl.subj.)’
- AC g. *chavo~rrava-q* ‘be dizzy’ (3.122.0201)
 h. *qa\$a~lla\$q* ‘be making a knocking or clicking noise’ (3.122.0173)
 i. *chama~lím-q* ‘be wrinkled’ (3.122.0054)
 j. *chava~dhév-q* ‘be cut in several pieces (of long object)’ (3.123.0435)

Some consonant alternations appear in root derivations that do not involve reduplication, as in (3).

- (3) LU a. *\$iil-ax* ‘be poured’ *\$iidh-ax* ‘trickle’
 b. *xaar-ax* ‘growl’ *xaadh-ax* ‘snarl’
- AC c. *ma\$i-q* ‘be twisted’ (3.122.0220) *mari-q* ‘face about, turn whole body’
(3.123.0499)

10.4.2.8. SUPPLETIVE VERBS. The last process to be noted in Coastal Cupan base derivation is suppletion, primarily for subject number (with intransitives) and object number (with transitives) (Hyde 1971:163, 165). Subject-number suppletion appears in several of the tense-aspect suffixes illustrated in Table 11.4.1, and it seems likely that these are derived from suppletive verbs. The list of suppletive verbs in LU is relatively long compared to the lists for other Takic languages; this may reflect better documentation of the language. The number-suppletive bases that we have noticed are seen in (1) – we suspect that there are more. Forms with singular subjects and objects appear in the “singular” column, those with plural subjects and objects in the “plural” column. A few of the verbs have one or both of the pairs in a class other than the large *-ax/-i* class, but most are both members of this class. To save space, we provide only one translation, that for the intransitive (or for the transitive if that is the only theme attested).

(1) LU	singular	plural
a. be acquired, picked	<i>ku\$án-ax/-i</i>	<i>ayán-ax/-i</i>
b. fall	<i>hulúk-ax/-i</i>	<i>koov-ax/-i</i>
c. get up, wake up	<i>kwot-ax/-i</i>	<i>waraav-ax/-i</i>
d. go in	<i>chulúp-ax/-i</i> ¹	<i>\$ulaaq-ax/-i</i>
e. go out	<i>pulúch-ax/-i</i>	<i>mujáq-ax/-i</i>
f. grab, catch	<i>chaqwi</i>	<i>jawa7na</i> (tr.)
g. hang	<i>hang-ax/-i</i>	<i>juj-ax/-i</i>
h. be hit, hit with stick	<i>wot-ax/-i</i>	<i>wuva7na</i> (tr.; sg. or pl.)
i. jump off, take off, fly	<i>wiil-ax/-i</i>	<i>waap-ax/-i</i>
j. kill	<i>moqna</i>	<i>qe7ée</i>
k. land (of hawk, birds)	<i>xov-ax/-i</i>	<i>qach-ax/-i</i>
l. lie down	<i>how-ax/-i</i>	<i>ma\$a</i>
m. be on top, sit on, ride on	<i>qal-ax/-i</i>	<i>lim-ax/-i</i>
n. be pulled out, taken off	<i>kul-ax/-i</i>	<i>hujáq-ax/-i</i>
o. put, keep	<i>taván-ax/-i</i>	<i>wu\$án-ax/-i</i>
p. run	<i>pokwa, ja7</i>	<i>ngoora</i>
q. be sick, die	<i>takwája</i>	<i>tapa</i>
r. sit down (animate)	<i>taw-ax/-i</i>	<i>tava7-ax/-i</i>
s. be standing (usu. animate)	<i>wiit-ax</i>	<i>puru7-ax/-i</i>
t. be standing (inanimate)	<i>wach, \$e7</i>	<i>tuu7</i>
u. be throw (down, off, away)	<i>mat-ax/-i</i>	<i>wich-ax/-i</i>
v. be thrown, stone or magical power	<i>peng-ax/-i</i>	<i>piivan</i>

¹ Note that *chulúp-* (1d) and *pulúch-* (1e) are mirror images, perhaps reflecting the opposite directions of their meanings.

So far only three AC number-suppletive verbs have been found (2). For many AC verbs, the corresponding plurals were not elicited.

(2) AC	singular	plural
a. fall	<i>haluq(-q)</i> (3.123.0268)	<i>karapx-on</i> (3.123.0272)
b. run	<i>huq(-q)</i> (3.122.0223)	<i>ngorx-ma</i> (3.122.0223)
c. mount, be on top of (tr.)	<i>qali7-q</i> (3.122.0123) (sg.obj.)	<i>limma-q</i> (3.123.0554) (pl.obj.)

Some bases are suppletive both for number and for animacy. Variants of a particularly complex case, the verbs for ‘be, be in a place, live, stay, be present’, are seen in (3).

- (3) LU a. *aaw* ‘be, be located, live, exist, stay, remain, have (animate sg. subj.)’
 b. *qal* ‘be there, have (inanimate sg.subj.); ‘be, be there, exist, be alive, have (animate pl.subj.)’
 c. *won* ‘be there, have (inanimate pl.subj.)’

These verbs are also used in expressions of possession, as seen in (4) (a phenomenon also attested in Serran languages; see 9.2.8 for SE, 9.3.6 for KI). The examples in (4) also illustrate the different types of subjects. In (4d) the only formal indication that *-pa\$kala* ‘leaching tools’ is to be construed as plural or collective is the fact that the verb is *won*. (Corresponding expressions of possession have not been found in the AC data.)

- (4) LU a. *Pi7 pom-na aaw-qu\$*.
 and 3PL-father be-PST.IPFV
 ‘And they had a father.’ (Elliott 1999:98)
- b. *No-mix qal-uk oonu po7 chilku-t*.
 1SG-possession be-USIT 3SG.PRO DET basket.cap-ABS
 ‘I used to have her basket cap.’ (Elliott 1999:780)
- c. *Pi7 qal-qu\$ cham-noo-7um*.
 and be-PST.IPFV 1PL-chief-PL
 ‘And we had directors.’ (Elliott 1999:780)
- d. *Pi7 o-pa\$kala won-q*.
 and 2SG-leaching.tool be-PRS.SG
 ‘And you have your leaching tools.’ (Elliott 1999:1069)

10.5. THE VERB BASE IN CUPEÑO.

10.5.1. VERB CLASSES. CU has two large verb classes plus a group of irregular verbs. The first class consists of the thematic verbs and the second class of the athematic verbs. The

thematic suffixes are *-in* ‘transitive’ (which is *-my-n* with plural subjects in the past tense), seen in (1), and *-jax* ‘intransitive’ (2). The athematic verbs lack a thematic suffix and are exemplified in (3). It is sometimes convenient to further divide the thematic verbs into a transitive class and an intransitive class.

- (1) CU
- | | | |
|----|------------------|------------------------------------|
| a. | <i>cha\$-in</i> | ‘polish, make shiny’ |
| b. | <i>jukich-in</i> | ‘believe, respect’ |
| c. | <i>hyljaq-in</i> | ‘drown (tr.)’ |
| d. | <i>tan-in</i> | ‘dance (intr.)’ |
| e. | <i>chux-in</i> | ‘spit’ (object is always ‘saliva’) |
| f. | <i>ngyj-in</i> | ‘shake (tr.)’ |
| g. | <i>huch-in</i> | ‘take off clothing’ |
- (2) CU
- | | | |
|----|-------------------|---|
| a. | <i>cha\$-ax</i> | ‘shine (intr.)’ |
| b. | <i>jukich-ax</i> | ‘be valuable, respected, sacred’ |
| c. | <i>hyljaq-jax</i> | ‘drown (vi.)’ |
| d. | <i>awluk-jax</i> | ‘go down, of sun’ |
| e. | <i>chux-jax</i> | ‘be spat out’ |
| f. | <i>ngyj-ax</i> | ‘shake (intr.), tremble, as earthquake’ |
| g. | <i>huch-ax</i> | ‘be undressed’ |
- (3) CU
- | | | |
|----|---------------|--|
| a. | <i>muu</i> | ‘shoot an arrow’ |
| b. | <i>wiw</i> | ‘prepare acorn mush’ |
| c. | <i>hamaan</i> | ‘be ashamed’ |
| d. | <i>awluk</i> | ‘give out (of heart), go down (of people)’ |
| e. | <i>chux</i> | ‘melt’ |
| f. | <i>ngyj</i> | ‘be dizzy, get dizzy’ |
| g. | <i>hush</i> | ‘skin (tr.)’ |

The suffixes *-in* and *-jax* are clearly related to the LU thematic suffixes *-i* and *-ax*, although the relationship may not be fully cognate given the propensity of Cupan languages to adjust their morphology by phonologically mediated replacement (Heath 1998). The *-my-* that precedes the transitive thematic suffix with plural subjects is probably cognate with the *-m-* that marks plural in the Hopi k-class and in some k-class

verbs in SE, and which appears as a distributive in CA. Thus the thematic verbs of CU may represent an evolution of the k-class. However, the CU thematic verbs are perhaps less consistent in both phonology and semantics than in Serran and LU. While verbs with thematic *-jax* include the “eventive,” the “processes on inanimate objects” group of verbs, the verbs with *-in* are much more diverse.

A small number of thematic verbs do not show the expected transitivity. For instance, *tan-in* ‘dance’ (1d), a verb that can refer to any dancing, is not obviously transitive, although it has the *-in* suffix and a plural with *-my-*, e.g. *tan = py7-my-n-wyn* ‘they were dancing’, it is not attested with an overt object. In contrast, *qajy-jax* ‘wash or soak s.th’ can appear with objects, although it has the normally intransitive *-jax* suffix.

Some verb roots appear in both of the major classes, like *chux*, thematic in (1e) and (2e), and athematic in (3e). Similarly with *ngyj*, in (1f, 2f, 3f), *huch* in (1g, 2g, 3g), *hama-* in (1c, 3c); and *awluk* in (2d, 3d).

The set of irregular (and defective) verbs includes several common verbs of position, motion, and basic cultural processes. Examples appear in (4); for more detail, see 10.5.2.7 and 10.5.2.8.

- (4) CU
- | | | |
|----|-----------------------------|---|
| a. | <i>nyq</i> | ‘come, walk’ |
| b. | <i>nynywy</i> | ‘walk’ |
| c. | <i>jax</i> | ‘say’ |
| d. | <i>wyn</i> | ‘be located (inanimate pl. or mass subj.), lie’ |
| e. | <i>hiw ~ qa ~ qal ~ max</i> | ‘be, dwell, live, sit, stand’ |

A number of verb paradigms have irregularities that apparently result from the preservation of only a selection of base alternants from an original larger paradigm; these are discussed and illustrated in 10.5.2.6.

Some verbs in the athematic class, as well as some of the irregular verbs, belong to the set of stressless roots. With these roots, the main stress falls on the prefix or suffix, and appears on the root only when there is no affix, or when the only affix is one that, in its own turn, cannot be stressed. The verb *jax* ‘say’, shown in (5), is an example.

- (5) CU
- | | | |
|----|------------------|------------------|
| a. | <i>pý-jax</i> | ‘3SG said’ |
| b. | <i>py-ja-qál</i> | ‘3SG was saying’ |

- c. *py-ja-qalfi* ‘while 3SG (different subj.) was saying’
 d. *jax* ‘will say’

Nyq (4a) and *wyn* (4d) are also stressless roots, but they are defective, in contrast to *jax*, which has a full tense-aspect paradigm. This verb also has this property in LU and CA. In CA it is the only example of this type; in LU the verb *won* ‘be, dwell (inanimate plural subject)’ is also in this category, as it is in CU. In CU there are twelve stressless verb roots (Hill 2005:473):

- | | | |
|--------|---|--|
| (6) CU | 1. <i>jax</i> _s ‘say’ | 7. <i>ngang</i> _s ‘weep’ |
| | 2. <i>ku\$</i> _s ‘get, take’ | 8. <i>nyq(y(n))</i> _s ‘come’ |
| | 3. <i>kwa7</i> _s ‘eat’ | 9. <i>tav</i> _s ‘put down’ |
| | 4. <i>max</i> _s ‘give’ | 10. <i>tuku</i> _s ‘carry with tumpline’ |
| | 5. <i>muu</i> _s ‘shoot with bow’ | 11. <i>tyw</i> _s ‘see’ |
| | 6. <i>myq(a(n))</i> _s ‘kill (sg.obj.)’ | 12. <i>wyn</i> _s ‘put in’ |

A second phonological property divides verb bases that end in consonants from verb bases that end in vowels. Consonant-final bases have distinctive non-concatenative morphology in the imperative and potential moods (see 11.5.8-9). However, in these moods, the thematic suffixes are treated as if they were vowel-final, with final *-i* from *-in* and *-a* from *-jax*.

10.5.2. DERIVATION OF THE VERB BASE. Verb bases in CU are derived with a variety of suffixes for motion, valence change, and the desiderative.

10.5.2.1. ASSOCIATED MOTION SUFFIXES. CU has a fairly complex system of associated motion suffixes. These include *-lu7* ~ *-lju7*, which encodes prior (and usually purposive) motion, with cognates of very similar meaning in SE (10.2.3.4) and in LU (10.4.2.2). With a verb of motion, like ‘run’ in (1d) and ‘go’ in (1e), the motion can be understood as concurrent. This is an old suffix, found throughout Uto-Aztecan. Within Takic, there is no corresponding source verb. The directional opposite of *-l(j)u7* is expressed by *-mi7aw* ‘come and do’, derived from the homophonous verb *mi7aw* ‘arrive’. Alongside these prior motion suffixes are two suffixes encoding concurrent motion. The suffix *-ngij*

encodes concurrent motion “thither”: ‘go along doing, go off doing, go back doing’. This suffix appears also in LU, AC, and CA, and must have been grammaticalized from a Proto-Cupan motion verb ‘go off/away, go back, go home’, perhaps **ngeeje(m)*.¹²² In LU, its range of meanings often includes prior motion, but this is not the case in CU. Concurrent motion “hither” is encoded in a suffix derived from the defective verb *nyq* ~ *max* ‘come’: *-vanyq* (nonfuture) ~ *-vamax* (future) ‘pass along doing, come along doing’ (with the component *-va-* not yet identified).¹²³

Examples of *-l(j)u7* ‘(purposive) prior motion thither’ (GOPR) are seen in (1).

- (1) CU a. *Ny7 = ny tyw-á-lu7-vichu-qa.*
 1SG.PRO = 1SG.ERG see-ABLAUT-GOPR-DES-PRS.SG
 ‘I want to go to see (it).’
- b. *Chimi_pym-nash-ni-lju.*
 1PL.OBJ_3PL-sit-CAUS-GOPR
 ‘They went to set us down.’
- c. *Tyk = py-Ø-lu-qal.*
 empty = 3SG-TR-GOPR-PST.IPFV.SG
 ‘He went to empty it.’
- d. *Pijamanga = ku7ut ja7 = py-jax-a-lu-qal.*
 always = QUOT run = 3SG-INTR-ABLAUT-GOPR-PST.IPFV.SG
 ‘They say he kept going along running.’ (Nolasquez Creation 100)
- e. *Isi-lj pijamanga ha\$ i = py-jax-a-lu-qal.*
 Coyote-ABS always go = 3SG-INTR-ABLAUT-GOPR-PST.IPFV.SG
 ‘Coyote kept on going along.’ (Nolasquez Creation 106)

The *n* of the transitive thematic suffix *-in* is lost before *l*, as seen in (1c). We know that the thematic suffix is underlyingly present because of the position of the pronominal

¹²² Cf. Hopi *ngöja(k)* ‘pursue’, *ngööji* ‘pursuit’.

¹²³ Freeland (1951:61) provides the useful term “venitive” for purposive motion hither (cf. Latin *venire* ‘come’).

prefix, cliticized after the root and before the thematic suffix, a point that will be discussed in more detail below. *-l(j)u7* is an *a*-ablauting suffix: following stressless elements of several types, it induces an ablaut vowel *a*, as in (1a,d,e). When followed by certain other derivational suffixes, *-l(j)u7* retains glottal stop, as in (1a), though the glottal stop is lost in most other environments. This motion suffix is homophonous with the *l* and *ly* allomorphs of the denominalizing suffix *-tu7 ~ -lu7 ~ -lju7* and has the same ablauting properties (see 14.15.1.3).

Examples with *-mi7aw* ‘arrive and do’ (COMEPR) appear in (2). This suffix does not induce ablaut and appears to have no special phonological properties other than stresslessness: As can be seen with the stressless root *tyw* ‘see’ in (2b), *-mi7aw* cannot be stressed.

- (2) CU a. *Tan=py7-my-n-mi7aw.*
 dance = 3PL-PL-TR-COMEPR
 ‘They came and danced.’ (Faye Creation 82)
- b. *Ny-týw-mi7aw.*
 1SG-see-COMEPR
 ‘I came and saw.’
- c. *Mylyn xalyw=py-jax-mi7aw.*
 much fall = 3SG-INTR-COMEPR
 ‘He became much worse.’ (Faye Creation 110)
- d. *Amáj=ny=py jaw-mi7aw.*
 now = 1SG = IRR carry-COMEPR
 ‘Now I will bring it.’ (Faye Creation 110)

Examples with *-ngij* (GOING) are given in (3). In (3a), the thematic suffix *-jax* appears as *-ji* before *-ngij*. In (3b) we see the loss of the thematic suffix *-in* before *-ngij*. In (3c) it is intransitive *-jax* that is elided.

- (3) CU a. *Waj = pym-ji-ngij-wyn.*
 swim = 3PL-INTR-GOING-PST.IPFV.PL
 ‘They went swimming along.’
- b. *Pi_wym = py-Ø-ngij.*
 3SG.OBJ__throw = 3SG-TR-GOING
 ‘He threw it over his shoulder and went off.’
- c. *Myn = py7-Ø-mi7aw-ngij.*
 turn.around = 3PL-INTR-COMEPR-GOING
 ‘They left to come back.’
- d. *Chyn-a-ngij-qat.*
 roll-INTR-GOING-IFUT.SG
 ‘It’s going to go rolling away.’

The “concurrent motion hither” associated motion suffixes *-vanyq* ~ *-vamax* (COMING), nonfuture and future respectively are shown in (4). These are *i*-ablauting suffixes, inserting a stressable vowel *i* following the verb root. With stressless verb roots this *i* receives the stress (4a,c). Following the thematic suffix *-jax* (which is derived from the stressless verb root *jax*), an unstressed ablaut vowel generally appears as schwa (4b). The ablaut vowel does not appear with *-in* (4d), a suffix not derived from a stressless root.

- (4) CU a. *kwa7-í-vanyq*
 eat-ABLAUT-COMING.NFUT
 ‘come along eating’
- b. *Nam = py-jax-y-vanyq.*
 cross = 3SG-INTR-ABLAUT-COMING.NFUT
 ‘He came along crossing.’
- c. *Chym tyw-í-vamax.*
 1PL.PRO see-ABLAUT-COMING.FUT
 ‘We will come along looking.’

- d. *tan-in-vamax*
 dance-TR-COMING.FUT
 ‘come along dancing’

A suffix *-nyq* ‘come doing’ (COMING) (nonfuture if *-qa* ‘present’ does not follow) appears only with the verb *jaw* ‘hold, grasp, carry’ (5a). The future *-max* is attested only following *jaw-mi7aw* ‘arrive’ (5b). We treat these forms as allomorphs of *-vanyq*, *-vamax* in this environment: ^x*jawvanyq*, ^x*jawvamax* are not attested. While examples of *jaw* with *-ngij*, *-nyq*, and *-mi7aw* might be understood as compound verbs, given the otherwise absence of verb compounding in CU and the clearly suffixal status of cognate items in the other Cupan languages, they are probably best treated as suffixes.

- (5) CU a. *Kanaasta = ku7ut aj7ani-sh pym-jaw-nyq.*
 basket = QUOT big-ABS 3PL-bring-COMING.NFUT
 ‘They brought a big basket.’
- b. *Ny7 = ny = py jaw-mi7aw-max.*
 1SG.PRO = 1SG.ERG = IRR carry-COMEPR-COMING.FUT
 ‘I will bring it.’

While they are poorly attested, combinations of associated motion suffixes can occur, as in (6). However, though the forms in (6) were produced, just what they mean remains unclear.

- (6) CU a. *jaw-mi7aw-lu*
 hold-COMEPR-GOPR
- b. *man-a-ngij-neq*
 fall-INTR-GOING-COMING

10.5.2.2. VALENCE-CHANGING SUFFIXES. The valence-changing suffixes (other than the transitive *-jax* and intransitive *-in* thematic suffixes discussed in 10.5.1) are *-ni(n)* ‘causative’, *-max* ‘benefactive’, and *-xa* ‘ask to do for’. Examples of the causative are given in (1). The suffix *-ni(n)* appears with thematic verbs with suffix *-in*, as in (1a,b),

and with intransitive athematic verbs, as in (1c,d,e). It does not appear with thematic verbs in *-jax*. In the past tense of thematic verbs, the pronominal prefixes appear before the thematic suffixes rather than before the roots (this is seen, for instance, in 10.5.2.1 (4b)). And the complex of pronominal prefix plus thematic suffix – plus any inflectional suffix – is cliticized to the verb stem.¹²⁴ In (1a) *py-* ‘3SG’ is in this position, so we know that the thematic suffix *-in* is underlyingly present, even though it has been obscured by regular phonological processes. In (1a), the final *n* of causative *-nin* is lost regularly before *q*. In (1b), the *-n-* of *-my-n-* is lost by geminate reduction before *-nin*. Note in (1e) that causative *-nin*, like desiderative *-vichu*, provides an environment in which the denominal verbalizing suffix retains its final glottal stop: *-lu7*.

- (1) CU a. *Mi_tan=py-Ø-ni-qal.*
 3PL.OBJ__dance = 3SG-TR-CAUS-PST.IPFV.SG
 ‘He made them dance.’
- b. *Mi_hush=chy7-my-Ø-nin.*
 3PL.OBJ__smoke = 1PL-PL-TR-CAUS
 ‘We made them smoke.’
- c. *Chimi_pym-7a\$-nin.*
 1PL.OBJ__3PL-bathe-CAUS
 ‘They bathed us.’
- d. *IvÍ-j=chy=py wyl-nin.*
 this-ACC = 1PL.ERG = IRR grow-CAUS
 ‘We will make this one grow.’
- e. *Qaj=chy=py tyw-lu7-nin.*
 NEG = 1PL.ERG = IRR name-VBLZ-CAUS
 ‘We won’t name it.’

¹²⁴ This analysis with cliticization avoids the typologically anomalous idea that the pronominal prefixes are somehow converted to suffixes, or typologically worse, infixes.

Examples of benefactive *-max* are given in (2). The benefactive occurred only rarely in the speech of Roscinda Nolasquez in the 1960s. Miss Nolasquez preferred a periphrastic expression with a non-benefactive verb and the postposition *-kwaani*, with the beneficiary encoded in the prefix on the postposition, as in (2d). Paul-Louis Faye elicited examples (in (2a,b)), and benefactive constructions of this type also appear in his text collection, as in the future-tense directive in (2c), albeit rarely.

- (2) CU a. *Hani, ka~kva7ma-l wyn-max = yn.*
 HORT PL~pot-ABS put.PL-BEN.IMP = 1SG.AB
 ‘Please set the table for me.’
- b. *\$aw~\$aw-in-max = yn.*
 REP~make.bread-TR-BEN.IMP = 1SG.AB
 ‘Make a few tortillas for me.’
- c. *Ni kwaw-nin-max = 7ym = py ny-pulínma-j.*
 1SG.OBJ call-CAUS-BEN = 2PL = IRR 1SG-man’s.son-ACC
 ‘You (pl.) will cause my son to be called for my sake.’ (Faye Creation 112)
- d. *Ny7 = yn ny-jy py-kwaani tavxaa7-qa.*
 1SG.PRO = 1SG.AB 1SG-mother 3SG-sake work-PRS.SG
 ‘I’m working to please my mother.’

The benefactive suffix *-xa* ‘ask to do for someone’, which is well attested in the Kroeber and Grace (1960) materials for LU, was not used by J. Hill’s CU consultants in the early 1960s. However, it is attested in sentences elicited by Faye around 1920. The beneficiary is the subject of the clause (the second person in the imperative). Some examples are given in (3).

- (3) CU a. *Ny7 = ny wyk-in-xa-qa.*
 1SG.PRO = 1SG cut-TR-BEN.CAUS-PRS.SG
 ‘I ask someone to cut for me.’
- b. *Ny7 = ny haw-in-xa-qa.*

1SG.PRO = 1SG sing-TR-BEN.CAUS-PRS.SG
 ‘I ask someone to sing for me.’

- c. *Puj-nin-xa*.
 dine-CAUS-BEN.CAUS.IMP
 ‘Ask her to feed someone for you.’

10.5.2.3. DESIDERATIVE SUFFIX. The desiderative suffix *-vichu*, found also in LU and MCA, is seen in (1). CU also has a periphrastic expression for ‘want to do’, with the verb *ajyw* ‘want’ and a complement with irrealis subordinator *-pi*; an example appears in (1g). Desiderative *-vichu* is an *i*-ablauting suffix, as seen with stressless *tyw* ‘see’ in (1f). Following the suffix *-jax*, as in (1d), this ablaut vowel is unstressed and reduces to *y*. However, following the independent verb *jax*, the ablaut vowel is stressed and is heard clearly as *i* (1e), as with other verbs in the stressless group.

- (1) CU a. *I__chakw-in-vichu-nash*.
 2SG.OBJ__catch-TR-DES-FUT.IPFV.SG
 ‘(He) is going to be trying to catch you.’
- b. *Py-qaawi-vichu*.
 3SG-die(sg.)-DES.PST
 ‘He wanted to die.’
- c. *Pi-jaja wal = py-n-vichu-qal*.
 3SG-try dig = 3SG-TR-DES-PST.IPFV.SG
 ‘He wanted to try and dig it up.’
- d. *Qaj paja = ny-jax-y-vichu-qal*.
 NEG chat = 1SG-INTR-ABLAUT-DES-PST.IPFV.SG
 ‘I didn’t want to talk to him.’
- e. *Chimi__jax-í-vichu-qa*.
 1PL.OBJ__say-ABLAUT-DES-PRS.SG
 ‘He wants to tell us.’ (H&N 2[4] 90)

- f. *Tyw-í-vichu-qa = ny.*
 see-ABLAUT-DES-PST.IPFV.SG = 1SG.ERG
 ‘I want to see.’
- g. *Qaj py-7ajyw-qał py-qwa7a-pi.*
 NEG 3SG-want-PST.IPFV.SG 3SG-eat-IRR.SUB
 ‘He didn’t want to eat it.’

10.5.2.4. THE SUFFIXES IN COMBINATION. Many combinations of these suffixes are attested, as illustrated in (1) and as seen in many of the examples in preceding sections.

- (1) CU a. *Ni_kwaw-nin-max = 7ym = py ny-pulĩnma-j.*
 1SG.OBJ__call-CAUS-BEN = 2PL.ERG = IRR 1SG-man’s.son-ACC
 ‘You (pl.) will cause my son to be called for my sake.’ (Faye Creation 112) [= 10.5.2.2 (2c)]
- b. *A\$-nin-xa7.*
 take.bath-CAUS-BEN.CAUS.IMP.SG
 ‘Ask her to bathe him for you.’
- c. *Puljĩni-ch-y nganga-qa man-a-ngij-nyq.*
 baby-ABS-CF cry-PRS.SG fall-INTR-GOING-COMING
 ‘The baby is crying because he fell off.’
- d. *Pi_jaw-mi7aw-lu.*
 3SG.OBJ__carry-COMEPR-GOPR
 ‘He went to bring it.’

These combinations raise the question of the order of these elements. Jacobs (1975) suggested that CU, like LU, exhibits a verb-internal syntax with regard to the derivational suffixes, so that their order is determined by syntactic considerations. He elicited the examples shown in (2). These examples are much more complex than any that appear in natural discourse, where even sequences of two suffixes are rare.

- (2) CU a. [[*[Puj-lu]-nin]-vichu]-qa*.
 dine-GOPRDS-CAUS-DES-PRS.SG
 ‘He wants to make him go to eat.’ (Jacobs 1975:175.21)
- b. [[[*[Puj-nin]-vichu]-ni]-lu]-qa*.
 dine-CAUS-DES-CAUS-GOPR-PRS.SG
 ‘He goes to make him want to feed her.’ (Jacobs 1975:175.22)
- c. *Iv’-j = ny* [*i* _ [[*[pa7-nin]-vichu]-ni]-lu]-max]-qat* \emptyset .
 this-ACC = 1SG.ERG 2SG.OBJ _ drink-CAUS-DES-CAUS-GOPR-BEN-IFUT.SG be
 ‘I’m going to go over there for you, to make him want to make her drink this.’
 (Jacobs 1975:63.131)

10.5.2.5. REDUPLICATION IN THE CUPEÑO VERB BASE. While aspect is to a great degree encoded in CU by inflectional suffixes, other processes also create aspectual diversity in verb bases. The most important of these is reduplication, although this process does not seem to be as rich or as regular as that attested for SE, LU or CA.

A common kind of reduplication yields a full copy of the verb root, encoding repetitive, continuative, or distributive aspect, according to the nature of the verb root and the discourse context. A few verbs, such as *maq-in* (1e) and *kwiv* (1f) must be reduplicated if they have plural objects or subjects; that is, the “scene” within which speakers construe the meanings for these verbs is that if subjects or objects are plural the aspect must be distributive. Examples of this full-root reduplication appear in (1). In this type of reduplication, the right-hand copy of the root carries the stress.

- (1) CU a. *kym-jax* ‘bow’ *kym~kým-jax* ‘bow repeatedly’
 b. *suk-in* ‘tie up’ *suk~súk-in* ‘tie up with multiple knots, or in several places’
 c. *suk-jax* ‘be tied up’ *suk~súk-jax* ‘be completely tied up’
 d. *qy\$-ax* ‘get hurt’ *qy\$~qy’\$-ax* ‘be crippled’
 e. *maq-in* ‘collect’ *maq~maq-in* ‘collect (pl.obj.)’
 f. *kwiv-jax* ‘be lying down’ *kwiv~kwív-jax* ‘be lying down (pl.subj.)’

If the stem (as opposed to the theme) has more than one syllable, both will be copied in full reduplication, as shown in (2).

- | | | | | | | |
|-----|----|----|-------------------|-------------------|---------------------------|-------------------------------------|
| (2) | CU | a. | <i>chyngyn-in</i> | ‘kick (tr.)’ | <i>chyngyn~chýngyn-in</i> | ‘kick repeatedly’ |
| | | b. | <i>ngaja-jax</i> | ‘turn head aside’ | <i>ngaja~ngája-jax</i> | ‘turn repeatedly, shake one’s head’ |
| | | c. | <i>paja-jax</i> | ‘chat, gab’ | <i>paja~pája-jax</i> | ‘jabber, chatter’ |
| | | d. | <i>puchaq</i> | ‘jump’ | <i>puchaq~púchaq</i> | ‘jump repeatedly’ |

As in LU, there is full reduplication with a change in the consonant in the right-hand copy to *l*, as in (3). *L*-reduplication applies with various kinds of consonants and appears to contribute a special “color” to the verb form. *L*-reduplicated copies are often repeated in the “stylistic” variant of full reduplication (see (7)). Two of the examples in (3) have root-initial *t* and the copy with *l* following a CVCV root. This might be understood as due to regular lenition, without sound-symbolic significance. However, since intervocalic lenition of *t* is no longer an active process in contemporary Cupan, we must accept that the examples in *t* show *l*-reduplication. The *l*-reduplicative pattern supports the idea that the first of the series in full-root or -stem reduplication is the original and the following is the copy. An alternative view, treating these reduplications in terms of having an unstressed, full-root or -stem reduplicative prefix and a modified original, would introduce more complications than it would resolve.

- | | | | | | | |
|-----|----|----|------------------|---------------------|------------------------|-------------------------------------|
| (3) | CU | a. | <i>tykwy-jax</i> | ‘shake off once’ | <i>tykwy~lýkwy-jax</i> | ‘shake self off (like a dog)’ |
| | | b. | <i>kapa-jax</i> | ‘yawn’ | <i>kapa~lápa-jax</i> | ‘be cracked’ |
| | | c. | <i>puchil-ax</i> | ‘have little holes’ | <i>puchi~lúchi-jax</i> | ‘be full of little holes, be lumpy’ |

Reduplication with a copy of the first CV (to the left, or, less commonly, of the final VC (to the right) is also attested, with various specialized meanings, as in (4). With these, the stress falls on the first syllable, whether the first syllable is the CV copy or is the root which precedes the VC copy.

(4)	CU	a.	<i>nyng</i>	‘hide (tr.)’	<i>ny~nyng</i>	‘play peon (hide tokens)’
		b.	<i>paq-in</i>	‘slap’	<i>pa~paq-in</i>	‘slap (pl.subj.)’
		c.	<i>jax</i>	‘say’	<i>ja~jax</i>	‘be saying’
		d.	<i>kup</i>	‘sleep’	<i>ku~kup</i>	‘stay in bed’
		e.	<i>kup</i>	‘sleep’	<i>kup~up</i>	‘be sleepy’
		f.	<i>kwaw-in</i>	‘call, invite’	<i>kwa~kwaw-in</i>	‘call, invite repeatedly’
		g.	<i>kwaw-jax</i>	‘shout’	<i>kwaw~aw-jax</i>	‘be shouting continually’
		h.	<i>chyng-in</i>	‘kick (tr.)’	<i>chy~chyng-in</i>	‘be kicking’
		i.	<i>chyng-in</i>	‘kick (tr.)’	<i>chyng~yng-in</i>	‘kick repeatedly’
		j.	<i>mul-in</i>	‘boil (tr.)’	<i>mul~ul-ax</i>	‘be boiling (intr.)’

With disyllabic roots with initial stress, this type of reduplication yields loss of the vowel in the first syllable in the right-hand copy, as in (5). The stress is assigned to the CV copy and the first vowel of the root, now unstressed, undergoes syncope.

(5)	CU	a.	<i>typil</i>	‘weave’	<i>ty~tpil</i>	‘be weaving’
		b.	<i>wixan</i>	‘step on’	<i>wi~wxan</i>	‘step on several times’

Roscinda Nolasquez, J. Hill’s principal consultant, used reduplication as an important stylistic resource in narrative. This type of reduplication is a variant of full reduplication (it does not happen with the CV or VC copies), and involves adding as many copies of the full root as might capture the “color” of an event, up to as many as seven or eight. Stress is delayed until the right-most exemplar. The examples in (6) are from the Creation account; the Creator is digging the first grave.

(6)	CU	a.	<i>Mu=ku7ut</i>	<i>py7</i>	<i>tymá-l</i>	<i>wal~wal~wal~wal~wál=py-n.</i>
			and=QUOT	DET	earth-ABS	dig~REP~REP~REP~REP=3SG-TR
			‘And it is said he dug-dug-dug-dug-dug the ground.’ (H&N 5[10] 29)			

- b. *Mu = ku7ut chyngyn~chyngyn~chyngyn~chyngyn~chyngyn~chyngyn~*
 and = QUOT kick;stamp~REP~REP~REP~REP~REP~
chýngyn = py-n axwý-ch-i.
 REP = 3SG-TR that-ABS-ACC
 ‘And it is said he stamp-stamp-stamp-stamp-stamp-stamp-stamped that.’ (H&N
 5[10] 31)

With *l*-reduplication, the original initial consonant is copied as *l*, as in (7), where Coyote is shaking himself off.

- (7) CU *Py-taxwi = ku7ut py7 tykwy~lykwy~lykwy~lýkwy = py-n.*
 3SG-REFL = QUOT 3SG.PRO shake.off~REP~REP~REP = 3SG-TR
 ‘It is said he shook-shook-shook-shook himself.’ (H&N 57[114] 19)

10.5.2.6. SOME LESS PRODUCTIVE BASE MODIFICATIONS. Along with reduplication, CU verbs exhibit a number of relatively unproductive base modifications involving stress shifting, stem ablaut, *-aan* suffixation, and glottal stop infixation. In addition, CU has a few instances of verb roots that appear with more than one stem-forming final consonant. These constructions are reminiscent of the “sub-morphemic” processes of CA (10.6.2.6) and the proliferation of unproductive stress-shifting suffixes of LU (10.4.2.7.1). These processes may have been more productive at earlier stages of the family, but it is difficult to reconstruct them since the daughter languages preserve only spotty evidence for them. These processes are less common in CU than in LU and CA, so we have space to include a full range of examples.

Aspectual stress shifting discussed here is not the same as the shifting of stress that occurs with the stressless roots, where stress falls on stress-attracting prefixes or suffixes. Instead, it involves paired stem formations that sometimes have stem-initial, sometimes stem-final stress.

The first set of examples of stress-shifting are seen in (1) (with stress marked for all examples in (1, 2, 3)). In the examples in (1), the stress-shifted forms appear to be imperfective, durative, or stative in contrast to the more perfective initial-stressed forms. With examples like (1f,i), the variably present glottal stop may be underlying and is lost when the preceding vowel is not stressed, though the difference between *sú7lin* and *súlin*

in (1f) remains mysterious. Some of these examples, (1b,c,d,f,h), exhibit other processes as well, such as a suffixed or lost final consonant. Establishing the underlying form for many of these items is quite problematic.

- | | | | | |
|-----|----|----|--|--|
| (1) | CU | a. | <i>chí7in-in</i> ‘lift object’ | <i>chi7ín</i> ‘carry in arms’ |
| | | b. | <i>kíljul-jax</i> ‘slip’ | <i>kiljísí-wy</i> ‘be slippery’ |
| | | c. | <i>mú7my-jax</i> ‘smile’ (stative only) | <i>myhúlj</i> ‘smile’ |
| | | d. | <i>píqav-jax</i> ‘get dark’ | <i>piqáv-jax</i> ‘be dark’
<i>piqi~víqi-7aw</i> ‘in darkness’ |
| | | e. | <i>sálakw</i> ‘scratch once’ | <i>salákw</i> ‘scratch lots, be scratching’
<i>salákw-jax</i> ‘be scratched up’ |
| | | f. | <i>sú7lin</i> ‘start a single basket’
<i>súl-in</i> ‘tie s.th’
<i>súl-ax</i> ‘be tied’ | <i>sulín</i> ‘start baskets again and again’ |
| | | g. | <i>wál-in</i> ‘dig (human subj.)’ | <i>walá~wal-in</i> ‘irrigate’ |
| | | h. | <i>wí7a</i> ‘raise’ | <i>wi7áj-in</i> ‘charge a lot’
<i>wi7áj-ax</i> ‘be high, expensive’ |
| | | i. | <i>yípy-jax</i> ‘ease pack’ | <i>ypý7y-jax</i> ‘relax, rest for a while’ |

In (2), the right-hand column has the more perfective forms, many of which show stress shift. And the examples in (2d,e) differ in transitivity. Again, there are a variety of processes at work, especially notable are those of (2a,c,d).

- | | | | | |
|-----|----|----|--|---|
| (2) | CU | a. | <i>á\$av7a</i> ‘naked, empty-handed, bare’ | <i>á7\$a, a\$á7</i> ‘get dressed’ |
| | | b. | <i>yíla-(i)n</i> ‘wait for’
<i>yíla-jax</i> ‘turn head’ | <i>yláa-jax</i> ‘turn head to see’ |
| | | c. | <i>píching-ish</i> ‘belongings’ | <i>pichín</i> ‘get’
<i>pichín-va7a-sh</i> ‘one who gets belongings (in a ceremony)’ |
| | | d. | <i>chípi-jax</i> ‘break into little pieces (intr.)’ | <i>chipíl-in</i> ‘break into little pieces (tr.)’
<i>chípilj</i> ‘break broad flat object’ |
| | | e. | <i>pílyiv-jax</i> ‘break (long object) (intr.)’ | <i>piljív-in</i> ‘break long object in pieces’ |

The examples of stress-shifting in (3) appear to be near synonyms, or to lack a clear aspectual difference.

(3)	CU	a.	<i>chá~shpal</i> ‘patch, mend’	<i>-chapál-7a</i> ‘patch, mending’
		b.	<i>hývyl-ax</i> ‘be soft’	<i>hyvyljyvyn</i> ‘it was soft’
		c.	<i>hýw7ni</i> ‘carry in hands’	<i>hywín</i> ‘carry in hands’
			<i>hýw-in</i> ‘set a bird onto nest’	
		d.	<i>málaxw</i> ‘taste’	<i>maláxw</i> ‘try’
		e.	<i>púchaq-jax</i> ‘jump’	<i>pucháq-jax</i> ‘jump’
		f.	<i>púlin-va7a-sh</i> ‘midwife’	<i>pulín</i> ‘give birth’
		g.	<i>tý~typin</i> ‘follow, track’	<i>typín</i> ‘follow, track’
		h.	<i>tí7a</i> ‘roost’	<i>ti7á</i> ‘roost’
				<i>natii</i> ‘land, roost (of bird)’
		i.	<i>wáqa</i> ‘shoe’	<i>waqá7</i> ‘put on shoe’
		j.	<i>wá~wva7i-sh</i> ‘long’	<i>wavá7i-sh</i> ‘long’
		k.	<i>wísik-in</i> ‘scratch’	<i>wisík-in</i> ‘scratch at door’
		l.	<i>wíchax-in</i> ‘drop, throw, throw out’	<i>wicháx-in</i> ‘drop, throw’

Somewhat like the examples in (3) are the reduplicated plurals of the nouns in (4). In CU, postvocalic *kw* is disfavored (cf. 4.5.4.6). This is resolved in the second plural of (4a) by *kw* > *k* and in the plural of (4b) by *kw* > *w*. Example (7f) below provides another instance of *kw* > *k*.

(4)	CU	singular	plural
	a.	<i>kaválj-7imal</i> ‘quick’	<i>kwa~kwa7valjim ~ kwa~kva7aljim</i>
		cf. <i>kaválj-ax</i> ‘beat fast, of heart’	
	b.	<i>kwava7mal</i> ‘a big spotted bird that cries in the night and brings bad news’	<i>kwa~wva7malim</i>

“Stem ablaut” includes vowel changes in the stem itself (as opposed to the appearance of the ablaut vowels *i* and *a* that appear with some suffixes). These are illustrated in (5). The forms in (5a-m) also exhibit stress shift.

- | | | | | |
|-----|----|----|---|--|
| (5) | CU | a. | <i>a7chiwin</i> ‘make, do’ | <i>icháajwin</i> ‘make, do’ |
| | | b. | <i>ixa</i> ‘cough’ | <i>axí7</i> ‘cough’ (attested only with imperfective inflection) |
| | | c. | <i>huva</i> ‘sniff’ | <i>huvá7</i> ‘smell’
<i>hywvǵ</i> ‘smell’
<i>huvi~húvi-jax</i> ‘be sniffing’ |
| | | d. | <i>piqav-jax</i> ‘get dark’ | <i>piqáv-jax</i> ‘be dark’
<i>piqi~víqi-7aw</i> ‘in darkness’ |
| | | e. | <i>pis7-ish</i> ‘rotten’ | <i>pisá7-ish</i> ‘rotten’ |
| | | f. | <i>ku\$_s</i> ‘get, take’ | <i>ku\$ǵy</i> ‘get, take’ |
| | | g. | <i>muu_s</i> ‘shoot with bow and hit’ | <i>muhǵ</i> ‘shoot once’ |
| | | h. | <i>ngaja-jax</i> ‘shake head’ | <i>ngyj-ax</i> ‘be dizzy’ |
| | | i. | <i>wyn_s</i> ‘put in’ | <i>wynín</i> ‘miss target’ |
| | | j. | <i>sul</i> ‘tie’ | <i>su7lin</i> ‘start one basket’
<i>sulín</i> ‘start baskets again and again’ |
| | | k. | <i>maa(n)</i> ‘leave alone, leave behind’ | <i>manín</i> ‘fast, diet’
<i>ma7nín</i> ‘fast, diet’ |
| | | l. | <i>miljǵw</i> ‘argue’ | <i>mǵljiwy</i> ‘argue’ |
| | | m. | <i>ala7a-t</i> ‘head louse’ | <i>alǵ-jyw</i> ‘pick lice’
(cf. <i>-7alá-m</i> ‘somebody’s head lice’) |
| | | n. | <i>amu</i> ‘hunt (ipfv)’ | <i>ami</i> ‘hunt’ (pfv. only)
<i>am7i</i> ‘hunt’ (pfv. only) |
| | | o. | <i>nawa\$</i> ‘hold, keep (ipfv)’ | <i>naw\$i</i> ‘keep’ (pfv. only) |

Suffixation with *-(a)an* occurs with a number of common stems. The stress often shifts to this stem-forming suffix. Examples are seen in (6), along with a few other related forms. In many cases, the different stem formations appear to be synonymous. When meaning differences can be identified, there is no semantic regularity among them. The suffix is probably a reflex of a causative, but as can be seen below, it does not always contribute a causative or transitivizing sense.

- (6) CU
- | | | |
|----|---|--|
| a. | <i>ix</i> ‘do’ | <i>ix-an</i> ‘do thus’ |
| b. | <i>ku\$_s</i> ‘take’ | <i>ku\$-áan</i> ‘take’
<i>ku\$-áa</i> ‘pick up’
<i>ku\$-a</i> ‘pick up’ |
| c. | <i>kyw</i> ‘tremble, shake’ | <i>kyw-án</i> ‘stir, mix’ |
| d. | <i>man-ax</i> ‘fall’ | <i>man-án-ingij-ax</i> ‘fall by accident’ |
| e. | <i>muu_s</i> ‘shoot with bow and hit’ | <i>muh-áan</i> ‘shoot at s.th’
<i>mu~mh-áan</i> ‘shoot at s.th’
<i>mu~mx-an</i> ‘shoot at s.th repeatedly’
<i>muh-a</i> ‘shoot at s.th’ |
| f. | <i>ngylyl-ax</i> ‘surround, tell all around, spread gossip’ | <i>ngylyl-an-in</i> ‘visit’ |
| g. | <i>nyng</i> ‘hide’ | <i>nyng-áan</i> ‘hide s.th’ |
| h. | <i>tav_s</i> ‘put down(sg.), put in wide container’ | <i>tav-áan</i> ‘put down, put in ...’
<i>tav-an-in</i> ‘put down, put in ...’ |
| i. | <i>tywy(n)</i> ‘grow (of plant)’ | <i>tyw7n-áan</i> ‘plant’ |
| j. | <i>u7la</i> ‘sew’ | <i>ul-áan</i> ‘sew’
<i>u7la-n</i> ‘sew’ |
| k. | <i>wyk-in</i> ‘slice’ | <i>wy~wk-an</i> ‘cut up s.th’
<i>wy~wyk-in</i> ‘cut up in slices’ |
| l. | <i>wyn_s</i> ‘put in (pl.)’ | <i>wyn-áan</i> ‘put in’
<i>wynín</i> ‘miss target’ |
| m. | <i>wywva</i> ‘beat, hit’ | <i>wywv-áan</i> ‘beat, hit’
<i>wywva-n</i> ‘beat, hit’
<i>hywv-áan</i> ‘beat, hit’ (sic with <i>hy</i>) |
| n. | <i>wix-in</i> ‘step on’ | <i>wi~wx-an-in</i> ‘step on several objects’ |

Another common alternation involves a syllable *-in*, sometimes stressed, in (7).

- (7) CU
- | | | |
|----|---|--|
| a. | <i>chyx-jax</i> ‘be clean, shining’ | <i>chyx-ín</i> ‘drain, of berries’ |
| b. | <i>hyw7ni</i> ‘carry in hands’ | <i>hyw-ín</i> ‘carry in hands’
<i>hyw-in</i> ‘set a bird onto nest’ |
| c. | <i>qaj jy~jykni-lj</i> ‘bold’ (lit. ‘not afraid’) | <i>jykw-ín</i> ‘be afraid’ |
| d. | <i>maa(n)</i> ‘leave alone, leave behind’ | <i>ma7nín</i> ‘fast, diet’ |

- | | | |
|----|----------------------------------|---|
| e. | <i>su7lin</i> ‘start one basket’ | <i>sul-ín</i> ‘start baskets again and again’ |
| | | <i>sul-ax</i> ‘be tied’ |
| f. | <i>wyn_s</i> ‘put in’ | <i>wyn-ín</i> ‘miss target’ |

Glottal-stop infixation is shown in the examples in (8). Some of these also show a shift of stress. The glottal stops in (8b,c,h) may be induced by the following causative suffix.

- | | | | | |
|-----|----|----|---|--|
| (8) | CU | a. | <i>amu</i> ‘hunt (ipfv)’ | <i>am7i</i> ‘hunt (pfv)’ |
| | | | | <i>ami</i> ‘hunt (pfv)’ |
| | | b. | <i>ivawyt</i> ‘strong’ | <i>ivá7ni</i> ‘make strong’ |
| | | c. | <i>maa(n)</i> ‘leave alone, leave behind’ | <i>ma7nún</i> ‘fast, diet’ |
| | | | | <i>manún</i> ‘fast, diet’ |
| | | d. | <i>naw</i> ‘be jealous’ | <i>na7aw</i> ‘blame’ |
| | | e. | <i>paq-in</i> ‘slap’ | <i>pa7qat</i> ‘knock aside’ |
| | | f. | <i>sulín</i> ‘start baskets repeatedly’ | <i>su7lin</i> ‘start a basket once’ |
| | | g. | <i>tywin</i> ‘pick, harvest’ | <i>ty7wín</i> ‘pick, harvest’ |
| | | h. | <i>tywy(n)</i> ‘grow’ | <i>tyw7náan</i> ‘plant’ |
| | | j. | <i>tychi</i> ‘grab’ | <i>tysh7i</i> ‘grab’ |
| | | k. | <i>ypy-jax</i> ‘ease pack’ | <i>ypy7y-jax</i> ‘relax, rest for a while’ |

CU has a few attestations of verb roots that appear with more than one stem-forming final consonant (aside from glottal stop insertion), as shown in (9). The analysis in (9a) may be *a\$a-v-7a* ‘dress-absentative-past’, where *-7a* is a past-tense suffix attested on CA nouns and adjectives. However, this is the only likely example in the CU corpus.

- | | | | | |
|-----|----|----|---|---|
| (9) | CU | a. | <i>a\$a_v7a</i> ‘naked, empty-handed, bare’ | <i>a7\$a-</i> ‘get dressed’ |
| | | | | <i>a\$a7</i> ‘get dressed’ |
| | | b. | <i>chipi-jax</i> ‘be broken into little pieces’ | <i>chipíl7j-in</i> ‘break into little pieces’ |
| | | c. | <i>chajáw-jax</i> ‘stand up’ | <i>cháwaj-ax</i> ‘climb, get up’ |
| | | d. | <i>hyljýp</i> ‘have hiccups’ | <i>hyljyq-jax</i> ‘drown’ |
| | | e. | <i>huva</i> ‘sniff’ | <i>huvá7</i> ‘smell (tr.)’ |
| | | | | <i>hywvúj</i> ‘smell (tr.)’ |
| | | f. | <i>ikýl-i-sh</i> ‘tangled’ | <i>ikni~7ikni-7i-sh</i> ‘hooked’ |

g.	<i>jaw</i> ‘get, carry’	<i>jawich-in</i> ‘carry’
h.	<i>jyjwy</i> ‘straighten arrows’	<i>jyjwyn</i> ‘straighten arrows’
i.	<i>jywín</i> ‘become used to’ <i>jywín-inin</i> ‘spoil (a child)’	<i>jywísyx7a</i> ‘there is enough’
j.	<i>kapa-jax</i> ‘yawn’	<i>kapal-in</i> ‘open, permit’ <i>kapal-ax</i> ‘be open’
k.	<i>kiljul-ax</i> ‘slip’	<i>kiljísi-wy</i> ‘it is slippery’ <i>kiljy-chu</i> ‘smooth, iron’
l.	<i>kivy</i> ‘send’	<i>kivylj-in</i> ‘herd’ <i>kivych-in</i> ‘herd’
m.	<i>lawa~láwa7ash</i> ‘hard’	<i>lawá\$awy</i> ‘it is, they are hard, said of things that are always hard’ <i>ljawach-in</i> ‘starch (tr.)’
n.	<i>myhúlj</i> ‘smile’	<i>mu7my-jax</i> ‘smile’ (stative only)
o.	<i>mykwyl-ax</i> ‘go around’	<i>mykwyn-in</i> ‘put around’
p.	<i>pachi-n ~ pschi-jax</i> ‘be scalded’	<i>pachik</i> ‘leach acorns’
q.	<i>paq-in</i> ‘hit, slap’	<i>paqat-ax</i> ‘explode’
r.	<i>\$ikík-jax</i> ‘creak’	<i>sikilj-ax</i> ‘rattle’ <i>\$ikíj</i> ‘creaking sound’
s.	<i>-si</i> ‘urine’	<i>\$ysílj-in ~ \$ysílj-ax</i> ‘pour, spill’
t.	<i>\$ukal-ax</i> ‘shrivel up’	<i>\$uka-jax</i> ‘wrinkle’ <i>\$uljúxwynyt</i> ‘wrinkled’
u.	<i>-\$yv7a</i> ‘hulls’	<i>\$yváj</i> ‘crack’
v.	<i>ta\$uqa-n</i> ‘straighten’	<i>ta\$u~tá\$u7-i-sh</i> ‘straight’
w.	<i>tykwyl-in</i> ‘brush off’	<i>tykwí ~ tykwi</i> ‘throw away’
x.	<i>waqa</i> ‘shoe’	<i>waqá7</i> ‘put on shoe’
y.	<i>wi7a-n</i> ‘raise’	<i>wi7áj-in</i> ‘charge a lot’ <i>wi7áj-ax</i> ‘be high, expensive’
z.	<i>xal-in</i> ‘rattle’	<i>xalýj-in</i> ‘clear throat’

10.5.2.7. SUPPLETIVE VERBS. Like the other Takic languages, CU has a set of verb roots that are suppletive for number, with one form for singular subjects of intransitives and objects of transitives, and another for plural subjects and objects. These are listed in (1).

There is slippage in this system among the Tactic languages; for instance, the CU plural *mujaq* ‘go out, put out’ (1d) is singular in LU.

(1) CU	singular	plural
a. die, be sick	<i>qaawi</i>	<i>chix</i>
b. fall	<i>xalyw</i>	<i>jyvyv</i>
c. go in	<i>chulup-in</i>	<i>sulul-in</i>
put in	<i>chulup-jax</i>	<i>sulul-ax</i>
d. go out	<i>pulich-in</i>	<i>mujaq-in</i>
put out	<i>pulich-ax</i>	<i>mujaq-jax</i>
e. kill	<i>myqy(n)_s</i>	<i>chix</i>
f. put, put in	<i>tav_s</i>	<i>wyn_s</i>
g. run	<i>ja7-jax</i>	<i>ngyn-ax</i>
h. sit, be there (inan.) present tense	<i>qa7</i>	<i>wy7</i>
past tense)	<i>qal_s</i>	<i>wyn_s</i>
(<i>qa7</i> occasionally with animals)		
i. sit, dwell, be there (animate, present)	<i>hiw-qa</i>	<i>qa7</i>
j. sit, dwell, be there (animate, future)	<i>hiw-nash</i>	<i>max</i>
(immediate future)	<i>hiw-nash-qa-t</i>	<i>max-qa-ti-m</i>

CU has two verbs that are suppletive for tense, in (2). The verb in (2a) belongs to a larger set with complex distinctions for human, animate, and inanimate subjects (sketched above in (1i-j)).

- (2) CU a. *hiw-* (past sg., present sg., future sg.), *qa7* (present pl., animate), *wy7* (present pl. or mass/inanimate), *qal* (past pl.), *max* (future pl.) ‘be there, dwell, live’
 b. *nyqa* (present sg.), *nynywy* (present pl.), *nyq* (past), *mynmax* (future) ‘come’

10.5.2.8. DEFECTIVE VERBS IN CUPEÑO. There are several defective verbs in CU which are attested only in the present tense, as in (1). The verbs in (1a,b) represent a series of stative verbs in *-wy* that occur only in the present tense. The verbs in (1c,d) are the same for singular and plural subject.

- (1) CU
- | | | |
|----|-----------------|-------------------|
| a. | grow, of plants | <i>ty(w)-wy</i> |
| b. | be slippery | <i>kiljisi-wy</i> |
| c. | be hungry | <i>hakwiqa</i> |
| d. | be thirsty | <i>papaviqa</i> |

10.6. THE VERB BASE IN CAHUILLA.

10.6.1. CAHUILLA VERB CLASSES. The description of the major verb classes presented here is based mainly on the verbs as documented in the CA dictionary of Seiler and Hioki (1979). We distinguish several classes of verbs: verbs that show “automatic” reduplication, verbs that take the thematic suffix *-i*, verbs that form distributives in *-an*, athematic verbs, and a small class of irregular and defective verbs. Also see 10.6.2.13 for verbs that are suppletive for number of subject (intransitives) or object (transitives).

10.6.1.1. VERBS WITH “AUTOMATIC REDUPLICATION”. The first class of verbs to be considered, with about 60 members, exhibits what Seiler (1977:51) calls “automatic reduplication.” Nearly all verb roots of the shapes CVC and CVCCV fall into this class. As seen in (1), this reduplication copies the first CV of the root, and the copy is stressed. Example (1f) shows the not uncommon lowering of word-final *i* to *e*.¹²⁵

- (1) CA
- | | | | |
|----|--------------|-----------------|------------------------|
| a. | <i>chuq</i> | <i>chu~chuq</i> | ‘mince meat’ |
| b. | <i>mish</i> | <i>mi~mish</i> | ‘chew’ |
| c. | <i>saw</i> | <i>sa~saw</i> | ‘make tortillas’ |
| d. | <i>sem</i> | <i>se~sem</i> | ‘laugh’ |
| e. | <i>tang</i> | <i>ta~tang</i> | ‘roast agave in a pit’ |
| f. | <i>ma7ni</i> | <i>ma~ma7ne</i> | ‘dodge’ |
| g. | <i>qawpi</i> | <i>qa~qawpi</i> | ‘play the ball game’ |

“Automatic reduplication” appears only with inflections that permit an imperfective interpretation and we gloss the reduplication accordingly [IPFV]. Note that neither in CA nor cross-linguistically does imperfective aspect necessarily entail a durative or repetitive

¹²⁵ This lowering is widely attested. It found is not only in Seiler (1970) and Seiler and Hioki (1979) but also in the Harrington MCA notes.

sense.¹²⁶ The reduplicated form appears before the nonfuture (or present in MCA) and future tense-aspect suffixes (including when these are bases for nominalizations or different-subject subordination), and in the imperative. The unreduplicated form appears before a factive or irrealis suffix, in the immediate future, and with the realis and irrealis subordinating suffixes *-ve* and *-pi* respectively. (These inflections are discussed in 11.6 and 13.6.) The unreduplicated root also appears in the resultative nominalization with *-7a* (see 14.1).

Confusingly, verbs of the same class form distributives by a homophonous CV-reduplication. A reduplicated base appearing before one of the suffixes that does not cooccur with imperfective reduplication is to be understood as distributive.

If the initial consonant of the root is *h* or *ng*, the second *h* or *ng* is lost, resulting in a double vowel in the reduplicated form, as in (2) (repeated from 4.6.9 (1)).

- | | | | | | |
|-----|----|----|---------------|--|--------------------|
| (2) | CA | a. | <i>hal</i> | <i>ha~al</i> (< <i>ha~hal</i>) | ‘look for, search’ |
| | | b. | <i>huv</i> | <i>hu~uv</i> (< <i>hu~huv</i>) | ‘smell (intr.)’ |
| | | c. | <i>ngang</i> | <i>nga~ang</i> (< <i>nga~ngang</i>) | ‘cry’ |
| | | d. | <i>ngavay</i> | <i>nga~avay</i> (< <i>nga~ngavay</i>) | ‘sharpen an edge’ |

Roots of the shape CV7 may lose the final 7 in the reduplicated form, with (3c) being exceptional. (3b) shows another instance of the lowering of word-final *i* to *e* (cf. (1f)).

- | | | | | | |
|-----|----|----|-------------|----------------|-------------------------------|
| (3) | CA | a. | <i>wa7</i> | <i>wa~wa</i> | ‘roast meat’ |
| | | b. | <i>chi7</i> | <i>chi~che</i> | ‘gather, pick up from ground’ |
| | | c. | <i>si7</i> | <i>si~si7</i> | ‘urinate’ |

With roots of the shape CVCVC, the vowel of the first syllable following the copy deletes (syncopates), as in the examples in (4) (cf. the same pattern in CU, 10.5.2.5 (5)). (4c) represents an alternative treatment of (2d).

- | | | | | | |
|-----|----|----|----------------|-------------------|-----------------|
| (4) | CA | a. | <i>chiljaj</i> | <i>chi~shljaj</i> | ‘shell acorns’ |
| | | b. | <i>melan</i> | <i>me~mlan</i> | ‘argue, debate’ |

¹²⁶ Cf. the non-durative imperfective in Spanish in the famous line from García Lorca (1957:467): *Eran las cinco en punto de la tarde* ‘It was [IPFV] exactly five o’clock in the afternoon [when the bullfighter was killed]’.

- c. *ngavaj nga~ngvaj* ‘sharpen a knife or hoe, file’

There are also a few irregular forms, as in (5). In (5b) the first vowel of the root is unexpectedly retained.

- (5) CA a. *jim ii~jem* ‘have sexual intercourse’
 b. *nawan na~nawan* ‘take s.th away from sbdy’

10.6.1.2. VERBS WITH THEMATIC -I. The second class of verbs includes a group ending in *-i*. We understand this *-i* to be an intransitive thematic suffix, since nearly all verbs ending in *-i* in CA are intransitive, in contrast to the situation in LU, where thematic *-i* derives transitive verbs, and CU, with the thematic suffix *-in* for transitives. Most CA intransitives in *-i* have a corresponding causative form with *-in*. The source of CA intransitive *-i* might be simply truncation of the causative *-in* with reanalysis of the causative suffix as *-n* rather than *-in*. These intransitives in *-i* form distributives with both reduplication of the initial syllable and a distributive suffix *-Vm*, where *V* is a copy of the underlying vowel of the root and which replaces intransitive *-i*. A few *i*-final verbs are athematic and do not belong to this class; they form distributives simply with reduplication and have causatives in *-ni*.

The distributive *-Vm* suffix is cognate with the Hopi “inner plural” *-m-* and with the same *-m-* of SE (see 10.2.2.1 (6)). In both Hopi and SE, *-m-* replaces thematic *-k-* in k-class verbs. CA distributive *-Vm* is also cognate with the *-my* in the plural thematic suffix *-myn* of CU verbs in the *-in* class. Just as in Hopi (but unlike SE, CU), it can appear in both intransitive and causative verbs. The presence of this morpheme and the presence of the characteristic k-class causative *-in* suggests that CA *i*-final roots along with their causatives constitute a thematic verb class that reflects the Uto-Aztecan k-class. In large part, they exhibit the typical “eventive” semantics of the k-class, as is evident in the examples in (1) and (2).

- | | | | | |
|--------|-----------------------------|--------------|---------------|---------------------------|
| (1) CA | | intransitive | causative | distributive intransitive |
| a. | open | <i>aq-i</i> | <i>aq-in</i> | <i>a~7q-am</i> |
| b. | stretch out, of long object | <i>het-i</i> | <i>het-in</i> | <i>he~ht-em</i> |
| c. | get together with | <i>nak-i</i> | <i>nak-in</i> | <i>na~nk-am</i> |

d.	be tied around	<i>sut-i</i>	<i>sut-in</i>	<i>su~st-um</i>
e.	close	<i>tem-i</i>	<i>tem-in</i>	<i>te~tm-em</i>

The causatives of the distributives in *-Vm* add a final front vowel, recorded as both *-e* and *-i*, to the distributive, as in (2). There seems to be no significance to the choice of vowel, *e* being the common “relaxed” pronunciation of underlying *i* mentioned above.

(2)	CA			distributive	distributive
		intransitive	causative	intransitive	causative
a.	be spread	<i>hel-i</i>	<i>hel-in</i>	<i>he~hl-em</i>	<i>he~hl-em-e</i>
b.	be tied around	<i>sut-i</i>	<i>sut-in</i>	<i>su~st-um</i>	<i>su~st-um-i</i>
c.	be pasted	<i>tak-i</i>	<i>tak-in</i>	<i>ta~tk-am</i>	<i>ta~tk-am-e</i>
d.	separate	<i>wax-i</i>	<i>wax-in</i>	<i>wa~wx-am</i>	<i>wa~wx-am-i</i>

This distributive-causative sequence presumably reflects **-m-ina*, with diachronic loss of **-na* by a generalization of the grammatically triggered truncation of k-class causatives seen in diverse contexts in the other Tadic languages.

A few members of this class of intransitive verbs with final *-i* have reduplicated distributives without the *-Vm* suffix and retain the final *-i* of the intransitive. Some examples appear in (3). Some of these are attested with causatives with a final vowel, *-ini* (3b) or *-ine* (3d,e). (3a) seems to show an assimilation *h > sh* before *ch*, in the same high-vowel environment that this assimilation is attested in SE (cf. 4.2.5 (5)). Since this process has not been reported elsewhere for CA, it may be a lexicalized, fossilized remnant in this example.

(3)	CA			distributive	distributive
		intransitive	causative	intransitive	causative
a.	go	<i>hich-i</i>	<i>hich-in</i>	<i>hii~shch-e</i>	
b.	smell s.th	<i>huv-i</i>	<i>huv-ini</i>	<i>hu~hv-i</i>	
c.	get skinny	<i>jaw-i</i>	<i>jaw-in</i>	<i>ja~jaw-i</i>	
d.	get scared, be afraid	<i>juk-i</i>	<i>juk-ine</i>	<i>ju~juk-i</i>	
e.	wake up	<i>kwap-i</i>	<i>kwap-ine</i>		<i>kwa~kwap-ine</i>

Some verbs which do not end in *-i* also form distributives with the *-Vm* suffix, as in (4a), sometimes with specialized meanings as in (4a). The distributive suffix may be accompanied by CV reduplication.

- | | | | | | |
|-----|----|----|------------------|--------------|--|
| (4) | CA | a. | be tired | <i>hajin</i> | <i>ha~hj-am-i</i> ‘be really/always tired’ |
| | | b. | weave, of spider | <i>hew</i> | <i>he~hw-am</i> |
| | | c. | give | <i>max</i> | <i>ma~mx-am</i> |
| | | d. | rip on a seam | <i>qepel</i> | <i>qe~qpel-an ~ qe~qp-em-e</i> |

10.6.1.3. VERBS THAT FORM DISTRIBUTIVES IN *-AN*. About 75 verbs with consonant-final stems form distributives with *-an*, as in (1). In (1a,c) this *-an* cannot be the causative suffix, because the *-an* form of the causative appears only with the small of athematic verbs of 10.6.1.4 (1) below. However, since the verb *tew* ‘find’ is a member of the ablauting class, the *-an* suffix seen in (1b) is ambiguous between the causative and distributive; it might mean ‘make someone find several things’.

- | | | | | |
|-----|----|----|-------------------|---|
| (1) | CA | | | distributive |
| | | a. | cause to collapse | <i>lapash</i> <i>la~lpach-an</i> |
| | | b. | find | <i>tew</i> <i>te~tw-an</i> |
| | | c. | roll (intr.) | <i>chenen</i> <i>chenen-an</i> ‘keep rolling’ |

10.6.1.4. ATHEMATIC VERBS. The remaining verbs constitute a large athematic class, with hundreds of members. These all share two distinguishing properties: they are attested with reduplicated distributives without suffixes, and the causative of the distributive uses the same suffix, *-ni*, as the ordinary causative. It is convenient to divide these athematic verbs into the *i*-final intransitives that are not attested with distributive suffixes (as in (1)), other vowel-final verbs (2, 3), and consonant-final verbs (4).

Almost all verbs ending in the augment *-qi* have a causative in *-an*, as in (1).

- | | | | | | |
|-----|----|----|------------------------------|----------------|-----------------------------------|
| (1) | CA | | intransitive | causative | distributive |
| | | a. | reach for | <i>ju7a-qi</i> | <i>ju7a-q-an</i> |
| | | b. | slide down, become cheap | <i>xaju-qi</i> | <i>xaju-q-an</i> <i>xa~xju-qi</i> |
| | | c. | open hand and spread fingers | <i>sala-qi</i> | <i>sala-q-an</i> |

Verbs ending in other vowels are a mix of transitives and intransitives, and use more than one of the causative suffix forms. Attested intransitive distributives are all of the reduplicated unaffixed type.

(2)	CA			distributive	distributive
		intransitive	causative	intransitive	causative
a.	put on dress, skirt	<i>ela-</i>	<i>ela-ni</i>	<i>e-7la</i>	
b.	get a blister on s.th	<i>pe-pakwe</i>	<i>pe-pakw-in</i>	<i>pe-pa~pkwa</i>	
c.	have around neck	<i>qenxa</i>	<i>qenxa-ne</i>		<i>qe~qenxa-ne</i>
d.	lie flat on back	<i>tacha</i>	<i>tacha-ne</i>	<i>ta~tacha</i>	<i>ta~tacha-ni</i>
e.	sing	<i>taxmu</i>	<i>taxmu-ne</i>	<i>ta~taxmu</i>	

While most of these examples have causatives in *-ni* ~ *-ne*, other causatives appear as well, somewhat unpredictably, as in (3a,b). Ablaut (see below) is not expected in these cases.

(3)	CA	intransitive	causative
a.	get cured	<i>huva</i>	<i>huva7-ani</i>
b.	be strong	<i>iva</i>	<i>iva-n</i>
c.	burn (intr.)	<i>kina</i>	<i>kina-ne</i>
d.	rot	<i>pisa</i>	<i>pisa-ni</i>

Athematic verb stems ending in consonants also form distributives simply by reduplication (with some irregularities). The *-n* causatives of course do not appear following consonants, but *-ane* ~ *-ani*, *-in*, and *-ne* ~ *-ni* all appear, with the choice apparently lexically determined. *-ne* ~ *-ni* are most common with this group of stems.

(4)	CA		causative	distributive	distributive causative
a.	resemble	<i>ajax</i>	<i>ajx-ane</i>	<i>a~7ajax</i>	
b.	argue, quarrel	<i>najax</i>	<i>najx-ane</i>		
c.	go around	<i>kavaj</i>	<i>pe-kavaj-ni</i>	<i>kaa~kvaj</i>	
d.	swing	<i>kajaw</i>	<i>kajaw-ni</i>	<i>ka~kjaw</i>	
e.	shake (tr.)	<i>ngej</i>	<i>ngej-in</i>	<i>che-ngej-7an</i>	'give a little shake'

f. come out *pis* *pis-ani* *pi~pis* *pii~ps-ani*

The causative suffix *-ni* (sometimes *-ne* in Seiler's transcription) induces an ablaut vowel on some verb stems. In DCA, the ablaut vowel is *a*. Following the ablaut vowel, *-ni* loses its vowel and the resulting combination is *-an* (see discussion of 10.6.1.3 (1b) above). In Katherine Sauvel's MCA, the ablaut vowel is apparently *i* (Sauvel & Munro 1981:240) though it is *a* in the Harrington materials from Adán Castillo. While in CU ablaut vowels predictably occur following stressless roots and suffixes derived from them (such as *-jax* and *-wyn*), in CA, where the stressless-stressed distinction is almost completely lost with the shift of stress to the root-initial syllable, the appearance of this ablaut vowel is entirely lexically conditioned. The same verb roots that appear with *-ani* causatives also appear with ablaut vowels with other ablauting affixes, such as *-(i)k* 'immediate future', *-(a)p ~ -pi* 'irrealis', *-(a)law* 'purposive motion', and *-(i)ve* 'realis'. The list of verb stems documented with ablaut vowels in Seiler and Hioki (1979) is given in (5), along with additional verbs identified by Sauvel and Munro (1981) for MCA. There is apparently some variation among speakers; for instance, Sauvel and Munro state that *wel7isew* 'marry, said of a female subject' is an ablauting verb for some speakers but not for others. Many of these verbs are stressless roots in CU. However, since CA stress always appears on the first syllable of the root (with the single exception of *jax* 'say, do'), no phonological behavior defines this class in CA; ablauting has become a lexical feature of the verb.

- (5) CA
- | | |
|-------------------|-------------------------------|
| <i>aj</i> | 'pick from tree' |
| <i>ajaw</i> | 'want, like' (MCA) |
| <i>ajax</i> | 'resemble' |
| <i>chexen</i> | 'kill (pl.obj.)' |
| <i>chi7awen</i> | 'be seated, sitting on' (MCA) |
| <i>ex</i> | 'behave that way' |
| <i>heeñew</i> | 'fight' (MCA) |
| <i>heñew</i> | 'be angry' (MCA) |
| <i>hew</i> | 'spin a web' (MCA) |
| <i>hijax, hex</i> | 'say s.th' |
| <i>hing</i> | 'fly' |

<i>hivin</i>	‘take (pl.obj.)’
<i>ivawen</i>	‘be strong’ (MCA)
<i>jaw</i>	‘hold, catch’ (MCA)
<i>jax</i>	‘say, do’
<i>ki7iw</i>	‘wait for’ (MCA)
<i>kus</i>	‘take (sg.obj.)’
<i>kwa7</i>	‘eat’
<i>mamajaw</i>	‘help’ (MCA)
<i>max</i>	‘give’
<i>max</i>	‘stay (pl. subj.)’ (MCA)
<i>mekan</i>	‘kill (sg.obj.)’
<i>menvax</i>	‘come (future)’ (DCA)
<i>mex</i>	‘do some way or other’
<i>mijaxwen</i>	‘be’ (MCA)
<i>mux</i>	‘shoot, sting’
<i>najax</i>	‘quarrel’
<i>namajan</i>	‘feel, taste, try on’ (MCA)
<i>namik</i>	‘meet’ (MCA)
<i>nek</i>	‘come’
<i>ngang</i>	‘cry’
<i>nuk</i>	‘hold image ceremony’ (MCA)
<i>pax</i>	‘go in’
<i>pis</i>	‘come out’
<i>pish</i>	‘arrive’
<i>sex</i>	‘cook’ (MCA)
<i>tav</i>	‘put (sg.obj.)’
<i>teew</i>	‘see’
<i>tetewan</i>	‘count’ (MCA)
<i>tew</i>	‘find’
<i>vuk</i>	‘hit’
<i>wen</i>	‘put (pl.obj.)’
<i>wes</i>	‘plant’

Some suffixes also exhibit ablaut vowels before ablauting suffixes. These include *-wen* ‘stative, past imperfective plural’, *-qal* ‘past imperfective singular’, *-law* ‘purposive

motion’, *-vaneken* ‘going along doing’, *-m* and *-an* ‘distributive’, and *-kw* ‘verbalizer from adjectives’.

10.6.1.5. IRREGULAR AND DEFECTIVE VERBS. There are a few irregular and defective verbs, shown in (1). These appear in this class in the other Cupan languages as well.

- (1) CA
- a. *hiw-* (sg.subj.), *qal* (pl.subj.), *hiw-nash* (future sg.subj.), *max* (future with pl.subj.) ‘sit upright, live, stay (anim.subj.)’
 - b. *hiwen* ‘be standing (of humans and inanimates like smoke)’; be growing (of wild plants)’
 - c. *neken* (DCA nonfuture), *neke* (MCA present), *menvax* (future), *navuk* (imperative) ‘come’
 - d. *hijax*, *hex*, *nem* ‘say what’, with a complicated distribution of the forms
 - e. *jax* ‘say, do’ is the only stressless root, e.g. *ní-jax-qal* ‘I was saying’, *jáx-qal* ‘he was saying’

10.6.2. DERIVATION OF THE VERB BASE IN CAHUILLA.

10.6.2.1. MOTION SUFFIXES. CA has the most complex set of associated motion suffixes among the Takic languages, with two prior-motion suffixes and three for concurrent motion. The most common is DCA *-law*, MCA *-ljew*, which expresses prior (often purposive) motion thither. This suffix appears in the DCA corpus with diverse variants including *-lew*, *-ljew*, *-lw*, *-le* and *-l*. In Catherine Sauvel’s MCA it is *-lew* after *l*, *-ljew* elsewhere (Sauvel & Munro 1981:160); as pointed out in chapter 3, Harrington’s consultant Adán Castillo apparently did not have *lj* in his version of MCA. As in CU, this suffix is largely homophonous with a suffix that derives denominal verbs. It must be related to SE *-t\$u7(a)*, and to the LU and CU ‘GOPR’ suffixes LU *-lun*, CU *-l(j)u*, but its vocalism is peculiar. Like CU *-l(j)u7*, it induces *a*-ablaut, as seen in the examples in (1). In MCA this is the only associated motion suffix that cannot appear immediately before past-tense *-7*. Instead, its past tense must be *-qa7*, as in (1e).

- (1) DCA a. *Pe-nga7 jal pe hí-je*
 DIST-LOC QUOT DET 3SG-mother
pe-pich-a-law-qa7 *jekaw-qa7-ipa7*
 3SG > 3SG-arrive-ABLAUT-GOPR-NFUT.SG gather-NFUT.SG-DS
*hua-7t-i*¹
 iodine.bush-ABS-ACC
 ‘There he reached his mother while she was gathering herbs.’² (Seiler 1970:123 116)
- ¹ The herb being gathered, *hua-t*, is *Allenrolfea occidentalis* (Bean & Saubel 1972:36). We interpret long <a> of Seiler’s <húa:ti> as representing *a7*, in line with the pattern of glottalization of CA accusatives noted in 5.4.2.7.
- ² Seiler’s translation, ‘His mother, gathering herbs, had come close to him’, is not in accord with the structure of the CA sentence.
- b. *Pi-chem-tehw-a-lw-alu*.
 3SG.OBJ-1PL-see-ABLAUT-GOPR-IRR
 ‘We should go to visit him.’ (Seiler 1970:83 3)
- c. *I-jka muk-law-7i aj Isi-lj ta7*.
 PROX-DAT die-GOPR-FCT then Coyote-ABS EMPH
 ‘Coyote went that way [sic] to die.’ (Seiler 1970:99 101)
- MCA d. *Ne-vuk-7ami-lew-ne* *pe-ngax pe qawi-sh pa7*.
 1SG-straight-descend-GOPR-FUT 3SG-ABL FOC hill-ABS LOC
 ‘Me voy a bajar al otro lado de la loma. (I’m going to go down on the other side of the hill.)’ (3.112.0335)
- e. *Kia-t jal aj = al pichi-lew-qa7 hé-ki-nga*.
 boy-ABS QUOT now = QUOT arrive-GOPR-PST.SG 3SG-house-LOC
 ‘El muchacho ya iba llegando a su casa. (The boy was going off to arrive at his house.)’ (3.112.0127)

The “prior motion hither” suffix is *puli* (COMEPR). While there is a verb *-puli* ‘fall (sg.subj.)’, this seems an unlikely source for the suffix, and we have not identified a source verb. Examples appear in (2).

- (2) DCA a. *Ivi-m pa-am-ña~ñish-puli-wen ivi-j tema-l*
 PROX-PL 3SG.OBJ-3PL-DISTR~settle-COMEPR-NFUT.PL PROX-ACC land-ABS
 ‘These Indians settled in this area.’ (Seiler 1970:75 4)
- b. *Pe=l suk-ta-m hem-pa7-puli-wen pe7.*
 FOC=QUOT deer-ABS-PL 3PL-drink-COMEPR-NFUT.PL FOC
 ‘The deer were coming to drink.’ (Seiler 1970:127 163)
- c. *Penga=l pe-m-we~wen-puli kimu-l hé-ma-nga.*
 there=QUOT 3SG.OBJ-3PL-IPFV~stop-COMEPR door-ABS 3SG-SIDE-LOC
 ‘They stopped in front of the door.’ (Seiler 1970:117 58)
- MCA d. *Aj e-n-tew-puli-7.*
 now 2SG.OBJ-1SG-find-COMEPR-PST
 ‘Ya te encontré. (Now I have found you.)’ (3.113.0304)

There are three concurrent motion suffixes. The first is the thither suffix *-ichi* ‘go along doing, do along the way’, related to the motion verb *hichi-* ‘go’. This suffix competes with a second form that includes “thither” readings: *-ngi* ‘to go off doing, go back doing, go around doing’. Sauvel & Munro (1981:165) state that the difference between the two is that the *-ichi* means ‘go along’ and *-ngi* means ‘go around.’ However, a number of examples do not obviously conform to this distinction (e.g., (4a, b) do not seem to include a sense of ‘around.’) In DCA the latter suffix has apparently developed a number of specialized senses that have little to do with motion. The hither suffix for concurrent motion is DCA *-vaneken* ‘come/go along (doing)’, MCA *-vaneke* (cognate with CU *-vanyq*).

The first concurrent “thither” motion suffix, *-ichi*, is illustrated in (3). In (3b) the motion suffix is attached to the “do-support” verb *jax* in a verb-adjunct construction (cf. 11.6.1.13).

- (3) DCA a. *Ika-t pa7 e-m-tavan-a-nuk*
 net-ABS LOC 2SG.OBJ-3PL-put-ABLAUT-SS
e-m-jaw-ichi-pi e-m-chut-pi mijax-wen.
 2SG.OBJ-3PL-carry-GOING1-IRR.SUB 2SG.OBJ-3PL-burn-IRR.SUB be-ST.NFUT
 ‘Having put you in a net, they had to carry you off to cremate you.’ (Seiler 1970:91 105)
- b. *Aj jal wewn-i-sh sa:w jax-ichi jal.*
 now QUOT rain-NMLZ-ABS disappear do-GOING1 QUOT
 ‘Then the rain gradually stopped.’ (Seiler 1970:119 97)
- c. *Hichi-7i Taku-sh me~mlek-ichi-7i.*
 now prsn-ABS REP~make.noise-GOING1-FCT
 ‘He went, Tákuš, he went with noise (The Taakwish went along making noise).’ (Seiler 1977:168 (201))
- MCA d. *Pen naxa-j pe-kus-ichi-7.*
 and staff-ACC 3SG.OBJ-take-GOING1-PST
 ‘Él llevó su bastón. (He carried his staff [along].)’ (3.112.0206)

The second concurrent “thither” motion suffix, *-ngi* [GO&], is well attested in the associated motion function, as in the examples in (4). Unlike its cognates, LU *-ngi(m) ~ -j(m)*, AC *-nga(m)* (cf. 10.4.2.2.1 for LU and AC), CU *-ngij* (10.5.2.1), the CA suffix shows no trace of a morpheme-final consonant.

- (4) DCA a. *Ne7 kilje mijax-wen pish em-en-jaw-ngi-pi.*
 1SG.PRO NEG be-ST.NFUT COMP 2PL.OBJ-1SG-carry- GO&-IRR.SUB
 ‘I can’t possibly take you with me.’ (Seiler 1970:131 195)
- MCA b. *Chipatma-l jal chenen-ngi-7 kilje puli chenen-ngi-7.*
 basket-tray-ABS QUOT roll-GO&-PST NEG fall roll-GO&-PST
 ‘La batea se fue rodando, no se cayó, it went on rolling.’ (The basket tray went rolling away, it did not fall, it went on rolling.)’ (3.112.0137)

- c. *Hicha-j* *pe-7-mexan-ngi-qa* *i-pa7*.
 INDF,INAN-ACC 3SG.OBJ-2SG-do-GO&-PRS.SG PROX-LOC
 ‘¿Qué andas haciendo aquí? (What are you going around doing here?)
 (3.112.0182)
- d. *Sisqi-l-m-i* *pen* *sivoja-l-m-i* *me-qwa-ngi-qa7*.
 stinkbug-ABS-PL-ACC and worm-ABS-PL-ACC 3PL.OBJ-eat-GO&-PST.SG
 ‘He went around eating stinkbugs and worms.’ (3.112.0358)

Seiler (1977:168) reports that in DCA the main meanings of the suffix *-ngi* do not have to do with associated motion, but instead include ‘do surprisingly’ or ‘do all over the place’. Some other specialized meanings reported in Seiler & Hioki (1979) are shown in (5). No similar developments of *-ngi* are attested in LU, AC, or CU, and we have not identified any in the MCA corpus.

- (5) DCA a. have a cramp *che-pukush* *che-pukush-ngi* ‘have a slight cramp’
 b. hit with a stick *vuk-qepaj* *vuk-qepaj-ngi* ‘hit with stick, accidentally’
 c. see *teew* *teew-ngi* ‘watch, stare with accusing eyes’

The suffix for concurrent motion “hither,” DCA *-vaneken*, MCA *-vaneke* (with past tense *-vaneke-7*) induces *i*-ablaut (which Seiler (1970) often transcribes with the lowered pronunciation *e*, as in (6a)). In MCA the suffix retains the past-tense inflection before other derivational suffixes (Sauvel & Munro 1981:162-3), as in (d). These inflections are discussed in 11.6. The suffix *-vaneke(n)* seems to incorporate the verb *neke* ‘come’, but the *-va-* component remains unidentified.

- (6) CA a. *Ex-e-vaneken* *pe-em-te(w)-wen*.
 do.some.way-ABLAUT-COMING.NFUT 3SG.OBJ-3PL-see-NFUT.PL
 ‘They watched him come along.’ (Seiler 1970:55 223)

- b. ... *pa-ngang-i-vaneken* *pa-tax-sunwi-vaneken*
 3SG-cry-ABLAUT-COMING.NFUT 3SG-REFL-sorry-COMING.NFUT
nek-i-ve.
 come-ABLAUT-REAL.SUB
 ‘... he was crying as he went along, he went along feeling sorry for himself as he came.’ (Seiler 1970:75 7)
- MCA c. *Chem-taxmu-vaneke-vichu-we.*
 1PL-sing-COMING-DES-PRS.PL
 ‘We want to come along singing.’ (S&M 163)
- d. *Ne-chengen-vaneke-7-ajaw-qa7.*
 1SG-dance-COMING-PST-try-PST.SG
 ‘I tried to come along dancing.’ (S&M 163)
- e. *Pen jal tewlave-l aja neke-7 pe-hal-vaneke-7*
 and QUOT devil-ABS now come-PST 3SG.OBJ-look.for-COMING-PST
kia-7t-i.
 boy-ABS-ACC
 ‘Y es que el diablo ya venía buscando el muchacho. (And it’s that the devil was now coming along looking for the boy.)’ (3.112.0126)

Seiler (1977) includes among the associated motion suffixes the form *-(i)kaw* ‘do in various places’ [DISTR.MOT], perhaps from the verb *yekaw* ‘gather’. This suffix is different from the other associated motion suffixes in that it can encode what happens to objects, as in (7a), rather than only subjects. When it is attested with distributive suffixation, as in (7b), or with plural subjects (as in (5c)) it is not clear that motion or directionality is at issue.

- (7) DCA a. *Chija-m me-ta pe-wen-ikaw.*
 feather.headdress-PL 3PL-on.top CF-put(pl.obj.)-DISTR.MOT
 ‘He put feathers on them [on the heads of various people].’ (Seiler 1970: 109 93)

- b. *pe-qangi-mi-ikaw-*
 CF-bump.into-DISTR-DISTR.MOT
 ‘bump here and there’ (Seiler & Hioki 1979:166)
- c. *pe-em-ñach-ikaw-wen*
 3SG.OBJ-3PL-settle-DISTR.MOT-NFUT.PL
 ‘They settled in various places’ (Seiler 1970:63 321)

More than one motion suffix can appear in a verb construction, as in (8). The contrasting orders in (8d,e) imply that these suffixes can participate in internal syntax (see 10.6.2.5). The gloss offered by Seiler and Hioki (1979:143) for (8d) suggests that here *-ngi* expresses associated motion ‘come back’ that follows the action of the verb; Guillaume (2016) found that this is a relatively rare phenomenon. Sequences of this type are only sparsely attested so this possibility cannot be confirmed, but such a possibility is consistent with the overall complexity of the CA associated motion paradigm.

- (8) DCA a. *wipis-ichi-ljew-* ‘pull along’
 b. *ex-ichi-ljew-* ‘be leaving, on the way’
 c. *pe-qá~qngi-ngi-kaw-* ‘bump all around’
 d. *paw-law-ngi-* ‘go after water and return’
 MCA e. *jaw-ngi-lew-* ‘go to bring back(?)’ (3.112.0409)

10.6.2.2. CAUSATIVE AND DISTRIBUTIVE SUFFIXES. Since the distribution of causative and distributive allomorphs determines the verb classes of CA, these have been discussed and illustrated in 10.6.1. The athematic-class causative is *-ni*. It induces *a*-ablaut on the roots and suffixes that exhibit ablaut. Following most *-i* stem verbs, it is *-n*. A few verbs have causative *-an*. Following distributive suffixes, the causative is *-i* (or *-e*, not a significant contrast).

The two major distributive suffixes were discussed and illustrated in 10.6.1 (6-8). Verbs with intransitive thematic *-i* take distributive *-Vm*, where the vowel copies the stressed vowel of the verb root. A second distributive suffix is *-an*, which is homophonous with the causative *-an*. Athematic verbs do not take these suffixes; they form distributives

by reduplicating the first syllable of the root, with the resulting form bearing the stress on the copied syllable.

10.6.2.3. OTHER VALENCE-CHANGING SUFFIXES. The benefactive suffix of CA is *-max*, seen in (1), from the verb ‘give’, as in LU and CU. This suffix induces *i*-ablaut, as in (1a), where ablaut *i* appears lowered to *e*. In (1b), *-max* is followed by an *a*-ablauting suffix.

- (1) DCA
- a. *Tu7 tu7 ne-7em-jax-e-max-am pe-n-pa7-ka.*
 grind grind 1SG.OBJ-2PL-do-ABLAUT-BEN-IMP.PL 3SG.OBJ-1SG-drink-IFUT.SG
 ‘Grind them for me so that I can drink them.’ (Seiler 1970:131 190)
- b. *E-n-humsan-max-a-lu7.*
 2SG.OBJ-1SG-feather.arrow-BEN-ABLAUT-IRR
 ‘I could make bows and arrows for you.’ (Seiler1970:103 39)
- c. *Pi-ka pe-nungu-max-qal.*
 3SG-DAT 3SG > 3SG-take-BEN-NFUT.SG
 ‘She is taking it to her.’ (Seiler 1970:193 43)
- d. *Ne7 pe-n-7ajaw-qa pish*
 1SG.PRO 3SG.OBJ-1SG-want-PRS.SG COMP
ne-7-ku~kul-max-pi sawi-7ch-i.
 1SG.OBJ-2SG-IPFV~make-BEN-IRR.SUB bread-ABS-ACC
 ‘I want you to make bread for me.’ (3.112.0154)

The suffix *-xa* ‘ask sbdy to do s.th for subj.’, which also appears in LU and CU, is attested with five verbs in Seiler and Hioki (1979). These appear in (2). Example (2c) shows that *-xa* is an *a*-ablauting suffix.

- (2) CA
- a. *mavaj-xa-* ‘ask sbdy to rub one’ (MCA)
- b. *ngiñan-xa-* ‘ask sbdy to pay, charge sbdy’
- c. *tew-a-xa-* ‘ask to look after’ (MCA)
- d. *tus-xa-* ‘ask sbdy to grind’
- e. *wipis-xa-* ‘ask to pull oneself’

10.6.2.4. MOUNTAIN CAHUILLA DESIDERATIVE AND ‘TRY’. Desiderative *-vichu* is attested in MCA as well as in LU, AC (where it is *-vacha*), and CU. An example is given in (1).

- (1) MCA *Pe-em-7enan-vichu-we.*
 3SG.OBJ-3PL-learn-DES-PRS.PL
 ‘They want to learn it.’ (S&M 102)

DCA does not use *-vichu* and expresses the desiderative sense with a periphrastic expression, either with the verb *ayew* ‘want’ and a complement with irrealis subordinator *-(a)pi* or with immediate future. This periphrastic option is also found in CU.

MCA also has a suffix *-7ajaw* ‘try’, exemplified in (2). This comes from the verb *ajaw* ‘want, try’ (Sauvel & Munro 1981:101-102). It is sometimes translated ‘almost’, as in (2b). CU and LU both use periphrastic constructions to express the sense of “try.”

- (2) MCA a. *Ne-wajki-7ajaw-qa.*
 1SG-eat-TRY-PRS.SG
 ‘I’m trying to eat.’ (S&M 103)
- b. *Ne-taxmu-ljew-7ajaw-qa7*
 1SG-sing-GOPR-TRY-PST.SG
 ‘I almost went there to sing.’ (S&M 161)

DCA uses *namaan* ‘try’ in periphrastic expressions with complements in *-(a)pi*. These constructions will be discussed in 11.6.

10.6.2.5. INTERNAL SYNTAX. As in the other Tadic languages, the motion suffixes and the valence-changing suffixes in CA apparently participate in syntax internal to the verb construction. Seiler (1977:153) observes that he is unable to list a canonical order for the suffixes because the order is somewhat variable. Examples of order variation, with the suffixes *-max* ‘benefactive’ and *-law* ‘purposive motion’ appear in (1). In (1a) the order is *-max-law-*, while in (1b,c) the order is *-law-max-*.

- (1) CA a. *Pe-n-sex-max-law-i-k.*
 3SG.OBJ-1SG-cook-BEN-GOPR-ABLAUT-IFUT.SG
 ‘I go cook it for him.’ (Seiler 1977:153 (182i))
- b. *Pe-n-sex-law-max-i-k.*
 3SG.OBJ-1SG-cook-GOPR-BEN-ABLAUT-IFUT.SG
 ‘I go cook it for him.’ (Seiler 1977:153 (182ii))
- c. *Pa-7l-i* *pe-n-7ikw-a-lu-max-qal-e-ve*
 water-ABS-ACC 3SG.OBJ-1SG-dip-ABLAUT-GOPR-BEN-NFUT.SG-ABLAUT-REAL.SUB
mijax-wen.
 be-ST
 ‘I used to go get water for her.’ (Seiler 1970:185 1.6)

The suffixes *-ni* ‘causative’ and *-law* ‘purposive motion’ are not in fixed order. In (2a,b) the order is *-law-ni*, while in (2c) the order is *-ni-law*.

- (2) CA a. *Ip-ika* *ngi-lew-ni.*
 PROX-DAT go.away-GOPR-CAUS
 ‘Make it go back.’ (Seiler 1970:59 277)
- b. *wex-law-ni-* ‘make go over and sing hateful songs’ (S&H 238)
- c. *as-ni-law-* ‘take somebody to bathe’ (S&H 21)

The motion suffixes display similar variation when they co-occur, as seen in (3). In (3a,b) the motion suffix *-ngi* comes before the distributive doing suffix, *-ikaw*, while in (3d) the *-ngi* suffix is final, following *-law*. In (3c,d) *-law* is the final suffix.

- (3) CA a. *pe-qá~qngimi-ngi-kaw-* ‘bump all around’
 b. *wichi-n-ngi-kaw-* ‘water all over’
 c. *wipis-ichi-ljew-* ‘pull along’
 d. *ex-ichi-ljew-* ‘be leaving, on the way’
 e. *paw-law-ngi-* ‘go after water and return’

As noted in the discussions of LU in 10.4.2.5 and CU in 10.5.2.5, a solution to this problem was offered by Jacobs (1975), who showed that it is useful to think of the suffix sequence as a syntactic hierarchy, with the inner suffixes embedded under the outer ones. Several of the structures above are organized hierarchically in (4).

- (4) CA a. [[[Pe-[n-sex]-**max**]-**law**]-i-k.] cf. (1a)
 3SG.OBJ-1SG-COOK-BEN-GOPR-ABLAUT-IFUT.SG
 ‘I go cook it for him (I’ll go and {cook it for him}).’ (Seiler 1977:153 (182i))
- b. [[Pe-[[n-sex]-**law**]-**max**]-i-k]. (1b)
 3SG.OBJ-1SG-COOK-GOPR-BEN-ABLAUT-IFUT.SG
 ‘I go cook it for him (I’ll {go for him} and cook it).’ (Seiler 1977:153 (182ii))
- c. [obj-[[subj-wex]-**law**]-**ni**-] ‘make go over and sing hateful songs’ (2b)
- d. [[obj-[subj-7as]-**ni**]-**law**-] ‘take somebody to bathe’ (2c)
- e. [[[obj-[subj-wichi]-n]-**ngi**]-**kaw**-] ‘water all over’ (3b)
- f. [[[subj-paw]-**law**]-**ngi**-] ‘go after water and return’ (3e)

The difference between (4a) and (4b) is difficult to render in English. In (4a), it is the COOKING that is being done for someone, while in (4b), it is the GOING to cook that is being done for someone. In (4c), what is being caused is the going, which will ultimately permit the singing. In (4d), what is being caused is the bathing, and the subject is going in order to do the causing. In (4e), the subject is going around (-*ngi*) watering something, and this -*ngi* is further modified by -(i)*kaw* ‘in various places’. In (4f), the subject is going (-*law*) to get water, and the going is further modified by -*ngi* to show that it is a round trip.

The object prefixes agree with the outermost of the valence-changing suffixes. If the causative is outermost, the object is the object of causation. If the benefactive is outermost, the object is the object of the benefactive. Motion suffixes do not add arguments and thus are not valence changing, so their position does not matter for the interpretation of the object, if any.

10.6.2.6. SUB-MORPHEMIC ELEMENTS IN CAHUILLA VERBS. CA has a large set of relatively unproductive base-deriving suffixal elements that Seiler (1977) refers to as “sub-

morphemic.” They are similar to the LU stress-shifting suffixes discussed in 10.4.2.6 and are probably related to some of the puzzling CU stress shifting and other increments discussed in 10.5.2.6. They include the suffixes *-aa*, *-aqi*, *-ash*, and *-ay*, with *-Vl* and *-Vw* being of more restricted distribution.

The suffix *-aqi* (*-Vqi-* in Seiler 1977:173, *-aq-* in Seiler & Hioki 1979:25) also appears as *-aq* ~ *-eq* ~ *-uq* or *-qi* ~ *-qe*. This suggests that it may be an *a*-ablauting suffix: *-a-qi*. It encodes some kind of movement or change of state, perhaps the “starting point of a motion” (Seiler 1977:174). As noted in 10.6.1 (11), this suffix forms its causative in *-an*, again indicating that this element may be a member of the set that appears with ablaut vowels.

The suffix *-ash* seems to encode the sense of doing something quickly, or only a little. The examples in (1) show roots that are attested with both *-aqi* and *-ash*. As can be seen in the examples, the vowel in *-ash* and *-aqi* is sometimes replaced by a copy of the stressed root vowel.

- | | | | | |
|-----|----|----|--|--|
| (1) | CA | a. | <i>cha7-aqi-</i> ‘go up, rise of sun, smoke, etc.’ | <i>cha7-ash-</i> ‘lift up a little and go back to former position’ |
| | | b. | <i>che7-eqi-</i> ‘raise oneself up slightly from lying position’ | <i>che7-esh-</i> ‘do that and go back to lying position’ |
| | | c. | <i>kwej7-eqi-</i> ‘stoop down’ | <i>kwej7-esh-</i> ‘stoop down at an instant, buck of horse’ |
| | | d. | <i>lep-eqi-</i> ‘kneel down’ | <i>lep-esh-</i> ‘kneel down’ |
| | | e. | <i>mu7-aqi-</i> ‘pile up’ | <i>mu7-ash-</i> ‘pile up small quantity’ |
| | | f. | <i>nga-qi-</i> ‘get stuck’ | <i>ngat-ash-</i> ‘be too tight (of screws, doorknobs, door)’ |
| | | g. | <i>suk-uqe-</i> ‘shrink, wrinkle’ | <i>suk-ush-</i> ‘shrink, cramp’ |
| | | h. | <i>sup-aq-</i> ‘close eyes’ | <i>sup-ash-</i> ‘close quickly, of the eyes’ |
| | | i. | <i>wa7-aqe-</i> ‘open one’s mouth’ | <i>wa7-ash-</i> ‘open one’s mouth’ |
| | | j. | <i>xaju-qi-</i> ‘slide down, become cheap’ | <i>xaju-sh-</i> ‘slide down from tree’ |
| | | k. | <i>xal7-aqe-</i> ‘loosen, of belt, etc.’ | <i>xal-ash-</i> ‘burst (tr.), as straw basket or chair’ |

The suffix *-aa* is apparently more “stative” than *-ash*. The examples in (3) show *-aa* where the roots are attested with other suffixes for comparison.

- | | | | | |
|-----|----|----|---|---|
| (2) | CA | a. | <i>lak-aa-</i> ‘be flat, of spherical obj.’ | <i>lak-ash-</i> ‘get flat, of spherical obj.’ |
| | | | | <i>lak-i-</i> ‘flatten (body parts)’ |
| | | | | <i>laki-n-</i> ‘flatten brush, grass’ |
| | | b. | <i>lap-aa-</i> ‘be flat of nose, head’ | <i>lap-ash-</i> ‘cave in, collapse’ (tr./intr.) |
| | | c. | <i>puks-aa-</i> ‘be hump-like’ | <i>che-púks-aq-ish</i> ‘a humped person’ |
| | | d. | <i>suk-aa-</i> ‘shrink, wrinkle’ | <i>suk-ush-</i> ‘shrink, cramp’ |
| | | d. | <i>tel-aa-</i> ‘be baggy, lose’ | <i>tel-ash-</i> ‘get baggy, loosen’ |

The few forms where *-aj* is attested on a root that also appears with other suffixes, seen in (3), suggests that *-aj* may mean to do an action sloppily, by accident, or here and there, contrasted to focused and purposive action.

- | | | | | |
|-----|----|----|---|---|
| (3) | CA | a. | <i>chaw-aj-</i> ‘crawl, climb’ | <i>chawa-qe-</i> ‘get on hands and knees about to crawl’ |
| | | b. | <i>chuk-aj-</i> ‘peck of birds’ | <i>chuk-la-</i> ‘claw, jump and stick (as cholla cactus)’ |
| | | c. | <i>kav-aj-</i> ‘go round, turn around’ | <i>kava-le-</i> ‘twist, spin slowly’ |
| | | d. | <i>ñuch-aj-</i> ‘squash, squeeze’ | <i>ñush-</i> ‘knead dough, smash s.th juicy’ |
| | | e. | <i>pach-aj-</i> ‘drop and splatter wet soft object’ | <i>pash-</i> ‘drop flat, of wet, soft object, daub when painting’ |
| | | | | <i>pachi-</i> ‘leach acorns’ |
| | | f. | <i>pux-aj-</i> ‘hit, bump, pick of bird with beak’ | <i>pux-</i> ‘knock on door with hand or stick with round point’ |
| | | g. | <i>sakw-aj-</i> ‘mess up (as hairs)’ | <i>sakw-aa-</i> ‘stand shaggy, like grass or brush’ |
| | | h. | <i>saq-aj-</i> ‘feel itchy (dist.)’ | <i>saqa-</i> ‘feel itchy’ |
| | | i. | <i>suj-uj-</i> ‘spin, twirl’ | <i>suj-ish-</i> ‘tighten by screwing’ |
| | | j. | <i>tex-aj-</i> ‘bump against, into, nudge’ | <i>tex-</i> ‘grind and make flour, knock’ |

10.6.2.7. RAPID REPETITIVE REDUPLICATION. The rapid repetitive is marked by *-VCVj*, a reduplication with added *-j-*, as in (1). In (1c) the vowel *i* dissimilates to *e* before *-j-*. If

the second consonant of the root is a glottal stop, the C in the -VCV reduplication is instead a copy of the initial consonant of the root (1g,h).

- (1) CA
- | | | |
|----|-------------------|---|
| a. | <i>chel~elej-</i> | ‘shake (of body)’ |
| b. | <i>haw~awaj-</i> | ‘talk’ (also <i>hawa-wa7</i> , <i>hawaj-</i> , <i>hawi7</i>) |
| c. | <i>liw~iwej-</i> | ‘sing aloud, ring out’ |
| d. | <i>mul~uluj-</i> | ‘come out steaming, bubbling’ |
| e. | <i>ngen~enej-</i> | ‘make noise with vibration, as thunder, a car’ (also <i>ngen-en</i>) |
| f. | <i>chuv~uvej-</i> | ‘whirl around’ |
| g. | <i>le7~elej-</i> | ‘get loose, wobble (of tooth, stick, etc.)’ |
| h. | <i>ta7~ataj-</i> | ‘hurry, be anxious’ (with <i>sun-</i> ‘heart’) |

10.6.2.8. SUFFIXES IN L AND W. The suffixes -Vl (1) and -Vw (2) are poorly attested. It is difficult to generalize about what sense they contribute. In several instances it seems unclear whether the vowel belongs to the stem or to the suffix. The root *ngel* takes both suffixes and is given in both (1a) and (2c).

- (1) CA
- | | | |
|----|---|--|
| a. | <i>ngel-el-</i> ‘go along the edge’ | <i>ngel-ew-</i> ‘come right to the shore (as waves), stir s.th around the edge, edge (a lawn)’ |
| b. | <i>qap-al-</i> ‘collapse, tear down, break (a stick)’ | <i>qapi-</i> ‘break, as of a stick’ |
| c. | <i>suk-ul-</i> ‘shrink, of body parts’ | <i>suku-qe-</i> , <i>sukaa-</i> ‘shrink, wrinkle’
<i>suku-sh-</i> ‘shrink, cramp’ |
| d. | <i>tekw-el-</i> ‘flip off’ | <i>tekwe-</i> ‘be shaken off’ |
- (2) CA
- | | | |
|----|---|---|
| a. | <i>kaj-aw-</i> ‘swing on swing’ | <i>kaj-aa-</i> , <i>kaj~kaja-</i> ‘dangle’ |
| b. | <i>pe-mú~mja7-aw-</i> ‘flow out with force, of water (distr.)’ | <i>muj7aq-</i> ‘flow out with force, of water’
<i>-pe-mú~mj-aq-an-</i> ‘flow out with force, of water (distr.)’
<i>muje-</i> ‘flow out’ |
| c. | <i>ngel-ew-</i> ‘come right to the shore, stir s.th around the edge, edge (a lawn)’ | <i>ngel-el-</i> ‘go along the edge’ |

- d. *qach-aw-* ‘hit splashing’ *qacha-* ‘hit, of waves’
 qachi-n- ‘hit with fist, stick’

10.6.2.9. DOUBLING OF ROOTS. Full-copy reduplication, with stress on the second of the pair, expresses intensification, as in (1).

- (1) CA a. *pumli~púmlı-qal* ‘it is round and round, it is round all over, of a spherical object’
 (Seiler 1977:315)
 b. *tujva~tújva-qal* ‘it is round throughout, of a two-dimensional object’ (Seiler
 1977:315)

10.6.2.10. L-REDUPLICATION. *L-* reduplication is another full-copy type but where stress appears on the first syllable, as in (1). This reduplication is used mainly with copula complements. *L-* reduplication is also seen in LU and CU.

- (1) CA a. *púmu~lumu jaxwe* ‘it is round and round’ (Seiler 1977:316)
 b. *tıpi~ljpı jaqa* ‘many small drops are falling here and there’ (Seiler 1977:316)

10.6.2.11. DERIVATIONAL PREFIXATION. CA is unique among the Takic languages in having prefixation as an important derivational process in the verb. Some derivational prefixes are adverbial elements that have become part of the verb construction, while others may have originated as incorporated nouns. Two of the most common prefixes are contrastive focusing prefixes, *pe-* (which occasionally appears as *pa-*) and *che-*. These immediately precede the root, following any pronominal prefixes. This positioning shows that they cannot be considered proclitics even though they are not stressable. The stress remains on the first syllable of the root, which, for clarity, is marked on the derivationally prefixed verbs of this section.

The prefix *pe-* (*pe₂-* in Fuchs 1970 and Seiler 1977) probably represents the incorporation of the CA topic/focus marker of the same shape into the verb construction. Fuchs (1970) and Seiler (1977) tried to characterize *pe-* as contributing some kind of referential context, such as “localization” in space or time; Fuchs (1970:24) did recognize this localization function as “implying a contrast with other possibilities” (“und implizierter Gegenüberstellung mit anderen möglichen”). This contrastive focus function

of *pe-* is clear when we see it in context, as in the examples in (1a-d), from an argument between the two creators about what their creations should look like and whether or not they should die. Each sentence contradicts an adjacent sentence. In the MCA sentence in (1e), *pe-* may encode abruptness; this MCA verb, *-quli-* (with *i > e* lowering in the example), used for ducking into burrows, going under water, etc., always has *pe-* in Adán Castillo's texts.

- (1) DCA a. *“Pe kilj hichea pe-sili-pi” jax-qal.*
 EMPH NEG thing CF-drip-IRR.SUB say-NFUT.SG
 ‘“And nothing drips,” he said.’ (Seiler 1970:43 51)
- b. *“Kilje ache-ma muk-wen-e-t kilj pe-mijax-wen-ap”*
 NEG good-ADJZ be.sick-ST-NMLZ-ABS NEG CF-be-ST-IRR.SUB
jax-qal. “Kilj pe-mijax-wen muk-wen-e-t
 say-NFUT.SG NEG CF-be-ST be.sick-ST-NMLZ-ABS
tax_haji-n-wen-e-t” jax-qal.
 REFL_tire-CAUS-ST-NMLZ-ABS say-NFUT.SG
 ‘“It’s not right that sickness should exist,” he said. “Sickness and exhaustion should not exist,” he said.’ (Seiler 1970:43 55)
- c. *I i-pa pe-wen elele-kw-i-sh.*
 this here-at CF-exist bad-INCH-NMLZ-ABS
 ‘This thing here is bad.’ (Seiler 1970:43 57)
- d. *Kilje hem-pe-chex-wen-a-p.*
 NEG 3PL-CF-be.sick.PL-ST-ABLAUT-IRR.SUB
 ‘They should not get sick.’ (Seiler 1970:43 58)
- MCA e. *Telmek-ika pe-pe-kuli-n-7i.*
 land.of.the.dead-DAT 3SG.OBJ-CF-go.under-CAUS-FCT
 ‘He shoved him into hell.’ (3.112.0057)
 Harrington wrote <qule> for *kuli*.

Some verbs, like *kuli* in (1e), apparently require the contrastive focus *pe-*. In nearly all of these cases the verb expresses a situation that is a departure from the expected

state of things, or is surprising. This can be seen by examining verbs that appear both with and without *pe-*, as in the examples in (2). The presence of *pe-* (or *vuk-*) does not affect the stress placement; it remains on the root-initial syllable.

- | | | | | |
|-----|----|----|--|---|
| (2) | CA | a. | <i>pe-7etel-</i> ‘knock down’ | <i>etel</i> ‘push (to make sbdy to fall)’ |
| | | b. | <i>pe-kajaw-</i> ‘swing over (like Tarzan)’ | <i>kajaw-</i> ‘swing on swing, hanging on rope’ |
| | | c. | <i>pe-kwe~kwej-ch-an-</i> ‘buck (distr.)’ | <i>-kwej7esh-</i> ‘stoop down at an instant, buck of horse’ |
| | | d. | <i>pe-nami-</i> ‘cross quickly (by mistake)’ | <i>nami-</i> ‘cross road, river, go over’
<i>vuk-nami-</i> ‘cross over in (another road)’ |
| | | e. | <i>pe-naqma-</i> ‘hear accidentally’ | <i>naqma-</i> ‘hear’ |
| | | f. | <i>pe-ngelew-</i> ‘splash at the edge and go back’ | <i>ngelew-</i> ‘come right to shore’ (intr.), ‘edge lawn, stir around edge’ (tr.) |
| | | g. | <i>pe-pa~plawaj-</i> ‘go up in flame violently (distr.)’
<i>pe-palaw-</i> ‘go up in flame, spark’ | |
| | | h. | <i>pe-puli-</i> ‘fall accidentally’ | <i>puli-</i> ‘fall, drop (sg.subj.)’ |
| | | i. | <i>pe-setin-</i> ‘squash, press accidentally, step on (as sbdy’s foot)’ | <i>setin-</i> ‘press, squeeze into container, iron (clothes)’
<i>che-sétin</i> ‘squash accidentally’ |
| | | j. | <i>pe-sichaq-</i> ‘have diarrhea, smash accidentally’ | <i>che-síchaq-</i> ‘smash, squash (bugs, body part, etc.)’ |
| | | k. | <i>pe-taki-</i> ‘stop, block’ | <i>taki-</i> ‘be pasted’ |
| | | l. | <i>pe-tajul-</i> ‘slip down’ | <i>tajul-</i> ‘become smooth’ |
| | | m. | <i>pe-texaj-</i> ‘bump against/into, nudge’ | <i>tex-</i> ‘grind and make flour’ |
| | | n. | <i>pe-wichi-n-</i> ‘wet by dashing water’ | <i>wichi-n-</i> ‘water (plants)’
<i>vuk-wichi-</i> ‘splash accidentally’ |
| | | o. | <i>pe-wilji-</i> ‘run in a line’ | <i>wilji-</i> ‘be marked with a line, lined up, spread’ |

Contrastive focus *pe-* appears in negative sentences with the irrealis suffix *-(a)pi*; these constructions are the only way to express negatives with the future tense (Seiler 1977: 148; Sauvel & Munro 1981:196). The prefix *pe-* precedes the verb root, as in (3a), except with *jax* ‘say, happen, do’, where it precedes the pronominal prefixes, as in (3b). The

generalization might be that *pe-* is placed immediately before the syllable bearing the stress within the verb construction. Seiler (1977:148) notes this prefixation with *pe-* as a requirement for negative futures; however the only example of a negative future in the texts in Seiler (1970) lacks *pe-*, as seen in (3c).

- (3) CA a. *Kilj mi-chem-pe-tew-a-p.*
 NEG 3PL.OBJ-1PL-CF-see-ABLAUT-IRR
 ‘We won’t find them.’ (S&M 196)
- b. *Kilj pe-ní-jax-a-p.*
 NEG CF-1SG-say-ABLAUT-IRR.SUB
 ‘I won’t say it.’ (S&M 196)
- c. *Kilje silji-pi.*
 NEG drip-IRR
 ‘Nothing will drip.’ (Seiler 1970:43 50)

The second contrastive focus prefix, *che-*, is probably derived from the adverb *cha(qi)* ‘just’, which Seiler often spells *cheqe*. The examples with *che-* attested in Seiler (1970) are nearly all found in contexts where something unexpected happens to move a plot forward; Fuchs (1970:52) characterizes the prefix as “dynamic” (a gloss borrowed by Mamet (2008) both for this prefix and for *pe*₂). A series of interesting examples involve acts of opening. In (4a), the two creators hatch out of the egg-like structures in which they came into being, upon which they begin their acts of creation. In (4b), a hero opens the sun’s beehives, after the sun has told him not to go near the bees. In (4c), a hero has hidden, but people discover him by opening a basket and finding him disguised as a dove. In (4d), from MCA, a hero’s enemies cut the rope that will permit him to climb up from the land of the dead.

- (4) CA a. *Penga pe ajax pi-ka pe-em-che-kapal-wen pe7i-j*
 then FOC like 3SG-DAT 3SG.OB-3PL-CF-open-NFUT.PL 3SG-ACC
weevu7u-j pengkii-ch-i.
 egg-ACC like-ABS-ACC
 ‘Then they (just) broke out of that egg-like thing’ (Seiler 1970:39 11)

- b. *Pe-che-hakus-qal, hutti avéexa-m taxat*
 3SG.OBJ-CF-open-NFUT.SG well bee-PL EMPH
hem-pe-púj-wen-7e taxat.
 3PL-CF-scatter-NFUT.PL-FCT EMPH
 ‘He went and (just) opened it, well, the bees were everywhere.’ (Seiler 1970:87 (57))

- c. *Pe7 jal pe-em-che-7aqin-we7n-e penga7 jal pa-hiwqa*
 FOC QUOT 3SG.OBJ-3PL-CF-open-NFUT.PL-FCT then QUOT CF-dwell
pe7 maxajilj.
 DET dove-ABS
 ‘Then they (just) opened it and there was the dove.’ (Seiler 1970:125 143)

- MCA d. *Pengax pe pe-m-che-kwivish-7i uwi-7ch-i.*
 then FOC 3SG.OBJ-3PL-CF-cut-FCT rope-ABS-ACC
 ‘Then they cut the rope.’ (3.112.0240)

While *che-* can encode contrastive focus or emphasis with ordinary verbs, as with *pe-*, the verb stems that are attested commonly or invariantly with *che-* include verbs that encode forceful, accidental or unpredictable kinds of actions.

- (5) CA a. *che-hemi* ‘collapse crumbling’
 b. *che-huja* ‘be dislocated, of muscles’
 c. *che-kewin* ‘get away from sbdy who holds one tethered’
 d. *che-ngaval* ‘touch slightly, tip’
 e. *che-pukush* ‘have a cramp’
 f. *che-saji* ‘rip, snag’

Seiler (1977:163) and Fuchs (1970:53) treat an additional element *vuk-* as part of the same paradigm as *pe-* and *che-*.

The prefix *vuk-* ‘throw, hit with long object’, which often appears with the same verbs seen with *che-* and *-pe*, is transparently derived from the verb *vuk* ‘throw’. While as a prefix its meaning is somewhat bleached, it often seems to encode focus on a motion that

is forceful, somewhat similar to that of throwing and whipping; it occupies an uneasy slot somewhere in between a prefix and the first element of a compound. However, the *vuk-* prefix is not stressed. Examples appear in (6).

- (6) CA a. *vuk-meni* 'roll, turn over'
 b. *vuk-7etel* 'push'
 c. *vuk-seqaj* 'whip, call on phone'
 d. *vuk-7umin* 'cover up completely'
 e. *vuk-saaj* 'scatter, spread out'

The last prefix to be considered here, *ju-*, which appears immediately before the verb root, derives a transitive from the verb *ngij* 'go, go away'. Seiler (1977:156) states that *ju-* has a sense of "accompaniment, sometimes forceful" and gives the examples (7a), without *ju-*, and (7b), with it. It has been found with only one other DCA verb, in (7c), which does not seem to work the same way.

- (7) CA a. *ngij-qal*
 go.back-NFUT.SG
 'he goes back, home' (Seiler 1977:156 (183i))
- b. *pe-ju-ngij-qal*
 3SG.OBJ-JU-go.back-NFUT.SG
 'he takes it back, home' (Seiler 1977:156 (183ii))
- c. *ju-méxan*
 'dress up, fix someone or self up' (< *méx-an* 'do s.th to sbdy') (S&H 255)

This prefix is extremely rare, with only four or five attestations in Seiler (1970), none in Mamet (2008), and, as far as we can tell, none in the hundreds of pages of text in Sauvel and Elliott (2004). However, several examples have been found in the Castillo MCA texts collected by Harrington, as in (8).

- (8) MCA a. *Ja7i pe-ju-7ele-ngi-7 hunga-jka.*
 wind 3SG.OBJ-JU-blow-GOING2-PST back-DAT
 ‘The wind blew him back.’ (3.112.0283)
- b. *Majlu7a-t pe-ju-7iva-ngi-7.*
 colt-ABS 3SG.OBJ-JU-run-GOING2-PST
 ‘The colt ran off with him.’ (3.112.0283)

10.6.2.12. DERIVATIONAL PROCLITICIZATION. The proclitic *ax*_{__} may appear before future-tense constructions with the perfective future suffix *-nem* (MCA *-ne*), as seen in (1). In MCA the proclitic is sometimes pronounced *hax*_{__}. It does not appear in Harrington’s MCA texts from Adán Castillo. The sense contributed by *ax*_{__} is not entirely clear. In (1a-c) one verb appears with *ax*_{__} and another without it in the same sentence. Both orders with this difference are attested; in (1d) the second verb, not the first, has *ax*_{__}. Both verbs in coordination can have *ax*_{__}, as seen in (1e).

- (1) CA a. *Iv7ax ne7 ax_{__}ne-7ijax-nem pen ne-muk-nem.*
 right.away 1SG.PRO AX_{__}1SG-be.thus-FUT.PFV and 1SG-die-FUT.PFV
 ‘Soon I shall be in such a state that I shall die.’ (Seiler 1970:53 205)
- b. *Mu_{__}tuleka ax_{__}ne-hichi-nem pe-n-teew-nem.*
 farther_{__}morning AX_{__}1SG-go-FUT.PFV 3SG.OBJ-1SG-see-FUT.PFV
 ‘Early in the morning I shall go and see.’ (Seiler 1970:123 114)
- c. *Ne7 ax_{__}ne-ngij-nem ... pe-man ne-ngij-nem.*
 1SG.PRO AX_{__}1SG-go.back-FUT.PFV 3SG-with 1SG-go.back-FUT.PFV
 ‘I will go away ... I will go away with them.’ (Seiler 1970:43 64)
- d. *Hema ne-kwa-nem ax_{__}ne-kwa-nem.*
 probably 1SG.OBJ-eat-FUT.PFV AX_{__}1SG.OBJ-eat-FUT.PFV
 ‘It might even happen that he will eat me, he will eat me.’ (Seiler 1970:53 205)

- e. *Ax_7e-ñash-nem e-nga mavi-j pish*
 AX_2SG-sit-FUT.PFV PROX2-LOC night-ACC COMP
ax_pe-7-teew-nem.
 AX_3SG.OBJ-2SG-see-FUT.PFV
 ‘You must sit up there in the night and see what he does.’ (Seiler 1970:49
 150)

An additional left-edge element is a proclitic *qa_*, which has indefinite, dubitative (“must have”) and interrogative interpretations, seen in (2). It appears on question elements and indefinite demonstratives as well as on indefinite verbs for ‘do s.th’, ‘be some way’, ‘say s.th’. With the verbs, it appears before pronominal prefixes, as is clear in (2b).

- (2) CA a. *Pe tax_hajin-7i¹ qa_mijax-7i.*
 FOC REFL_tired-FCT Q_be-FCT
 ‘He somehow felt tired.’ (Seiler 1970:53 189)
¹ Seiler wrote *tawx-*, probably a typo.
- b. *Kilj e-ngiljáa-qal qa_7e-mex-a-lu.*
 NEG 2SG-move-NFUT.SG Q_2SG-do-ABLAUT-IRR
 ‘Whatever you do, don’t move.’ (Seiler 1970:51 171)

10.6.2.13. COMPOUNDING. CA exhibits more compound verbs than do other Takic languages. The examples in (1) show that stress placement is variable, with some compounds stressing the first member (1a-e), others the second (1f-h).

- | (1) CA | component meanings | compound meaning |
|-------------------------|-------------------------|----------------------------|
| a. <i>híj-saj</i> | [spread-scatter] | ‘take sandbath (of birds)’ |
| b. <i>chí7a-pis</i> | [sit up-come out] | ‘get over the hump’ |
| c. <i>sém-jaw</i> | [laugh-hold] | ‘laugh at sbdy’ (MCA) |
| d. <i>tíng-wax</i> | [warm-dry] | ‘warm’ |
| e. <i>che-táxal-pis</i> | [CF-feel.cold-come out] | ‘always be cold’ |
| f. <i>pis-múlul</i> | [come.out-steam.up] | ‘boil (water, food)’ |
| g. <i>hikus-témi</i> | [breathe-close] | ‘suffocate’ |
| h. <i>kuj-7úmin</i> | [bury-cover] | ‘cover up, cover up hole’ |

- | | | | |
|----|------------------|---------------|---------|
| i. | <i>jaw-neken</i> | [hold-come] | ‘bring’ |
| j. | <i>jaw-pish</i> | [hold-arrive] | ‘bring’ |

A particularly productive type of verb compounding involves the stative verbs for color terms, compounded with nearly all verbs of position and change of position, as well as a few other verbs like *jupi* in (2c). With these, stress is always on the second verb root.

- | | | | | | |
|-----|----|----|---------------------|-----------------|---------------------------|
| (2) | CA | a. | <i>sel-kéngi</i> | [red-fall] | ‘fall redly, like embers’ |
| | | b. | <i>tevis-képi</i> | [white-float] | ‘float whitely’ |
| | | c. | <i>tevis-júpi</i> | [white-turn] | ‘turn white’ |
| | | d. | <i>tukish-héti</i> | [green-stretch] | ‘stretch out greenly’ |
| | | e. | <i>tukish-kájaa</i> | [green-hang] | ‘hang greenly’ |

10.6.2.14. NOUN INCORPORATION. Noun incorporation is attested. There are a number of examples of the incorporation of *sun-* ‘heart’; some are seen in (1). (1d) shows that these incorporated elements precede contrastive-focus prefixes (but follow pronominal prefixes when these are present). Stress remains on the first syllable of the verb root where *sun-* ‘heart’ is incorporated.

- | | | | | | |
|-----|----|----|--------------------|------------------|--------------------|
| (1) | CA | a. | <i>sun-háhjam</i> | [heart-tire] | ‘threaten’ |
| | | b. | <i>sun-táwas</i> | [heart-lose] | ‘forget’ |
| | | c. | <i>sun-táv</i> | [heart-put] | ‘relax’ |
| | | d. | <i>sun-pe-témi</i> | [heart-CF-close] | ‘get disappointed’ |

However, the examples with other incorporated nouns in (2) show variability in stress placement. These examples are isolated cases and are probably fossilized; there is no evidence that incorporation is an active process in CA. In (2b) the incorporated element seems to reduplicate in the distributive though irregularly, i.e., it’s not **mama7une*. It may be a reduction of *ma~ma-7u~7une*, with both elements reduplicated.

- | | | | | | |
|-----|----|----|------------------|----------------|--|
| (2) | CA | a. | <i>kus-témi</i> | [throat-close] | ‘choke on s.th stuck in throat’ |
| | | b. | <i>má-7uni</i> | [hand-show] | ‘point’, dist. <i>mamu7une</i> |
| | | c. | <i>kut-múx</i> | [fire-shoot] | ‘make fire by friction with bowstring’ |
| | | d. | <i>push-ngéj</i> | [eyes-shake] | ‘be dizzy’ |

- | | | | |
|----|---------------------------------------|----------------------|----------------------------------|
| e. | <i>qaawi-náaw,</i>
<i>qaw-náaw</i> | [rock-bring] | ‘echo’ |
| f. | <i>támi-tuk</i> | [day-stay.overnight] | ‘make a camp, stay overnight’ |
| g. | <i>tám-kus</i> | [sun-take] | ‘sunbathe’ |
| h. | <i>ta(m)-méchi</i> | [knee-kneel] | ‘kneel on’ (Seiler 1970:45 (70)) |
| i. | <i>íng-jaw</i> | [salt-hold] | ‘salt, add salt’ |

10.6.2.15. SUPPLETIVE VERBS. The final process for base derivation in CA is suppletion for number. The list of verbs with suppletive singular and plural forms (agreeing with the subject in intransitives and the object in transitives) is fairly short, including at least the following verbs. The verb *hiw* is unique in showing two different number-suppletions depending on tense: (1i) is the future of (1h).

(1) CA	singular	plural
a. fall down (intr.), drop (tr.)	<i>puli</i>	<i>chavi</i>
b. get sick, die	<i>muk</i>	<i>chex</i>
c. kill	<i>mek ~ mek-an</i>	<i>chex-en</i>
d. be in a place (inan.)	<i>qal</i>	<i>wen</i>
e. put in place, in order	<i>tav</i>	<i>wen</i>
f. take, take hold, of stationary object	<i>kus</i>	<i>hivin</i>
g. drop, throw away	<i>ami-n</i>	<i>wichixan</i>
h. sit upright, live, stay (anim.)	<i>hiw</i>	<i>qal</i>
i. will sit upright, live, stay (anim.)	<i>hiw-nash</i>	<i>max</i>

CHAPTER 11

VERB INFLECTION IN THE MAIN CLAUSE

11.0. INTRODUCTION. Some of the most interesting differences among the Takic languages involve verb inflection and the diverse ways that argument marking, tense, aspect and mood are distributed between the verb construction and the auxiliary complex discussed in chapter 8.

The languages differ in which arguments are marked in the verb construction itself. TV, SE, and Coastal Cupan have no pronominal inflection at all in the verb construction in main clauses, instead encoding main-clause pronominal arguments exclusively in the auxiliary complex. In TV and in both Serran languages, both subject and objects are encoded in the pronominals of the auxiliary complex. In Coastal Cupan, subjects – but not objects – can be marked in the auxiliary complex. However, objects must be overtly expressed, encoded by items with accusative case marking, whether pronouns, demonstratives, or lexical items. KI has double exponency for subjects, marking subject and object in the auxiliary complex, but also requiring subject prefixes in the verb construction. This is perhaps correlated with a simplification of auxiliary subject pronominals that encode only person, not number, and which are used only for transitives. CU encodes subject in the auxiliary complex in non-past sentences, but has subject prefixes in the verb construction itself in the past tense. CU pronominal object inflection is encoded in proclitics attached to the verb construction (optional for 3SG objects), and by a set of clitics for absolute (that is, absolute case as opposed to ergative case) pronominal arguments; these latter appear almost exclusively in imperative clauses. In CA, subject and object pronominals are encoded in proclitics and prefixes on verb constructions, and both are required in virtually all clause types.

In contrast with the diversity in pronominal argument marking in main clauses, there is little variation among the languages in subordinate clauses, which will be considered in chapters 12 (for TV and Serran) and 13 (for Cupan). All of the languages for which there is adequate documentation of such clauses require subject prefixes on verb constructions in most types of subordinate predicates.

The distribution of tense and aspect marking also exhibits striking variation. KI encodes tense only in the auxiliary complex. TV verbs have nonfuture and future tense inflection, although tensed nominalizations reflecting underlying verbless complements, the immediate past and immediate future, appear in surface main clauses. SE main clause verbs contrast unmarked nonfuture with suffixed future-tense inflection. Like TV, SE also has verbless clause complements tensed for immediate past and immediate future in surface main clauses. In contrast, the Cupan languages have rich arrays of suffixes marking tense and aspect in the main-clause verb construction.

All of the languages exhibit aspect differences encoded by reduplication, although the details of reduplication processes and their functions differ among the languages, as discussed in chapter 10. Only the Cupan languages encode aspect in the suffixal complex of the verb construction. KI is the only language to mark passive voice in the verb construction, and only LU has a specifically impersonal suffix. Imperative mood is rather similar across the languages, generally employing unmarked verb bases (with some minor complications). TV and Serran have special pronominal argument forms for imperative clauses.

11.1. INFLECTION IN MAIN-CLAUSE TONGVA VERBS. TV main-clause verb inflection includes tense-aspect suffixes for nonfuture and future. In addition, imperative constructions are distinguished from non-imperatives.

11.1.1. NONFUTURE. As discussed in section 10.1, we have reanalyzed Munro's (2012) four-class treatment of TV verbs which she sorted by their nonfuture suffix complexes. In our analysis, we identify two phonologically defined forms of the nonfuture suffix, *-x* after *a* and *-k* elsewhere. These occur on verbs of a single thematic class. Examples of thematic verbs suffixed for nonfuture are given in (1).

- (1) TV a. *Noo = n = 7e* *wo\$aa7a-x* *wo\$ii7-a*.
 1SG.PRO = 1SG = IND look.at-NFUT dog-ACC
 'I am looking at the dog.' (3.103.0166)

- b. *To~took-ra-m=e* *jakee-na-x*.
 PL~woman-ABS-PL = IND dance-CAUS-NFUT
 ‘The women are dancing.’ (3.104.0092)
- c. *Noo=n=7e* *t\$aaro-k*.
 1SG.PRO = 1SG = IND dance.patada-NFUT
 ‘I am dancing the patada.’ (3.103.0183)
- d. *T\$aaj-no-k=mo=7e*.
 be.sick-NO-NFUT = 3PL = IND
 ‘They are sick.’ (3.104.0417)

There is a small set of athematic verbs not suffixed for nonfuture. These include the base-changing verbs in (2). The short bases are the nonfuture forms.

(2) TV		short base	long base	
	go	<i>mii</i>	<i>meaa</i>	(3.102.0552)
	come	<i>kii</i>	<i>kemaa</i>	(3.103.0335)
	be, dwell	<i>xaa</i>	<i>xaroo</i>	(3.103.0167)
	be, dwell, exist	<i>woo</i>	<i>woon</i>	(3.103.0363)

The identification of other athematic verbs is problematic. One clear example of such a verb is *waax* ‘leach acorn meal’. Examples containing this verb are given in (3). The nonfuture form in (3a) has no inflectional suffix. Its final *x* remains in the future in (3b,c), confirming it as part of the root. This root is probably from PUA **waki* ‘dry’ (Stubbs 2011 #720).

- (3) TV a. ***Waax=7e***.
 leach.acorn.meal = IND
 ‘He is leaching.’ (3.103.0620)
- b. *Noo=n=7e* ***waax-ro*** *metee=ma7*.
 1SG.PRO = 1SG = IND leach.acorn.meal-FUT now = AUG
 ‘Voy a lavar la bellota. (I’m going to clean the acorn meal.)’ (3.103.0620)

- c. *Jaa = 7e mii waax-ro.*
 now = IND go leach.acorn.meal-FUT
 ‘Fue a lavar la bellota. (She went to clean the acorn meal.)’ (3.103.0620)

A second possible instance of a non-base-changing athematic verb is *aax** ‘eat pinole’, which is not attested without suffixation. It occurs in the derived noun *aax-e[-j]* ‘pinole’ (3.103.596) and with the future suffix *aax-ro*. The Takic cognates SE *aak* and CU *ax* show that the *x* is part of the root and thus it is probably correctly identified as *aax*, but it is annoying not to have better evidence on this interesting root.

Mo7aak has also been considered as a possible athematic verb (10.1.1). However, *mo7aak* appears to be an adjective meaning ‘piled up’. It occurs as a complement in (4).

- (4) TV **Mo7aa-k** = 7e woo.
 pile-ADJZ = IND be
 ‘Está amontado. (It’s piled up.)’ (3.103.0623)

Mo7aak relates to a future verb form, *mo7aakero*, which is found in (5).

- (5) TV *Noo = n = 7e mo7aa-k-e-ro.*
 1SG.PRO = 1SG = IND pile-ADJZ/K-CAUS-FUT
 ‘Yo lo voy a amontar. (I’m going to pile it up.)’ (3.103.0623)

Mo7aakero is clearly a causative, the expected future form of unattested *mo7aa-k-ena-x** ‘pile it up’, where *-k-* may be either the adjectival suffix or the remnant k-class thematic suffix. A second adjectival form, *mo7aatko*, seems to relate to the noun *mo7aat* ‘pile’, but a derivation that includes the absolutive suffix before a derivational suffix would be extremely odd. Both noun and adjective are seen in (6).

- (6) TV **Mo7aa-t mo7aa-t-ko** woo.
 pile-ABS pile-ABS(?) -ADJZ be
 ‘It is piled in various piles.’ (3.103.0507)

11.1.2. FUTURE. The TV future suffix is *-ro*, which replaces any nonfuture suffix, as seen in (1). In (1b), underlying *o* is lost by syncope before the future suffix.

- (1) TV a. *Ma7eete hekaaajo-k.*
 much be.windy-NFUT
 ‘Está haciendo mucho viento. (It’s very windy.)’ (3.103.0087)
- b. *Heaamte hekaaj-ro.*
 tomorrow;in.the.morning be.windy-FUT
 ‘Mañana va hacer viento. (Tomorrow it’s going to be windy.)’ (3.103.0087)

The TV future *-ro* appears to be cognate with the motion suffix **-Lu7a*, with Proto-Takic **L* from the lenition of PUA **t*, cf. SE *-t\$u7(a)* (10.2.3.4) and CU/CA *-l(y)u(7)* (10.5.2.1). Perhaps coincidentally, the TV future is usually glossed as ‘going to’, the usual gloss for the immediate future in the other languages, the plain “future” in those languages glossed as corresponding to ‘will’. However, the semantic distinction between the TV “future” *-ro* and the barely attested TV “immediate future” *-ka-t/-k-to-m* (cf. 11.1.4 (5) below) is unclear. Nonetheless, the evolution of a suffix of prior motion into a future tense marker seems quite natural. Examples with the future suffix appear in (2). The corresponding nonfuture forms are shown in parentheses.

- (2) TV nonfuture
- a. *Heaa=ne hohoo-ro.* (*hohoo-k*)
 now = 1SG fart-FUT
 ‘I am going to fart.’ (3.105.0127)
- b. *Noo=n=7e kuu\$-ro.* (*kuu\$a-x*)
 1SG.PRO = 1SG = IND complain-FUT
 ‘I am going to complain.’ (3.105.0092)
- c. *Oo=7a t\$e7ee7-e-ro.* (*t\$e7ee-na-x*)
 2SG.PRO = 2SG sing-CAUS-FUT
 ‘You (sg.) will sing.’ (3.102.0880)

- (1) TV nonfuture
- a. *T\$aaro = 7a.* (t\$aaro-k)
 dance.patada = 2SG.IMP
 ‘Dance (sg.) the patada!’ (3.103.0183)
- b. *Hooye(7) = 7a.* (hooye7a-x)
 shake = 2SG.IMP
 ‘¡Mécelo! (Rock (sg.) it [in the cradle]!)’ (3.105.0142)
- c. *Oomom jakee = vo7.* (jakee-na-x)
 2PL.PRO dance = 2PL.IMP
 ‘¡Bailan ustedes! (Dance, you pl.!)’ (3.104.0090)

Imperative forms are usually directives, but they can also appear with the irrealis (“subjunctive” in Munro 2000) modal =*po* ~ =*p*, as discussed in section 8.3.1, and as seen in (2). In this case, the pronominal appears in the expected second position.

- (2) TV *Mahiik = po = 7a neemkomo.* (neemko-mo-k)
 SOON = IRR = 2SG.IMP return.IMP
 ‘¡Te arriendes pronto! (Come back soon!)’ (3.103.0282)

If the indicative stem ends in *na*, then that syllable is dropped in the imperative, as in (3). It seems possible that all the examples where the syllable *na* is dropped, involve the causative morpheme, underlying *-ina* or *-na*. With the loss of *na* from *-ena*, the vowel *e* remains, as in (3a).

- (3) TV nonfuture
- a. *Horoop-k-e = 7a.* (horoop-k-ena-x)
 hole-K(?)-CAUS = 2SG.IMP
 ‘¡Agujeréalo! (Poke a hole in it!)’ (3.103.0497)
- b. *Mokaa = 7a.* (mokaana-x)
 kill = 2SG.IMP
 ‘¡Mátalo! (Kill him!)’ (3.105.0150)

- c. *Jakee = 7a.* (jakeena-x)
 dance = 2SG.IMP
 ‘¡Baila! (Dance!)’ (3.104.0090)
- d. *T\$e7ee = 7a.* (t\$e7eena-x)
 sing = 2SG.IMP
 ‘¡Canta! (Sing!)’ (3.104.0093)

Verbs which have the element *-jno ~ -iino* (< *-ino*) before the nonfuture suffix have an imperative base that retains *-no* (4), though *-no* is lost with the future inflection *-ro* (4c) and with immediate past *-t* (4d) (for immediate past, see 11.1.4).

- (4) TV a. *Pavaa-jno = 7a* *paa-r.* (pavaa-jno-k)
 give.water-INO = 2SG.IMP water-ABS
 ‘¡Dale agua! (Give him some water!)’ (3.105.0368)
- b. *Mop-iino.* (mop-iino-k)
 pass-INO.IMP
 ‘¡Pasa! (Go ahead!)’ (3.104.0402)
- c. *Mop-i-ro = n = 7e* *noo = m-7a.* (mop-iino-k)
 pass-INO-FUT = 1SG = IND 1SG.PRO = AUG-(?)
 ‘Voy a pasar. (I’m going to go ahead.)’ (3.105.0149)
- d. *Ekwaa mop-i-t.* (mop-iino-k)
 here pass-INO.IPST.ABS
 ‘Por aquí pasó. (He went ahead here.)’ (3.105.0149)

Base-changing verbs form the imperative with the long base.

- (5) TV a. *Kemaa* *ekwaa-ro = ma7* *mahiiko.*
 come.IMP here-DAT = AUG soon
 ‘¡Vente paracá pronto! (Come here soon!)’ (3.105.0358)

- b. *Meaa mo-nuuno7.*
 go.IMP 2SG-alone
 ‘¡Vete tú solo! (Go by yourself!)’ (3.104.0094)
- c. *Xaroo = vo7 ekwaa.*
 dwell;stay.IMP = 2PL.IMP here
 ‘¡Estense aquí! (Stay pl. here!)’ (3.104.0395)

In TV, objects of imperative verbs can be marked with accusative case, as in (6). There are no examples of prohibitives (see below) with nominal objects, but it is probable that accusative marking is also used in those constructions.

- (6) TV a. *Waa~wk-e = 7a mo-puuhav-no.*
 REP~rain-CAUS.IMP = IMP 2SG-crop-PSD.ACC
 ‘¡Riega tu siembra! (Irrigate your crop!)’ (3.103.0365)
- b. *Huuto7 aawko-ta.*
 look.at.IMP crow-ABS.ACC
 ‘¡Mira el cuervo! (Look at the crow!)’ (3.102.0621)

While *xaaj ~ xaj* is the usual negative in TV, there is also a prohibitive proclitic *xa__*, as in (7). As a proclitic, *xa__* remains unstressed (and short) with the stress (and length) feature falling on the following imperative marker. Since the imperative clitic receives the stress, this provides a striking exception to the generalization that clitics are unstressed. Since clitics are extrametrical, the stress on the imperative element is not normally handled by the regular rule of second-mora stress (3.4.1). However, it would seem that the stresslessness of the proclitic overrides that of the otherwise stressless cliticized auxiliary pronominal.

- (7) TV *Xa__7aa oom \$eraaw7.*
 PROH__2SG.IMP 2SG.PRO speak.IMP
 ‘¡No hables! (Don’t speak!)’ (3.104.0060)

Transitive prohibitives use the pronominal clitics $=r=a$ (sg.), $=r=a=v$ (pl.), with examples repeated in (8) from the discussion in 8.3.1.3. Again the pronominals receive the stress and lengthen in stressed position.

- (8) TV a. **Xa_{r=aa}** *mokaa*.
 PROH₂=3SG.OBJ.IMP kill.IMP
 ‘¡No lo mates! (Don’t kill it!)’ (3.102.0869)
- b. **Xa_{r=aa=v}** *mokaa omoo=ma*.
 PROH=2=3SG.OBJ=2PL.IMP kill.IMP 2PL.PRO=AUG
 ‘¡No lo maten Uds.! (Don’t kill it, you pl!)’ (3.102.0869)

Prohibitive **xa_{r=aa}** is also found with future-tense directives, as in (9).

- (9) TV **Xa_{r=aa}** *huu7a-ro*.
 PROH₂SG.IMP be.angry-FUT
 ‘¡No te enojas! (Don’t get angry!)’ (3.104.0379)

11.1.4. IMMEDIATE PAST AND FUTURE. Two additional tense suffixes are attested in TV surface main clauses. These are *-t* ‘immediate past’ and *-ka-t/-k-to-m* ‘immediate future’. Cognates of these suffixes appear in all the Takic languages. As in the other languages, the noun-like features of these constructions suggest that they are to be identified as copula complements (as discussed in chapter 9). Examples will be treated in detail in the sections below on languages for which the constructions are better attested.

While the documentation is scanty, it hints that the situation is much the same in TV as in the other Takic languages. Munro (2011) describes the suffix *-t* as “past tense.” We use the label “immediate past” in conformity with our label for the same construction as found in the other Takic languages. Note however, that the suffix *-t* is in origin the absolutive suffix, the once-separable immediate past morpheme having been lost through contraction in TV. It survives only as the feature that selects the *-t* form of the absolutive suffix. To show this, we gloss this *-t* as IPST.ABS; it is semantically immediate past yet it behaves morphologically as the absolutive. An example is given in (1), showing an immediate past form inflected for both plural and accusative case.

- (1) TV nonfuture
Noo = n = a = hem huuto-k wehee-mo (cf. *t\$aa-jno-k* ‘be sick’)
 1SG.PRO = 1SG = 3PL.OBJ = PL see-NFUT two-PL.ACC
t\$aa-j-t-mo \emptyset .
 sick-INO-IPST.ABS-PL.ACC be
 ‘Yo vide a dos enfermos. (I saw two sick people.)’ (3.103.0166)

We note that the *no* component of *-ino* drops before immediate past *-t*, just as it does before future *-ro*. However, the loss of *-no* here cannot be explained by reference to syncope and consequent cluster reduction as discussed in 10.1.1 because examples like (1) and 11.1.3 (3d) do not provide an appropriate environment for syncope.

We treat the immediate past construction as a predicate complement, as illustrated in (2). The immediate past suffix reduces the thematic suffixes *-ina* (2a) or *-ino* (2b) to just their initial vowel and *-t* appears instead of the nonfuture suffix. The suffix attaches to the long base of base-changing verbs (2d,e). The range of meanings of the suffix appears to include usitative, as in (2d) and perhaps in (2b).

- (2) TV a. *Ekwaa = 7e koor-e-t* \emptyset . (koor-ena-x)
 here = IND step-CAUS-IPST.ABS be
 ‘Aquí pisó. (He stepped here.)’ (3.105.0144)
- b. *Muu-ro = ne nong-ii-t* \emptyset . (nong-iino-k)
 there-DAT = 1SG walk-INO-IPST.ABS be
 ‘Allá andaba (yo). (I was walking/used to walk there.)’ (3.105.0121)
- c. *Wakoo-t jaaw7ke* \emptyset . (wakoo-k)
 rain-IPST.ABS last night be
 ‘Estaba lloviendo anoche. (It was raining last night.)’ (3.103.0126)
- d. *Noo = n = 7e meaa-t ajooshe-s* \emptyset . (mii ~ meaa)
 1SG.PRO = 1SG = IND go-IPST.ABS many-times be
 ‘Yo fui muchas veces. (I went many times.)’ (3.104.0095)

- e. *Hamii-nga xaroo-t? Ø. (xaa ~ xaroo)*
 where-LOC dwell;stay-IPST.ABS be
 ‘¿Ónde estabas? (Where were you?)’ (3.103.0671)

These immediate-past verbless complements encode the subject or agent who does or has done the action indicated. These subject nominalizations in *-(e-)t* contrast with nominalizations with the more common form of the absolutive suffix, *-r*. Nominalizations in *-r* convey the sense of an expert, or a subject or agent who habitually does an action, e.g. *t\$et\$ii7a-r(om)* ‘singer(s)’, cf. *t\$et\$ii7-na-x* ‘sing’. They also contrast with resultative nominalizations with *-a-t*, which encode affected objects and themes (see (14.2) and examples in (4) below).

In the examples in (3), Harrington’s translations make it clear that he understood at least some of these forms as noun-like, as headless relative clauses. Example (3b) shows that forms with this *-t* can show accusative inflection.

- (3) TV a. *Menee worooj-t=7e koor-e-t Ø. (koor-ena-x)*
 PROX man-ABS=IND step-CAUS-IPST.ABS be
 ‘Ese hombre fue que pisó. (That was the man who stepped [on it].)’
 (3.105.0144)
- b. *Noo = n = a = 7 huuto-k maraa = m (t\$aaj-no-k)*
 1SG.PRO = 1SG = 3SG.OBJ = IND see-NFUT that = AUG
t\$aaj-ta.
 get.sick-IPST.ABS.ACC
 ‘Yo vide aquel enfermo. (I saw that sick person.)’ (3.104.0095)
- c. *nahoo7-e-t (nahoo7-ena-x)*
 command-CAUS-IPST.ABS
 ‘el capitán (the captain, the one who commands)’
- d. *Menee = ne jaaw-t teuijno Ø. (jaaw-k)*
 PROX = 3 > 1SG hold-IPST.ABS (a song word) be
 ‘Éste es que me tiene. (This is the one who holds me.) (It is God that holds us in his being.)’ (3.105.0468)

A different nominalization with the absolutive suffix *-t* forms nouns like those in (4), which are objects or the results of action. The underlying vowel of the nominalizer (probably *a*; see section 13.1) has become completely absorbed. These are formally similar to the subject nominalizations in (3) and also convey a past tense implicature. Based on analyses of constructions with subordinating *-V-t* in other Takic languages, we suspect that the heads of constructions like these in (4) are passive subjects of the *-t* predicates.

- (4) TV a. *Huutu7 totaa-ra e\$aajn-e-t. (e\$aaj-na-x)*
 see.IMP rock-ABS.ACC paint-CAUS-NMLZ.ABS
 ‘¡Mira la piedra pintada! (Look at the painted rock!)’ (3.105.0094) ¹
¹ Harrington’s note on this example suggests that these forms are not as noun-like as their apparent absolutive suffix suggests: “I tried to force a final *a* here but she would not add it.” That is, the speaker, Felicitas Montaña, was unwilling to use an accusative suffix with *e\$aajnet*.
- b. *ngooxa-t (nonfuture unattested)*
 grind-NMLZ.ABS
 ‘cosa molida, ya está molido (something ground or sharpened, now it is ground)’ (3.105.0092)

Barely attested in the TV materials is an immediate future suffix, apparently *-ka-t/-k-to-m*. This is cognate with immediate future suffixes in the main-clause system in all the other Takic languages. In SE and the Cupan languages it is well attested in subordinate clauses in purposives, future relative clauses, and occasionally complements. Only two examples, seen in (5), suggest its presence in TV, but Harrington was concerned that they might be LU constructions.¹²⁷ If they are valid TV forms, the examples in (5) share a sense that is associated with this suffix in SE and in the Cupan languages, of the actors who are designated to conduct an action, and/or who have a responsibility to conduct an action.

¹²⁷ Of (5a), Harrington’s notes say that his consultant, Jesús Jauro, “thinks this is R. [Reyeño = Luiseño] ending, cannot find the G [Gabrielino = Tongva]. After long reflexion thinks the ending is also G. 5 minutes more declares that *t\$áaroktom* is correct G., with a laugh.” Example (5b), collected later in the day (January 15, 1933), apparently confirms the construction.

- (5) TV a. *Anaange jaawke t\$aa-ro-k-to-m* \emptyset .
 afterwards at.night dance.patada-IFUT-ABS-PL be
 ‘A la noche vamos a bailar la patada. (Tonight we [they] are going to dance
 the patada.)’ (3.103.0183) (cf. *t\$aroo-k*)
- b. *wara7pi-ka-t* (verb root unattested)
 dance.style-IFUT-ABS Cf. CU *wyra7pij* ‘do war dance’, LU
 ‘dancing leader’ (3.105.0551) *wira7pikat* ‘singer at the *tanish* dance’.

11.2. INFLECTION IN MAIN-CLAUSE SERRANO VERBS. The inflectional system for SE main-clause indicative verbs includes the future, *-iv*, the immediate future, *-qa(7)*, and the immediate past, *-i-t*, plus the indicative suffix *-j* ~ *-i*. The other inflectional category is imperative formation; it is sometimes subtractive in nature.

There is a single mood distinction, between indicative and imperative. However, the corresponding distinctions in the verb forms do not align perfectly with their pragmatic use. The indicative verb is used in declaratives and interrogatives. The imperative verb form, when it co-occurs with the “potential” modal *kwy7*, can be used in declaratives and interrogatives. Future-tense constructions may be used as directives; these should probably be regarded as polite forms. Another polite directive uses the potential modal *kwy7* with the imperative form of the verb.

Surface main clauses with immediate future and immediate past inflection are analyzed here as derived from verbless complements, at least diachronically and perhaps synchronically as well. The immediate future functions like a verb inflectional suffix when it precedes AUX (i.e., in that position it takes the indicative suffix *-j*) but relevant forms to test the status of the immediate past in main clauses have not been found.

A set of processes that encode aspect, especially reduplication and truncation in the completive aspect, were discussed with the base-deriving processes in chapter 10, but are really intermediate on the continuum between base derivation and the inflectional categories considered here.

11.2.1. FUTURE. The future suffix is *-iv*. The future suffix in a main clause is normally accompanied by the irrealis modal *t(a)*. We assume that the suffix itself agrees with the

modal and shares in the irrealis sense. Since the future suffix is vowel-initial, SE verb bases lose their final vowels before it. The suffix itself is consonant-final and takes no indicative suffix when followed by AUX, as can be seen in (1).

- (1) SE a. *Kim-iv = t*
 come-FUT = IRR.3SG
 ‘She will come.’
- b. *Ichu7-k-in-iv = t*
 make-K-CAUS-FUT = IRR.3SG
 ‘She will make it.’

While the future suffix may accommodate question intonation as in (2a), it also may (rarely) occur with a following vowel *i*, as in (2b,c). It is unclear whether this should be regarded as an echo vowel, like the echo vowels seen with glottal-stop final forms with question intonation (cf. 10.2.1 (5)) or as an instance of the indicative suffix. We treat it here as an echo vowel because of its irregular occurrence. By comparison, the occurrence of the (unambiguous) indicative suffix is entirely regular. Examples (2a,c) show the use of the future in polite requests.

- (2) SE a. *Ta = m7* *ich-iv* ?
 IRR = 2SG > 3SG dip-FUT Q
 ‘Could you dip it?’
- b. *Ychyy = t* *ñi-iv-i* ?
 cold = IRR.3SG be-FUT-ECHO Q
 ‘Will it be cold?’
- c. *Ta = n* *aj-iv-i* ?
 IRR = 1SG > 3SG get(pl.obj)-FUT-ECHO Q
 ‘Could I get them?’

Examples like those in the right-hand column in (3) are highly unusual. We analyze these also as having the echo vowel.

- (3) SE a. *Puk-iv = t.* ~ *Puk-iv-i = t.*
 drop-FUT = IRR.3SG drop-FUT-ECHO = IRR.3SG
 ‘He’ll drop it.’
- b. *\$y-ii7v = t.* ~ *\$y-ii7v-i = t.*
 bloom-FUT = IRR.3SG bloom-FUT-ECHO = IRR.3SG
 ‘It will bloom.’

In (2b), *\$yii7v* is metathesized from *\$yy7-iv*, with a consequent blurring of morphemic boundaries. *\$yy7-iv*, in turn, is from *\$yy7a-iv*, with regular vowel replacement ($V_1V_2 > V_2$) across a morpheme boundary. Our morphological segmentation treats the result of these processes as though the glottal stop and the length feature have been absorbed by the suffix.

Another example showing future *-iv* with metathesis is (4).

- (4) SE *Mo^Rhmo^R-i7v = ta.*
 play.dolls-FUT = IRR.3PL
 ‘They’ll play dolls.’
 (cf. *mo^Rhmo^R7a-j = m* [play.dolls-IND = 3PL] ‘they’re playing dolls’)

The future form of the verb occurs in initial position only in the absence of any other full (non-clitic) word in the clause. Sentence (5a) represents the more common pattern of usage of the verb of (3b). (5b) is another typical example, one not phonologically complicated by metathesis.

- (5) SE a. *Ama7 = t* *\$y-ii7v.* (cf. *\$yy7(a)* ‘bloom’)
 that = IRR.3SG bloom-FUT
 ‘It will bloom.’
- b. *Ta = n* *kut\$-ia7n-chun-iv.*
 IRR = 1SG > 3SG fire-CAUS-BEN-FUT
 ‘I will light a fire for him.’

Kivi, the future of the short verb *ky-j* ‘say’, uniquely always shows a final *i*. Since this verb is unique, being the only single-syllable, short-vowel verb, it seems best to regard this equally unique *-ivi* as an irregular allomorph of the future suffix. The addition of this vowel-initial suffix has reduced the verb root to the single consonant *k-*.

- (6) SE *K-ivi = ta = n.* ~ *Ta = n* *k-ivi.*
 say.FUT = IRR = 1SG IRR = 1SG say.FUT
 ‘I will say it.’

Despite the gloss ‘say it’, as in (6), the verb *kyj* ‘say’ is intransitive; the “object” of *kyj* is adverbial. In SE, rather than “What did he say?”, one asks, literally, “How did he say it?”, with the indefinite manner adverb *hamin* ‘how, somehow, anyhow’, as in (7).

- (7) SE *Hamin = ta = vy-7* *ky-j.*
 INDF.MANNER = IRR = 3SG-PST say-IND
 ‘What did he say?’

The fact that the future of *kyj* is *kivi*, not **kivi7*, indicates that the underlying form of the *-ivi* allomorph has a long vowel: *-ivii*. The echo vowel discussed above would also have to be underlyingly long.

Although the irrealis modal *t(a)* is normally required for any main clause that has a future tense verb, in (8) it is omitted in the second clause.

- (8) SE *Mia = t* *kwyn* *mi-iv,* *kwyn* *hi-iv* *wany-t-i.*
 DUB = IRR.3SG QUOT.3SG go-FUT QUOT.3SG > 3SG see-FUT river-ABS-ACC
 ‘(It is said that maybe) when he goes, (it is said that) he will see the river.’

11.2.2. THE INDICATIVE SUFFIX. The indicative suffix *-j* is restricted to main clauses. Some indicative verbs take this suffix in all contexts but all indicative verbs take the suffix when followed by cliticized auxiliary material (1a,b) or when the verb (+ clitic) exhibits question intonation (1c,d). This suffix may be related to the TV indicative clitic = *7e* ~ = *e7* ~ = *j* (although the TV form is restricted to declarative sentences). It does not occur as a verb suffix elsewhere in Tactic.

- (1) SE a. *Ahqajy-j = kwyn* *ama-j* *añii7chi-ti*.
 babysit-IND = QUOT.3SG > 3SG that-ACC baby-ACC
 ‘She was taking care of the baby.’
- b. *Hiiu-t\$ua7-qa-j = n*.
 see-MOT-IFUT-IND = 1SG > 3SG
 ‘I’m going to go see him.’
- c. *Cha = m7* *hawahawa7na-j* ?
 IRR.2SG.PST = 2SG whisper-IND Q
 ‘Did you whisper?’
- d. *Ta = vy-7* *hiiñi7-ky-j* ?
 IRR = 3SG-PST fly-K-IND Q
 ‘Did he fly?’

Most occurrences of the indicative suffix occur with indicative verbs of certain phonological shapes even in the absence of a following auxiliary or question intonation. For a fuller account of the SE indicative suffix, see 10.2.1.

11.2.3. IMMEDIATE PAST AND IMMEDIATE FUTURE. Two other tense suffixes, immediate past *-i-t* and immediate future *-qa7*, appear in surface main clauses. The exemplification of the immediate future within the SE data is copious, that of the immediate past sparse. These suffixes also figure in subordinate clauses, and in that context are discussed in chapter 12. Indeed, it seems fair to say that these constructions diachronically originate in subordinate clauses as complements of a verbless main clause. In the examples below the zero copula is made explicit to highlight the structural status of the immediate past and of the immediate future where appropriate, as complements.

11.2.3.1. IMMEDIATE PAST. The inflection for the immediate past forms (in main clauses) is like that for nouns, being marked with plural *-m(y)*. This is morphological evidence of their presumed origin as verbless complements in subordinate clauses. The suffix *-t(a)* in the immediate past *-i-t(a)* can be identified with the absolutive suffix and is replaced by *-m(y)* in the plural; compare (1a) and (1b). With this understanding, then, the immediate

past morpheme is just the *-i-* of the complex *-i-t(a)*, pl. *-i-m(y)*. The immediate past morpheme is specified underlyingly as *-i-*, with an abstract (non-phonetic) feature that selects the absolutive in *-t* rather than in *-t\$* or *-ch*, and the locative in *-p* rather than *-v*.

The examples in (1) illustrate, along with the morphology, the tense semantics of the immediate past, often corresponding fairly well to the English present perfect and often translated by Sarah Martin with English “just,” as in (1a). Note that the “past” of the immediate past excludes any past-tense marking in AUX. We have no explanation for why singular persons are not marked with pronominal clitics in this context, with 2SG as in (1c) and 1SG in (2) below. The same unexplained absence of marking with the immediate future was noted in 8.3.2.4.

- (1) SE a. *A-taq kwe-i7-t Ø.*
 3SG-REFL eat-IPAST-ABS be
 ‘He has just eaten himself.’
- b. *Acham = ch \$aaw-t-i kwah~kwe-i7-m Ø.*
 1PL.PRO = 1PL > 3SG bread-ABS-ACC DUR~eat-IPST-PL be
 ‘We have been eating the bread.’
- c. *Haii-piu7 = t ymi7 pich-i-t Ø.*
 INDF-ABL = IRR 2SG.PRO arrive-IPST-ABS be
 ‘Where did you just come from?’
- d. *Haiip-iu7 = ta = mt\$ pich-i-m Ø.*
 where-ABL = IRR = 2PL arrive-IPST-PL be
 ‘Where have you (pl.) just come from?’

With a verb of motion, the immediate past may have the sense of having just gotten back from being away for some reason, as in (2).

- (2) SE *Juhaa-nu7 kim-i-t Ø.*
 pine.tree-ABL come-IPST-ABS be
 ‘I’ve just come back from Big Bear (“from Los Pinos [The Pines]”).’

Freeland (1951:61) uses the term “reventive” for this sense in Sierra Miwok. The Hopi “postgressive” *-ma*, pl. *-ma-ja* (Hopi Dictionary 1998:877) also has a reventive sense.

11.2.3.2. IMMEDIATE FUTURE. The immediate future suffix is *-qa7*, with an ephemeral glottal stop, i.e., a glottal stop which appears only in word-final position. When the subject is plural, the suffix has the plural *-qa-m*. This pattern is illustrated in (1).

- (1) SE a. *Uvia7imy=n* *jaa7-qa7* *ymy-j* *pajykja7* \emptyset .
tomorrow = 1SG > 2SG take-IFUT 2SG.PRO-ACC away be
‘Tomorrow I am going to take you away.’
- b. *Ymy=mt\$* *tyaa7-qa-m* \emptyset .
2PL.PRO = 2PL roast-IFUT-PL be
‘You (pl.) are going to roast it.’

The sense of this suffix seems to have to do with a present situation that is leading towards some expected situation. It is not an irrealis form; unlike true futures with *-iv*, it does not appear with the irrealis modal *t(a)*. This is identical to the behavior of the cognate suffix *-qat(im)* in CU, which does not co-occur with the CU irrealis modal *=py*. For irrealis *t(a)* to be present with immediate future inflection, the immediate future clause must be a question, as in (2).

- (2) SE a. *Yym=ta=mt\$=py* *tyaa7-qa-m* $\emptyset?$
2PL.PRO = IRR = 2PL = 2 > 3PL roast-IFUT-PL be
‘Are you (pl.) going to roast them?’
- b. *\$yaa7-qa-j=t* ?
bloom-IFUT-IND = IRR.3SG Q
‘Is it going to bloom?’

While the immediate past always has a noun-like structure, the immediate future, presents a mixed situation, behaving like an indicative verb or a complement depending on context. The immediate-future *-qa7* is verb-like in that when it is followed by AUX, it

takes the indicative suffix *-j* just like any other verb, and when it does, neither the final glottal stop nor the plural suffix appear, as in (2b) and (3).

- (3) SE a. *Hii-t\$ua7-qa-j = n.*
 see-MOT-IFUT-IND = 1SG > 3SG
 ‘I’m going to go see him.’ [= 11.2.1 (1b)]
- b. *Oo^R\$ana-qa-j = ch.*
 mark;write-IFUT-IND = 1PL
 ‘We’re going to write.’
- c. *Mii\$k-ina-qa-j = t* ?
 get.moist-K-CAUS-IFUT-IND = IRR.3SG > 3SG Q
 ‘Is he going to wet it?’
- d. *Kwa7-qa-j = ta = ch* ? *pa-ta-j.*
 eat-IFUT-IND = IRR = 1PL > 3SG Q PROX2-ABS-ACC
 ‘Are we going to eat that?’

For copula constructions, the immediate future suffix appears on the verb *ñiha-j* ‘do’ (cf. 9.2): *ñiaa-qa7* ‘going to be’, as seen in (4), where *hachaa7i7* is a predicate adjective. Note that we suggest here that the underlying structure is “it is the one that is going to be sharp”.

- (4) SE *Hachaa7i7 ñiaa-qa7.*
 sharp *be-IFUT*
 ‘It (the axe) is going to be sharp.’

11.2.3.3. PHONOLOGICAL COMPLEXITY IN THE IMMEDIATE FUTURE SUFFIX. Suffixation of the immediate future is a site of some phonological complexity, as the suffix-initial consonant undergoes assimilation to preceding phonological material. While this is briefly reviewed in 4.2.4, we return to the question here with a more detailed account. A stem-final vowel is in many instances lost through the regular rule of syncope (cf. section 3.2). This is complicated by the fact that the initial consonant of the ending is sensitive to the quality

of the preceding vowel whether phonetically present or not: If the preceding vowel is non-low, i.e., underlyingly *y*, then the suffix-initial consonant is *k*; if it is low, i.e., underlyingly *a*, the consonant is *q*.

With *k*-class verbs the situation is more interesting. The thematic *k* suffix is underlyingly *-ky*, with the non-low vowel *y*. Thus the *k*-form (rather than the *q*-form) of the suffix is selected. This creates a theoretical sequence *-ky-ka*. But the *y* of this sequence is in an environment where syncope is obligatory, thus creating the theoretical sequence *-kka*. While instances of *-kk* are pronounceable in SE, as in *waakkaʔ* ‘it’s going to dry’, *jarukk* ‘get clean’, they are found only postvocally. Since all *k*-class stems obligatorily end in a consonant, the derived sequence *-kka* for a *k*-class verb immediate future finds itself after a consonant. The solution is to reduce the sequence *-kka* to *-ka*, with the sequence *-ka* representing a contraction of the *k*-suffix and the immediate future suffix, as given in (1).

- (1) SE *Puraq-ka-j = n*.
 exit-K.IFUT-IND = 1SG
 ‘I’m going out. (I’m going to go out, I’m about to go out.)’
 (underlying *puraq -ky -qà -j ny*)

For simplicity of presentation, one might say either that the immediate future suffix has the allomorph *-a* after the *k*-suffix or that the *k*-suffix has a zero allomorph before the immediate future; either way, this would obscure the fact that this ending with *k*-class verbs really represents a morphemic overlap.

Thus the immediate future suffix has the allomorphs *-qaʔ*, *-qa-*, *-kaʔ*, *-ka-*, with the forms with the glottal stop being word-final and the others non-final.

The forms below are presented in an attempt to clarify what’s going on morphophonologically. The indicative verb with no tense inflection (plus other forms where useful) and the underlying form of the verb stem are provided in parentheses.

Forms in *q* with retained stem-final vowel (always *a*, short or long) are given in (2).

- (2) SE a. *Chyyp-k-ina-qa-j = ny*.
 lose-K-CAUS-FUT-IND = 1SG > 3PL
 ‘I’m going to lose them.’

(chyyp-k-in, chyyp-k-ina-j = n, underlying chyyp -ky -ina)

- b. *Ama7 ymy-j = vychi7 kuuhan-ichuna-qa7 Ø.*
 DIST 2SG.PRO-ACC = 3SG > 1PL call-BEN-IFUT be
 ‘He’s going to call you for us.’
 (*kuuhan-ichun*, *kuuhan-ichuna-j = n*, underlying *kuuhana -ichuna*)
- c. *Tyyvi-ch-i = n aja-qa7 Ø.*
 white.clay-ABS-ACC = 1SG > 3SG get-IFUT be
 ‘I’m going to get white clay.’
 (*aje-j*, imperative *aj*, underlying *aja*)
- d. *Ama7 oo^R\$ana-qa7 Ø.*
 DIST write-IFUT be
 ‘He’s going to write.’
 (*oo^R\$an*, *oo^R\$ana-j = n*, underlying *oo^R\$ana*)
- e. *Ichaa-qa-j = n.*
 dip-IFUT-IND = 1SG > 3SG
 ‘I’m going to dip it.’
 (*icha-j*, underlying *ichaa*)
- f. *Naamua-qa-j = n.*
 fight-IFUT-IND = 1SG
 ‘I’m going to fight.’
 (*naam*, *naamu-j = n*, fut. *naamu-iv*, underlying *naamua*)

In the unsuffixed indicative form of (2f), *naam*, this verb loses two vowels word finally. This cannot be handled by the present formulation of the rule of apocope (4.2.2).

Another exceptionality is found with *mu-j* ‘shoot’ and its distributive *muum* ‘shoot several, shoot multiple times’, with *mua* being the only other verb root identified as ending underlyingly in *ua*. Some forms of *muj* and *muum* are displayed in (3).

(3)	SE	a.	simple indicative	mu-j	muu~m
		b.	immediate future	mua-qa7	muu~mua-qa7
		c.	future	mu-iv	muu~mu-iv
		d.	imperative	mu	
		e.	imperative + clitic	muu = t\$	
		f.	completive	muu~mu	
		g.	s.th. shot (as of an arrow)	mu-i-ch	muu~mu-i-ch

Here the exceptionality is in the vowel length seen in the imperative plural (3e). The explanation seems straightforward: The singular imperative is *mu*, the result of the regular application of apocope to underlying *mua*. The form *mu*, having a final vowel (not followed by a glottal stop) gets interpreted as an underlyingly long vowel, which then appears as such in the imperative *muu = t\$*. This suggests that another phonological process may need to be recognized: any word-final vowel that survives to the phonetic surface can be interpreted as a long vowel, at least with respect to a following clitic. Unfortunately this elaboration of the rules accounts for only one known example.

Forms in *q* with syncopated stem-final vowel (always *a*) are given in (4).

- (4) SE
- a. *Kjaarni7-t-i = n* *paa^Rho^Rq-qa7* \emptyset .
 meat-ABS-ACC = 1SG > 3SG boil(tr.)-IFUT be
 ‘I’m going to boil the meat.’
 (*paa^Rho^Rq*, *paa^Rho^Rqa-j = n*, underlying *paa^Rhoo^Rqa*)
- b. *Pychaa7kw-qa-j = n*.
 butcher-IFUT-IND = 1SG > 3SG
 ‘I’m going to butcher it.’
 (*pychaa7kw*, *pychaa7kwa-j = n*, underlying *pychaa7kwa*)
- c. *Wo^Rqo^Rv-qa-j = n*.
 hit-IFUT-IND = 1SG > 3SG
 ‘I’m going to hit it.’
 (*wo^Rqo^Rv*, *wo^Rqo^Rva-j = n*, underlying *wo^Rqo^Rva*)

- d. *Nymiin-qa-j = n*.
 chase-IFUT-IND = 1SG > 3SG
 ‘I’m going to chase it.’
 (nymiin, nymiina-j = n, perhaps underlying *nymy -iina* ‘walk-CAUS’?)
- e. *Oo^Rva7-n-qa-j = n*.
 strong-CAUS-IFUT-IND = 1SG > 3SG
 ‘I’m going to force him.’
 (*oo^Rva7n*, *oo^Rva7na-j = n*, underlying *oo^Rva7 -na*)
- f. *Nyy7 = n* *kwa7-qa7* *kwij-t\$-i* \emptyset .
 1SG.PRO = 1SG > 3SG eat(tr.)-IFUT black.oak-ABS-ACC be
 ‘I’m going to eat (black oak) acorns.’
 (*kwa7-i*, fut. *kwei7v*, imp. *kwa7*, underlying *kwa7a*)
- g. *Kwij-t\$-i = ch* *kwa7-qa-m* \emptyset .
 black.oak-ABS-ACC = 1PL > 3SG eat(tr.)-IFUT-PL be
 ‘We’re going to eat (black oak) acorns.’

Forms in *k* with retained stem-final vowel (always *y* or *yy*) are given in (5) and with syncopated *y* in (6).

- (5) SE a. *Nyy7 = n* *aa-ngkwa7* *nymy-ka7* \emptyset .
 1SG.PRO = 1SG there-DAT walk-IFUT be
 ‘I’m going for a walk.’
 (*nym*, *nymy-j = n*, underlying *nymy*)
- b. *Qaj = m7* *nyhnga-t\$-i* *mo^Rch* *chawyy-ka7* \emptyset .
 NEG = 2SG > 3SG grape-ABS-ACC again pick-IFUT be
 ‘You’re not going to pick grapes anymore.’
 (*chawe-j*, underlying *chawyy*)

- c. Chymy tiy^R qaj jaay-ka-m pyy-ma-nu7 haii-m ii-m Ø.
 3SP > 1PL tell NEG get;grasp-IFUT-PL 3PL-hand-ABL INDF- PROX-PL be
 PL

‘They told us not to shake hands with any of them.’

<Chemu’ teer qay’ yeekam peemanu’ haym ‘im.> (R&E 764)

(je-j, underlying jaay)

- (6) SE a. Qaj = m aa^Rch-ka-m pyy-ki-j Ø.
 NEG = 3PL > 3SG miss-IFUT-PL their-house-ACC be
 ‘They won’t miss [getting to] their [heavenly] home.’
 <Qay’ ‘archkam peeki.> ‘They won’t pass up their home.’ (R&E 839)
 (aa^Rch, aa^Rchy-j = n, underlying aa^Rchy)

- b. Nyy7 = n waak-ka7 Ø.
 1SG.PRO = 1SG dry.up-IFUT be
 ‘I’m going to dry up.’
 (waak, waaky-j = n, underlying waaky)

- c. Tua7-t-i = n aak-ka7 Ø.
 flour-ABS-ACC = 1SG > 3SG eat.particles-IFUT be
 ‘I’m going to eat the flour.’
 (aak, aaky-j = n, underlying aaky)

K-class forms, with -ka(7) from merged -k-qa(7), are shown in (7).

- (7) SE a. Ha7tis-ka-j = n.
 sneeze-K.IFUT-IND = 1SG
 ‘I’m going to sneeze.’
 (ha7tisk, ha7tisky-j = n, underlying ha7tis -ky)
- b. Tukupha-kja7 hioo^Rch-ka7 Ø.
 above-DAT climb-K.IFUT be
 ‘I’m (or 3SG’s) going to go up.’
 (hioo^Rchk, hioo^Rchky-j = n, underlying hioo^Rch -ky)

Fronted forms of the immediate future suffix occur after verb stems that end with a palatal consonant (8a,b) or that have the vowel *i* plus a glottal stop (8c). (The fronted form should, in principle, also occur after *ih*, but no example has been found.) Note that *ch* does not figure as a palatal consonant. Since this assimilation is phonetically required, the fronting of *k* in this environment is not marked orthographically.

- (8) SE a. *Aa-p* *maa7-ka7* \emptyset .
 DIST-LOC come.around.a.bend-K.IFUT be
 ‘It (the deer) is going to come around there.’
 (< *maa7-ky -qà*; *maa7k* is a k-class verb)
- b. *Ama7=kwyny=vy-7* *wyt\$y^R\$-t\$* *mi-j* *haii-p* *ii-p*
 DIST=QUOT=3SG-PST man-ABS go-IND INDF-LOC PROX-LOC
hyiiñ-ka7 \emptyset .
 hunt-IFUT be
 ‘The man went somewhere to hunt.’
 (*hyiiñ*, *hyiiñy-j=n*, underlying *hyiiñy*; *hyiiñ* is an athematic verb)
- c. *Pahi7-ka7* \emptyset .
 dawn-K.IFUT be
 ‘It’s going to dawn.’
 (< *pahi7-ky -qà*; *pahi7k* is a k-class verb)

The immediate future morpheme provides an environment for glottal stop metathesis in the preceding stem. Since for all verb roots ending in glottal stop plus vowel, the vowel is *a*, the immediate future suffix has the forms *-qa7*, *-qa-* with these verbs.

- (9) SE a. *Mo^Raa7-qa7* \emptyset .
 emit.smoke-IFUT be
 ‘It’s going to smoke.’
 (*moo^R7*, *moo^R7a-j=vy-7* ‘it emitted smoke’, underlying *moo^R7a*)

- b. *Hyyja7-qa-j = n.*
 shake-IFUT-IND = 1SG
 ‘I’m going to shake it.’
 (hyyjy7, hyyjy7a-j = n, underlying hyyjy7a)
- c. *Q^Ra7-qa-j = m.*
 be.sick(pl.)-IFUT-IND = 3PL
 ‘They’re going to be sick.’
 (qo^R7a-j = m, underlying qo^R7a)

11.2.4. IMPERATIVE. The final inflectional process to consider in SE main-clause verbs is the formation of the imperative.

K-class verbs suffixed with *-k-in(a-)* form imperatives by truncation of the causative suffix, a process that yields an *i*-colored *k*, i.e., *ky*, in final position. The imperative of the transitive verb contrasts, then, with the indicative of the intransitive verb, only in the “color” of the final consonant, as illustrated in (1) and (2). Note that the *i*-coloration of the *k* is never written before *i* itself.

- | | | | | |
|-----|----|--|--|---|
| (1) | SE | intransitive indicative | transitive imperative | transitive |
| | a. | <i>haach-k</i> ‘it got sharp’ | <i>haach-ky</i> ‘sharpen it!’ | <i>haach-k-in</i> |
| | b. | <i>ty^Rna^R7-k</i> ‘it turned black’ | <i>ty^Rna^R7-ky</i> ‘make it black!’ | <i>ty^Rna^R7-k-in</i> |
| | c. | <i>hwaa^Rn-k</i> ‘he jumped’ | <i>hwaa^Rn-ky</i> ‘jump on it’ | <i>hwaa^Rn-k-in</i> |

- | | | | | |
|-----|----|-----------------|-------------------|-----------------------------|
| (2) | SE | <i>Hunu7-ky</i> | <i>aa-ngkwa7.</i> | (cf. <i>hunu7-k-in(a)</i>) |
| | | move-K.CAUS.IMP | DIST-DAT | |
| | | ‘Move it!’ | | |

If the end of a verb stem provides a palatalizing context, there is ambiguity of form.

- | | | | | |
|-----|----|---------------------------------|-------------------------------|--------------------|
| (3) | SE | <i>typiñi7-ky</i> ‘he stumbled’ | <i>typiñi7-ky</i> ‘trip him!’ | <i>typiñ7-k-in</i> |
|-----|----|---------------------------------|-------------------------------|--------------------|

Some imperative constructions create non-deleting environments for vowels that are normally lost in the indicative forms of the causative.

- (4) SE imperative transitive
 a. *aa^Rna7-ky* ‘open it!’ *aa^Rn7-k-in*
 b. *typiñi7-ky* ‘trip him!’ *typiñ7-k-in*

A few intransitive k-class verbs may also truncate their final underlying syllable: they can lose the thematic suffix *-k(y-)* in the imperative.

- (5) SE a. “*Hwaa^Rn*, *hwaa^Rn*,” *ky-j = kwyny*. < *hwaa^Rn-k(y)*
 jump.IMP jump.IMP say-IND = QUOT.3PL
 ‘“Jump! Jump!” (it is said that) they said.’
 b. *Tahi~tahi7*. < *tahi~tahi7-k(y)*
 IPFV~hurry.IMP
 ‘Hurry!’

However, this reduction is not always found with k-class imperatives. There are other examples of k-class verbs with the k-suffix retained in imperative usage without any additional marking, as in (6).

- (6) SE a. *kajaw-k* ‘swing!’
 b. *myjy7-k* ‘hide!’
 c. *Nyyp-k* *ii-p*.
 sit.down-K.IMP PROX-LOC
 ‘Sit down here!’
 d. “*Kiva* *jangk* *akichama-v* *cho^Rnu7-k* *y mi7 = ta = m7*
 come.here.IMP but door-LOC stand-K.IMP 2SG.PRO = IRR = 2SG
puchuk *taa^Rr-k-iv*,” *ky-j = kwyn*.
 hard;very open.mouth-K-FUT say-IND = QUOT.3SG
 ‘“Come here then and stand at the door and (you should) open your mouth wide,” he said.’

Example (6d), with the imperative construction *cho^Rnu7k* ‘stand!’, illustrates two additional points regarding the imperative that should be mentioned. It contains the verb

kiva ‘come here’, the irregular imperative form of *kim(a)*, and it contains the future construction *ymi7 = ta = m7 puchuk taa^Rrkiv*, literally ‘you will open your mouth wide’ but here used with imperative force. The use of the future as an imperative is perhaps the most frequent type of directive in SE. It is likely that this usage is more polite than directives with the imperative. Future-tense verbs are used as directives in other Tadic languages as well as in Tübatulabal (Voegelin 1935:113) and in Hopi, so may be a proto-feature of the Northern Uto-Aztecan languages.

Athematic verbs usually form imperatives by truncation of the final vowel or vowels. The vowels in parentheses in (7) are present when the imperative form appears with question intonation, and with some, before a cliticized pronominal. Those vowels echo the vowel of the preceding syllable; it can be seen in (7a,b) that they are not retentions of the underlying final vowel.

(7)	SE	imperative		indicative
	a.	<i>ho^R7(o^R)</i>	‘sew it/them!’	<i>ho^R7a-j</i>
	b.	<i>tyy7(y)</i>	‘roast it/them!’	<i>tyy7a-j</i>
	c.	<i>maq(a)</i>	‘Give it/them!’	<i>maq-a-j</i>
	d.	<i>aj ~ aja-</i>	‘get it/them!’	<i>aje-j (< aja)</i>
	e.	<i>ja7</i>	‘run!’	<i>ja7-i</i>
	f.	<i>tav</i>	‘put it down/in!’	<i>tavy-j</i>
	g.	<i>nym(y-)</i>	‘walk!’	<i>nymy-j</i>

A single attested example of an imperative with truncation of the motion suffix *-t\$u7(a)* ‘do while going along’ possibly illustrates a regular pattern.

(8)	SE	<i>hiut\$</i>	‘go see!’	< <i>hiu-t\$u7(a)</i>
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There are many irregular forms of imperatives. Various forms are shown in (9).

(9)	SE	imperative		indicative	underlying root
	a.	<i>chia7</i>	‘pick it up!’	<i>chi7a-j</i>	<i>chi7a</i>
	b.	<i>piaa7</i>	‘bewitch him/throw it!’	<i>püi7(a)</i>	<i>püi7a</i>
	c.	<i>ja</i>	‘grab it!’	<i>je-j</i>	<i>jaa</i>
	d.	<i>mia</i>	‘go!’	<i>mi-j</i>	<i>miaa</i>

e.	<i>mu</i> ~ <i>muu</i> = ‘shoot it!’	<i>mu-j</i>	<i>mua</i>
f.	<i>yj</i> ‘steal it!’	<i>yjy-j</i>	<i>yjy</i>
g.	<i>yn</i> ‘learn it!’	<i>ynan(a-)</i>	<i>ynana</i>
h.	<i>wir</i> ‘put them down!’	<i>wiha-j</i>	<i>wihaa</i>
i.	<i>ñia</i> ‘do it!’	<i>ñiha-j</i>	<i>ñihaa</i>
j.	<i>hi7</i> ~ <i>hiy7</i> ‘look at it/them!’	<i>hi-j</i>	<i>hiy</i>

Examples (9a,b) have been mentioned elsewhere as evidence that the process of glottal stop metathesis has become morphologized. (9c,d) are just the unsuffixed stems of underlying *jaa*, *miaa*, with regular long vowel shortening in word-final position. (9e) has lost its underlyingly final vowel but shows, in the plural form, *muu* = *tʂ*, what must be expressive lengthening, as seen below in (10). (9f) has lost its underlying final vowel. The underlyingly trisyllabic verb of (9g) has lost its final syllable with consequent erosion of the preceding vowel. (9h) has lost its final vowel, and its medial *h*, now final, is replaced by *r*. This is the only SE verb known to participate in the *h* ~ *r* alternation, an alternation found most conspicuously among kin terms. (9i) has lost medial *h* but otherwise the entire underlying form remains but with regular word-final vowel shortening. (9j) has two forms. Although unique among imperatives, both are regular with respect to the phonological rules of SE. The first form, *hi7*, has truncated the final vowel of the underlying form *hiy*. What remains is *hi*, and a word-final underlyingly short vowel, if it is not to be deleted, must be protected by an inserted glottal stop. The second form, *hiy7*, represents the full underlying form of the verb plus the same protective glottal stop.

The examples in (10) shows that transitive imperative verbs appear with subject-object auxiliary elements.

- (10) SE a. “*Muu* = *tʂ*” *ky-j* = *kwyn*.
 shoot.IMP = 2 > 3SG say-IND = QUOT.3SG
 ‘ “Shoot it (pl.)!” he said.’
- b. *Kivaa* *uu7* = *mynytʂ*.
 come.IMP take.IMP = 2PL > 1SG
 ‘Come (pl.) and take me!’

- c. *Hat\$ik* *paa-t\$ = chi7* *ichi-chun.*
 go.get.IMP water-ABS = 2SG > 1SG dip-BEN.IMP
 ‘Go get it, dip some water for me!’

When the imperative form of the verb is used with the potential modal *kwy7*, it may occur in declarations (11a,b), hortatives (11c), and questions (11d) (see 8.2).

- (11) SE a. *Kwy7 = n* *joo^R7.*
 POT = 1SG > 3SG dry.IMP
 ‘I can dry it.’
- b. “*Ajayp* *ama7 = kwy7* *tqamin* *hii-t-i*
 because 3SG.PRO = POT.3SG > 3SG strangely INDF-ABS-ACC
ichu7-kj,” *ky-j = kwyn.*
 make-K.CAUS.IMP say-IND = QUOT.3SG
 ‘ “[It’s] because he (Coyote) might do something strange.” he said.’
- c. “*Kwy7 = t\$* *py-my-kja7* *mia,*” *ky-j = kwyny.*
 POT = 2SG.IMP 3-PL-DAT go.IMP say-IND = QUOT.3PL
 ‘ “You should go to them,” they said.’
- d. *Kwy7 = n* *joo^R7-o^R* ?
 POT = 1SG > 3SG dry-ECHO Q
 ‘Can I dry it?’

In SE, plural imperatives are identical to singular imperatives, but are followed by plural pronominal clitics. These do not block the truncation of the causative: e.g. *Widhap-ky = mynyt\$* ‘Leave me alone (pl.)!’, vs. *Widhap-ky* ‘Let go!’, from *widhap-k-in(a)*. An athematic example is *Oo^R\$an* ‘Write!’, vs. *Oo^R\$an = t\$* ‘Write (pl.)!’ from *oo^R\$an*.

The usual Serrano negative is *qaj* ‘not’. A special prohibitive form, *qaj7* ‘don’t!’, is used in the imperative (12a). However, directives in the future tense are indicative, not imperative, and use *qaj* as in (12b).

- (12) SE a. *Qaj7 = t\$ kwa7 ama-j mo^Rch.*
 PROH = 2SG.IMP eat.IMP DIST-ACC again
 ‘Don’t eat that any more!’
- b. *Qaj = ta = mt\$ mu-iv.*
 NEG = IRR = 2PL > 3SG shoot-FUT
 ‘Don’t shoot!’

Example (12a) shows that in SE nominal objects of negative imperative verbs are marked for accusative case though nominal objects of positive imperatives are not marked, as seen in (13). (13b,c) show the contrast clearly.

- (13) SE a. *Akaj = mynyt\$ ny-majr.*
 give.IMP = 2PL > 1SG 1SG-child;son
 ‘Give me my son!’
- b. *Kwa7 = t\$ pat.*
 eat.IMP = 2SG.IMP PROX2
 ‘Eat that!’
- c. *Qaj7 kwa7 = t\$ pa-ta-j.*
 PROH eat.IMP = 2.IMP PROX2-ABS-ACC
 ‘Don’t eat that!’

Example (14) shows an unusual occurrence of the quotative *kwyn(y)* in what amounts to a directive. Coyote is trying to keep his daughters from leaving him by feigning a terrible headache and implores them to take care of their ailing father by invoking a cultural norm.

- (14) SE *Kwyny = mynyt\$ puhcha7.*
 QUOT = 2PL > 1SG take.care.of.IMP
 ‘You ought to take care of me (It is said that you take care of me).’

11.3. INFLECTION IN MAIN-CLAUSE KITANEMUK VERBS. KI has no tense-aspect suffixes in main-clause verbs. Both past and future are encoded in the auxiliary complex, treated in chapter 8.

11.3.1. SUBJECT PREFIXES. Unlike TV and SE, KI requires subject prefixes in the verb construction itself. This yields dual exponency when the subject clitics are present in transitive sentences with objects other than third singular, as in (1).

- (1) KI *Ymy = vy* *my-myk*.
 2PL.PRO = 2 > 3PL 2SG-hit
 ‘You hit them.’ (3.100.0588; Anderton 1988:114)

The KI pronominal prefixes were introduced in 6.2.2 and are repeated in (2). They are identical to the possessive prefixes on nouns (Anderton 1988:76). They also include a special hortative 1PL prefix *tša-*. While Anderton’s transcription does not represent the KI vowel length contrast because of the inconsistencies in the Harrington notes, KI clearly had a vowel-length contrast, and the plural prefixes were probably *tsyy-*, *yy-*, *pyy-*, with long vowels as in SE. Indeed, Harrington notes on one example of *pyy-*: “Here long as usual in such position” (3.98.0282).

- | | | | | | |
|-----|----|--------|------------|--------------|-------------------------|
| (2) | KI | person | singular | plural | hortative plural |
| | | 1 | <i>ni-</i> | <i>tsyy-</i> | <i>tša-</i> |
| | | 2 | <i>my-</i> | <i>yy-</i> | |
| | | 3 | <i>a-</i> | <i>pyy-</i> | (Anderton 1988:76, 104) |

The different 1PL prefixes are cognate with competing prefix forms in SE. The normal KI form, *tsyy-*, is cognate with Dorothy Ramón’s *chyy-* (in Ramón & Elliott 2000), while the hortative form, *tša-*, corresponds to Sarah Martin’s *cha-*.

Examples of the prefixes in sentences are seen in (3). While there is no dual in KI, Harrington’s translation specifies “you two” in (3d), probably to make sure that “you” is not understood as singular.

- (3) KI a. *Ny7 = m = ne* *ni-jam-k.*
 1SG.PRO = 1 > 2SG = NEHE 1SG-remember-K.CAUS
 ‘I remembered you.’ (3.98.0232; Anderton 1988:109)
- b. *Kut\$ara7-ny* *tsyy-kwa7.*
 spoon-INS 1PL-eat
 ‘Comimos con cuchara. (We ate with a spoon.)’ (3.98.0483; Anderton 1988:86)
- c. *Yymy7y um-uk* *yy7-yn.*
 2PL.PRO 2PL-EMPH 2PL-know
 ‘Uds. [mismos saben]. (You yourselves know.)’ (3.100.0847; Anderton 1988:110)
- d. *Yy-mi nahwin-ik* \emptyset .
 2PL-go deposit-IFUT be
 ‘You two are going to deposit [at the shrine].’ (3.98.0327; Anderton 1988:227)
- e. *A-ju7j-nan* *a-tama-j.*
 3SG-make.noise-CAUS 3SG-teeth-ACC
 ‘He grits his teeth.’ (3.98.0382; Anderton 1988:82, 512)
- f. *Pyy-py7-k* *pyy-tak.*
 3PL-fan-K.CAUS 3PL-REFL
 ‘The people are fanning themselves in the hot weather. (They are fanning themselves.)’ (3.98.0465; Anderton 1988:115)
- g. *Tsa-kwa7 = t\$.*
 1PL.HORT-eat = IMP.PL
 ‘Vamos a comer. (Let’s eat.)’ (3.98.0359; Anderton 1988:96)

Except for the hortative first-plural *tsa-*, as in (3g), the subject prefixes are not used with imperatives (see 11.3.2 below).

- (4) KI a. *Maka=n paa-t\$.*
 give = 2 > 1SG.IMP water-ABS
 ‘Give me [some] water!’ (3.98.0383; Anderton 1988:192)
- b. *Qaj = vym = yt\$ hiu.*
 PROH = 2 > 3PL = IMP.PL see
 ‘Don’t you [pl] look at them!’ (3.98.0351; Anderton 1988:193)

Furthermore, the subject prefixes are not used on verbless complements, whether nouns or adjectives. This feature contrasts with the situation in CA, the other Tadic language that requires subject prefixes on verbs. In CA, subject prefixes are required not only on the verb, but on other predicate types as well (see 11.6). Examples of the KI situation appear in (5).

- (5) KI a. *Yymy7y hawngani-tsa-m Ø.*
 2PL.PRO poor-ABS-PL be
 ‘Uds. están pobres. (You pl. are poor.)’ (3.98.0211; Anderton 1988:106)
- b. *Pata7 \$u\$avaa-t\$ Ø.*
 PROX2 liar-ABS be
 ‘Es embustero. (He is a liar.)’ (3.100.0483; Anderton 1988:109)
- c. *Akikata-m itsat\$ Ø.*
 Kitanemuk-PL 1PL.PRO be
 ‘Nosotros somos jaminates. (We are Kitanemuks.)’ (3.98.0065; Anderton 1988:82)

11.3.2. IMMEDIATE FUTURE. The KI immediate future is marked by *-ik(a)*, as seen in (1).

- (1) KI *Ni-mi [huur-k-in-ik Ø].*
 1SG-go peek.out-K-CAUS-IFUT be
 ‘Voy ir asomar. (I’m going to stick my head out.)’ (3.98.0256)

The immediate future takes no subject prefix and thus is not to be understood as a main-clause verb. We identify it as a same-subject subordinated form that serves syntactically

as a complement, as in SE. We treat it in some detail in 12.3.3, in the chapter on subordinate clauses.

11.3.3. IMPERATIVE. Imperative inflection in KI takes several forms. Imperative verbs have no subject prefix, with the exception of the hortative 1PL *tša-*.

Verbs in the k-class exhibit two major imperative types. The most common (or perhaps simply best attested) are singular imperatives of transitives formed by truncation. While in SE the truncation of the k-class causative/transitive suffix *-in(a)* is complete, leaving but a trace of the vowel as a feature of the preceding *k*-suffix (i.e., *-ky*), in KI the vowel *i* of the suffix remains, as seen in the examples of k-class transitives in (1). Recall that in indicative sentences when not followed by other suffixes, the causative suffix is completely truncated (10.3.2). While in synchronic perspective the *-i* in the imperatives may look like an imperative-forming suffix, it is the truncated residue of the causative.

(1) KI		imperative	indicative	
a.	close	<i>tym-k-i</i>	<i>tym-k(-in-)</i>	(3.98.0308)
b.	fan	<i>py7-k-i</i>	<i>py7-k(-in-)</i>	(3.98.0211)
c.	fix	<i>itsu7-k-i</i>	<i>itsu7-k(-in-)</i>	(3.98.0456)
d.	pull taut	<i>myyt\$-k-i</i>	<i>myyt\$-k(-in-)</i>	(3.100.0415)
e.	shake	<i>tykw-k-i</i>	<i>tykw-k(-in-)</i>	(3.98.0383)
f.	split	<i>\$erer-k-i</i>	<i>\$erer-k(-in-)</i>	(3.98.0272)
g.	spread apart	<i>kwa7[j]-k-i</i>	<i>kwa7j-k(-in-)</i>	(3.98.0273)
h.	stop, stand it up	<i>tso7n-k-i</i>	<i>tso7n-k(-in-)</i>	(3.98.0462)
i.	suck	<i>tsuu7ng-k-i</i>	<i>tsuu7ng-k(-in-)</i>	(3.98.0390)

The imperatives of intransitive k-class verbs lack the *y* that appears in the indicative bases.

(2) KI		imperative	indicative	
a.	edge down	<i>ngyryhr-k</i>	<i>ngyryhr-yk</i>	(3.100.0441)
b.	go in	<i>tsurup-k</i>	<i>tsurup-yk</i>	(3.98.0387)
c.	listen	<i>ka7v-k</i>	<i>ka7v-yk</i>	(3.98.0390)
d.	sit down	<i>ra7wh-k</i>	<i>ra7wh-yk</i>	(3.98.0387)

Non-derived athematic verbs form singular imperatives with no modification of the base, as in (3).

(3)	KI	imperative = indicative
	a.	braid <i>kwirav</i> (3.98.0236)
	b.	bring <i>jaa7</i> (3.100.0368)
	c.	grind <i>tuur</i> (3.100.0503)
	d.	kick sbdy <i>tsingim</i> (3.98.0284)
	e.	ladle <i>its</i> (3.98.0359)
	f.	look at, see <i>hiu</i> (3.98.0258)
	g.	paint <i>oo\$an</i> (3.100.0446)
	h.	shell s.th <i>tsyry7</i> (3.98.0201)
	i.	speak Kitanemuk <i>kiitanamu7</i> (3.98.0066)
	j.	stir <i>hakwaw</i> (3.98.0208)
	k.	take s.th off <i>puk</i> (3.98.0230)

That the loss of *n* in the k-class imperative transitives, as in (1), is due to a morphological truncation and not simply to a phonological process is made clear by the fact that final *n* is not lost in imperatives of athematic verbs ending in *-in.*, as in (4).

(4)	KI	imperative = indicative
	tell a story	<i>tsitsi7aakin</i> (3.100.0608)

The verb *jaaw* (5a) loses its final *w* before the imperative plural clitic $=(y)t\$,$ which nonetheless remains in its postconsonantal form (5b). This pattern may be related to the diachronic loss of intervocalic $*w$ after $*a$ in Serran. The *w* is also lost in this verb before passive *-hea* and the instrument nominalizer *-ihwa7-t*. Cf. SE *je-j*, underlyingly *jaay*, as in 11.2.3.3 (5c); a proto-form $*jaawy$ is indicated.

(5)	KI	imperative = indicative
	a.	grab, grasp, catch <i>jaaw</i> (3.98.0272)
	b.	<i>jaa = yt\$</i> 'grab it (you pl.)!' (3.98.0272; Anderton 1988:104)

Athematic verbs with causative suffixes have two types of imperative. In both, the causative *-n* appears in the imperative, but not in the indicative form. For the *a*-final roots with causatives in *-n*, the singular imperative is the same as the causative, as in (6), while verbs ending in *-ea7*, seen in (9), below, appear in the imperative in what is probably their full underlying form, with *-ea7n*.

(6)	KI		imperative	causative	non-causative	
	a.	cook	<i>kwaha-n</i>	<i>kwaha-n</i>	<i>kwar</i> ‘be cooked’	(3.98.0234)
	b.	make	<i>kyma-n</i>	–	<i>kym</i>	(3.98.0273)
	c.	separate	<i>naa7ka-n</i>	<i>naa7ka-n</i>	<i>naa7ak</i> ‘become apart, separate selves’	(3.98.0475)

The verb *kym(a-)* ‘make’ in (6b) occurs in causative form in the imperative (6c) and when suffixed, as in (7). Otherwise the unsuffixed (non-causative) form *kym* is used.

(7)	KI	<i>kii-tsa-j</i>	<i>kyma-n-i7aa-t\$</i>	
		house-ABS-ACC	make-CAUS-AGTV-ABS	
		‘carpintero (carpenter – one who makes a house)’ (3.98.0283)		

Contrast the two homophonous verbs *kym(a-)* ‘make’ in (6c, 7) and ‘spill, empty’ in (9d), below.

The verb *mak* ‘give’ (8) has two imperative forms, one of which is based on a theoretical causative *maka-n**, unattested in the indicative. No suffixed forms analogous to those for *kym* ‘make’ have been encountered.

(8)	KI	imperative	indicative	
	give	<i>mak</i> ~ <i>maka-n</i> ‘give it (to X)!’	<i>mak</i>	(3.98.0357)

For verbs ending in *-ea7*, the singular imperative appears with the presumably underlying *n* of the causative suffix, which is lost word-finally in the indicative forms.

(9)	KI	imperative	causative	non-causative
	a.	blow on	<i>puh-ea7n</i>	<i>puh-ea7(n)</i> (3.98.0211)
	b.	bury	<i>kam-ea7n</i>	<i>kam-ea7(n)</i> (3.98.0268)

- c. empty, spill *kym-ea7n* *kym-ea7(n)* *kym* (3.98.0213)
 d. start a fire *kwat\$-ea7n* *kwat\$-ea7(n)* (3.100.0638)

Verbs with *-nin* causatives preserve this suffix without adjustment in the imperative, a phenomenon attested only by the forms in (10), but presumably regular. Note that *tuunin* in (10b,c) is the *-nin* causative of *tuun* ‘run’ (*tuun-nin* > *tuu-nin*).

- (10) KI imperative = indicative
 a. make dance *tuhtu7-nin* (3.100.0567)
 b. make run *tuu-nin* (3.100.0502)
 c. *tuu-nin=yt\$* ‘(You pl.) make it run!’ (3.100.0502)

The imperatives of some short verbs show final *h* (11a,b,d) or *7* (11a,c) and the base-changing verbs *kim* ‘come’ and *mi* ‘go’ have “long-form” imperatives (11c,d).

- (11) KI imperative indicative
 a. put down, put on *tah ~ ta7 ~ ta* *ta ~ tav-* (3.98.0094, 3.100.0622)
 b. shoot *muh* *mu* (3.98.0146)
 c. come *kiva ~ kiva7* *kim* (3.100.0388)
 d. go *meah* *mi* (3.98.0270)

A comparison with SE is of interest here. All “base-changing” verbs in SE can be accounted for as the result of purely phonological processes involving the indicative suffix except for *kiva* ‘come here!’, the cognate of the KI imperative *kiva* (11c). The corresponding indicative is SE *kim(a)* ‘come’, which is unattested in imperative use.

In addition to the above, there are other minor irregularities, perhaps reflecting incomplete documentation of base variants.

- (12) KI imperative indicative
 a. stab, stick *tsykyn* *tsyk* (3.100.0506)
 b. work *hu7eahaw* *hu7eaha* (3.98.0269)

Plural imperatives show the imperative plural clitic = (y)t\$, placed at the end of the first word of the construction, as in (13). (= t\$ appears after a vowel or a vowel + glottal stop, = yt\$ after other consonants.)

- (13) KI *Kaj=vym=yt\$ hii.*
 PROH = 2 > 3PL = IMP.PL see
 ‘Don’t you pl. look at them!’ (3.98.0351; Anderton 1988:193) [= 11.3.1 (4b)]

Most commonly in KI = (y)t\$ appears after the form that corresponds to the singular imperative. First-person plural imperatives also have = (y)t\$ and exhibit the first person hortative subject prefix *tsa-*.

- (14) KI imperative indicative
 a. *tsi7* ‘pick it up!’ (3.98.0256) *tsi7* ‘pick s.th. up’
 b. *tsi7=t\$* ‘pick it up (pl.)’ (3.98.0256)
 c. *tsa-tsi7=t\$* ‘let’s pick it up’ (3.98.0256)
- (15) KI a. *haajin* ‘rest!’ (3.98.0217) *haajin* ‘rest’
 b. *haajin=yt\$* ‘rest (pl.)!’ (3.98.0217)
 c. *tsa-haajin=yt\$* ‘let’s rest’ (3.98.0217)

Hortatives sometimes include a future-tense clitic, as in (16). In these examples the hortatives occur with the indicative form of the verb, not the imperative.

- (16) KI a. *Tsa-ki(m)=mat=yt\$.*
 1PL.HORT-come = FUT = IMP.PL
 ‘Vamos a venir. (Let’s come.)’ (3.98.0060; Anderton 1988:353)
- b. *Tsa-mi=mat=yt\$.*
 1PL.HORT-go = FUT = IMP.PL
 ‘Vamos ir. (Let’s go.)’ (3.98.0359)

c. *Tsa-muksyk = mat = yt\$.*

1PL.HORT-crowd.in = FUT = IMP.PL

‘No vamos a caber (We’re not going to fit in’), there are lots of people in the room and no room for any more of us to get in.’ (3.100.0692) (The sense seems to be: ‘Let’s try to crowd in anyway.’)

For comparison, the SE cognate of $= (y)t\$$ appears as a second person imperative pronominal $= t\$$ (cf. the 2PL indicative $= mt\$$) and also as part of the 1PL hortative pronominal *chyt\$*.¹²⁸

KI has a special prohibitive *kaj* (in (13) and (17)) used with imperatives, instead of the negative *naw* used elsewhere. (In SE, the prohibitive is *qaj7*, while the negative is unglottalized *qaj*.) With intransitive verbs, an augment *-m* appears, perhaps a plural marker. This is strongly reminiscent of the SE 2PL indicative $= mt\$$ mentioned above.

(17) KI a. *Kaj = tsi7 hiu.*
 PROH = 2 > 1SG look.at.IMP
 ‘Don’t look at me!’ (3.98.0351)

b. *Kaj = m = yt\$ mea.*
 PROH = PL(?) = IMP.PL go.IMP
 ‘¡No vayan! (Don’t go pl.!)’ (3.98.0351)

Also like SE, KI does not permit accusative case suffixes on nominal objects of imperative verbs. Unfortunately there are no attestations of prohibitive constructions with nominal objects; in SE, those objects do have accusative suffix. (18a,b) show the contrasting unmarked and suffixed noun object.

(18) KI a. *Nyk-k-i my-\$it\$a.*
 close-K-CAUS.IMP 2SG-mouth
 ‘¡Ciérrate la boca! (Shut your mouth!)’ (3.98.0238)

¹²⁸ Note that SE imperative pronominals are not separately covered above in 11.2 since they do not figure as part of the verb morphology as they do in KI; in SE they function at the clause level within the auxiliary and are discussed in 8.2.

- b. *A-kwiots-k* *a-\$it\$a-j*.
 3SG-bends-K.CAUS 3SG-mouth-ACC
 ‘He protrudes his lips to one side’ (3.98.0215)

11.4. INFLECTION IN MAIN-CLAUSE COASTAL CUPAN VERBS. The Cupan languages exhibit more complex inflection in the verb construction than do the Serran languages and TV. LU has the largest inventory of tense-aspect suffixes among Takic languages; many of these are documented for AC as well. However, unlike Inland Cupan, Coastal Cupan has no pronominal marking in main-clause verb constructions. Subjects, which can be zero, especially in the third person singular, are encoded by either second position clitics or independent pronouns and nouns. There are no object prefixes or proclitics. Objects suffixed for accusative case, must appear in transitive sentences, whether pronouns, demonstratives, or lexical items.

11.4.1. VERB CLASSES AND TENSE SUFFIXES. In contrast to the absence of pronominal prefixes in main-clause verb constructions, the tense-aspect inflection of verb constructions in LU is the most elaborate system found in the Takic languages. Table 11.4.1 is adapted from Elliott (1999:54-60). We give in parentheses some of Elliott’s inflection numbers to which the inflections in his dictionary entries are keyed. We have changed some of Elliott’s labels for the suffixes. No numbers are assigned to suffixal complexes that Elliott did not include in his tables. While Elliott distinguishes athematic verbs with final *a* from athematic verbs ending in other vowels, we do not make this distinction, which is unnecessary when the underlying form of the intransitive thematic suffix is understood to be *-ax*, not *-a* (see 10.4.1). The division into two athematic classes is also unnecessary since the difference between these putative classes is entirely phonological, not a matter of lexical assignment (see below).

Examples from the Hyde texts (Hyde & Elliott 1994), and from texts in Kroeber and Grace (1960) appear in the sections below to illustrate the LU tense-aspect system. On occasion, we cite examples longer than single sentences, to better elucidate the contrasts in meaning in the system of suffixes, and to point out problems and ambiguities. Many of the suffixes are documented for AC as well; these will be illustrated in examples below. The AC examples, from the Harrington notes, are all very short.

Table 11.4.1. Luiseño inflectional suffixes in the main clause

	thematic <i>-a(x)</i>	thematic <i>-i</i>	athematic vowel final	athematic consonant final	irregular
Elliott (1999) verb class	Class I	Class II	Class III	Class IV	Class V
	'be thrown away'	'throw away'	'fight'	'accuse'	'come, travel'
present singular (3)	<i>wich-a-q</i>	<i>wich-i-q</i>	<i>nawvu-q</i>	<i>na7ajun-q</i>	<i>munáa</i>
present plural (4)	<i>wich-a-an</i>	<i>wich-i-wun</i>	<i>nawvu-wun</i>	<i>na7ajun-wun</i>	<i>munáa</i>
recent past sg.	<i>wich-a-qat</i>	<i>wich-i-qat</i>	<i>nawvu-qat</i>	<i>na7ajun-qat</i>	<i>mon-qat</i>
recent past pl.	<i>wich-a-qatu-m</i>	<i>wich-i-qatu-m</i>	<i>nawvu-qatu-m</i>	<i>na7ajun-qatu-m</i>	<i>mon-qatu-m</i>
past perfective (?)	<i>wich-ax-muk</i>	<i>wich-i-muk</i>	<i>nawvu-muk</i>	<i>na7ajun-muk</i>	<i>mon-muk</i>
past perfective 1 (5)	<i>wich-ja</i>	<i>wich-jax</i>	<i>nawvu-x</i>	<i>na7ajun-ax</i>	<i>moo7un</i>
past perfective 2 (6)	<i>wich-a</i>	<i>wich-ax</i>	–	–	<i>mon-muk</i>
past imperfective (11)	<i>wich-a-qu\$</i>	<i>wich-i-qu\$</i>	<i>nawvu-qu\$</i>	<i>na7ajun-qu\$</i>	<i>mon-quí\$</i>
usitative (12)	<i>wich-uk</i>	<i>wich-i-k</i>	<i>nawvu-k</i>	<i>na7ajun-uk</i>	<i>mun-úk</i>
habitual, counterfactual (9)	<i>wich-ax-ma</i>	<i>wich-i-ma</i>	<i>nawvu-ma</i>	<i>na7ajun-ma</i>	<i>mon-ma</i>
immediate future sg. (18)	<i>wich-ax-lut</i>	<i>wich-i-lut</i>	<i>nawvu-lut</i>	<i>na7ajun-lut</i>	<i>mon-luwut</i>
Immediate future pl.	<i>wich-ax-kutu-m</i>	<i>wich-i-ktu-m</i>	<i>nawvu-ktu-m</i>	<i>na7ajun-kutu-m</i>	(?)
future perfective (10)	<i>wich-a-an</i>	<i>wich-i-n</i>	<i>nawvu-n</i>	<i>na7ajun-an</i>	<i>mon-ma-an</i>
future imperfective	<i>wich-a-ma-an</i>	<i>wich-i-ma-an</i>	<i>nawvu-ma-an</i>	<i>na7ajun-ma-an</i>	<i>mon-ma-an</i>
imperative sg.	<i>wich-ax</i>	<i>wich-i</i>	<i>nawvu</i>	<i>na7ajun</i>	<i>munáa</i>
imperative pl. (8)	<i>wich-ax-a-m</i>	<i>wich-i-ja-m</i>	<i>nawvu-ja-m</i>	<i>na7ajun-ja-m</i>	<i>mon-ma</i>

11.4.2. NONFUTURES IN COASTAL CUPAN. Kroeber and Grace (1960:150) described the LU present-tense suffixal system *-q ~ -qa / -an ~ -wun* as “present-aorist [...]. This may refer to present, immediate past (today), or indefinite time.” This range of nonfuture meanings is attested in Hyde and Elliott’s (1994) texts as seen in (1).

The LU present tense is used with hortative *hani7 = cha* ‘let’s go’, as in (1d). (1e,f) show the “aorist” sense, while (1g-i) illustrate the present-tense suffix being used for the immediate past, which is perhaps best thought of as encoding events prior to the moment of speaking, but relevant to what is being said as motivation or some other contingent relationship. In the examples in (1g,h) the protagonist, Raven, is in the process of realizing that his cousin Taakwish, a ball-lightning-like monster, has probably eaten his (Raven’s) son, and that he must plan to recover his son’s head from Taakwish’s cave. In (1h), Wildcat is searching for his brother, and this is the answer to one of his inquiries, which is clearly relevant to his ongoing search. Example (1j) shows *-qa*, the post-consonantal variant of the present tense singular suffix.

- (1) LU a. *Ivi7 pi7 iva7 xil-ax-munaa.*
 PROX and here rain-INTR-MOVING.PRS
 ‘It’s raining.’ (H&E 877)
- b. *Wuko7-a-q = up.*
 arrive-INTR-PRS.SG = 3SG
 ‘It’s coming (of thunder, upon having just seen a flash of lightning).’ (H&E 878)
- c. *Ne-j qwa7-wun.*
 1SG.PRO-ACC eat-PRS.PL
 ‘They are eating me.’ (H&E 1308)
- d. *Hani7 = cha ngee-wun.*
 HORT = 1PL go.away-PRS.PL
 ‘Let’s go in.’ (H&E 1012)
- e. *Qaj o-j neqp-i-q kun po7 mijkinga.*
 NEG 2SG.PRO-ACC fight-TR-PRS.SG QUOT FOC ever
 ‘It never fights you, they say.’ (H&E 884)
- f. “Dipper” *pomum jax-wun momja-m.*
 3PL.PRO say-PRS.PL White.person-PL
 ‘White people say “The Dipper.” ’ (H&E 1297)
- g. *Tee no-kaamay michí-jk ngee-q.*
 perhaps 1SG-son somewhere-DAT go.away-PRS.SG
 ‘I guess my son has gone off somewhere.’ (H&E 1301)
- h. *Hot-i-j-q po-j. Po-j hila7-i-q.*
 get-TR-GO&-PRS.SG 3SG.PRO-ACC 3SG.PRO-ACC eat-TR-PRS.SG
 ‘He got him. He ate him.’ (H&E 1299)
- i. *Qaj chaam tiiw-i-wun.*
 NEG 1PL.PRO see-TR-PRS.PL
 ‘We didn’t see him.’ (H&E 1280)

- j. *Pi7 chuxi7-qa putoowili wuna7 palvun-la jo-t po-mij-qala*
 and show-PRS.SG still DIST.LOC valley-ABS big-ABS 3SG-be-DS
Mission Hills po-maacha-nga.
 3SG-back-LOC

‘But it shows still that there was a big canyon behind Mission Hills.’ (H&E 837)

The corresponding tenses in AC are nonfutures. They are often glossed as past. The AC nonfuture-tense suffixes are singular subject *-q* (in (2a,b) and plural subject *-on* (with thematic intransitives) and *-won ~ -wan* (with transitives and athematic verbs). Note that the AC form of the motion suffix in (2b), *-man*, lacks the final long vowel of the LU equivalent, *-munaq*, seen in (1a). The athematic and thematic intransitives appear in (2c); a thematic transitive is shown in (2d). The Spanish and English glosses given by Harrington include both present and past perfect inflection, suggesting the same tense range as suggested by Kroeber and Grace (1960) for the LU suffixes, above.

- (2) AC a. *Amu7=an na-7aach-a huq-ana-q*
 already = 1SG 1SG-horse-ACC run-CAUS-NFUT.SG
 ‘I [already] raced my horse.’ (3.122.0222)
- b. *Na-7aach=p mará7-x-man, na-7aach=p moy7-q.*
 1SG-horse = 3SG sweat-INTR-MOVING.NFUT 1SG-horse = 3SG be.tired-NFUT.SG
 ‘Mi caballo viene sudando, mi caballo está cansado. (My horse comes sweating, my horse is tired.)’ (3.123.0584)
- c. *Chaa7am=cha mux-won pe7 amu7 chiw7-x-on.*
 1PL.PRO = 1PL gamble-NFUT.PL and now lose-INTR-NFUT.PL
 ‘We were gambling and we lost. (We were gambling and now we have lost.)’
 (3.123.0472)
- d. *Ni-j=pum mol-a-won.*
 1SG.PRO-ACC = 3PL remember-TR-NFUT.PL
 ‘They remember me’ (3.123.0469)

A common present-tense construction with an immediate past sense in LU is encoded with the present tense singular of the copula, *mij-q* with a nominalized complement, as in (3).

- (3) LU *Tee om o-hila7-i mij-q no-kaamaj-i*
 DUB 2SG.PRO 2SG-eat-TR.NMLZ be-PRS.SG 1SG-son-ACC
 ‘Perhaps you have eaten my son.’ (H&E 1302)

A past perfect construction of the same type uses the past imperfective of the copula, *mij-qu\$*, as in (4).

- (4) LU *Punee-ji Taakwi-sh po-qwa7 mij-qu\$*
 3SG.ANIM.PRO-ACC prsn-ABS 3SG-eat.NMLZ be-PST.IPFV
 ‘The Taakwish had eaten him.’ (H&E 1309)

Present-tense relational clauses are usually verbless (see chapter 9), a point that is important for understanding some types of main-clause inflection. For instance, in (5) *po-7oov-i* ‘what he gave’ is the same complement construction as *o-hila7-i* ‘what you ate’ in (3). However, since the reading is present tense, not immediate past, there is no overt copula.

- (5) LU *Ivi7 ne-jk po7 po-7oov-i Ø*
 PROX 1SG-DAT DET 3SG-give-TR.NMLZ be
 ‘This is what he gave me.’ (H&E 1328)

11.4.3. PAST-TENSE SUFFIXES. Especially notable in the LU main-clause verb construction is the proliferation of suffixes encoding past tense, for which six suffixes, including the “usitative”, are documented. Kroeber and Grace (1960:150-52), citing unpublished notes by Philip Sparkman from about 1905, describe the system and label the past-tense suffixes as seen in (1), although they observe that some of Sparkman’s “tenses” “are actually aspectual in meaning” (1960:152). Jacobs (1975:85) adopted the Kroeber and Grace “recent past” labels. However, as will be shown below, the suffixes labeled “recent past” can appear in sentences about events of the mythic times, so the label is somewhat misleading. Mythic time, though, is of a different sort from the everyday time of

experience with apparently different rules of tense usage. An exploration of the difference goes well beyond the concerns of our comparative grammar. For reference and in anticipation of the discussion below, we also include in (1) our labels for the suffixes.

- (1) LU a. *-muk* recent past [...] including from (day before) yesterday to about a month (“two to three weeks”) ago (K&G 151) [past perfective (PST.PFV)]
- b. *-qa-t / -qa-tu-m* recent past imperfect (K&G 151) [RPST]
- c. *-qu\$* past durative. Sparkman’s “remote past imperfect, back from two to three weeks ago” (<-kkuš>, K&G 151) [past imperfective (PST.IPFV)]
- d. *-ja ~ -jax ~ -x* Past punctual, Sparkman’s “past perfect.” (K&G 152) [past perfective (PST.PFV)]

11.4.3.1. PAST PERFECTIVE -MUK. The suffix *-muk*, documented by Kroeber and Grace (1960) and Jacobs (1975), appears in the speech of Villiana Hyde, principal consultant for Elliott and for many other linguists, only in her songs,¹²⁹ which are fixed texts where archaic language appears. Mrs. Hyde also used *-muk* only for a few irregular verbs, such as *aaw-* ‘be, dwell (animate sg. subj.)’ and *mon* ‘travel, come, etc.’, seen in Table 11.4.1, above. The examples in (1) below are from her recitation of the lyrics of a song about the building of the first ceremonial house by the mythic characters Deer and Antelope, so *-muk* here refers to the creation time and not at all to the “recent past.” The syllable *la7* in the examples is apparently a vocable (VOC).

- (1) LU a. *Ngoox-ax-muk pi7 la7 kwooj-ax-muk.*
grind-INTR-PST.PFV and VOC water.stand-INTR-PST.PFV
‘It shook and the waters stood still.’ (H&E 1123)
- b. *Ngiin-ax-muk pi7 la7 tooj-ax-muk.*
rumble-PST.PFV and VOC rumble-INTR-PST.PFV
‘It rumbled and rumbled.’ (H&E 1123)

¹²⁹ Some of Mrs. Hyde’s songs may have come from her brothers, who were ritual experts. Others may be of her own composition. While some of her songs are in the same genres as those in Harrington’s notes (in 3.120), none of them have the same wording.

The suffix *-muk* is almost certainly the base for the past relativizing suffix *-mukwish*, discussed in 12.4. The sense of *-muk* is probably primarily aspectual, but its exact function cannot be determined from the available data. However, it must satisfy the “realis” criterion since it appears with the realis modal =*il*, as in (2).

- (2) LU a. *Xil-ax-muk* = *p* = *il*.
 rain-INTR-PST.PFV = 3SG = REAL
 ‘It was raining.’ (K&G 151)
- b. *Noo* = *n* = *il* *nech-ax-u-t* *mijx-muk*.
 1SG.PRO = 1SG = REAL pay-INTR-(NMLZ?)-ABS be-PST.PFV
 ‘I was [the one who was] paid already.’ (K&G 151)

11.4.3.2. RECENT PAST -QAT(U-M) AND PAST IMPERFECTIVE -QU\$. The recent past (RPST) suffix *-qat* (pl. *-qatu-m*) has an imperfective sense. It is semantically quite distinct from the perfective immediate past (IPST) of SE, which refers to having just now done something. The notion of immediacy is an important component of the IPST.

The suffix *-qat(u-m)* is in origin a suffix sequence originating as a nominalization, with absolutive *-t(o-)* and plural *-m*. Elliott (1999) does not include this suffix in his tables of verb inflection. The form is much the same as the *-qa-t* and *-qa-tV-m* suffix sequences used in other Tadic languages for immediate future in main clauses and in subordinate clauses of purpose. (The immediate future sense in LU is conveyed by the innovative singular suffix sequence *-lu-t* and its suppletive plural *-ku-tu-m*.) The suffix *-qat(u-m)* is also identical in form to the present-tense suffix in LU relative clauses.

Example (1) provides an example of *-qat* in a main clause. Other main-clause usages are seen below in (3a,d).

- (1) LU *Om* = *\$u* *qaj* *hii-ngaj* *hajám-i-qat* ?
 2SG.PRO = Q NEG what-ABL prepare-TR-RPST
 ‘Why aren’t you getting ready?’ (H&E 607)

In subordinate clauses *-qat(u-m)* shows nominal inflection including accusative case, as in (2), which is from a song (see 12.4).

- (2) LU *Hej-a-qat-i* *wal-a-qat-i* *no-jaax* *no-jaax*.
 dig-INTR-RPST-ACC bury-INTR-RPST-ACC 1SG-try 1SG-try
 ‘To dig, to bury, I try, I try.’ (from a song) (H&E 1139)

It is difficult to distinguish any difference in meaning between *-qat(um)* and the other imperfective past suffix, *-qu\$*, in Mrs. Hyde’s usage. The two are clearly distinct, since in her speech the realis modal =*il* appears only in clauses with *-qu\$*, and never with *-qat*. Mrs. Hyde can use both *-qat(um)* and *-qu\$* for the imperfective of mythic times, as seen in (2). Thus the “recent past” gloss assigned by Kroeber and Grace (1960) and Jacobs (1975) needs elaboration. Just as the PROX2 demonstrative, which prototypically refers to something within the purview of second person, can be used in reference to something distant, in contrast with something still farther off (cf. 6.0 (1)), so too it may be that the “recent” past can refer to sometime rather remote from the time of speaking, but a time that is recent within the context of a story.

The examples in (3) all come from a single text, a story in which the Pleiades are attractive young women. Coyote kills Wildcat, their husband, disguises himself in Wildcat’s skin, and takes up residence in their comfortable bed as their husband. He climbs back and forth to earth on the Milky Way. When the women discover that he is not their real husband, they kill him by cutting his magical ladder. The sentences in (3) are given in the same order as in the text, but they are not immediately consecutive. In (3), *-qat(um)* and *-qu\$* are used for orientation or “scene-setting” in the Pleiades narrative. It is possible that *-qat(um)* means something like “deep background,” in contrast to the more immediate scene-setting elements encoded by *-qu\$*.

- (3) LU a. *Cheexaji-m* *pumóm* *tuupa-nga* *qal-qatu-m*.
 Pleiad-PL 3PL.PRO sky-in dwell(anim.pl.)-RPST-PL
 ‘The Pleiades lived in the sky.’ (H&E 1290)
- b. *Pi7* *choo7unu-m* *qal-qu\$* *ajaalinik*.
 and all-PL live(anim.pl.)-PST.IPFV well.
 ‘And all of them lived well.’ (H&E 1290)

- c. *Ano7 aaw-qu\$.*
 Coyote be.present(anim.sg.)-PST.IPFV
 ‘Coyote was there.’ (H&E 1290)
- d. *Mol-i-k puné-j Cheexaji-m-i punee-m-i*
 remember-TR-USIT 3SG.INAN.PRO-ACC Pleiad-PL-ACC 3ANIM.PRO-PL-ACC
ijqal iis-i-qat pujaamangaj.
 just spy-TR-RPST always
 ‘He remembered that (his desire to live with the women) as he was always
 spying on the Pleiades.’ (H&E 1291)

AC has past imperfective *-qwa\$* (3a,b) as well as recent past *-qat* (3c).

- (3) AC a. *Miisi-nga qal-qwa\$ ataax-a-m.*
 mass-LOC be.there-PST.IPFV person-INCR-PL
 ‘The people were at mass [when the earthquake happened in 1812].’
 (3.122.0219)
- b. *Poo7 = kon = a takwaj-ja nechma-l mii7-qwa\$.*
 3SG.PRO = QUOT = DPST die-INTR.PST.PFV old.woman-ABS be-PST.IPFV
 ‘She died because she was very old.’ (3.122.0203)
- c. *Noo = n qaj ajall-a7-qat wom7 tuukmo-nga mij-qal.*
 1SG.PRO = 1SG NEG know-TR-RPST already night-LOC be-DS.PTCP
 ‘Yo no sabía que era tan noche. (I did not know that it was already
 nighttime.)’ (3.123.0442)

11.4.3.3. PAST PERFECTIVE *-(J)A(X)*. Far more common than past perfective *-muk* are the perfectives that Elliott (1999) calls “simple past.” As seen in Table 11.4.1 above, there are several forms of this morpheme.

In the first case, the past perfective construction is marked by truncation of the thematic suffixes, a process also found with the k-class verbs in SE. In both LU and AC intransitive thematic verbs lose the thematic suffix *-ax* and have a past perfective suffix *-ja* or *-a*. LU examples include *wuko7-ja* ‘arrived’ in (5a) and *kari7-ja* ‘climbed up’ in (6d), below. Transitive thematic past perfectives, such as *oov-ax* ‘gave’, as seen below in (4b),

and *\$iw-ax* ‘skinned’ and *wax-ni7-ax* ‘dried’, in (5c,d), lose thematic *-i* and have a past perfective suffix *-jax* or *-ax* (the differences between these pairs is unclear). Athematic verbs with final vowels retain those vowels and add a suffix *-x*. Consonant-final athematic verbs with CVCVC roots have the allomorph *-ax*. These apparent past perfective tense-aspect suffixes in transitives like *oov-ax* and *\$iw-ax* probably are reflexes of the old thematic *k* left by truncation of the causative *-ina*, as in the SE completive, although forms like *wax-ni7-ax* and the past perfectives of athematic verbs make clear that they have been reinterpreted as inflectional suffixes.

A glottal stop infix, as seen in (1), appears in LU monosyllabic athematic verbs with final consonants and in some irregular verbs (cf. *moo7un* in Table 11.4.1), including verbs with the stress-attracting suffix *-j* (1e,f). This *-j* is different from the motion suffix *-j* (of *-ngi(m) ~ -j(m)*; cf. 10.4.2.2), which has no effect on stress. This reduplication echoes the completive reduplication of athematic verbs in SE.

(1)	LU	past perfective	verb stem
	a.	<i>aa7a\$</i> ‘bathed’	<i>aa\$</i> ‘take a bath’
	b.	<i>aa7aw</i> ‘lived (sg. animate)’	<i>aaw</i> ‘be, dwell, etc. (sg. animate)’
	c.	<i>haa7al</i> ‘searched’	<i>haal</i> ‘search’
	d.	<i>kuu7up</i> ‘slept’	<i>kup</i> ‘sleep’
	e.	<i>nguroo7uj</i> ‘it rumbled’	<i>ngurooj</i> ‘rumble, of thunder’
	f.	<i>\$awaa7aj</i> ‘whispered’	<i>\$awaaj</i> ‘whisper’

A number of common verbs, including all denominal verbs derived with *-chu ~ -lu*, form the past perfective by reduplication of the initial CV of the root, as seen in (2). Some verbs, like *\$awaaj* ‘whisper’ are attested with this reduplication (2f) and also with glottal stop infixation (1f). Again, these reduplicated past-tense verbs resemble the completive reduplications with athematic verbs in SE (see 10.2.3.10). Examples (2e,f) are given with Elliott’s (1999) *qw* spelling rather than Bright’s (1968) *kw*.

(2)	LU	past perfective	verb stem
	a.	<i>aa~7mu</i> ‘hunted’	<i>aamu</i> ‘hunt’
	b.	<i>hu~hlu</i> ‘made an arrow’	<i>huulu</i> ‘make an arrow’
	c.	<i>kii~kchu</i> ‘built a house’	<i>kiichu</i> ‘build a house’
	d.	<i>na~na7jawun</i> ‘accused’	<i>na7jawun</i> ‘accuse’

- | | | |
|----|-------------------------------|---------------------------|
| e. | <i>qwa~xwa</i> ‘ate’ | <i>qwa7</i> ‘eat’ |
| f. | <i>qwa~qwtáa</i> ‘woke up’ | <i>qwataa</i> ‘wake up’ |
| g. | <i>\$a~\$waj</i> ‘whispered’ | <i>\$awaaj</i> ‘whisper’ |
| h. | <i>\$u~\$wo7</i> ‘was afraid’ | <i>\$uwo7</i> ‘be afraid’ |
| i. | <i>jaa~ja</i> ‘ran’ | <i>ja7</i> ‘run’ |

The realis modal =*il* can appear with *-qu\$* and the past perfectives, as in (3). As noted above in 11.4.1.2.1, =*il* also appears with *-muk* ‘past perfective’. However, it does not appear with the “recent past” imperfectives in *-qat(um)*.

- (3) LU a. *Iva7=up=il axáninik mij-qu\$.*
 PROX = 3SG = REAL like.that be-PST.IPFV
 ‘This is what happened.’ (H&E 1327)
- b. *Ivi7=up=il ne-jk oov-ax.*
 PROX = 3SG = REAL 1SG-DAT give-TR.PST.PFV
 ‘He gave them to me.’ (H&E 1327)

Past perfective constructions appear as predicates on the main line of narratives, the narrative structure that develops the sequence of actions. The examples in (4) are main line predicates of this type, again from the Pleiades story. The verb *mo-mukun* ‘killed’ in (4b), from *mokna* ‘kill’, is an example of a reduplicated past perfective, like those in (2), with a slightly irregular form.

- (4) LU a. *Pa7=kuna7 ano7 iixmaqanik wuko7-ja poomu-tu.*
 then = QUOT coyote finally arrive-INTR.PST.PFV 3PL-DAT
 ‘And so the coyote reportedly went to them.’ (H&E 1292)
- b. *Tuuku-t-i=kuna7 mo~mukun.*
 wildcat-ABS-ACC = QUOT PST.PFV~kill
 ‘He reportedly killed the wildcat.’ (H&E 1292)
- c. *Pa7 \$iw-ax po-j.*
 then skin-TR.PST.PFV 3SG.PRO-ACC
 ‘Then he skinned him.’ (H&E 1292)

- d. *Pa7=kuna7 wax-ni7-ax puné-j tuuku-t*
 then = QUOT dry-CAUS-TR.PST.PFV 3SG.INAN.PRO-ACC wildcat-ABS
po-taava-j.
 3SG-skin-ACC
 ‘Then he dried the wildcat’s skin.’ (H&E 1292)

The usitative suffix *-uk* ~ *-k* is used for habitual past action. However, it is not always clear why Mrs. Hyde chooses the usitative instead of the past imperfective with *-qu\$*. The examples below are from the “Pleiades” text seen also in 11.4.3 (2) and in (4). A usitative verb also appears in 11.4.3 (2d). The examples in (6) are consecutive sentences. Examples (5a,b,c) all seem to express precisely the same kinds of background ideas, building up to the final sentence with a past perfective, yet the usitative *-uk* appears in (6a,b), and *-qu\$* is seen in (5c). The next sentence is (5d), with the switch to the simple past as the main line of the narrative resumes.

The intransitive thematic suffix *-ax* is lost before the usitative suffix *-uk* (as in (5b)), but the transitive suffix *-i* is not, as in (5a), where the usitative appears as *-k*. The vowels of vowel-final athematic verbs are lost before *-uk*.

- (5) LU a. *Pumóm wor-i-k awój puné-j.*
 3PL.PRO let.down-TR-USIT sometimes 3SG.INAN.PRO-ACC
 ‘They would let it (the rope) down sometimes.’ (H&E 1294)
- b. *Pi7 kari7-uk waanawu-nga.*
 and climb-INTR.USIT Milky.Way-LOC
 ‘And he would climb up on the Milky Way rope.’ (H&E 1294)
- c. *Ano7 a\$ún-nga ijqu\$ wor-a-qu\$ kari7-a-qu\$.*
 coyote 3SG.INAN-LOC also go.down-INTR-PST.IPFV climb.up-INTR-PST.IPFV
 ‘The coyote would also go down and climb up on it.’ (H&E 1294)
- d. *Pa7=kuna7 kari7-ja supl-ish.*
 then = QUOT climb.up-INTR.PST.PFV one-time
 ‘And one time he climbed up.’ (H&E 1294)

In the AC materials the only past-perfective suffixes documented are *-ja* (with thematic intransitives in *-x*) and *-ax* (with thematic transitives in *-a*). There are no examples of past perfectives of athematic verbs, or of usitatives. Examples of attested suffixes appear in (6).

- (6) AC a. *Jomaax=kono ngiin7-ja wona7 San Xwaan-nga.*
 long.ago = QUOT earthquake-INTR.PST.PFV DIST.LOC San Juan-LOC
 ‘Antes hubo temblor en SJC. (Long ago [in 1812] there was an earthquake at San Juan Capistrano.)’ (3.122.0219)
- b. *Miisa-nga qal-qwash ataax-a-m, pa7 = kon = a*
 mass-LOC be.there-PST.IPFV person-INCR-PL then = QUOT = DPST
ngiin7-ja pa7 = kon = a = m \$ott-ja
 earth.quake-INTR.PST.PFV then = QUOT = DPST = PL crush-INTR.PST.PFV
ataaxa-m.
 person-PL
 The Ind[ians]s were at mass, then the earth quaked, then la gente se aplastaron (the people were crushed). (3.122.0219)
- c. *\$ott-ax atax-m-a pa7 = kon = a.*
 crush-TR.PST.PFV person-PL-ACC then = QUOT = DPST
 ‘Entonces es que aplastó a la gente. (It then crushed the people.)’ (3.122.0219)

11.4.4. FUTURE TENSES. The diverse future tenses are illustrated below in (1) through (4), with some context.

The examples in (1) show future perfectives with the suffix *-an* ~ *-n*. (1c) shows the irrealis modal with the future tense. This modal is optional in LU, although it is required in CU (and recall that the future tense in SE requires the irrealis modal = *t(a)*). (1d) shows that the *x* of the intransitive thematic suffix is lost by regular rule (cf. 4.4.7) before the future perfective *-an*. On the other hand, the morphophonemic reason why the *a-a* sequence seen in (1a) does not coalesce into just *a* is unknown.

- (1) LU a. *Tuuku-t-i noo mokna-an.*
 wildcat-ABS-ACC 1SG.PRO kill-FUT
 ‘I’m going to kill that wildcat.’ (H&E 1291)
- b. *Pi7 qaj wunaa-lu-m unán-i-n awoo hax po-mij-qala.*
 and NEG DIST-ABS-PL find.out-TR-FUT other INDF.HUMAN 3SG-be-DS
 ‘They won’t find out that someone else has taken his place.’ (H&E 1291)
- c. *Po-j = cha = pu qaj xaal-i-n po-wuko7-ax-i.*
 3SG.PRO-ACC = 1PL = IRR NEG allow-TR-FUT 3SG-arrive-INTR-ACC
 ‘We won’t allow him to come back.’ (H&E 1296)
- d. *Wuko7-a-an wuna7 mixee-l.*
 arrive-INTR-FUT DIST.LOC pigeon-ABS
 ‘A pigeon will arrive.’ (H&E 1341)

In (2) we see examples of the immediate future *-lu-t/- (ku-)tu-m*. The suffix *-lu-t* may be related to the purposive motion suffix *-lu* (illustrated in 10.4 (9)). Like *-qa-t(u-m)*, these suffixes have nominal inflection, with an absolutive suffix *-t(u-)* and plural *-m*. Also like *-qa-t(u-m)*, they can appear in relative clauses, which will be discussed in 12.4. But they can also be surface independent predicates as in (2), which we note again originate as underlying verbless complements. This range of usage of immediate-future verbs also appears in the other Takic languages.

- (2) LU a. *Noo = nu = pu hatí7a-an. Po-j tuyjúng-i-lu-t Ø tee*
 1SG.PRO = 1SG = IRR go-FUT 3SG.PRO-ACC ask-TR-IFUT.SG-ABS be DUB
qaj no-kaamaj-i po-hila7-i mij-q.
 NEG 1SG-son-ACC 3SG-eat-TR.NMLZ be-PRS.SG
 ‘I’m going to go. [I’m] going to ask him whether he has eaten my son or not.’
 (H&E 1300)
- b. *Cham = ch nech-ax-ku-tu-m Ø.*
 1PL.PRO = 1PL pay-INTR-IFUT.PL-ABS-PL be
 ‘We are about to be paid.’ (K&G 145)

Examples of the immediate future from Sparkman's notes, rechecked with Kroeber's consultant Felix Calac and given by Kroeber and Grace (1960), are seen in (3). Unlike the future perfective *-an ~ -n*, the immediate future suffixes do not appear with the irrealis modal *=pu* when the meaning is simply near-future. However, they can appear with *=pu* when the sentence is conjectural, as in (3b,d).

- (3) LU a. *Po-na7=up kii-chu-lu-t* \emptyset .
 3SG-father = 3SG house-VBLZ-IFUT.SG-ABS be
 'His father is going to build a house.' (K&G 67)
- b. *Po-na7=\$u=pu kii-chu-lu-t* \emptyset .
 3SG-father = Q = IRR house-VBLZ-IFUT.SG-ABS be
 'Perhaps his father is going to build a house.' (K&G 67)
- c. *Po-kaamaju-m=pum kii-chu-k-tu-m* \emptyset .
 3SG-son-PL = 3PL house-VBLZR-IFUT.PL-ABS-PL be
 'His sons are going to build a house.' (K&G 67)
- d. *Po-kaamaju-m=\$u=m=pu kii-chu-k-tu-m* \emptyset .
 3SG-son-PL = Q = 3PL = IRR house-VBLZ-IFUT.PL-ABS-PL be
 'Perhaps his sons are going to build a house.' (K&G 67)

The difference of meaning between the immediate future and the future perfective is not clear. (4a,b) are consecutive sentences in a text about the building of the first ceremonial house in mythic time. The first has the immediate future, while the second has the future perfective, although Hyde and Elliott's (1994) English translations are identical. The difference may lie in the fact that (4b), with the future perfective, is a polite request or directive (see 11.4.8), a context that would exclude the "be going to" immediate future. Note that Mrs. Hyde often uses contracted *-tu-m* 'immediate future plural' instead of *-k(u)-tu-m*.

- (4) LU a. *Pi7 chaam fiesta lvi7-i- \emptyset -tu-m* \emptyset .
 and 1PL.PRO fiesta make-TR-IFUT.PL-ABS-PL be
 'And we will have a fiesta.' (H&E 1266)

- b. *Pi7 om pumoom-i waw-i-n.*
 and 2SG.PRO 3PL.PRO-ACC invite-TR-FUT
 ‘And you will invite them.’ (H&E 1266)

The suffix *-maan* is a future imperfective, expressing duration in the future. Elliott (1999) describes it as a suffix sequence *-ma-an*, with *-ma* being the ‘habitual’ suffix seen below in 11.4.6. Kroeber and Grace (1960:33) and Jacobs (1975:86) also treat *-ma-an* as a sequence. Kroeber and Grace (1960:33) report a variant *-maxan* (seen in (5e,f,g)). Since *max* is the future of the irregular CU verb *hiw ~ qal ~ max* ‘be, dwell’, *-ma(x)an* may reflect a grammaticalization of this verb with an additional future suffix. This is not the only context where *axa* becomes *aa*; this process is also found in the formation of derived adjectives and nouns from intransitives with the nominalizing suffix from **-a7*, as in *juvátaat* ‘black’ from *juvát-ax-a-t* [black-INTR-ADJZ-ABS] (cf. 4.4.7, 14.14.4). Both yield exceptional long vowels in unstressed position. The unstressed double vowel provides phonological support for the agreement among the authors that this is a morphological sequence. Nonetheless, even though it almost certainly represents a sequence at least diachronically, we find it useful here to treat it as a unit.

- (5) LU a. *Winge7-maan ne-j pom-peew-i.*
 mistake -FUT.IPFV 1SG.PRO-ACC 3PL-friend-ACC
 ‘They’ll take me for their husband.’ (H&E 1292)
- b. *Po7 no-7aash mijx-maan.*
 DET 1SG-pet be-FUT.IPFV
 ‘That animal will be mine.’ (H&E 1324)
- c. *Po7 loov-i-maan wam7.*
 3SG.PRO be.good-TR-FUT.IPFV already
 ‘It will all be fine.’ (H&E 1325)
- d. *Pa7 pi7 om hel-ax-maan.*
 then and 2SG.PRO hide-INTR-FUT.IPFV
 ‘And then you’ll hide.’ (H&E 1345)

- e. *Nech-i-maxan = up om.*
 pay-TR-FUT.IPFV = 2SG 2SG.PRO
 ‘Thou wilt pay always.’ (K&G 33)
- f. *Man = up qaj woltu-maxan o-jo7-m-i o-na7-m-i.*
 but = 2SG NEG get.angry-FUT.IPFV 2SG-mother-PL-ACC 2SG-father-PL-ACC
 ‘But do not get angry at your mothers, your fathers.’ (K&G 201 5)
- g. *Pi7 = pu = ka jaaw-ax-maxan o-naachaxan hi-sh*
 and = 3SG = COND be.absent-INTR-FUT.IPFV 2SG-food INDF.INAN-ABS.ACC
poom-ik o-7oovi-pi.
 3PL-DAT 2SG-give-IRR.SUB
 ‘And it might happen that you have no food to give to them.’ (K&G 202 14)

All of the future suffixes are documented for AC. The immediate future suffixes, seen in (6), are *-lat* ‘singular’, *-ktam* ‘plural’. The future is *-an*. Unlike in LU, the *-x* ‘thematic intransitive’ suffix is not lost before *-an*, as seen in (7b).

- (6) AC a. *Noo moor-a-la-t na-tax Ø.*
 1SG.PRO kill-TR-IFUT.SG-ABS 1SG-REFL be
 ‘Yo me voy a matar. (I am going to kill myself.)’ (3.121.0783)
- b. *Jamaak-x-la-t Ø.*
 be.soft-INTR-IFUT.SG-ABS be
 ‘It is going to get soft.’ (3.123.0402)
- c. *Kiw-tal = kono = m kott-a-k-ta-m paveesa-tal men7 Ø.*
 alfalfa-INS = QUOT = PL cover-TRS-IFUT.PL-ABS-PL reed-INS or be
 ‘Ya van a techarlo arriba, o con alfalfa o con tule. (They are going to thatch it, either with wild alfalfa or reeds.)’ (3.123.0417)
- d. *Amom = \$a = m qaj maqa7-x-k-ta-m Ø.*
 2PL.PRO = Q = PL NEG lie.down-INTR-IFUT.PL-ABS-PL be
 ‘¿Uds. no van a dormir? (Aren’t you pl. going to go to sleep?)’ (3.123.0578)

Similarly, unlike in LU, the future imperfective (7) is always *-maxan*, never contracted to *-maan*.

- (7) AC a. *Hoo = na = pa qaal-maxan ex-nga.*
 INTRJ(?) = 1SG = IRR be-FUT.IPFV ground-LOC
 ‘Yo voy estar tirado en el suelo. (I will lie thrown on the ground.)’
 (3.123.0268)
- b. *Noo = na = pa moon-maxan amú7 patook7wala.*
 1SG.PRO = 1SG = IRR come-FUT.IPFV already morning
 ‘Yo voy a venir muy de mañana. (I will come very early in the morning.)’
 (3.123.0286)

11.4.5. HABITUAL -MA. The suffix *-ma* is glossed by Elliott (1999) as “habitual,” a usage seen in (1).

- (1) LU *Noo = n waam mon-ngi-ma.*
 1SG.PRO = 1SG far travel-GO&-HAB
 ‘I go far (every day).’ (H&E 1333)

It is also commonly used in “gnomic” expressions, expressions of timeless truths, as in (2).

- (2) LU a. *Momja-m oonu nginaal-i-ma.*
 White.person-PL PROX2 mispronounce-TR-HAB
 ‘White people pronounce it wrong.’ (H&E 1333)
- b. *Po7 choo7un-nga micha7 wol-ax-ma.*
 3SG.PRO every-LOC somewhere grow-INTR-HAB
 ‘It grows everywhere.’ (H&E 473)

Jacobs (1975:86) reports that *-ma* appears as *-max* in some varieties of LU spoken on reservations to the north of Rincon. He glosses the suffix as “usitative.”

Habitual *-ma*, seen in (3), is relatively well-attested in the AC corpus. Harrington (3.122.0208) observes, “Note that these *-ma* forms are used in general statements.”

- (3) AC a. Of a whale blowing they say *Puxx-a-ma paa-l echko-k.*
 blow-TR-HAB water-ABS high-DAT
 ‘Pallá soplidos parriba. (Over there blowings/blasts upward.) [It blows water high.]’ (3.123.0581)
- b. *Ngor-x-ma moj-nga iivt-nga hange7ma-la-m.*
 run(pl.)-INTR-HAB moon-LOC new-LOC young.men-ABS-PL
 ‘Los muchachos corren en luna nueva. (The young men run at the new moon.)’
 (3.122.0223)

11.4.6. COUNTERFACTUAL *-MA*. There is also a suffix *-ma* which is used to encode counterfactuals. This sense is so distinct from the habitual and gnomic meanings of habitual *-ma* that we believe two homophonous elements should be recognized. There is also a barely-attested clitic =*ma* which follows conditional =*xu* (see 8.3.4 (11)), probably of the same origin as counterfactual *-ma*.

The examples in (1) illustrate counterfactual *-ma*. Examples (3c,d) are the voice of Coyote in the Pleiades story of the seven sisters. Coyote plots to kill the sisters’ husband, Wildcat, and believes his plot will succeed.

- (1) LU a. *Pumoom-i no-pet-m-i no-paa\$-i tuyjúng-i-ma.*
 3PL.PRO-ACC 1SG-YoBr-PL-ACC 1SG-OlBr-ACC ask-TR-CFAC
 ‘They should have asked my younger brothers, my older brother.’ (H&E 235)
- b. *Hijx-ma =kun om o-\$uun, o-ki-j*
 say-CFAC = QUOT 2SG.PRO 2SG-heart 2SG-house-ACC
no-lom-i-qala oonu axáninik?
 1SG-knock.down-TR-DS PROX2 like
 ‘What would you think (what would your heart reportedly say) if I were to knock down your house like that?’ (Elliott 1999:338)

- c. *Noo = xu = n = pu wuná-l ja7á-sh mijx-ma.*
 1SG.PRO = DES = 1SG = IRR DIST-ABS man-ABS be-CFAC
 ‘Oh, I wish that I were that man.’ (H&E 1291)
- d. *Wuna7 \$u~\$nga-lu-m pom-7eesh aa7-ma.*
 DIST.LOC PL~woman-ABS-PL 3PL-with live-CFAC
 ‘And I could live with those women there.’ (H&E 1291)

Jacobs (1975) provides two examples of counterfactual *-ma*, in (2), but he does not comment on it and does not distinguish it from habitual *-ma*.

- (2) LU a. *Toni Xwaan weh = xu = m = pu = ku aamu-mu-ma.*
 Tony Juan both = DES = 2PL = IRR = COND hunt-MOVING-CFAC
 ‘Tony and Juan should have been hunting.’ (Jacobs 1975:77)
- b. *Hax = \$u = kun mijx-ma qaj = \$u = pu Taakwi-sh.*
 who = Q = QUOT be-CFAC NEG = Q = IRR prsn-ABS
 ‘Who can it be, they say, if not Taakwish?’ (Jacobs 1975:86)

Kroeber and Grace (1960) make no mention of counterfactual *=ma/-ma* in LU.

Astonishingly, a clear example of counterfactual *-ma* was found in the AC corpus, in (3).

- (3) AC *Noo-xa = n7 = pa wona7 mom-nga aa7-ma*
 1SG.PRO-just = 1SG = IRR DIST.LOC ocean-LOC be.there.SG.ANIM-CFAC
ne-7e-j woxotch-a-nak.
 1SG-leg-ACC stretch-TR-SS
 ‘Yo quisiera [estar] allá en la playa con los pies tirantes, I’d like to be [there] on the beach with my legs stretched straight out.’ (3.123.0543)

11.4.7. IMPERATIVES. Imperative constructions are rather rare in the text materials for LU. This is because future-tense verbs are far more common as directives than are the imperative constructions themselves. In AC, Harrington collected the imperative (usually

the prohibitive) with almost every verb. However, future-tense directives are also attested in his materials. The examples in (1) show such future directives.

- (1) a. LU *Qaj kupu7a-an pominik.*
 NEG be.asleep-FUT much
 ‘Don’t sleep very much. (You shouldn’t sleep so much.)’ (H&E 1337)
- b. AC *Ni-jk \$ull-a-n choo7an awox.*
 1SG.PRO-DAT put.in-TR-FUT all different.LOC
 ‘Échame todo aparte. (Put it [my food] on different plates for me.)’
 (3.123.0505)

In future directives, the negative is the usual form, *qaj*, as in (1a). But in true imperatives the negative is expressed with the prohibitive, LU *tu\$u*, AC *tu\$\$a* or *tu\$xa*, as will be seen below in examples (3b) and (4) and others.

The singular imperative consists simply of the verb base, regardless of verb class or phonological structure, with a few very minor complications. One is the unexpected form of the frequentative suffix *-la*. Both the frequentative suffix *-la* and the homophonous motion suffix *-la* appear as *-lax* in the imperative, although in their past perfective inflection they look like athematic vowel-final forms.

- (2) LU *Kiimki Haraa\$a ne-j toowna-lax, ne-j kwaavichu-lax.*
 prsn/plcn 1SG.PRO-ACC watch-FREQ.IMP 1SG.PRO-ACC care.for-FREQ.IMP
 ‘Kiimki Haraa\$a (the spirit of San Clemente Island) watch over me, take care of me.’ (H&E 155)

Another minor complication with imperatives is the apparent suffix *-m* on the motion ‘go away’ and suffixes derived from it, as in (3). This *-m* is not a suffix but rather a root-final consonant which appears only when the verb root or the related motion suffix is unsuffixed, as in the imperative; see also 10.4.2.¹³⁰

¹³⁰ Kroeber and Grace (1960:141) regard the final *-m* as part of the root and say that it “occurs in the past punctual [= perfective] and sometimes in the imperative.” Elliott (1999) treats it the same way. The dictionary entry for *ngee* (Elliott 1999:639) lists *ngeem* as the imperative of *ngee* without further comment.

- (3) LU a. *Ngeem o-ki-jk.*
 go.away 2SG-house-DAT
 ‘Go home!’ (H&E 1324)
- b. *Tu\$u oonum-i om jaw-ngim.*
 PROH PROX2-ACC 2SG.PRO take-GO&.IMP
 ‘Don’t take her!’ (H&E 792)

Thematic verbs with intransitive *-ax* have singular imperatives ending in *-ax* in LU, *-x* in AC. Note that this contrasts with the situation in CU, where the final *x* of the intransitive thematic suffix *-jax* is lost in the imperative (see 11.5.6).

- (4) LU a. *Tu\$u om majáq-ax.*
 PROH 2SG.PRO turn.back-INTR.IMP
 ‘Don’t turn back!’ (H&E 1336)
- b. *Tu\$u om nol-ax paa-nga.*
 PROH 2SG go.in-INTR.IMP water-in
 ‘Don’t go into the water!’ (H&E 1341)
- c. *Hati7-ax, ngeem.*
 go-INTR.IMP go.away
 ‘Go along now!’ (H&E 1324)
- d. *Tu\$u om i-jk chulúp-ax.*
 PROH 2SG.PRO PROX-DAT enter-INTR.IMP
 ‘Don’t go in there!’ (H&E 1252)
- e. *Che-jk wil-ax.*
 here-DAT jump-INTR.IMP
 ‘Jump over here!’ (H&E 1274)
- f. *Oonu-pa7 wuní-jk taw-ax.*
 PROX2-LOC DIST-DAT sit-INTR.IMP
 ‘Sit down there!’ (H&E 128)

- AC g. *Qal-x a-7ach-nga.*
 mount-INTR.IMP 2SG-horse-LOC
 ‘¡Súbete en tu caballo! (Mount your horse!)’ (3.123.0628)
- h. *Tu\$xa \$angaw7-x.*
 PROH prick-INTR.IMP
 ‘¡No te espines! (Don’t prick yourself!)’ (3.123.0602)

Imperative singulars of thematic verbs in LU *-i*, AC *-a* are given in (5).

- (5) LU a. *Kwaat-i wuna7.*
 wait-TR.IMP DIST.LOC
 ‘Wait there!’ (H&E 1341)
- b. *In-i ivii-m-i noo-ngaj.*
 take.away-TR.IMP PROX-PL-ACC 1SG.PRO-ABL
 ‘Get these things off of me!’ (H&E 1308)
- c. *Qami7-i po-j.*
 let.go-TR.IMP 3SG.PRO-ACC
 ‘Let her go!’ (H&E 1371)
- AC d. *Kwaavch-a a-tax, tu\$xa hala77-a waa7-ch.*
 care.for-TR.IMP 2SG-REFL PROH eat-TR.IMP meat-ABS
 ‘¡Cuídate, no comas carne! (Take care of yourself, don’t eat meat.)’
 (3.123.0323)

Derived verbs with LU *-ni(7i)* ‘causative’, in (6), behave like the thematic verbs, as do AC verbs with causative *-(a)na*.

- (6) LU a. *Loovi-ni aláxwi-ch-i hi-sh cham-lo7xa-j.*
 be.good-CAUS.IMP bad-ABS-ACC INDF.INAN-ABS.ACC 1PL-do-ACC
 ‘Forgive us our trespasses.’ (H&E 1119)

- b. *\$uwoo7-ni7i po-j.*
 afraid-CAUS.IMP 3SG.PRO-ACC
 ‘Frighten him!’ (H&E 170)

- AC c. *Liww-ana.*
 be.cold-CAUS.IMP
 ‘¡Enfríalo! (Chill it!)’ (3.123.0540)

- d. *Tu\$\$a ngool-ana.*
 PROH be.drunk-CAUS.IMP
 ‘¡No lo emborraches! (Don’t get him drunk!)’ (3.123.0330)

Athematic vowel-final verbs are unmodified in the singular imperative, as in (7). Note the marking of pronouns for accusative case, an exception to the generalization that the objects of imperatives are not so marked (see 5.4.2.7).

- (7) LU a. *Pi7 kwaavichu chaam-i aláxwi-ngay.*
 and care.for.IMP 1PL.PRO-ACC bad-ABL
 ‘And deliver us from evil.’ (H&E 1119)

- b. *Samsa po-j.*
 buy.IMP 3SG.PRO-ACC
 ‘Buy it!’ (K&G 153)

- c. *Tu\$u om oonu axáninik lo7xa oonu.*
 PROH 2SG.PRO PROX2 like do.IMP PROX2
 ‘Don’t do that!’ (H&E 1322)

- AC d. *Kwaavcha a-tax.*
 care.for.IMP 2SG-REFL
 ‘¡Cuídate! (Take care of yourself!)’ (3.123.0323)

Athematic verb bases that end in consonants do not change in the singular imperative, as seen in (8).

- (8) LU a. *Oonu-pa7 ne-j toow wam7.*
 PROX2-LOC 1SG.PRO-ACC look.at.IMP already
 ‘Just look at me now.’ (H&E 128)
- b. *Jax chaam-i hii-ngaj wunaa-l-i ponee-ji*
 say.IMP 1PL.PRO-ACC what-ABL DIST-ABS-ACC 3SG.PRO.ANIM-ACC
o-kaamaj-i om mokna-q.
 2SG-son-ACC 2SG.PRO kill-PRS.SG
 ‘Tell us why you killed your son.’ (H&E 413-4)
- c. *Naachaxan.*
 eat.IMP
 ‘Eat up!’ (H&E 400)
- AC d. *Toow.*
 look.IMP
 ‘Look!’ (3.123.0607)
- e. *Tu\$xa haal7.*
 PROH look.for.IMP
 ‘¡No lo busques! (Don’t look for it!)’ (3.123.0516)

In example (9), we see that the LU imperative of *mon* is its long form, *munaa*. Long-form imperatives are also seen with the base changing verbs in the other Takic languages. The LU example is addressed to a dangerous spirit. For AC, Harrington recorded *monma* (9b).

- (9) LU a. *Awoo-nga om micha7 munaa.*
 other-LOC 2SG.PRO somewhere go.IMP
 ‘You must go somewhere else.’ (H&E 488)
- AC b. *Tu\$xa kaleq-tal monma.*
 PROH fast-INS come.IMP
 ‘¡No venga pronto! (Don’t hurry!)’ (3.123.0508)

Plural imperatives add *-a-m* to verb bases ending in *x* (10).

- (10) LU a. *Umóm oomu-xaj hati7-ax-a-m.*
 2PL.PRO 2PL-alone go-INTR.IMP-IMP-PL
 ‘You guys go on by yourselves.’ (H&E 1254)
- b. *Nech-i-lax-a-m umóm.*
 pay-TR-FREQ.IMP-IMP-PL 2PL.PRO
 ‘Pay before you go.’ (K&G 153)
- AC c. *Ngor-x-a-m.*
 run-INTR-IMP-PL
 ‘¡Corran ustedes! (Run, you pl.!)’ (3.122.0223)
- d. *Jun-x-a-m*
 join.together-INTR-IMP-PL
 ‘¡Júntense uds! (Get together, you pl.!)’ (3.123.0409)

Elsewhere, the imperative plural adds *-ja-m*. (11).

- (11) LU a. *Nech-i-ngi-ja-m.*
 pay-TR-GO&.IMP-IMP-PL
 ‘Go ye and pay!’ (K&G 153)
- b. *Iva7=kwa mat-i-ja-m.*
 here = COND stop-TR.IMP-IMP-PL
 ‘Stop the song here!’ (H&E 1411)
- c. *Hila7-i-ja-m.*
 eat-TR.IMP-IMP-PL
 ‘Go ahead and eat it!’ (H&E 363)
- d. *Qal-ma-ja-m.*
 be.there(anim.pl.)-HAB.IMP-IMP-PL
 ‘Farewell!’ (H&E 128)

- e. *Qe7ee-ja-m* *chaam-i*.
 kill(pl.).IMP-IMP-PL 1PL.PRO-ACC
 ‘Kill us!’ (H&E 982)
- f. *Toow-ja-m* *oonum-i*.
 look.IMP-IMP-PL that-ACC
 ‘Take a look at that!’ (H&E 802)
- AC g. *Cha7~chí77-a-ja-m* *oona* *tosvelaka*.
 DISTR~pick.up-TR-IMP-PL PROX2.ACC little.pieces
 ‘Ye pick up all the little chips of wood! (Pick up [pl.] those little pieces
 [scattered about]!)’ (3.123.0394)
- h. *Kami77-a-ja-m*.
 leave-TR-IMP-PL
 ‘¡Déjenlo Uds! (Leave it, you pl.!)’ (3.123.0631)

Note that pronominal objects of both positive imperatives (in (2, 5b,c, 6b, 7a,b, 8a,b, 9c, 11e,f)) and the prohibitive (3b), are marked for accusative case. However, ordinary nouns do not have accusative case with imperatives. Except for (6a), a fragment of “Our Father,” which appears to be a remarkable exception: an imperative verb followed by a triplet of accusatives, an adjective, a demonstrative, and a noun.

11.5. INFLECTION IN MAIN-CLAUSE CUPEÑO VERBS. CU, like the other Cupan languages, has a richly inflected verb construction, although the tense/aspect markings are not as diverse as those in LU. An interesting complexity in the CU system is the interaction of verbal inflection with the system of second-position auxiliary complex clitics (see 8.5). This set of interactions is diagrammed in Table 11.5.

The suffixes (and the non-concatenative processes in potential and imperative singular inflection) appear in the first column. We have indicated the stative inflections by showing these in combination with intransitive thematic *-jax*. Of course *-jax* also appears in non-stative intransitives with the plural subject tense/aspect suffix, homophonous with the stative suffix. Interaction of tense-aspect affixation with the subject marking by a pronominal clitic or a subject prefix is indicated in columns to the

right as required (req.) or optional (opt.). The “subject clitic” column includes both the ergative-case forms, which encode agents of transitive verbs, and absolute-case forms that are subjects of intransitives. The object clitic column refers to the context where the absolute-case clitics encode objects of transitives, which appear mainly with the imperative.

The past tenses require a subject prefix on the verb itself. In the otherwise-unmarked past perfective, these prefixes encode the tense as well as the person and number of the subject. There is no column for the object proclitics that appear, not in the auxiliary complex, but at the left edge of transitive verb constructions. The only restriction on these is that they do not appear with true imperative verbs. The 3SG object proclitic is optional, conditioned by discourse-level considerations. However, other person and number combinations are always marked.

Table 11.5. Cupeño main-clause verb inflection

		subject clitic	object clitic	subject marked on verb	realis modal =yp	irrealis modal =py	potential modal =kwy
	verb suffix						
past							
perfective	∅			req.	opt.		
imperfective							
sg.	-qal			req.	opt.		
pl.	-wyn			req.	opt.		
stative	-jax-wyn			req.	opt.		
immediate past							
sg.	-qal-y-t	req.					
pl.	-wyn-ti-m	req.					
stative	-wyn-y-t	req.					
present							
sg.	-qa	req.					
pl.	-wy	req.					
stative	-jax-wy	req.					
immediate future							
sg.	-qa-t	req.					
pl.	-qa-ti-m	req.					
future							
perfective	∅	req.				req.	

imperfective			
sg.	<i>-nash</i>	req.	req.
pl.	<i>-wyny</i>	req.	req.
stative	<i>-jax-wyny</i>	req.	
habitual, usitative			
sg.	<i>-ny</i>	req.	req.
pl.	<i>-wyny</i>	req.	req.
potential	<i>-ʔ-, etc.</i>	req.	req.
imperative			
sg.	<i>-ʔ-, etc.</i>		req.
pl.	<i>-m</i>		req.
hortative		req.	

A second type of interaction of inflection with the clitic system in the auxiliary complex involves inflection for mood. The realis modal =*yp* appears only with past-tense inflections. It is optional in that context, and apparently has a somewhat emphatic force. In contrast, the irrealis modal =*py* is required with the future tense (although it cannot appear with the immediate future). An irrealis modal is also required with the future tense in SE. With potential and habitual inflections, the potential modal =*kwy* is required.

The future perfective is peculiar in that it is expressed simply by the bare base, without any inflectional affixes (although transitive future verbs can be preceded by object proclitics). The future imperfective is formed with singular and plural suffixes. The present-tense suffixes, singular and plural, are truncations of the past imperfective suffixes, losing the final consonant of the past imperfective. The immediate past inflection is a nominalized present tense, with truncation blocked by the absolutive suffix.

11.5.1. PAST TENSE VERBS. A subject prefix (1) is required in past-tense verb constructions. The subject prefixes are of the same form as the possessive prefixes (see 5.2.1 (6)).

(1) CU		SG	PL
	person	1	<i>ny- chym-</i>
		2	<i>y- ym-</i>
		3	<i>py- pym-</i>

With athematic verbs the prefix precedes the root. With thematic verbs, those with the suffixes *-in* ‘transitive’ and *-jax* ‘intransitive’, the subject prefix in the past tense appears before the thematic suffix in an enclitic complex following the verb root. These constructions may originate in an adjunct verb structure like that found in CA (11.6.1.13), with the CU thematic suffixes being the structural equivalent of the light verbs of the CA construction, and the CU verb roots equivalent to the CA adjuncts. In CU, with the reduction of the secondary verbs into thematic suffixes, the prefix + thematic suffix complex cliticizes to the associated verb root.¹³¹

In this context, the thematic suffix *-in* appears in the form *-my-n* following plural subject prefixes. The *-my* in *-my-n* may be a reflex of what Whorf (1946:175) called the “inner plural” of the k-class, discussed in chapter 10. This is seen also in SE *-m-* (10.2.2.1 (6)) and the CA distributive *-Vm* (10.6.1 (7)). In CU, as in SE, it appears only with the transitive thematic suffix *-in*. In CU, the combination *mm* that results when a plural pronominal prefix comes before *-my-n* becomes *7m* by regular rule (4.5.4.1); thus *pym-my-n* > *py7-my-n* ‘3PL-PL-TR’, etc.

Most of the examples below illustrate the categories indicated in Table 11.5 above with the conjugation of the root *chux*. This root is chosen because it is attested in all three of the verb classes. The athematic base means ‘melt’. The transitive thematic base with *-in* means ‘spit’; its object always appears as *-hiña-* ‘(one’s)-saliva’,¹³² although perhaps some other liquid could be ‘spat’ as well. If this transitive verb also has an oblique object, that object will be represented with a pronominal prefix with the dative postposition *-yik* ‘to, at’. The intransitive thematic base with *-jax* means ‘be spat out’.

In the examples below, the pronominal prefix *py-* is usually translated ‘he’ for animate subject, although it equally well means ‘she’ or ‘it’.

¹³¹ The situation in CU is parallel to the pattern of future tense marking in Portuguese as described by Dixon and Aikhenvald (2002b:19). See also Aikhenvald (2002:56 *et passim*) for further examples of languages whose verb structures contain cliticized inflected minor verbs. This analysis is a departure from that of Hill (2005:120), where cliticization within the verb complex was not yet recognized. At this point we are not prepared to take the next logical step, which would be to recognize the thematic endings as having clitic status even in the absence of the pronominal prefixes.

¹³² This is an unstressed root, so in the nominative case stress falls on the prefix and root-initial *h* is lost, yielding, for example, *nyjña* ‘my saliva’, vs. accusative *nyhiñáj*.

The past tense in CU extends from the previous day (*tuku* ‘yesterday’) to mythic time. It does not appear with the adverb *apút* ‘already’, which appears with present tense suffixes for an immediate past time. The usage of the perfective and imperfective aspects is of a common type, with imperfectives used in discourse for background scene-setting, and perfectives for single events on a narrative line.

11.5.1.1. PAST PERFECTIVE. The past perfective is unmarked except for the presence of the subject pronominal, as seen in the examples below.

Athematic verbs with the subject prefix preceding the root:

- (1) CU a. *py-chux*
 3SG-melt
 ‘it melted’
- b. *pym-chux*
 3PL-melt
 ‘they melted’

Transitive thematic verbs with the subject prefix before thematic *-in*:

- (2) CU a. *chux=py-n py-hiñá-j*
 spit = 3SG-TR 3SG-saliva-ACC
 ‘he spat’
- b. *chux=py7-my-n pym-hiñá-j*
 spit = 3PL-PL-TR 3PL-saliva-ACC
 ‘they spat’

Intransitive thematic verbs with subject prefix before thematic *-jax*:

- (3) CU a. *chux=py-jax*
 spit = 3SG-INTR
 ‘it was spat out’

- b. *chux = pym-jax*
 spit = 3PL-INTR
 ‘they were spat out’

11.5.1.2. PAST IMPERFECTIVE. The past imperfective is marked with the suffixes *-qal* (sg.) and *-wyn* (pl.), as illustrated below.

Athematic verbs with the subject prefix preceding the root:

- (1) CU a. *py-chux-qal*
 3SG-melt-PST.IPFV.SG
 ‘it was melting’

- b. *pym-chux-wyn*
 3PL-melt-PST.IPFV.PL
 ‘they were melting’

Transitive thematic verbs with the subject prefix before thematic *-in*:

- (2) CU a. *chux = py-∅-qal* *py-hiñá-j*
 spit = 3SG-TR-PST.IPFV.SG 3SG-saliva-ACC
 ‘he was spitting’

- b. *chux = py7-my-n-wyn* *pym-hiñá-j*
 spit = 3PL-PL-TR-PST.IPFV.PL 3PL-saliva-ACC
 ‘they were spitting’

Intransitive thematic verbs with subject prefix before thematic *-jax*:

- (3) CU a. *chux = py-ja-qal*
 spit = 3SG-INTR-PST.IPFV.SG
 ‘it was getting spat out’

- b. *chux = pym-jax-wyn*
 spit = 3PL-INTR-PST.IPFV.PL
 ‘they were getting spat out’

The past imperfective plural suffix *-wyn* is homophonous with the past stative, which can be used with either singular or plural subjects, as in (4); the same is true of the truncated stative *-wy* in the present tense (11.5.2). The two suffixes *-wy(n)* have converged from quite different historical sources; past imperfective *-wy(n)* is a grammaticalization of a light verb of position, **wyny*, while stative *-wy(n)* is a reflex of the Uto-Aztecan passive/impersonal suffix **(i)wa*.

- (4) CU a. *chux = py-jax-wyn*
 spit = 3SG-INTR-ST.PST
 ‘it was spat out (and stable in the resulting condition)’
- b. *chux = pym-jax-wyn*
 spit = 3PL-INTR-ST.PST
 ‘they were spat out (and stable in the resulting condition)’

11.5.2. PRESENT TENSE VERBS AND THE IMMEDIATE PAST.

11.5.2.1. IMMEDIATE PAST. A nominalization of the present tense, found also in present-tense subject-headed relative clauses (13.2.4), masquerades in CU as a main-clause predicate encoding immediate past tense. Like the immediate past constructions in SE, it often translates as ‘“just” happened/did.’ In fact, parallel to the situation with immediate futures (11.5.3.1), immediate past forms of this type are verbless clause complements. The nominalizing suffixes block the truncation that forms the present tense, so that these constructions resemble past imperfectives. However, they are not past-tense predicates: they require pronominal markers in AUX, and they do not appear with pronominal prefixes. While they often have an immediate past interpretation, some of them seem to require understanding as present-tense forms.

With defective verbs like *nyq* ‘come’, *nynywyn* ‘walk around’, *qal* ‘be there (animate)’ and *wyn* ‘be there, inanimate’, the nominalizing suffix sequence is *-y-t*. However, with other verbs, the sequence will include *-qal* or *-wyn*. Examples with the defective verbs appear in (1).

- (1) CU a. *My nyqn-y-t* \emptyset *ny-xaku-j* *ku\$-i-qa-t*
 and come-IPST-ABS be 1SG-carrying.strap-ACC get-ABLAUT-IFUT-ABS
 ‘I have come back to get my carrying straps.’ (H&N 12[24] 123)
- b. *Ný-jy,* *y7=yt* *miví-7aw nynywyn-y-t* $\emptyset?$
 1SG-mother 2SG.PRO = 2SG.AB INDF-LOC walk.around-IPST-ABS be
 ‘Mother, where have you been walking around?’ (Faye Kisilj Pywik 152)
- c. *Miví-7aw = yt* *hiw-qal-y-t* $\emptyset?$
 INDF-LOC = 2SG.AB be-PRS.SG-IPST-ABS be
 ‘Where did you stay?’ (H&N 12[24] 135)

Examples with the present-tense suffixes appear in (2). (2a,b) have singular subjects. (2c,d) are active-voice plurals, requiring number agreement with the subject not only in the present-tense suffix, but also by pluralization of the nominalized construction with *-m*. (2e,f,g) are statives, where the stative suffix *-wyn* is indifferent to subject number. (2h) is an example collected by Jacobs (1975) where an immediate-past nominalization has its own complement.

- (2) CU a. *My = \$y = 7yt* *pa-7aw* *a\$-qal-y-t* \emptyset .
 and = Q = 2SG.AB water-LOC bathe-PRS.SG-IPST-ABS be
 ‘You must have bathed in the water.’ (H&N 13[26] 165)
- b. *Qaj = ny* *hi-sh* *mixa-qal-y-t* \emptyset .
 NEG = 1SG.ERG INDF-ABS do-PRS.SG-NMLZ-ABS be
 ‘I’m not doing anything.’
- c. *Hi-sh = ym = y* *mixan-wyn- \emptyset -ti-m* $\emptyset?$
 INDF-ABS = 2PL.ERG = CF do-PRS.PL-IPST-ABS-PL be
 ‘What have you (pl.) been doing?’
- d. *Chym = ysh* *[wiw-qa-ti-m* *[mijax-wyn-y-ti-m]]* \emptyset .
 1PL.PRO = 1PL.AB make.acorn.gruel-IFUT-ABS-PL be-PRS.PL-NMLZ-ABS-PL be
 ‘We should make acorn gruel, we were going to make acorn gruel (and are getting to the job).’

- e. *Qaj = yl = py nganga-wyn-y-t Ø ny-ny7y-m.*
 NEG = 3PL.AB = IRR cry-ST.PRS-NMLZ-ABS be 1SG-relative-PL
 ‘Don’t you be crying, my relatives.’ (H&N 80[160] xix.1)
- f. *Ivı7-aw = \$y = ny kup-wyn-y-t Ø.*
 PROX-LOC = Q = 1SG.ERG sleep-ST.PRS-NMLZ-ABS be
 ‘I must have been asleep.’ (H&N 59[118] 80)
- g. *Tykwyl = \$y mijax-wyn-y-t Ø.*
 Skunk-ABS = Q be-ST.PRS-NMLZ-ABS be
 ‘It must have been Skunk.’ (H&N 72[144] 61)
- h. *Qaj jukich-in-wyn-Ø-ti-m Ø*
 NEG believe-TR-PRS.PL-NMLZ-ABS-PL be
nish-lju-vy-l-i py-ngij-pi ki-ngax.
 age.of.woman-VBLZ-REAL-ABS-ACC 3SG-go.away-IRR.SUB house-ABL
 ‘We did not think that the old woman would leave the house.’ (Jacobs
 1975:142 68)

11.5.2.2. PRESENT TENSE. Paul-Louis Faye’s field notes observe that the CU present tense is used for ‘the same day’. The adverb *apıt* ‘already’ appears with this tense, showing that it extends into the recent past. There are no aspectual distinctions in the present. Note that the subject clitics differ as to whether they are ergative (ERG) or absolute (AB) case, i.e., subject of transitive (ERG) or intransitive (AB).

The present-tense suffixes *-qa* and *-wy* result from truncation of the imperfective suffixes *-qal* and *-wyn*. For the examples below, in order to make the system as clear as possible, we use first person clitics, because 3SG clitics in the absolute case are often zero. This sometimes requires that we imagine a rather unlikely scenario (giants spitting someone out, or the wicked witch melting in *The Wizard of Oz*).

The present plural suffix *-wy*, in (1, 2, 3), is homophonous with present singular or plural stative *-wy*, in (4). (Note that the *x* of *-jax* is regularly lost before *q*.)

- (1) CU a. *Ny7=yn chux-qa.*
 1SG.PRO = 1SG.AB melt-PRS.SG
 ‘I am melting.’
- b. *Chym=ysh chux-wy.*
 1PL.PRO = 1PL.AB melt-PRS.PL
 ‘We are melting.’
- (2) CU a. *Ny7=ny ny-hiñá-j chux-i-qa*
 1SG.PRO = 1SG.ERG 1SG-saliva-ACC spit-TR-PRS.SG
 ‘I am spitting.’
- b. *Chym=chym chym-hiñá-j chux-in-wy*
 1PL.PRO = 1PL.ERG 1PL-saliva-ACC spit-TR-PRS.PL
 ‘We are spitting.’
- (3) CU a. *Ny7=yn chux-ja-qa.*
 1SG.PRO = 1SG.AB spit-INTR-PRS.SG
 ‘I am spat out.’
- b. *Chym=ysh chux-jax-wy.*
 1PL.PRO = 1PL.AB spit-INTR-PRS.PL
 ‘We are spat out.’

For the statives in (4) we use the demonstrative *axwýsh* ‘that’, because we can’t imagine a first-person scenario.

- (4) CU a. *Axwý-sh chux-jax-wy.*
 that-ABS spit-INTR-ST.PRS
 ‘That is spat out (and stable in the resulting condition).’
- b. *Axwý-chi-m chux-jax-wy.*
 that-ABS-PL spit-INTR-ST.PRS
 ‘Those are spat out (and stable in the resulting condition).’

If the present-tense verb is in sentence-initial position followed by vowel-initial clitics or the contrastive-focus suffix *-y*, the truncation of the suffixes is blocked and they appear as *-qal* and *-wen*, as in (5a, 6a, 7a). These non-truncated variants can be distinguished from the past tense imperfective forms, shown in (5b, 6b, 7b) by the absence of subject prefixes in the present tense constructions, and the presence in the auxiliary of the pronominal clitics, which cannot appear in past-tense clauses. Note that in present-tense sentences with 3SG subjects, or in weather predicates like (5a), usually no pronominal subject clitic appears. However, in (5b) a pronominal argument marker (*py-*) must be present, because it structurally marks past tense.

(5) CU a. *Ju~júj-qal-y.*

DUR~snow-PRS.IPFV.SG-CF

‘It’s snowing.’

b. *Ju~juj=py-qal.*

DUR~snow = 3SG-PST.IPFV.SG

‘It was snowing.’ (past imperfective)

(6) CU a. *Hix-qal=yn.*

say-PRS.IPFV.SG = 1SG.AB

‘I say.’

b. *Ny-hix-qal.*

1SG-say-PST.IPFV.SG

‘I was saying.’ (past imperfective)

(7) CU a. *Tysí-wyn=yl wiw.*

play-PRS.PL = 3PL both

‘The two of them are playing.’ (H&N 17[34] 49)

b. *Mu=ku7ut mukíkma-lji-m pym-tysí-wyn.*

and = QUOT bird-ABS-PL 3PL-play-PST.IPFV.PL

‘And it is said the birds were playing.’ (H&N 57[114] I.5) (past imperfective)

11.5.3. FUTURE TENSE VERBS. CU has a fairly elaborate future-tense system. The realis immediate future, often translated as “going to”, contrasts with two irrealis future constructions, distinguishing perfective and imperfective.

SE, LU, and CA all have an immediate “going to” future, SE *-qaʔ/-qa-m*, LU *-lu-t/-~~(ku-)~~tu-m*, CA *-ka/-ka-te-m*. SE has only a single irrealis future, *-iv*, while LU distinguishes future perfective *-an ~ -n* and imperfective *-maan*. CA has a slightly different distinction, a “plain” future *-nem* and an irrealis future *(-a)-lu ~ -pulu* that expresses desired states that might not occur. TV has but a single, generalized future suffix, *-ro*. In KI, a simple past-future contrast is marked only within the auxiliary complex.

11.5.3.1. IMMEDIATE FUTURE. The CU immediate future, as in LU, is a nominalization that also appears in subordinate clauses including future subject relative clauses and purpose clauses. It is marked by a suffix complex consisting of *-qa* plus an absolutive in *-t*, plus the plural suffix *-m*. The suffix induces an ablaut vowel *i* after stressless stems; this *i* can be stressed. The element *-qa* is subject to syncope, which aligns with the regular *-ta- ~ -ti-* alternation of the absolutive suffix (5.1.1.1): syncope *-q-ta-*, unsyncope *-qa-ti-*. Syncope *-q-ti-* is found after the ablaut vowel *-i-*, as in (5) below.

Jacobs (1975:123) suggested that all examples of immediate future forms were in fact predicate nominals (in our terms, verbless clause complements or copula complements). Jacobs provided the paradigm in (1), showing that the copula is present with immediate futures when it is not in the present indicative, where CU has verbless clauses (see chapter 9) unless *mijax* has a deontic sense in the construction with *-pi* discussed below. We follow Jacobs’ analysis. However, in spite of this technical grammatical status, in all of the Cupan languages the immediate future in the present tense functions like any other main-clause predicate, so it is listed as part of the inventory of tense-aspect suffixes. In (1) we retain Jacobs’s representation though in our later examples we mark a \emptyset copula for verbless clauses.

- (1) CU a. *Nyʔ=yn* *hiwchu-qa-t* \emptyset .
 1SG.PRO = 1SG.AB know-IFUT-ABS be
 ‘I’m going to learn.’ (Jacobs 1975:123.17)

- b. *Ny7=yp hiwchu-qa-t py-mijax-wyn.*
 1SG.PRO = REAL know-IFUT-ABS 3SG-be-ST.PST
 ‘I was going to learn.’ (Jacobs 1975:123.18)
- d. *Ny7=kwy=n hiwchu-qa-t mija7a.*
 1SG.PRO = POT = 1SG.AB know-IFUT-ABS be.POT
 ‘I might be going to learn.’ (Jacobs 1975:123.19)

When the immediate future suffix appears in apparent surface main clauses it is distinguished from the “plain” future by the fact that the latter tense always appears with the irrealis modal =*py*. This modal is never present in clauses with the immediate future except in conjectural contexts (as in (8) below). The immediate future with *chux* is illustrated in (2)-(4). The zero copula is made explicit to highlight the structural status of the CU immediate future as a complement.

- (2) CU a. *Ny7=yn chux-qa-t Ø.*
 1SG.PRO = 1SG.AB melt-IFUT-ABS be
 ‘I’m going to melt.’
- b. *Chym=ysh chux-qa-ti-m Ø.*
 1PL.PRO = 1PL.AB melt-IFUT-ABS-PL be
 ‘We’re going to melt.’
- (3) CU a. *Ny7=ny chux-i-qa-t ny-hiñá-j Ø.*
 1SG.PRO = 1SG.ERG spit-TR-IFUT-ABS 1SG-saliva-ACC be
 ‘I’m going to spit.’
- b. *Chym=chym chux-i-qa-ti-m chym-hiñá-j Ø.*
 1PL.PRO = 1PL.ERG spit-TR-IFUT-ABS-PL 1PL-saliva-ACC be
 ‘We’re going to spit.’
- (4) CU a. *Ny7=yn chux-ja-qa-t Ø.*
 1SG.PRO = 1SG.AB spit-INTR-IFUT-ABS be
 ‘I’m going to get spat on.’

- b. *Chym = ysh chux-ja-qa-ti-m Ø.*
 1PL.PRO = 1PL.AB spit-INTR-IFUT-ABS-PL be
 ‘We’re going to get spat on.’

Immediate future *-qa-t(i-m)* is an *i*-ablauting suffix. This inserts an *i* after stressless verb bases of the athematic class, as in (5) with *myqyn_s* and *tyw_s*. We would expect *i*-ablaut following the intransitive thematic suffix *-jax* as well, but for some reason this almost never occurs; the construction is *chuxjaqat* as in (4a), not ^x*chuxjaxiqat*.

- (5) CU a. *Maan = yn myqn-í-qa-t = ny suqa-t-i Ø.*
 let.IMP = 1SG.AB kill-ABLAUT-IFUT-ABS = 1SG.ERG deer-ABS-ACC be
 ‘Let me kill a deer.’

- b. *My qaj mipa mi_utyw-í-q-ti-m Ø.¹*
 but NEG ever 3PL.OBJ_usee-ABLAUT-IFUT-ABS-PL be
 ‘And (you pl.) are never going to see them again.’ (H&N 23[46] Leaving Warners II.9)

¹ The subject of this sentence is marked with a pronominal clitic in the immediately preceding sentence, and apparently it was thought unnecessary to repeat it.

Immediate future *-qa-t(i-m)* can appear following the future imperfective *-nash* (sg.), *-wyny* (pl.), as in (6).

- (6) CU a. *Xwaan mamajuw-nash-qa-t Ø.*
 Juan help-FUT.IPFV.SG-IFUT-ABS be
 ‘Juan is going to be helping.’ (Jacobs 1975:59)
- b. *Tukumáj awá-l ny-7ash hiw-nash-qa-t Ø.*
 tomorrow dog-ABS 1SG-animal be.there-FUT.IPFV.SG-IFUT-ABS be
 ‘Tomorrow I am going to have a dog.’ (Hill 2005:129.35c)
- c. *Qaj pijámanga pishwýli-sh mijax-wyny-qa-t Ø.*
 NEG always young.man-ABS be-ST.FUT-IFUT-ABS be
 ‘You (pl.) will not always be young.’ (H&N 28[56] 25)

And it can appear with the future root *max* of the irregular verb *hiw* ~ *qal* ~ *max*, as in (7).

- (7) CU *Atíra ichákwin max-qa-ti-m* Ø.
 very good;well dwell;live.FUT-IFUT-ABS-PL be
 ‘You (pl.) will live well.’ (H&N 24[48] 49)

While the CU corpus includes hundreds of immediate future constructions, the immediate future suffix has been found only twice with the irrealis modal *-py*. The first appears in a speech by Coyote in the Creation text, when he discovers that his relatives have betrayed him. It seems likely that the irrealis modal in (8a) expresses his astonishment and doubt when he realizes this. In (8b) Coyote is promising his mother a fine meal of a fat hen, but the audience for the story already knows that the hen has escaped. Such conjectural uses of the irrealis with the immediate future are well attested in LU (11.4.5 (2b,d)). Note that in (8a) the vocalism *-a-m* of the immediate future plural is at variance with the *-i-m* generally encountered elsewhere, such as in (8b). The variant in *-a-* is also encountered in (9a), below, followed in the same example by immediate future forms in *-i-*.

- (8) CU a. *Ixi-q-ta-m = yl = py* Ø, *ymym ny-pa\$ma-nim?*
 do-IFUT-ABS-PL = 3PL = IRR be 2PL.PRO 1SG-older.brother-PL
 ‘Is this what you are doing, my older brothers?’ (H&N 3[6] 135)
- b. *Amáj = chy = py ichákwin puj-qa-ti-m* Ø.
 today = 1PL = IRR good;well dine-IFUT-ABS-PL be
 ‘Today we are going to eat well.’ (H&N 62[124] 50)

A peculiarity of the immediate future is that it can be sequenced with future-tense constructions. While there are sequences of immediate futures one after the other (as in the first four verbs of (9a)), the sequence ‘immediate future ... future’, seen with the last two verbs of (9a) and in (9b) is not uncommon.

- (9) CU a. *Amáj=yn* *aja* *puluch-ja-qa-t* *puljĩni-sh* \emptyset
 now = 1SG.AB now go.out-INTR-IFUT-ABS baby-ABS be
ni_jax-wy, *my* *axwý-chi-m* *ni_tewí-q-ta-m* \emptyset ,
 1SG.OBJ_say-PRS.PL and that-ABS-PL 1SG.OBJ_see-IFUT-ABS-PL be
my *ni_mu~mha-qa-ti-m* \emptyset , *pytá7a-nim*
 and 1SG.OBJ_REP~shoot-IFUT-ABS-PL be all-PL
ni_chakw-i-qa-ti-m \emptyset , *my=ny=py* *py7* *iví-jka*
 1SG.OBJ_catch-TR-IFUT-ABS-PL be and = 1SG = IRR FOC here-DAT
chulup-jax.
 go.in-INTR.FUT
 ‘Now I am going to come out as a baby, and they are going to see me, and shoot at me, and all grab at me, and I will go in here.’ (H&N 13[26] 191)
- b. *Aja=n* *haw-i-qa-t* \emptyset *my=ny=py* *aja* *tan-in.*
 now = 1SG.AB sing-TR-IFUT-ABS be and = 1SG = IRR now dance-TR.FUT
 ‘I am going to sing now and then I will dance.’

11.5.3.2. PERFECTIVE FUTURE. The perfective future is simply the verb base, with no affixation other than object proclitics. Clauses with perfective futures require the subject pronominal clitic and the irrealis modal =*py* (cf. Table 11.5). Before the irrealis modal there is no absolute vs. ergative distinction in first and second person pronominals; only the ergative forms are used. In the perfective future, there is no distinction in the verb between singular and plural (except with number-suppletive verb roots).

- (1) CU *Ny7=ny=py* *chux.*
 1SG.PRO = 1SG = IRR melt.FUT
 ‘I will melt.’
- (2) CU *Chym=chy=py* *chux-in* *chym-hiñá-j.*
 1PL.PRO = 1PL. = IRR spit-TR.FUT 1PL-saliva-ACC
 ‘We will spit.’
- (3) CU *Ny7=ny=py* *chux-jax.*
 1SG.PRO = 1SG = IRR spit-INTR.FUT
 ‘I will be spat out.’

11.5.3.3. IMPERFECTIVE FUTURE. The imperfective future has the suffix *-nash* (sg.) or *-wyny* (pl.). As with the perfective future, a subject clitic and the irrealis modal *=py* are required in the clause.

- (1) CU a. *Ny7 = ny = py* *chux-nash.*
 1SG.PRO = 1SG = IRR melt-FUT.IPFV.SG
 ‘I will be melting.’
- b. *Chym = chy = py* *chux-wyny.*
 1PL.PRO = 1PL = IRR melt-FUT.IPFV.PL
 ‘We will be melting.’
- (2) CU a. *Ny7 = ny = py* *chux-i-nash* *ny-hiñá-j.*
 1SG.PRO = 1SG = IRR spit-TR-FUT.IPFV.SG 1SG-saliva-ACC
 ‘I will be spitting.’
- b. *Chym = chy = py* *chux-in-wyny* *chym-hiñá-j.*
 1PL.PRO = 1PL = IRR spit-TR-FUT.IPFV.PL 1PL-saliva-ACC
 ‘We will be spitting.’
- (3) CU a. *Ny7 = ny = py* *chux-jax-nash.*
 1SG.PRO = 1SG = IRR spit-INTR-FUT.IPFV.SG
 ‘I will be being spat out.’
- b. *Chym = chy = py* *chux-jax-wyny.*
 1PL.PRO = 1PL = IRR spit-INTR-FUT.IPFV.PL
 ‘We will be being spat out.’

The stative of the imperfective future uses *-wyny* with singular and plural subjects. A singular is illustrated in (4).

- (4) CU *Axwý-sh = Ø = py* *chux-jax-wyny.*
 that-ABS = 3SG = IRR spit-INTR-ST.FUT
 ‘That will be spat out (and stable in the resulting condition).’

11.5.4. CUSTOMARY, HABITUAL, USITATIVE. The customary, usitative suffixes *-ny* (sg.) and *-wyny* (pl.) require the presence of the potential modal =*kwy*. The plural form is identical to the future imperfective plural and future stative suffixes, but can be distinguished from these because it appears with =*kwy* instead of irrealis =*py*. The examples (1-3) below are presented in singular (a) and plural (b) pairs.

- (1) CU a. *Ny7 = kwy = n chux-ny.*
 1SG.PRO = POT = 1SG.AB melt-CUST.SG
 ‘I used to melt, I generally melt.’
- b. *Chym = kwy = sh chux-wyny.*
 1PL.PRO = POT = 1PL.AB melt-CUST.PL
 ‘We used to melt, we generally melt.’
- (2) CU a. *Ny7 = kwy = ny chux-i-ny ny-hiñá-j.*
 1SG.PRO = POT = 1SG.ERG spit-CUST.SG 1SG-saliva-ACC
 ‘I used to spit, I generally spit.’
- b. *Chym = kwy = chy chux-in-wyny chym-hiñá-j.*
 1PL.PRO = POT = 1PL.ERG melt-TR-CUST.PL 1PL-saliva-ACC
 ‘We used to spit, we generally spit.’
- (3) CU a. *Ny7 = kwy = n chux-ja-ny.*
 1SG.PRO = POT = 1SG.AB spit-INTR-CUST.SG
 ‘I used to be spat out, I generally get spat out.’
- b. *Chym = kwy = sh chux-jax-wyny chym-hiñá-j.*
 1PL.PRO = POT = 1PL.AB melt-INTR-CUST.PL 1PL-saliva-ACC
 ‘We used to be spat out, we generally get spat out.’

Again, as in 11.5.3.3, the stative of the imperfective future uses *-wyny* with singular and plural subjects, with singular illustrated in (4).

- (4) CU *Axwý-sh = Ø = kwy chux-jax-wyny.*
 that-ABS = 3SG = POT spit-INTR-ST
 ‘That used to be spat out, that generally is spat out (and stable in the resulting condition).’

11.5.5. POTENTIAL. The potential modal =*kwy* is required with potential inflection. Potential inflection is non-concatenative and depends on the shape of the verb base. Athematic verbs ending in consonants must conform to a potential template where two syllables follow the stress. If the verb base does not satisfy the template, glottal stops and vowel copies will be added to fill it out. Thus in (1), *chux* ‘melt’ appears as *chu7u7ux*.

- (1) CU *Ny7 = kwy = n chu7u7ux.*
 1SG.PRO = POT = 1SG.AB melt.POT
 ‘I can melt.’

A two syllable initial-stressed stem like *changnyw* ‘be angry’ becomes *changny7yw*. However, a two-syllable stem with stress on the second syllable will require two copies, e.g. *hyljýp* ‘hiccup’ becomes *hyljý7y7yp*. The rare verbs that have two syllables following the stress, such as *mamajyw* ‘help’ are unchanged, as are verbs that end in vowels, regardless of the length of the base or stress placement.

With thematic verbs, the suffixes *-in* and *-jax* become *-i* and *-ja* respectively, and count as vowel-final bases. Examples are given in (2).

- (2) CU a. *Ny = kwy = ny chux-i ny-hiñá-j.*
 1SG.PRO = POT = 1SG.ERG spit-POT.TR 1SG-spit-ACC
 ‘I can spit.’
- b. *Ny = kwy = n chux-ja.*
 SG.PRO = POT = 1SG.AB spit-POT.INTR
 ‘I can be spat out.’

This truncation has been extended to final unstressed syllables ending in *n* and *x* in thematic verbs. Thus the potential form of athematic *nenmin* ‘chase’ is *nenmi*, of *ma~max* ‘be grinding acorn flour’ is *ma~ma7a*. This truncation has been extended to athematic

verbs where final *x* appears in a stressed syllable. The verb *mynmáx* ‘come (future)’ becomes *mynmá7a*, with a loss of the final *x*; similarly, *jax* ‘say’ becomes *ja7a*, not **ja7a7ax*, and *max* ‘give’ becomes *ma7a*, not **ma7a7ax*.

There is no difference between singular and plural subject marked in the potential verb construction. In potential sentences, subject person and number is encoded in the auxiliary complex.

11.5.6. IMPERATIVE AND PROHIBITIVE. The present work provides an opportunity for a more detailed presentation of the complex imperative forms than that found in Hill (2005). The singular imperatives of athematic bases are especially diverse. First, for consonant-final athematic bases where the final (or only) syllable is stressed, the singular imperative is formed by infixing a glottal stop before the final consonant, and a suffix *-a* is added. The origin of this structure is probably a suffix *-7a*, with (usually) metathesis of the glottal stop and the final consonant of the verb base. This may be related to the TV singular imperative clitic = *7aa*. Examples appear in (1). Note that unlike the singular imperatives, the plurals are straightforward, simply adding *-am* (following consonants) or *-m* (following vowels) to the verb base. The infixing glottal stops that appear in the singular imperative are absent in the plural.

- (1) CU a. *Chu7xa*.
melt.IMP.SG
‘Melt!’
- b. *Chux-a-m*.
melt-IMP-PL
‘Melt (pl.)!’
- c. *Te7wa7\$a*.
disappear.IMP.SG
‘Disappear!’
- d. *Te7wa\$a-m*.
disappear-IMP-PL
‘Disappear (pl.)!’

If the final consonant in the stressed syllable of an athematic verb is a glottal stop, no additional glottal stop appears (cf. 4.5.4.1), but the final *a* is present, as in (2).

- (2) CU a. *Chi7-a*.
gather-IMP.SG
'Gather it!'
- b. *Chi7-a-m*.
gather-IMP-PL
'Gather it (pl.)!'
- c. *Pi7-a*.
bewitch-IMP.SG
'Bewitch him!'
- d. *Pi7-a-m*.
bewitch-IMP-PL
'Bewitch him (pl.)!'

If the consonant-final syllable of an athematic verb is not stressed, a glottal stop is infixes along with an echo vowel. These forms are identical to the habilitative/potential inflections of such verbs.

- (3) CU a. *Pachi7ik*. < *pachik*
wash.IMP
'Wash it!'
- b. *Pachik-a-m*.
wash-IMP-PL.
'Wash it (pl.)!'
- c. *Ku~ku7u\$*. < *ku~ku\$*
REP~bark.IMP.SG.
'Be barking (howling, hissing, etc.)!'

- d. *Ku~ku\$-a-m.*
 w REP~bark-IMP-PL
 ‘Be barking (howling, hissing, etc.) (pl.)!’

The imperatives of athematic verbs where the final unstressed syllable ends in *n* lose that consonant in the singular imperative and add a glottal stop. This is probably the result of an analogic extension of the truncation of the thematic suffix *-in*, seen below in (7a). If the syllable with final *n* is stressed, the singular imperative is formed as in (1); an example appears in (4e,f).

- (4) CU a. *Myqy-7.*
 kill(sg.)-IMP.SG
 ‘Kill it!’
- b. *Myqyn-a-m.*
 kill(sg.)-IMP-PL
 ‘Kill it (pl.)!’
- c. *A7chiwi-7.*
 make-IMP.SG
 ‘Make (cook, etc.) it!’
- d. *A7chiwin-a-m.*
 make-IMP-PL
 ‘Make (cook, etc.) it (pl.)!’
- e. *Wyni7n-a.*
 miss.target-IMP.SG
 ‘Miss it!’
- f. *Wynin-a-m.*
 miss.target-IMP-PL
 ‘Miss it (pl.)!’

There are only a few examples of athematic verbs where a final unstressed syllable ends in *x*. However, there are hints that the same analogical extension of truncation that is well attested in *n*-final athematic verbs is also occurring with those ending in *x*, as seen in (5).

- (5) CU a. *Ma~ma-7a.* (< *max*)
 REP~grind.acorn.flour-IMP.SG.
 ‘Be grinding acorn flour!’
- b. *Ma~max-a-m.*
 REP~grind.acorn.flour-IMP-PL
 ‘Be grinding acorn flour (pl.)!’

Vowel-final athematic bases simply add a final glottal stop in the singular imperative (these are the only final glottal stops in unstressed syllables in CU; they are sometimes followed by an echo vowel, as in (6e)). Note that the long vowel in (6d) is not stressed; this is an exceptional construction. If the final vowel is *i* or *u*, a transitional glide may appear, as in (6f,h).

- (6) CU a. *Hiqsá-7.*
 breathe-IMP.SG
 ‘Breathe!’
- b. *Hiqsá-a-m.*
 breathe-IMP-PL
 ‘Breathe (pl.)!’
- c. *Kylvy-7.*
 make.acorn.soup-IMP.SG
 ‘Make acorn soup!’
- d. *Kylvy-y-m.*
 make.acorn.soup-IMP-PL
 ‘Make acorn soup (pl.)!’

- e. *Wyrá7pi7ij.*
 dance.whirling.dance.IMP.SG
 ‘Dance the whirling dance!’
- f. *Wyrá7pij-a-m.*
 dance.whirling.dance-IMP-PL
 ‘Dance the whirling dance (pl.)!’
- g. *Hu-7.*
 fart-IMP.SG
 ‘Fart!’
- h. *Huw-a-m.*
 fart-IMP-PL
 ‘Fart (pl.)!’

Thematic bases ending in *-in*, *-jax* appear as *-i7(i)*, *-ja7a* respectively in the singular imperative.

- (7) CU a. *Chux-i7 ý-hiña.*
 spit-TR.IMP 2SG-saliva-ACC
 ‘Spit!’
- b. *Chux-in-a-m ým-hiña.*
 spit-TR-IMP-PL 2PL-saliva-ACC
 ‘Spit (pl.)!’
- c. *Chux-ja7a!*
 spit-INTR.IMP
 ‘Be spat on!’
- d. *Chux-jax-a-m!*
 spit-INTR-IMP-PL
 ‘Be spat on (pl.)!’

Transitive imperatives cannot appear with the object proclitics discussed below (at 11.5.8). Instead, their objects can be encoded by absolute (in the sense absolute vs. ergative) clitics following the imperative, as in (8). Example (8c) is ambiguous, and can have any of the three meanings noted in the translations. When these object clitics follow the thematic suffix *-in*, the *n* remains in the singular imperative. It also remains if it is the final *n* of an athematic verb, as in (8d).

- (8) CU a. *Yla-ny-m = yn!*
 wait-TR-PL = 1SG.AB
 ‘Wait for me (pl.)!’
- b. *Yla-ny-m = ysh!*
 wait-TR-PL = 1PL.AB
 ‘Wait for us (pl.)!’
- c. *Yla-n = ym!*
 wait-TR = 3PL.AB/PL
 ‘Wait for them (sg.)!’ / ‘Wait for them (pl.)!’ / ‘Wait for him (pl.)!’
- d. *Nynmin = y7ysh!*
 chase = 1PL.AB
 ‘Chase us (sg.)!’

While J. Hill’s field notes contain occasional examples of nominal objects of imperatives marked with accusative case, in the overwhelming majority of examples nominal objects of imperatives lack the accusative case suffix, in clear contrast with indicative sentences collected at the same time, where the nouns bear accusative case.

As in CA, in CU imperative verbs cannot appear with negatives. There is no special prohibitive particle, as in TV, Serran, and LU. The ordinary negative *qaj* is used in future-tense directives, as in (9), and also in irrealis *-pi* directives, as in (10). Object nominals in such expressions are marked for accusative case. These constructions are in fact far more common than true imperatives in positive as well as negative constructions.

- (9) CU a. *My=yl=py qaj Isi-lj-i tutuchi-max.*
 and=3PL=IRR NEG Coyote-ABS-ACC tell-BEN
 ‘And don’t (But you will not) tell Coyote.’ (H&N 6[12] 65)
- b. *Qaj=yl=py ngang.*
 NEG=1PL.AB=IRR cry.FUT
 ‘Don’t cry (pl.)! (We don’t cry.)’

Example (10) shows a *-pi* directive, a construction with a verbless-clause complement.

- (10) CU *Qaj naxáni-ch-i amáj ym-\$uun ym-7iva-wyny-pi.*
 NEG man-ABS-ACC today 2PL-heart 2PL-strong-CUST-IRR.SUB
 ‘Don’t be (You should not be) dependent on a man!’ (H&N 28[56] 30)

11.5.7. HORTATIVE. In addition to the imperatives, there is a hortative, which has a peculiar distinction between an “exclusive” and an “inclusive” reading of the clitic sequence, as in (1). In clitic sequences like that in (1b), the 1PL clitic is always ergative =*chy*, even if the verb is intransitive and the 3PL clitic following is =*7yl* ‘3PL absolute’ (as in (1d)), with the hortative particle *han(i)*. However, with the “exclusive,” if the verb is intransitive, the 1PL clitic is absolute =*ysh*.

- (1) CU a. *Chux-in-wyn = chy chym-hiñá-j.*
 spit-TR-PRS.PL = 1PL.ERG 1PL-saliva-ACC
 ‘Let’s spit (you and me)!’
- b. *Chux-in-wyn = chy = my chym-hiñá-j.*
 spit-TR-PRS.PL = 1PL = 3PL.ERG 1PL-saliva-ACC
 ‘Let’s all spit (you and me and others present)!’
- c. *Hani = sh.*
 HORT = 1PL.AB
 ‘Let’s go!’

- d. *Han = chy = 7yl.*
 HORT = 1PL = 3PL.AB
 ‘Let’s everyone here go!’

11.5.8. OBJECT PROCLITICS ON VERBS. Along with the prefixes for past-tense subject, transitive verb constructions in CU, except for formal imperatives, can appear with object markers that appear before the verb. These occur only in Inland Cupan. Given their phonological and cooccurrence properties, the CU object markers are probably best analyzed as proclitics, grammaticalized from accusative-marked independent pronouns like those of LU. CA has both object prefixes and object proclitics. The CA object proclitics (see 11.6.1.1 (4)) show an intermediate stage of grammaticalization, with forms like *cheme-j* ‘1PL-ACC’ showing a clearly identifiable accusative suffix. This is in contrast to the fusion seen in CU *chimi*.

The CU object proclitics are given in (1).

(1) CU		singular	plural
	person	1 <i>ni</i>	<i>chimi</i>
		2 <i>i</i>	<i>imi</i>
		3 <i>pi</i>	<i>mi</i>

They precede the subject prefix in past tense athematic verb constructions, as in (2).

- (2) CU *Mu = ku7ut mi_pym-naqma-wyn py7-mu7utu-wyni.*
 and = QUOT 3PL.OBJ_3PL-hear-PST.PL.IPFV 3PL-hoot-DS.PL
 ‘And it is said they heard them hooting like owls.’ (Faye Kisilj Pywik 20)

With thematic verbs, they do not shift with the subject prefix to the position before the thematic suffix, but instead remain in initial position before the root (as in (3a)). They are never stressed (in conformity with their proclitic status), even when they appear before stressless verb roots without other inflection, as in (3b). They do not appear with true imperatives; instead, the absolute pronominal clitics of the auxiliary are used. However, the object proclitics do appear in future-tense directives, as in (3c).

- (3) CU a. *Mu=ku7ut aja py-na7akwa-nm-i mi_kwaw=py-n.*
 and=QUOT now 3SG-son-PL-ACC 3PL.OBJ__call=3SG-TR
 ‘And it is said then he called his sons.’ (Faye Creation 122)
- b. *Yt=kwy=p ny7y-j ni_kwa7.*
 PROX2=POT=3SG.ERG 1SG.PRO-ACC 1SG.OBJ__eat.POT
 ‘He could eat me!’ (Faye Creation 126)
- c. *Qaj=y=py ni_syx-in.*
 NEG=2SG=IRR 1SG.OBJ__burn-TR.FUT
 ‘Do not burn me!’ (Coyote Eats Daughter 59)

Object proclitics can encode both direct objects and indirect objects with ditransitive verbs. In ditransitives, the object proclitic always encodes the indirect object, as in (4), where the indirect object is *chimi* ‘us’ and the direct object is *hunwyt* ‘bear’.

- (4) CU *Ymym=kwy=my chimi_mixaan, my chimi_myqan-max hunwyt-t.*
 2PL=POT=2PL.ERG 1PL.OBJ__do and 1PL.OBJ__kill-BEN bear-ABS
 ‘You all have to do something for us, and kill the bear for us.’ (Faye Kisilj Pywik 225)

In CU, the object proclitics for 3SG are optional, having a discourse function of focus or emphasis. However, all other objects are always marked.

11.6. INFLECTION IN MAIN-CLAUSE CAHUILLA VERBS. CA had at least three major dialect variants: Pass CA or Wanikik CA, Desert CA (DCA), and Mountain CA (MCA). While Pass CA has very scanty documentation, verbal inflection is well documented in DCA and MCA, and is slightly different between the two varieties. Consequently the two varieties will be discussed here in separate sections. MCA is in some ways more similar to CU than is DCA, perhaps reflecting the relative geographical proximity of the MCA and CU communities. Our materials on MCA come from Sauvel and Munro (1981), Sauvel and Elliott (2004), and Harrington’s archive of field work with Adán Castillo in the 1940s

and 1950s. DCA, with materials from Fuchs (1970), Seiler (1970, 1977), and Seiler and Hioki (1979), will be treated first.

The inflectional system of CA verbs resembles that of the other Cupan languages, although it is slightly less elaborated. However, CA is distinguished among the Takic languages by the requirement that almost all predicates appear with pronominal prefixes. The main exception is intransitive imperatives and transitive imperatives with third-person objects. CA verb constructions are also distinctive in having a set of contrastive focus prefixes that appear after the pronominal prefixes and before the verb stem. No other Takic language has prefixes of this type.

11.6.1. MAIN-CLAUSE VERB INFLECTION IN DESERT CAHUILLA.

11.6.1.1. PRONOMINAL PREFIXES AND PROCLITICS. The inventory of the main-clause subject prefixes is repeated in (1) from the discussion in 6.2.2. These prefixes must appear on all main-clause verb constructions, except with intransitive imperatives, and transitive imperatives with third-person objects.

(1) DCA subject prefixes for main-clause verbs

		singular	plural
person	1	<i>ne-</i> (~ <i>-n-</i>)	<i>chem-</i>
	2	<i>e-</i> (~ <i>-ʔ-</i>)	<i>em-</i>
	3	\emptyset -	<i>hem-</i> (~ <i>-em-</i>)

A summary of the relevant phonology affecting these prefixes includes the following. First, when subject prefixes are preceded by object prefixes in transitive constructions, the vowel of the subject prefixes *ne-* '1SG' and *e-* '2SG' (underlying *ʔe-*) can be lost. For the second person singular this leaves just a glottal stop, *-ʔ-*. This *ʔ-* of the second person singular is in turn lost before verb stems beginning with *ʔ*. Second, the remaining *n-* of the first person singular, as well as the final *-m-* of the plurals, is lost before verb stems beginning with *n* and *m* respectively. As in CU, the sequence *m-m* can become *ʔm*. In addition, in CA *n-n* can become *ʔn*. However, while this process is fairly regular in MCA, it is optional in DCA, and, in particular, it does not occur when the nasal is final in object-subject combinations such as *pe-em-* '3PL > 3SG' or *pe-n-* '1SG > 3SG' (= 3SG-3PL, 3SG-1SG

respectively). Finally, the initial *h* of the 3PL is lost when it follows an object prefix, yielding the above-mentioned combinations with double vowels in prefixal sequences like *me-hem-* > *me-em-* ‘3PL > 3PL’ and *pe-hem* > *pe-em-* ‘3PL > 3SG’ (= 3PL-3PL, 3SG-3PL).

A different set of pronominals, the proclitics shown in (2), appears before verbless complements (cf. 8.3.6, 9.4.12), including before nominalized predicates in subordinate clauses, and before constructions with the immediate future suffix *-ka(7)/-ka-te-m*. While the forms of the finite-verb prefixes in (1) resemble the ergative clitics of CU, the subject proclitics in (2) resemble the CU absolutes (except for the second person plural, where the absolute clitic in CU is =*yl*). In this paradigm, the third person subject is unmarked, in both singular and plural.

(2) DCA subject proclitics for relational complements and immediate future

		singular	plural
person	1	<i>hen</i> <u> </u>	<i>esh</i> <u> </u>
	2	<i>e</i> <u> </u>	<i>eme</i> <u> </u>
	3	∅	∅

The object prefixes, shown in (3), are required with main-clause transitive predicates, with the exception of a third person object of an imperative. The object prefixes may be affixed to verbs, where they precede the subject prefix or to the subject proclitics of (2), as appropriate. We believe that the reflexive *tax* is appropriately regarded as a proclitic, like the object markers below in (4).

(3) DCA object prefixes

		singular	plural
person	1	<i>ne-</i>	<i>cheme-</i>
	2	<i>e-</i>	<i>eme-</i>
	3	<i>pe- ~ pi-</i>	<i>me-</i>

As in CU, object marking comes before the subject prefixes. However, unlike CU, where marking 3SG object functions to heighten transitivity, and is otherwise optional, in CA third person objects are always marked, in both singular and plural (except on transitive imperatives), while 3SG subject is unmarked, the opposite of the CU system.

When a relational complement, an immediate future, or another type of nominalized predicate is zero-marked third person subject, the object markers have a final *-j*, the post-vocalic allomorph of the accusative suffix, as seen in (4). Like the CU object pronominal proclitics, these CA forms look very much like the LU accusative-marked independent pronouns. However, in LU these are independently stressable independent words, while in CA they are unstressed proclitics. (In CU these forms have undergone phonological bleaching to *ni_*, *chimi_*, etc., and no longer preserve the segmentable accusative inflection.) Note that the object proclitics in (4) do not appear with main-clause finite verbs with 3SG subjects, although this is also a zero-marked environment.

(4) DCA object proclitics

		singular	plural
person	1	<i>ne-j_</i>	<i>cheme-j_</i>
	2	<i>e-j_</i>	<i>eme-j_</i>
	3	<i>pe-j_</i>	<i>me-j_</i>
	reflexive	<i>tax_</i>	

Seiler (1977:231) cites a pattern in which the expected object prefix optionally does not appear if the object follows the verb as an “afterthought.” He offers (5) as an example.

(5) CA ... *hi-je* *nem* *jekaw-qal* *hua-7t-i*.
 3SG-mother walk gather- NFUT.SG iodine.bush-ABS-ACC

‘His mother walked around, gathered – weed.’ (Seiler 1977:232 (42))¹

¹ Translated rather differently in *Cahuilla Texts*: ‘(After shooting the rabbit, the boy saw) his mother walking around (the clearing) gathering herbs.’ (Seiler 1970:122 115)

Since the structure of (5) is repeated in the next sentence in the text, as (6), the idea that *hua7ti* is again an afterthought seems untenable, yet no object prefix is present.

(6) CA ... *yekaw-qal-epa7* *hua-7t-i*.
 gather-NFUT.SG-DS iodine.bush-ABS-ACC

‘(His mother) gathering herbs (had come close to him).’ (Seiler 1970:123 116)

The appearance in (6) of the different-subject subordinator *-epaʔ* (= *-ipaʔ*) is puzzling since the context seems to call for a same-subject subordinator. However, the preceding sentence, (5), lacks a subordinator, possibly in error, since there is a transition between the boy-as-subject to the mother-as-subject. Perhaps (6) was offered as a corrective. If so, then (5) and (6) offer but a single exception regarding object pronoun prefixation; no others have been found in the CA corpus. This makes any attempt at a general explanation for (5) and (6) seem premature.

11.6.1.2. TENSE, ASPECT, MOOD SUFFIXES. The tense, mood, and aspect suffixes of DCA are shown in Table 11.6.1.2. This represents a reanalysis of materials from Fuchs (1970) and Seiler (1977).

Table 11.6.1.2. Tense, aspect, and mood suffixes in main-clause verbs in Desert Cahuilla

TENSE	ASPECT	MOOD
nonfuture	stative <i>-wen</i>	factive <i>-ʔi</i>
sg. <i>-qal</i>	(usitative, customary <i>-wene</i>)	irrealis <i>-pulu</i> ~ <i>-(a)-lu</i>
pl. <i>-wen</i>	future imperfective	hortative <i>-na</i> ~ <i>-n</i>
future <i>-nem</i>	sg. <i>-nash</i> ~ <i>-ñash</i> ~ <i>-nish</i> ~ <i>-ñish</i>	imperative
immediate future	pl. (unattested)	sg. <i>-ʔa</i>
sg. <i>-(i)k(a)</i>		pl. <i>-ʔaam</i> ~ <i>-jam</i> , etc.
pl. <i>-katem</i> ~ <i>-ktem</i>		

DCA has a somewhat reduced system of tense-aspect suffixes compared to the systems in LU and CU, as well as in MCA. Seiler (1977:237) believed that the language lacked tense marking entirely, and that all inflection was for aspect and mood. However, we believe that tense is an appropriate category for the description of DCA inflection. There is clearly a future tense. DCA, like the other Takic languages, also has an “immediate future” in main clauses, marked by a nominalizing suffix that also appears in subordinate clauses. These future suffixes contrast with suffixes for nonfuture. This is quite different from the situation in SE, where nonfuture verbs are unmarked and only the future is marked. DCA is unusual in having modal suffixes for factive and irrealis. The “factive” (a term proposed by Fuchs 1970) *-ʔi* perhaps should be thought of as the realis of the nonfuture, in contrast to the irrealis of the future, *-pulu/- (a)-lu*. In the other Cupan

languages these modal contrasts are encoded in the auxiliary complex, by realis *=*yp* and irrealis *=*py*. The DCA aspectual suffixes precede tense and mood suffixes.

11.6.1.3. NONFUTURE. The most common verb affix in the DCA text materials in Seiler (1970) is the nonfuture. This is marked with the suppletive *-qal* (sg.) and *-wen* (pl.). In CU, the same pair encode the past imperfective.

Fuchs (1970), Seiler (1977), and Jacobs (1975) all considered *-qal* and *-wen* to be aspectual, marking the durative. However, the pair has a reliably durative sense only in combination with a following subordinating suffix (same-subject realis *-ve* or irrealis *-p(i)*, different-subject *-ipa7*). (Examples of this type appear in section 12.6.) Elsewhere, *-qal* and *-wen* often encode punctual or perfective events, as in the examples in (1). We conclude that the suffix pair belongs to the tense system, and that “nonfuture” is a better label than “durative”.

- (1) DCA
- a. *Pe7 jal taxat Muka-t jax-qal “Ki7i.”*
 3SG.PRO QUOT EMPH prsn-ABS say-NFUT.SG no
 ‘But it is said that Mukat said “No.”’ (Seiler 1970:43 57)
- b. *Pe7 huja-l-i pe-kus-qal.*
 3SG.PRO arrow-ABS-ACC 3SG.OBJ-take-NFUT.SG
 ‘He took an arrow.’ (Seiler 1970:47 112)
- c. *Penga pe ajax p-ika pe-em-che-kapal-wen pe7i-j*
 then FOC like 3SG-DAT 3SG.OBJ-3PL-CF-open-NFUT.PL DET-ACC
weevu7u-j pengki-ch-i.
 egg-ACC like-ABS-ACC
 ‘Then they broke out of that egg-like thing.’ (Seiler 1970:39 11)
- d. *Puti¹ pe-puche-qal = el ...*
pucha CF-jump- NFUT.SG = QUOT
 ‘It is said that he jumped.’ (Seiler 1970:55 230)

¹ Various forms of the Spanish exclamation *pucha*, *puche*, indicating astonishment, surprise, are used as discourse particles.

As expected with an imperfective suffix (Labov & Waletzky 1967), *-qal* and *-wen* appear in narrative discourse in “background” and “orientation” contexts, as in (2).

- (2) DCA a. *Aj jengi-ljaw-qal pe7.*
 then time.pass-GOPR-NFUT.SG FOC
 ‘And so time went by.’ (Seiler 1970:65 7)
- b. *Me-mávi-ljew-qal me-páj-ljew-qal*
 3PL.OBJ-night.fell-GOPR-NFUT.SG 3PL.OBJ-dawn-GOPR-NFUT.SG
hem-neken.
 3PL-come.NFUT
 ‘Nights fell and mornings dawned on them as they went on their way.’
 (Seiler 1970:83 18)

However, *-qal* and *-wen* are also the most frequent verbal suffixes in main clauses of the narrative “main line” (as in the examples in (1)), where, following the theory of narrative syntax advanced by Labov and Waletzky (1967), we expect past perfective predicates.

The suffixes *-qal* and *-wen* are used in present-tense contexts. The examples in (3) were uttered as Seiler’s consultant Genevieve McGee looked at a set of line drawings and described what she saw.

- (3) DCA a. *I nawishma-l iñishi-lj pe-7une-qal hé-pas-i*
 PROX girl-ABS little-ABS 3SG > 3SG-show-NFUT.SG 3SG-Obj-ACC
e-t-i hiwen-e-7t-i.
 PROX2-ABS-ACC object-NMLZ-ABS-ACC
 ‘This little girl is showing her brother an object.’ (Seiler 1970:187 14)
- b. *Ivi-m pe-em-tew-wen, na~nxani-che-m, kwiñi-7lj-i.*
 PROX-PL 3SG.OBJ-3PL-see-NFUT.PL PL~man-ABS-PL black.oak-ABS-ACC
 ‘These men are looking at the oak tree.’ (Seiler 1970:185 2)

11.6.1.4. FUTURE PERFECTIVE. Fuchs (1970) and Seiler (1977), consistent with their theory that CA finite inflection is entirely aspectual, refer to the suffix *-nem* as an

“expectative.” However, we prefer the analysis of Jacobs (1975), who concluded that it is simply a future, though we regard it as future perfective. DCA *-nem* corresponds to MCA *-ne* (cf. 11.6.2.9).

The suffix *-nem* is in no way irrealis. In fact, it cannot be used with the negative. Negative future expressions require the irrealis subordinator *-p(i)*, as in (1).

- (1) DCA *Kilj pe-mijax-wen-a-p.*
 NEG CF-be-ST-ABLAUT-IRR.SUB
 ‘It should not exist.’ (Seiler 1970:43 55)

The suffix *-nem* is attested with the temporal adverbs and adverbial expressions in (2). These show the temporal scope of verbs with *-nem*, ranging from ‘immediately’ to ‘later’.

- | | | | | |
|-----|-----|----|---------------------------------------|------------------------|
| (2) | DCA | a. | right now, right away, immediately | <i>iv7ax</i> |
| | | b. | soon, after a while, later | <i>mawa</i> |
| | | c. | at night | <i>mavi</i> |
| | | d. | at daybreak, in the future, next time | <i>pay(pa)</i> |
| | | e. | in the morning | <i>mutúleka</i> |
| | | f. | tomorrow | <i>tuleka</i> |
| | | g. | another day | <i>supuli tamitpa7</i> |
| | | h. | in three days | <i>tuku pah</i> |
| | | i. | in the end | <i>hungayka</i> |

An example with *-nem* and the adverb *mawa* ‘soon’ (2b) is given in (3).

- (3) DCA *Mawa ne-pis-nem.*
 soon 1SG-return-FUT.PFV
 ‘I shall be back soon.’ (Seiler 1970:93 7)

Futures with *-nem* often include a proclitic *ax_* of unknown meaning but appearing exclusively with future-perfective verbs (cf. 10.6.2), with the variant *hax_* sometimes found in MCA (11.6.2.9).

- (4) DCA a. *Iv7ax enga ax_7em-pa-nem.*

right.away there AX__2PL-drink-FUT.PFV
 ‘You (pl.) can drink right away.’ (Seiler 1970:113 24)

b. *Mutúleka ax__ne-hichi-nem pe-n-teew-nem.*
 in.morning AX__1SG-go-FUT.PFV 3SG.OBJ-1SG-see-FUT.PFV
 ‘Tomorrow morning I will go, I will see her.’ (Seiler 1977:143 (163))

c. *Ne7 ax__7en-kii-nem men, pe-nga “hih,”*
 1SG.PRO AX__1SG-go.with-FUT.PFV and DIST-LOC INTRJ
ax__ni-jax-nem pe hém-ki me-ta ax__che-lapash-nem
 AX__1SG-say-FUT.PFV DET 3PL-house 3PL-on AX__CF-collapse-FUT.PFV
pe ax__hem-kina-nem.
 FOC AX__3PL-burn-FUT.PFV
 ‘I will come with you and I will say “Hih,” and their house will collapse and they will burn.’ (Seiler 1970:115 45)

As in the other Takic languages, a future suffix appears in directives, as in (4).

(4) DCA “*Em-na7ani-nem*” *jax-qal* “*iv7ax pen eti-j pa7*
 2PL-make.fire-FUT.PFV say-NFUT.SG right.away and DEM-ACC FOC
ax__pe-7em-wa~wa-nem.”
 AX__3SG.OBJ-2PL-IPFV~roast-FUT.PFV
 ‘“Make a fire,” he said, “right away, and then roast him.”’ (Seiler 1970:127 171)

11.6.1.5. IMMEDIATE FUTURE. The last of the tense suffixes is the immediate future, with the same suffixes as in CU, although Seiler (1970, 1977) writes the suffixes with *k* instead of *q*, and we follow his usage. The CA singular immediate future suffix often appears without the absolutive *-t* seen in LU and CU, but the absolutive, as *-te-*, always appears in the plural, which is marked with the usual nominal plural *-m*. The suffix induces *i*-ablaut, as in CU, and when the ablaut vowel is present the singular often appears simply as *-k*, as in the second verb in (1b). As in the other Takic languages, this construction also appears in several types of subordinate clauses, discussed in section 12.6. Unlike the future *-nem*, the immediate future suffixes seldom appear with temporal adverbs. In these

examples, the zero copula is made explicit to highlight the structural status of the CA immediate future as a verbless-clause complement.

- (1) DCA a. *Ne7 ta7 hen__ngij-ka Ø.*
 1SG.PRO EMPH 1SG__go.home-IFUT be.
 ‘I’m going home now.’ (Seiler 1970:131 195)
- b. *Ne-qi pe-n__wa7-ka Ø pe-n__kwa7-i-k Ø.*
 1SG-EMPH 3SG.OBJ-1SG__roast-IFUT be 3SG.OBJ-1SG__eat-ABLAUT-IFUT be
 ‘Just me, I will roast it, I will eat it (I’m going to roast and am going to eat it all by myself).’ (Seiler 1970:125 140)
- c. *Wih-kwa pu~vu-la-m puwax-ka-te-m Ø.*
 two-COL PL~doctor-ABS-PL do.magic-IFUT-ABS-PL be
 ‘The two doctors were going to do their magic.’ (Seiler 1970:71 70)
- d. *Ijax-wen eme-j__chex-ni-k-te-m Ø.*
 be.thus-ST 2PL-ACC__die.PL-CAUS-IFUT-ABS-PL be
 ‘That’s how it is, they are going to kill you.’ (Seiler 1970:77 18)

11.6.1.6. STATIVE. Just as in LU and CU, the suffix for the stative *-wen*, as in (1), is homophonous with the nonfuture plural. *-wen* is construed as nonfuture unless it is followed by a future suffix.

- (1) DCA a. *Pe7 tukmijat mijax-wen.*
 DET night be-ST
 ‘There was darkness.’ (Seiler1970:39.1)
- b. *Penga chaqe weevu7-i ajax-wen.*
 there there egg-ACC be.like-ST
 ‘It was just like an egg.’ (1970:39.10)

As mentioned above, the CA aspectual suffixes precede the tense and mood suffixes. In a single attested example (2), stative *-wen* occurs before future *-nem*. In (2) the stative suffix is in the form *-we7-* because of the *n-n > 7-n* dissimilation.

- (2) DCA Ax_7ijax-**we7-nem**.
 AX__be.thus-ST-FUT.PFV
 ‘They will be that way.’ (Seiler1970:43.55)

11.6.1.7. USITATIVE OR CUSTOMARY -WENE. None of the sources on CA that we have consulted distinguishes a usitative/customary suffix *-wene*. However, we believe that it should be recognized, although it is attested in relatively few examples. Since Seiler’s transcriptions often represent the factive mood of the nonfuture plural as *-wene*, presumably a fast-speech pronunciation of *-wen-7i* ‘nonfuture/stative-factive’, it is sometimes difficult to distinguish the two constructions. For instance, the construction *meempuvishwe7ne* in (1c) has a glottal stop, suggesting that it may be from *-wen-7i* ‘past imperfective plural-factive’. However, the usage is like those in (1a,b), and frequently intrusive glottal stops in Seiler’s (1970) transcriptions do not seem to involve the factive, but are pausal, or simply stylistic.

- (1) DCA a. *Pe7 pe jewi taxliswe-te-m pe-em-ne~nmi-wene*
 FOC FOC long.ago person-ABS-PL 3SG.OBJ-3PL-IPFV~follow-USIT
me-em-nuk-wene.
 3PL.OBJ-3PL-make.image-USIT
 ‘Long ago the people followed this custom, long ago they held doll fiestas.’
 (Seiler 1970:57 265)
- b. *Pe7i-j pi-sh hem-juluka-j pe-em-su~stum-wene*.
 3SG.PRO-ACC 3SG-INS 3PL-hair-ACC 3SG.OBJ-3PL-IPFV~tie-CUST
 ‘With that they used to tie their hair.’ (Seiler 1977:208 (259))
- c. *Suu-le-m-i me-em-puvish-we7ne, man pi-sh*
Juncus-ABS-PL-ACC 3PL.OBJ-3PL-cut-CUST and 3SG-INS
pe-ne~neh-qal-e.
 3SG.OBJ-IPFV~basket-NFUT.SG-FCT
 ‘They (people in earlier days) used to cut grass [*Juncus* sp.] from which they made baskets.’ (Seiler 1970:147 6)

11.6.1.8. FUTURE IMPERFECTIVE. The future imperfective singular *-nash* ~ *-ñash* ~ *-nish* ~ *-ñish* is poorly attested, occurring most frequently in the future tense of the irregular verb *hiwqal*, *qal*, *hiwnash*, *max* ‘be, be located, be staying’. It is always followed by the future tense suffix, as in (1), or by modal suffixes, as in (2). No example of a distinct suffix for future imperfective plural appears in the data. In CU the future imperfective is *-wyny*, but as shown above, the cognate of *-wyny* in CA is not a future, but a usitative or customary.

- (1) DCA a. *E-nga ne-hiw-nish-nem.*
 PROX2-LOC 1SG-stay-FUT.IPFV.SG-FUT.PFV
 ‘There I shall stay.’ (Seiler 1970:57 249)
- b. *Wajik-wene-t-i pi-chem-ku~kul-nem pe7 tuhajimanish*
 eat-NMLZ-ABS-ACC 3SG.OBJ-1PL-IPFV~make-FUT.PFV FOC always
che-tu-nish-nem tawpaxi-ch-i tawpaxi-ch-i.
 CF-bear.fruit-FUT.IPFV.SG-FUT.PFV year-ABS-ACC year-ABS-ACC
 ‘We will make things grow that will bear fruit year after year.’ (Seiler 1970:43 62)
- c. *Qilj7i i7ive hé-mu ax_sawa-ñish-nem.*
 3SG.neck without 3SG-face AX_be.absent-FUT.IPFV.SG-FUT.PFV
 ‘His neck will be missing and he will have no face.’ (Seiler 1970:125 140)
- (2) DCA a. *E-nga e-hiw-nash-na.*
 PROX2-LOC 2SG-stay-FUT.IPFV.SG-HORT
 ‘You must stay there.’ (Seiler 1970:49 150)
- b. *E-nga e-hichi-pulu man i-lj pa7*
 PROX2-LOC 2SG-go-IRR and mesquite-ABS FOC
e-pa~pax-ngi-nish-pulu.
 2SG-REP~go.in-MOTNG-FUT.IPFV.SG-IRR
 ‘You might go over there and go under those mesquite trees.’ (Seiler 1970:101 39)

11.6.1.9. FACTIVE. The analysis of the factive, the first of the modal suffixes, has been disputed. Fuchs (1970) and Seiler (1977:140) assign the label “factive” to a suffix *-7i*.¹³³ Since *-7i* appears almost exclusively in past-tense contexts, Jacobs (1975) suggested that it marked a past perfective or non-durative, contrasted with past durative *-qal* ~ *-wen*. In their treatment of MCA (discussed below), Sauvel and Munro (1981) labeled it “past tense.” However, we concur with Fuchs and Seiler, that in DCA this is not a tense or aspect suffix but rather one of mood.

The suffix does not occur with the negative. This fact supports the idea that it is modal: negative factives have no suffix, as in (1).

- (1) DCA *I kilj pe-em-7enan pish hem-chengen-pi.*
 PROX NEG 3SG.OBJ-3PL-learn COMP 3PL-dance-IRR.SUB
 ‘They just could not learn how to dance.’ (Seiler 1970:45 94)

This suffix often occurs following nonfuture *-qal* and *-wen*, which can (but need not) have a durative or imperfective sense. Its occurrence in discourse is restricted. It appears primarily on verbs in clauses at the climax of a plot line or an argument, or in codas expressing moral evaluation, and never in orienting or background clauses. Furthermore, it is found in examples like (2), that are not clearly past tense.

- (2) DCA *I7 iv7ax man pa7 chem-qal-7i chem hemu7-an,*
 PROX now and FOC 1PL-be-FCT 1PL.PRO end-at
chem-nga7a-m hem-qa~qal-ngi.
 1PL-first.ancestor-PL 3PL-DISTR~be-GOING2
 ‘And it is that now we are the youngest generation; each of us has a first ancestor [a lineage founder].’ (Seiler 1970:63 329)

For these reasons we regard it as a modal suffix, like the irrealis. We retain Fuchs’s (1970) label “factive” (FCT) for the suffix *-7i*. The suffix can follow the verb root directly, as in (2), above, or (3), or it can follow a nonfuture suffix, as in the examples in (4). The suffix is rather variable. The glottal stop often metathesizes with the final consonants of

¹³³ Seiler (1977:140) does not use the word “factive” but rather “factual.” “Factive” is our translation of the German *faktisch*.

-qal and *-wen* (as in (4)), and sometimes the *i* (which is usually pronounced *e* by Seiler's consultants) is not present. Sometimes the glottal stop is missing.

- (3) DCA *Jewi qawi-sh jewi pe-em-kus-7i melki-che-m.*
 long.ago rock-ABS long.ago 3SG.OBJ-3PL-take-FCT White.person-ABS-PL
 'The White people ... took away that rock long ago.' (Seiler 1970:75 10)

- (4) DCA a. *Pe jal i-ka pe-e-muh-we7n-e.*
 FOC QUOT PROX-DAT 3SG.OBJ-3PL-shoot-NFUT.PL-FCT
 'It is said they shot high up.' (Seiler 1970:103 44)
- b. *Pe-l pe7 naxani-sh aj mi-jk pis-qa7l-e.*
 FOC-QUOT DET man-ABS then 3PL-DAT go.out-NFUT.SG-FCT
 'Then it is said the man went out to (meet) them.' (Seiler 1970:113 17)

11.6.1.10. IRREALIS FUTURE. Occurring in the same suffixal position as the future *-nem* – which means it never co-occurs with it – is irrealis *-pulu/(-a)-lu7*. The *a* in *-a-lu* (seen in (4)) is the ablaut vowel, appearing only in ablauting environments as discussed in section 10.6.1. Seiler (1977:144) labels this suffix “possibility,” with a bias toward indirection. This suffix, but not *-nem*, encodes requests or wishes, as in (1). These contrast with the clearly directive uses of *-nem* (as in 11.6.1.4 (3)).

- (1) DCA a. *Hema ne7 e-n-kijn-pulu pen pe-nga*
 perhaps 1SG.PRO 2SG.OBJ-1SG-go.with-IRR and DIST-LOC
ne-7-(7)amin-pulu.
 1SG.OBJ-2SG-drop-IRR
 'Could I perhaps go with you so you could put me down there?' (Seiler 1970:87 75)
- b. *Hem-ngij-pulu.*
 3PL-go.away-IRR
 'I wish they would go.' (Seiler 1977:144 (164))

It can encode counterfactuals, as in (2).

- (2) DCA *Hiw-nish-pulu* *mas* *mi-sh* *kus-pulu* *taxat*.
 live-FUT.IPFV.SG-IRR rather 3PL-INS tease-IRR PRT
 ‘If [Coyote] had stayed alive, he would have gone on making fun of them.’
 (Seiler 1970:63 326)

Like *-nem*, *-pulu* can follow future durative singular *-nish*, as above in (2) and also in (3) (repeated from 11.6.1.8 (2b)).

- (3) DCA *E-nga* *e-hichi-pulu* *man* *i-lj* *paʔ*
 there-in 2SG-go-IRR and mesquite-ABS FOC
e-pa~pax-ngi-nish-pulu.
 2SG-REP~go.in-MOTNG-FUT.IPFV.SG-IRR
 ‘You might go over there and go under those mesquite trees.’ (Seiler 1970:
 103 39)

Seiler asserts that it also occurs following nonfuture plural *-wen* and stative *-wen*, but no examples appear in his texts of 1970 or his 1977 grammar.

The suffix is a *a*-ablauting form; following verb roots and suffixes that require *a*-ablaut (see 10.6.1 (10)), it appears as *-lu-*, seen in (4).

- (4) DCA *Pe-ʔ-aj-a-lu* *pen* *né-puch-i* *pi-sh*
 3SG.OBJ-2SG-collect-ABLAUT-IRR and 1SG-eye-ACC 3SG-INS
pe-n-tingʔaj-pulu.
 3SG.OBJ-1SG-cure-IRR
 ‘If you could get some, I could cure my eyes with it.’ (Seiler 1970:121 103)

11.6.1.11. HORTATIVE. The last of the modal constructions are the hortatives and the imperatives. The hortative is encoded with a suffix *-na*, as in (1).

- (1) DCA *Pi-chem-pe-ngali-na*, *pi-chem-kus-na*.
 3SG.OBJ-1PL-CF-rope-HORT 3SG.OBJ-1PL-tease-HORT
 ‘Let’s rope him and tease him!’ (1970:143 8)

Hortative *-na* is an *a*-ablauting suffix and it reduces to *-n* after the ablaut vowel, as seen in (2).

- (2) DCA *Kilje e-pis-a-n.*
 NEG 2SG-go.out-ABLAUT-HORT
 ‘Don’t go out.’ (Seiler 1970:157 3)

If the vowel preceding the hortative suffix is not an ablaut vowel, then the suffix retains its full form *-na*, as can be seen in (3).

- (3) DCA *Kilje e-hichi-na pi-jik.*
 NEG 2SG-go-HORT 3SG-DAT
 ‘Don’t go near her.’ (Seiler 1970:87 62)

In the hortative, objects are marked with the accusative suffix, as in (4).

- (4) DCA *Mawa ne-hichi-pa7 pe-7-temi-na kimu-7l-i.*
 later 1SG-go-DS 3SG.OBJ-2SG-close-HORT door-ABS-ACC
 ‘Tomorrow, after I go, lock the door!’ (Seiler 1977:145 (165))

This differs from objects of imperatives (see 11.6.1.12 below) which are not marked for accusative, as in (5).

- (5) DCA *Temi-7 kimu-l.*
 close-IMP door-ABS
 ‘Lock the door!’ (Seiler 1977:145 (166))

Furthermore, unlike imperatives, the hortative forms can appear with negatives, as in (2) and (3) above, and with statements of temporal or conditional precedence (Seiler 1977:144), as in (4) above. In these constructions, nominal objects are marked for accusative. True imperative verbs do not appear with negatives. This is like the situation in CU, where negative directives use future-tense verbs.

11.6.1.12. IMPERATIVE. The singular imperative forms show a number of complexities and irregularities. With roots of the shape CVC, one imperative type adds a suffix *-7e*, with the glottal stop metathesizing with the preceding consonant, as in (1). This pattern appears with verb roots that do not exhibit ablaut vowels with ablauting suffixes.

- (1) DCA *Se7x-e.* < *sex*
 cook-IMP
 ‘Cook it!’ (Seiler 1977:146 (168))

The glottal stop is absent with verb roots that do exhibit ablaut vowels with ablauting suffixes (see the list in 10.6.1 (10)), like *tav* in (2). Here, the imperative suffix is simply *-e*.

- (2) DCA *Tav-e.* < *tav*
 put.down-IMP
 ‘Put it down!’ (S&H 200)

Three verbs, *kwa7* ‘eat’, *pis* ‘come out’, and *wen* ‘put down’ add *-a*, as in (3). It seems possible that this *a* might be the same as the ablaut vowel *a*.

- (3) DCA *Kwa7-a.* < *kwa7*
 eat-IMP
 ‘Eat it!’ (Seiler 1977:146 (b))

Most vowel-final roots add *-7*, as in (4). Example (4) also illustrates the fact that object nouns (*tapa7mal* ‘pot’ in this example) are unmarked for accusative case in the imperative.

- (4) DCA a. *Tapa7ma-l* *chi7a-7.* < *chi7a*
 pot-ACC sit-IMP
 ‘Set up the pot!’ (Seiler 1970:101 23)
- b. *Hichi-7.* < *hichi*
 go-IMP
 ‘Go!’ (Seiler 1977:146 (169))

Although Seiler (1977) does not mention this point, the thematic causative suffix *-in* truncates to *i*, and the singular imperative displays the usual vowel-final pattern, as in (5). Sauvel and Munro (1981:86) state that in MCA *n* is always lost if it is final in the stem, and is replaced by glottal stop. We do not know if this is true as well for DCA.

- (5) DCA *Temi-7* *kimu-l* < *temi-n* ‘close up, lock s.th.
 lock-IMP door-ABS
 ‘Lock the door!’ (Seiler 1977:145 (166))

Seiler (1977:146) states that in DCA verbs stems that are polysyllabic (which seems to mean “with more than two syllables”) or that are monosyllabic with long vowels, use the bare stem as imperative; but he cites no examples in support of this generalization. Fortunately, his texts attest (6), a three-syllable example with an athematic causative and no glottal stop.

- (6) DCA *Ngj-ljew-ni* < *ngj-law-ni*
 go.away-GOPR-CAUS
 ‘Make it go away!’ (Seiler 1970:59 277)

Seiler and Hioki (1979) list only six verbs of the monosyllabic long-vowel type, and one of these, *teew*, has an irregular imperative *tee7*. The remainder, such as *kiin* ‘follow, accompany’ or *leer* ‘read’, presumably use these bare stems as imperatives.

Not discussed by Seiler are verbs that end in unstressed consonant-final syllables. In MCA, these use the bare stem as the imperative, as in (7):

- (7) MCA *Papúchaq*.
 ‘Jump!’ (S&M 84)

Verbs with automatic reduplication (see 10.6.1) use the reduplicated form in the imperative, as in (8).

- (8) DCA a. *Ha~al* < *ha~hal* < *hal*
 IPFV~look.for
 ‘look for it!’ (Seiler 1977:146 (168))

- MCA b. *Kaxóon ku~kul* < *kul*
 box IPFV~make
 ‘Make a box!’ (S&M 89)

The purposive motion suffix *-law* truncates to *-l* (9).

- (9) DCA *Tehwe-l* < *tehwe-law*
 look-GOPR.IMP
 ‘Go take a look!’ (Seiler 1970:115 52)

In contrast to the complexity of the singular forms, the plural imperatives are straightforward. The plural imperative is marked by *-a-m* following a consonant (11a), *-ja-m* or *-aa-m* following a vowel (10b,c). Note that in CA, plural transitive imperatives are ambiguous, referring to plurality either of subject, or object, or both.

- (10) DCA a. *Tehwe-law-a-m* < *tehwe-law*
 look-GOPR-IMP-PL
 ‘Go (pl.) see him!’ / ‘Go (sg.) see them!’ (Seiler 1977:146)
- b. *Pis-a-ni-ja-m* < *pis-a-ni-*
 come.out-ABLAUT-CAUS-IMP-PL
 ‘Take (pl.) it out!’ / ‘Take (sg.) them out!’ (Seiler 1970:41 31)
- c. *Teklu-ja-m* / *Teklu-aa-m* < *teklu-*
 be.quiet-IMP-PL
 ‘Be quiet (pl.)!’ (Seiler 1977:147)

While the third person object is normally unmarked in imperatives (cf. (4) above), a first-person object will be encoded as a prefix as in (11), in which case the second-person subject prefix will also appear.

- (11) DCA a. *Ne-7e-max-a-m.* < *max*
 1SG.OBJ-2PL-give-IMP-PL
 ‘Give (pl.) it to me!’ (Seiler 1970:125 140)
- b. *Cheme-7-tee7.* < *teew*
 1PL.OBJ-2SG-see.IMP
 ‘See us!’ (Seiler 1977:136 (157ii))

First-person subjects of imperatives are encoded with pronominal prefixes, as in (12). With this first person hortative sense, there is no plural suffix on the imperative.

- (12) DCA *Chem-hichi7.* < *hichi*
 1PL-go.IMP
 ‘Let’s go.’ (Seiler 1977:136 (157i))

11.6.1.13. ADJUNCT VERBS WITH EXPRESSIVE MODIFICATIONS. A distinctive feature of CA main clauses is a construction consisting of a verb root, usually modified by diverse expressive devices, followed by the light verb *jax*, which carries all inflection. This construction has a wide range of functions in narrative, especially that of providing rhetorical foregrounding and “color.” Seiler (1977) describes these constructions of having the sense to “do a little,” as in in (1a,b). However, the construction seems to have a much wider range of uses.

- (1) DCA a. *Kus pi-jax-ngi-qal.*
 take 3SG > 3SG-do-GOING2-NFUT.SG
 ‘3SG took a little, took one by one.’ (Seiler 1977:225 (27ii))
- b. *Teew eme-sh-jax-i-ktem* \emptyset .
 see 2PL.OBJ-1PL-do-ABLAUT-IFUT.PL be
 ‘We’re going to go to see you once in a while.’ (Seiler 1977:226 (29))
- c. *Né-sun chelj jax-qal ne-juki-qali-ve.*
 1SG-heart shake do-NFUT.SG 1SG-be.afraid-NFUT.SG-REAL
 ‘When I am afraid, my heart trembles.’ (S&H 29)

Note that example (2), structurally identical to (1a), in that the adjunct is simply the unmodified root, has a “do a little” sense only rather abstractly.

- (2) DCA a. *Pax jax-7e.*
 go.in do-IMP.SG
 ‘Enter!’ (Seiler 1970:135 61)

The expressive modifications in adjuncts include the lengthening of the root vowel (3a,b), or of the final consonant (3c,d). The roots in (3a,b,c,e) are also clipped, losing their final *-i*. Reduplication, of the full copy type, often repeated several times, as in (3e,f) is common. “Automatically” reduplicating roots (10.6.1) have their unreduplicated forms in these constructions; these can then undergo full copy reduplication. Some adjuncts exist only as onomatopoeia, as with *tis tis tis* in (3g). In the examples in (3), we use colons to mark expressive lengthening in place of Seiler’s raised dots.

- (3) DCA a. *I7 juluka chaqe ke::p jax-7e.*
 PROX hair just glide(?) do-FCT
 ‘His hair grew long.’ (Seiler 1970:69 47)
- b. *Pe7 taxlis-te-m me-j_kwa7i-we-t hé-sun-i we::k*
 DET person-ABS-PL 3PL-ACC_eat-NMLZ-ABS 3SG-heart-ACC cut
pe-n-jax-7i.
 3SG.OBJ-1SG-do-FCT
 ‘I am slowly cutting open the ogre’s heart.’ (Seiler 1970:119 84)
- c. *Penga puti ngiljáa-qal tema-l i7 chaqe tawk:: jax-7i.*
 then *pucha* shake-NFUT.SG earth-ABS PROX just shake do-FCT
 ‘Then *pucha!* the earth started to shake and tremble.’ (Seiler 1970:45 72)
 For *pucha*, see 11.6.1.3 (1d).
- d. *Pe::-nga = l tavu-t pis:: jax-qal.*
 DIST-LOC = QUOT rabbit-ABS go.out do-NFUT.SG
 ‘In the distance a rabbit popped out (of his hole).’ (Seiler 1970:123 114)

- e. *Kelawe-t pi-sh pe-em-vuk-wen pe-nga pak pak pak pak*
 stick-ABS 3SG-INS 3SG.OBJ-3PL-hit-NFUT.PL DIST-LOC pat pat pat pat
pe-em-jax-a-ni-wen.
 3SG.OBJ-3PL-do-ABLAUT-CAUS-NFUT.PL
 ‘With a wooden paddle they shaped it and patted it pat-pat-pat-pat.’ (Seiler 1970:145 4)
- f. *Tu7 tu7 ne-7em-jaxe-max-a-m pe-n__pa7-ka. Ø.*
 grind grind 1SG.OBJ-2PL-do-BEN-IMP-PL 3SG.OBJ-1SG__drink-IFUT.SG be
 ‘Grind them for me so I can drink them.’ (Seiler 1970:131 190)
- g. *Pe7 jal neken Taku-sh melki-vaneken tu:v: jax-qal.*
 FOC QUOT come prsn-ABS make.noise-COMING.NFUT INTRJ do-NFUT
 ‘Takush came, making his noise, “toovv.”’ (Seiler 1970:129 184)

Adjuncts exhibit incorporation (4a) and compounding (4a) and perhaps (4b). Both are common with adjuncts and rare elsewhere.

- (4) DCA a. *Hem-hichi-wen i-ka tam-piis-paax jax-qal-ive-jka.*
 3SG-go-NFUT.PL PROX-DAT sun-come.out-go.in do-NFUT.SG-REAL-DAT
 ‘They went in the direction in which the sun comes out and goes in (where it rises and sets).’ (Seiler 1970:83 6)
- b. *Huti i ja::w wipi::s pi-jaxe-qal.*
 well PROX grab pull;drag 3SG.OBJ-do-NFUT.SG
 ‘He caught hold [of the blanket] and slowly pulled at it.’ (Seiler 1970:95 55)

While all inflection usually is attached to *jax* in these constructions, motion and other derivational suffixes can appear in construction with the adjunct. The motion suffix *-ngi* appears with *kus-* in (5a); a variant of the motion suffix *-law* appears with *pax* in (5b). (5c) shows *hiv* with the contrastive focus prefix *cha-*. The contrastive focus element appears as a separate particle *cha* in (5b).

- (5) DCA a. *I7 jal Xaltiska pe-ngax tis-tis-tis kus-ngih*
 PROX QUOT Brown.Bird 3SG-ABL INTRJ take-GOING2
pe-jaxe-qal.
 3SG.OBJ-do-NFUT
 ‘Brown Bird grabbed them one by one *tis-tis-tis*.’ (Seiler 1970:120 105)
- b. *Pe=l penga naxaa-sh cha pax-a-lu jax-7i.*
 FOC=QUOT then man-ABS just;CF enter-ABLAUT-GOPR do-FCT
Wilja-l.
 Ferret-ABS
 ‘Then Ferret slipped in and they didn’t see him.’ (Seiler 1970:61 301)
- c. *Pe jal huja-j cha-hiv pi-jaxe-qal.*
 FOC QUOT arrow-ACC CF-take 3SG.OBJ-do-NFUT.SG
 ‘Then he took his bow and arrows.’ (Seiler 1970:121 108)

11.6.1.14. PAST-TENSE SUFFIX -7A ON NOUNS. The CA past-tense suffix *-7a*, introduced in chapter 9, is described by Seiler (1977:238) as “the only grammatical element that autonomously carries the meaning of ‘past’.” Seiler labels the suffix *-7a₁* to distinguish it from the suffix on the deverbal nouns in *-7a₂* that appear in object relative clauses and action nominalizations, and that we have glossed NMLZA (see 13.3).

The suffix *-7a* ‘past’ appears only with nouns and nominalized verbs, the latter all in the nonfuture or realis categories including derivations with *-i-sh*, *-e-t*, *-we-t(e-m)*, and *-ve*, as seen in (1). Example (1b) shows that the tense suffix has scope over a clause (another example is (2)). (1c,d) show examples with nouns, and (1e,f) show examples with the realis subordinator *-ve*.

- (1) CA a. *Esh_7amu-we-te-m-7a* Ø.
 1PL_hunt-NMLZ-ABS-PL-PST be
 ‘We were (and no longer are) hunters.’ (Seiler 1977:238 52)
- b. *Hen_7amu-we-t achaj-7a* Ø.
 1SG_hunt-NMLZ-ABS good-PST be
 ‘I was (and no longer am) a good hunter.’ (Seiler 1977:239 53)

- c. *Jewi hiw-qa7l-e né-mas, Francisco Toro,*
 long.ago be-NFUT.SG-FCT 1SG-FaYoBr
puu-l-7a, hespen puu-l-7a Ø.
 doctor-ABS-PST very doctor-ABS-PST be
 ‘Long ago there lived my stepfather,¹ Francisco Toro, who was a doctor, a
 very great doctor.’ (Seiler 1970:139 1)
¹ Gifford (1922) reports that the same term is used for father’s younger brother (p. 56) and
 stepfather (p. 57) in Desert CA. This is also true of SE (pp. 54, 55) and CU (p. 59).
- d. *Iv7i tema-l taxis-te-m he[m]-mexan-7a Ø.*
 PROX land-ABS Indian-ABS-PL 3PL-property-PST be
 ‘The land here belonged to the Indians.’ (Seiler 1970:149 2)
- e. *Pe-7e~7nan-qal-e pe7i-j pish*
 3SG.OBJ-IPFV~know-NFUT.SG-FCT 3SG.PRO-ACC COMP
nek-i-ve-7a.
 come-ABLAUT-REAL-PST
 ‘He knew that he had arrived.’ (Seiler 1970:75 13)
- f. *Ax_7ijax-nem qa_mexenanuk pish chem-qal-ve-7a*
 AX_say-FUT.PFV Q_how COMP 1PL-be-REAL-PST
qa_mexenanuk pish chem-pis-i-ve-7a.
 Q_how COMP 1PL-come.out-ABLAUT-REAL-PST
 ‘You will tell how we lay (in the egg) and how we came out.’ (Seiler 1970:41
 21)

While Seiler states that *(-a)-a7* appears only on predicate nominal and adjectival clauses with no copula, there is an example (2) where *-7a* is indeed suffixed to the copula *mijax*, though also with *-wen*, probably an example of clausal scope for the suffix.

- (2) CA *Pe-qi wam tukmija-t mijax-wen-7a.*
 3SG-EMPH apparently night-ABS be-ST-PST
 ‘Only darkness existed.’ (Seiler 1970:39 2)

11.6.2. MAIN-CLAUSE VERB INFLECTION IN MOUNTAIN CAHUILLA. MCA inflection is different enough from inflection in DCA that it merits a separate discussion, especially because the system of tense inflection, with a present vs. past contrast, resembles CU more than it does DCA.

11.6.2.1. PRONOMINAL PROCLITICS. While the prefixes with ordinary verbs are identical in Desert and Mountain CA (see 11.6.1.1 (1)), the MCA proclitic system with verbless complements and immediate futures has slightly different forms. One is that the 1PL subject proclitic is *hish*_{__} or *ish*_{__}, not *esh*_{__}. The 2SG proclitic has a variant *et*_{__}. These proclitics are shown in (1).

(1) MCA subject proclitics with relational complements and immediate future

		singular	plural
person	1	<i>hen</i> _{__}	<i>hish</i> _{__} ~ <i>ish</i> _{__}
	2	<i>e</i> _{__} ~ <i>et</i> _{__}	<i>eme</i> _{__}
	3	∅	∅

The transitive combinations are seen in (2). Throughout the pronominal system, second person singular and plural are treated more analytically than are the other persons. This is parallel to a similar different treatment of the second person forms in SE. The order of elements is object-subject, as can be seen in the morphological glossing. The paradigms below are adapted from Sauvel and Munro (1981:148).

(2) MCA		singular object	plural object
singular subject		<i>e-n</i> _{__} '1SG > 2SG'	<i>e-me-n</i> _{__} '1SG > 2PL'
		2-1SG _{__}	2-PL-1SG _{__}
		<i>pe-n</i> _{__} '1SG > 3SG'	<i>me-n</i> _{__} '1SG > 3PL'
plural subject		3SG-1SG _{__}	3PL-1SG _{__}
		<i>i-sh</i> _{__} '1PL > 2SG'	<i>e-mi-sh</i> _{__} '1PL > 2PL'
		2-1PL _{__}	2-PL-1PL _{__}
	<i>pi-sh</i> _{__} '1PL > 3SG'	<i>mi-sh</i> _{__} '1PL > 3PL'	
	3SG-1PL _{__}	3PL-1PL _{__}	

A second difference from DCA is that in MCA singular object proclitics in constructions with nominalized forms have *-j* not only with third person subjects (which are unmarked), but also with second person subjects. The MCA forms for second and third person subjects appear in (3). Though the order of elements is object-subject, the accusative case suffix *-j* is found after the 2SG subject(!) element (3a,c,d). Evidently a generalization was made that the *-j* must be phonetically final in the sequence despite its etymological identity as an object marker in construction with the initial element. Several combinations do not mark number of subject.¹³⁴

(3)	MCA	a.	<i>ne-7e-j</i> ₌	'2SG > 1SG'	
			1SG-2-ACC ₌		
		b.	<i>ne-7-me</i> ₌	'2PL > 1SG'	
			1SG-2-PL-		
		c.	<i>che-m-7e-j</i> ₌	'2 > 1PL'	
			1SG-PL-2SG-ACC ₌		
		d.	<i>pe-7e-j</i> ₌	'2SG > 3SG'	
			3SG-2-ACC ₌		
		e.	<i>pe-7-me</i> ₌	'2PL > 3SG'	
			3SG-2-PL-		
		f.	<i>me-7e-j</i> ₌	'2 > 3PL'	('2SG > 3PL' / '2PL > 3PL')
			3PL-2-ACC ₌		
		g.	<i>ne-j</i> ₌ ∅	'3 > 1SG'	('3SG > 1SG' / '3PL > 1SG')
			1SG-ACC ₌ 3		
		h.	<i>cheme-j</i> ₌ ∅	'3 > 1PL'	('3SG > 1PL' / '3PL > 1PL')
			1PL-ACC ₌ 3		
		i.	<i>e-j</i> ₌ ∅	'3 > 2SG'	('3SG > 2SG' / '3PL > 2SG')
			2-ACC ₌ 3		
		j.	<i>e-me-j</i> ₌ ∅	'3 > 2PL'	('3SG > 2PL' / '3PL > 2PL')
			2-PL-ACC ₌ 3		
		k.	<i>pe-j</i> ₌ ∅	'3 > 3SG'	('3SG > 3SG' / '3PL > 3SG')
			3SG-ACC ₌ 3		

¹³⁴ We leave the zero for the unmarked third person subject free-floating in (3g-l). It seems unproductive to worry about where that which does not occur occurs, i.e., whether the ∅ is before or after accusative *-j*.

1. *me-j* $\underline{\quad}$ \emptyset ‘3 > 3PL’ (‘3SG > 3PL’ / ‘3PL > 3PL’)
 3PL-ACC $\underline{\quad}$ 3

Some of the proclitics in (3) are the same in form as accusative forms of the MCA independent pronouns, given in (4) for comparison. But even with coincidence of form, some, such as (3d) and (4e), have differences of internal structure.

- (4) MCA a. *ne7e-j* [1SG.PRO-ACC]
 b. *cheme-j* ~ [1PL.PRO-ACC]
 cheme-m-i [1PL.PRO-PL-ACC]
 c. *e7e-j* [2SG.PRO-ACC]
 d. *eme-m-i* [2PL.PRO-PL-ACC]
 e. *pe7e-j* [3SG.PRO-ACC]
 f. *pe7em-i* [3PL.PRO-ACC]

11.6.2.2. TENSE, ASPECT, MOOD. There are several differences between the DCA and MCA among the tense-aspect-mood suffixes. The most important is that MCA has split the nonfuture into a present tense and a past tense, as in CU. There are also other differences, both in form and in usage. The MCA system of main-clause verb suffixes is seen in Table 11.6.2.2.

Table 11.6.2.2. Tense, aspect, mood suffixes in Mountain Cahuilla main-clause verbs

TENSE	ASPECT	MOOD
present	imperfective	factive
sg. <i>-qa</i>	sg. <i>-qal-</i>	positive <i>-ʔ</i>
pl. <i>-we</i>	pl. <i>-wen-</i>	negative <i>-∅</i>
past	stative <i>-we</i>	irrealis future <i>-puʔ ~ -luʔ</i>
sg. <i>-qaʔ(a)</i>	polite usitative	hortative <i>-na ~ -n</i>
pl. <i>-weʔ(e)</i>	sg. <i>-nash-puʔ</i>	imperative
immediate future	pl. <i>-wene-luʔ</i>	sg. <i>-∅ ~ -ʔ ~ -e</i>
sg. <i>-kaʔ ~ -k</i>	future perfective <i>-ne</i>	pl. <i>-a-m ~ -ja-m ~ -aa-m</i>
pl. <i>-kate-m ~ -kte-m</i>	future imperfective	
	sg. <i>-nashne ~ -nash-</i>	
	pl. <i>-wene</i>	

11.6.2.3. PRESENT TENSE. The MCA present tense, *-qa* (sg.), *-we* (pl.), appears to be more or less identical in function to the CU present tense. It is used for events that take place at the time of the utterance and is especially common in “gnomic” statements about ongoing conditions. There are no examples of non-gnomic statements with adverbs in the available MCA corpus, so it is difficult to determine the temporal scope of the tense marker. However, there are no examples with *tukuʔ* ‘recently, yesterday’, which is common with past tense forms (as in 11.6.2.4 (1a)). The adverb *ivʔax* ‘now’ also means ‘immediately’ and appears with past and future tenses as well as with the present. Examples are seen in (1).

- (1) MCA a. *Chem ip-ika haj-ljew-qa cheʔ-mexan-ʔa.*
 1PL.PRO PROX-DAT end-GOPR-PRS.SG 1PL-property-PSD
 ‘Our territory ends over there.’ (S&E 983)
- b. *Ivʔax kilj juj-qa.*
 now NEG snow-PRS.SG
 ‘Now it no longer snows.’ (S&E 980)

- c. *Cheme-j_qala-k nishljuve-lj ta7 pe-n-7e~7nan-qa*
 1PL-ACC_FaMo-DEC old.woman-ABS EMPH 3SG.OBJ-1SG-IPFV~know-PRS.SG
pe7i-j.
 3SG.PRO-ACC
 ‘However, I do remember my paternal grandmother (our deceased paternal grandmother).’ (S&E 1002)
- d. *Pe7 iv7ax, iv7ax aj umu7 i-pa7*
 FOC today today now all PROX-LOC
pe-m-ku~kul-we.
 3SG.OBJ-3PL-IPFV~make-PRS.PL
 ‘Nowadays they all make them.’ (S&E 1341 947)
- e. *Pe7 pe7 iv7ax pe7 pe7 Borrego Springs hem-jax-we.*
 DET FOC today FOC FOC Borrego Springs 3PL-say-PRS.PL
 ‘Nowadays they call it Borrego Springs.’ (S&E 1003)
- f. *Pe7e-j pi-sh chiv7ax taxlis-te-m hem-ika*
 3SG.PRO-ACC 3SG-INS right.now person-ABS-PL 3PL-DAT
hem-he~eñew-we he~eñew-i-l-nga.
 3PL-IPFV~fight-PRS.PL IPFV~fight-NMLZ-ABS-LOC
 ‘Por esto ahora la gente entre ellos pelean. (For that reason right now people are fighting one another in the war.)’ (3.112.0096)

11.6.2.4. PAST TENSE. The forms of the MCA past tense suffix are sg. *-qa-7(a)*, pl. *-we-7(e)*. The final vowel of these forms (the “echo vowel”) is variably present, such that the suffix often occurs in the forms *-qa7*, *-we7*. In questions which have a high-low-high contour on the verb, the echo vowel must be present to accommodate the final high (Sauvel & Munro 1981:23) We find it most straightforward to posit the echo vowels as present in underlying form, i.e., *-qa7a*, *-we7e*.

The temporal scope of the past tense is from “yesterday” to the creation time. Examples appear in (1).

- (1) MCA
- a. *Tuku7 ijax-we pe7 pe7 e-ngax ne-7enan-7a*
 recently happen-ST FOC FOC PROX2-ABL 1SG-friend-NMLZ
nichi-lj pish-qa7 Japan-ngax.
 woman-ABS arrive-PST.SG Japan-ABL
 ‘This happened recently when my female friend came from Japan.’ (S&E 1351 957)
- b. *Penga pe7 pe7 hem-sjaqi-we7 jewi, jewi.*
 then FOC FOC 3PL-move.away-PST.PL long.ago long.ago
 ‘Then they moved away a long, long time ago.’ (S&E 1060 740)
- c. *Pe7 pe7 e-nga pe7 hiw-qa7a taxliswe-t.*
 DET FOC PROX2-LOC DET live-PST.SG person-ABS
 ‘There was a man living there.’ (S&E 1003.703)
- d. *Chem che7-mingki-m kilj hi-cha-j pe-m-7e~7nan-we7.*
 1PL.PRO 1PL-relative-PL NEG INDF-ABS-ACC 3SG.OBJ-3PL-IPFV~know-PST.PL
 ‘Our ancestors did not know anything about that.’ (S&E 980)
- e. *Wih-kwa me-m-teew-we7e juluk-m-i su~spul-m-i*
 two-group 3PL.OBJ-3PL-see-PST.PL skull-PL-ACC DISTR-one-PL-ACC
 ‘Los dos estaban examinando las calaveras uno por uno. (They both were examining the skulls one by one.)’ (3.112.0324)

11.6.2.5. IMPERFECTIVE -QAL-, -WEN-. Another pair of endings based on **qaLy* and **wyny* should be mentioned. MCA has a pair of imperfective suffixes sg. -*qal-*, pl. -*wen-* which show their final consonants when there is a following vowel, as seen in (1). These correspond in form to the nonfuture -*qal* (sg.), -*wen* (pl.) of DCA, but unlike those suffixes, those of MCA are always imperfective or durative. Unlike in DCA, they do not appear alone, but contribute durativity in combination with other suffixes, especially subordinators. In (1a) the speaker is talking about how her mother could call the wind.

- (1) MCA a. *Pe7 pe7 ja7i pish-nashpu7 pe7i-j*
 DET FOC wind arrive-POL.USIT.SG 3SG.PRO-ACC
pe-7exan-qal-ipa7.
 3SG.OBJ-do-IPFV.SG-DS
 ‘The wind would come when she did that.’ (S&E 1011)
- b. *Chem aj ish_sawaa-wen-i-kte-m* Ø.
 1PL.PRO now 1PL_be.absent-IPFV.PL-ABLAUT-IFUT-PL be
 ‘We are going to die.’ (S&E 1108)
- c. *Tewlave-l me-puni-qal-ipa7 hem-kina7-wen-ipa7 ishva-jka*
 devil-ABS 3PL.OBJ-circle-IPFV.SG-DS 3PL-burn-IPFV.PL-DS left-DAT
me-puni-qa7.
 3PL.OBJ-circle-PST.SG.
 ‘Cuando estaba dando vuelta el diablo, cuando los diablos estaban quemándose (when the devil was going around in a circle, when the devils were burning up), the chief was making circuits to the left (around the band of devils).’ (3.112.0444)

In contrast, like the nonfuture in DCA, the MCA past-tense suffixes *-qa7* and *-we7* (above) are indifferently perfective or imperfective, appearing both in background clauses and in main-line event clauses in narrative discourse.

11.6.2.6. IMMEDIATE FUTURE. The immediate future in MCA is identical in form and usage to the immediate future in DCA. It appears in both main and subordinate clauses. Like that of CU and DCA, the immediate future of MCA is treated here as a verbless clause complement.

The forms of the immediate future suffix are sg. *-ka7*, pl. *-ka-te-m*, as in (1). As in CU (see 11.5 (9)), the MCA immediate future and future often appear in sequence as in (1b).

- (1) MCA a. *Umu pé-ma7 aj et_puwax-ka7* Ø.
 all 3SG-hand now 2SG_dance-IFUT be
 ‘With all that you perform your ritual dance.’ (S&E 992)

- b. *E-t pajpa7 eva-t-ee, chem ish_hichi-ka-te-m*
 PROX2-ABS in.future PROX2-ABS-HES 1PL.PRO 1PL_go-IFUT-ABS-PL
 Ø. *Pen tulika7 mavish pi-sh hax_chem-pish-ne.*
 be and tomorrow late 3SG-INS HAX_1PL-arrive-FUT.PF
 ‘Tomorrow, uh, we’re going to go away. And we’ll come back tomorrow
 night.’ (S&E 1032)

With the *i* ablaut vowel, the immediate future appears as *-i-k*, *-i-k-te-m*, as in (2).

- (2) MCA a. *Kilj eme-n_chexn-i-k* Ø.
 NEG 2PL.OBJ-1SG_harm.PL-ABLAUT-IFUT be
 ‘I’m not going to harm you.’ (S&E 1107)
- b. *Pen hem-kutash-7i pe-j_mekn-i-k-te-m Taku-7sh-i* Ø.
 and 3PL-talk-FCT 3SG-ACC_kill-ABLAUT-IFUT-ABS-PL prsn-ABS-ACC be.
 ‘Y hablaron a matarlo al Takush. (and they declared that they would kill the
 Taakwish.)’ (3.112.0313)

11.6.2.7. STATIVE. Three sets of suffixes encode aspect: the stative, the polite usitative, and the future suffixes. The stative suffix is *-we* (present), *-we7(e)* (past). Examples appear in (1).

- (1) MCA a. *Pe-nga7 pe7 qawi-sh mijax-we.*
 DIST-LOC FOC hill-ABS be-ST.PRS
 ‘There is a hill there.’ (S&E 1002)
- b. *Hespen acha7 jupi-we7 paj-qal-ipa7*
 very thick be.cloudy-ST.PST dawn-IPFV.SG-DS
 ‘It was very cloudy at sunrise.’ (3.113.0097)

11.6.2.8. POLITE USITATIVE. The compound suffix pair *-nash-pu7* (singular subject) and *-wene-lu* (plural subject) that we are labeling ‘polite usitative’ (POL.USIT) is attested only in Sauvel and Elliott (2004), a documentation of the speech of Katherine Sauvel. It is not mentioned by Sauvel and Munro (1981), and it does not appear in other published texts from MCA speakers, Adán Castillo in the Harrington field notes or Genevieve McGee in

Seiler (1970)). These forms are made up of the future imperfective suffixes *-nash*, *-wene* (see 10.6.2.10) and the irrealis suffixes *-pu7*, *-lu* (11.6.2.13). The usage is somewhat mysterious. Sauvel and Munro (1981:105) document a future imperfective singular *-nash-ne* (a combination of *-nash* and the future perfective *-ne*). They state that with a plural subject of the imperfective, *-ne* must be used (see 11.6.2.10 below). They do not document *-wene*. In CU (Hill 2005, and section 11.5 in the present work) *-nash* is the future imperfective singular and *-wyny* is the future imperfective plural. In DCA, we have suggested (in 11.6.1.7) that *-wene* be recognized as a distinctive usitative/customary suffix. In Sauvel and Elliott (2004) the plural form of our “polite usitative” is consistently transcribed as *-wenu7*, suggesting that it contains a form equivalent to CU *-wyny*.

The suffixes *-nash* (in both CA and CU) and *-wyny* (in CU) are specifically future imperfectives. Although there are questions (according to Sauvel and Munro 1981:97), *-alu7* only follows consonants. The second parts of *-nashpu7* and *-wenu7* are almost certainly the suffixes *-pu7* ~ *-a-lu7* (DCA *-pulu7* ~ *-a-lu7*), where *a* is the ablaut vowel (and with the ablaut *a* assimilating to the preceding vowel in *wenu7*). These irrealis future suffixes are elsewhere attested in sentences that are speculative, hopeful, or even counterfactual (see 11.6.2.1). These suffixes in MCA appear in polite directives as well (Sauvel & Munro 1981:96). Thus the “irrealis” sense of *-pu7* ~ *-a-lu7* can be “indirect,” a very common cross-linguistic form of politeness (Brown & Levinson 1987). We suspect that in using this compound made up of future-oriented suffixes for a usitative, Mrs. Sauvel was employing indirection to signal respect. One bit of evidence for this analysis is that she used often *-nashpu7*, *-wenu7* when she talked about the deeds and habits of relatives and other elders who were no longer living. In other contexts, she might simply have wished to avoid seeming overly assertive. Evidence for this idea is that she never uses the form when a usitative expression appears in the reported speech of someone else (a frequent occurrence in the texts). These are hypotheses; Mrs. Sauvel died in 2011, and the usage may have been specific to her family. In her speech, it exists alongside the past-tense suffixes *-qa7* and *-we7*, which she also used as usitives, including for senior relatives. So the use of *-nashpu7*, *-wenu7* is by no means categorical, but it is quite frequent. It is usitative, describing events of the same type that occurred repeatedly. These suffixes often appear with *tuhájmani7chi* ‘always’, as in (1b) below. Sauvel and Elliott (2004) translate them as ‘would ...’.

Examples appear in (1). Note that the final glottal stop in *-nashpu7* does not appear consistently. The expression *peta7 ne7elavive* ‘my late father’ in (1a) literally means ‘the one who clothed me’. Sauvel and Elliott (2004) often translate these expressions for deceased kin with ‘God rest his soul’ (as in (2) below).

- (1) MCA
- a. *Pe7 pe-ta7 ne-7ela-vi-ve*
 DET 3SG-on 1SG.OBJ-dress-put.on-REAL.SUB
pe-7a~7alxi-nashpu.
 3SG.OBJ-IPFV~tell.history-POL.USIT.SG
 ‘My late father would tell us about her.’ (S&E 1016 711)
- b. *Tuhájmani7chi cheqe ivilju-nashpu7 chemem-i*
 always just speak.Cahuilla-POL.USIT.SG 1PL.PRO-ACC
cheme-jik.
 1PL.PRO-DAT
 ‘He always spoke Cahuilla to us.’ (S&E 737 528)
- c. *Pe7i-sh pe7 ne7 tuhájmani7chi pe7i-j*
 3SG-about FOC 1SG.PRO always 3SG-ACC
pe-n-ha~al-nashpu7.
 3SG.OBJ-1SG-IPFV~look.for-POL.USIT.SG
 ‘That is why I always used to look for it.’ (S&E 822.578)
- d. *Pe7 pe7 jewi pen tax_hem-nening-wenelu.*
 FOC FOC long.ago and REFL_3PL-play.peon-POL.USIT.PL
 ‘This was long ago when they would play peon.’ (S&E 1290 901)
- e. *Pe7 pi-chem-naqma-wenelu chem.*
 FOC 3SG-1PL-hear-POL.USIT.PL 1PL.PRO
 ‘And we would hear it.’ (S&E 1144)

The suffixes *-nashpu7* and *-wenelu* also appear in counterfactual expressions (as do ordinary *-pu7* and *-alu7*), as seen in (2).

- (2) MCA *pe7 pe7 ku7 pe7e jewi pe7 pe-n-7e~7nan-nashpu7,*
 FOC FOC EMPH POC long.ago FOC 3SG.OBJ-1SG-IPFV~know-POL.USIT.SG
pe-n-nanal-nashpu7 pe7i-j pe-ta7
 3SG.OBJ-1SG-ask-POL.USIT.SG 3SG.PRO-ACC 3SG-on
ne-7ela-vi-ve.
 1SG-dress-put.on-REAL.SUB
 ‘If I had thought about it, I would have asked my father, God rest his soul.’ (S&E 699 504)

11.6.2.9. FUTURE PERFECTIVE. The future suffix *-ne* (= DCA *-nem*) can be used over a wide temporal range. For instance, the first two sentences in (1) come from a story where Katherine Sauvel as a young woman promised her father-in-law that she would milk his cow while he was away from home overnight. (1a) is her promise, uttered in the afternoon as he is leaving, to do the milking the following morning. (1b) is uttered by her brother-in-law, who fortunately shows up the next morning as she is trying unsuccessfully to milk an angry cow. The need is immediate, and upon saying (1b) he sits right down and does the job. (1c,d) show the same contrast. The future perfective may appear with the proclitic *ax__* or *hax__* (only *ax__* in DCA), as in (1a,d).

- (1) MCA a. *Hax__ ne-siichi-ne.*
 HAX__ 1SG-milk-FUT.PFV
 ‘I’ll milk her.’ (S&E 1032)
- b. *Oo, ne-qi pe-n-ku~kul-ne.*
 oh 1SG-EMPH 3SG-1SG-IPFV-do-FUT.PFV
 ‘Oh, I’ll do it.’ (speaking of immediate need) (S&E 1033)
- c. *Pen iv7ax pe-n-teew-ne.*
 and today;now 3SG-1SG-see-FUT.PFV
 ‘Now I’ll see it.’ (S&E 1109)
- d. *I-pa7 pe7 tulika hax__ pe-n-teew-ne.*
 PROX-LOC FOC in.morning HAX__ 3SG-1SG-see-FUT.PFV
 ‘I’ll see him in the morning.’ (S&E 1110)

- e. *Pe7 e-t pa7 pi-chem-kuj-ne.*
 FOC PROX2-ABS FOC 3SG-1PL-bury-FUT.PFV
 ‘We can bury her.’ (S&E 816)

The future perfective suffix can also be used in directives, as in (2), a series of examples from a tale about the culture hero Kunxanvaxmal.

- (2) MCA a. *Pe-nga nawxwa-nga pe-7em-tav-ne.*
 DIST-LOC middle-LOC 3SG-2PL-put-FUT.PFV
 ‘Take him in the middle.’ (S&E 1337)
- b. *Pen pe-7em-chut-ne.*
 and 3SG-2PL-burn-FUT.PFV
 ‘Burn him alive.’ (S&E 1337)
- c. *E-nga me-7-hivin-ne.*
 PROX2-LOC 3PL-2SG-take-FUT.PFV
 ‘You grab them here.’ (S&E 1337)

As with *-nem* in DCA, *-ne* cannot appear in negative sentences. Instead, future negatives use the irrealis subordinator *-a-p*, *-pi*. Negative future verbs in MCA all also incorporate a prefix *pe-*, probably the contrastive focus prefix. With the verb *jax*, this element precedes the subject prefix, as in (3b), which makes it look like a 3SG object prefix.

- (3) MCA a. *Kilj chem-pe-hichi-pi.*
 NEG 1PL-CF-go-IRR.SUB
 ‘We won’t go.’ (S&M 196)
- b. *Kilj pe-chém-jax-a-p.*
 NEG CF-1PL-go-ABLAUT-IRR.SUB
 ‘We won’t say it.’ (S&M 196)

11.6.2.10. FUTURE IMPERFECTIVE. Sauvel and Munro (1981:105) report that MCA has a future imperfective singular *-nashne*. This construction does not appear in the texts in

Sauvel and Elliott (2004), although there are attestations in the Harrington MCA materials. It is attested only in the singular.

- (1) MCA a. *Xelja-7t-i ax_pe-n-pashxaam-nashne.*
 clothes-ABS-ACC AX__3SG-1SG-wash-FUT.IPFV.SG
 ‘I will be washing the clothes.’ (S&M 105)
- b. *Ax_wewen-nashne tuluka7.*
 AX__rain-FUT.IPFV.SG tomorrow
 ‘It will be raining tomorrow.’ (S&N 105)
- c. *Tuhájmani7chi hax_kuktash-nashne.*
 always HAX__talk-FUT.IPFV.SG
 ‘He’ll always be talking.’ (S&M 105)
- d. *Ne-teew-nashne.*
 1SG.OBJ-see-FUT.IPFV.SG
 ‘Be watching me!’ (3.112.0350)

There is a single attestation in the Harrington MCA notes where *-wene* seems to function as stative future. Since this is the future imperfective plural in CU, it may also count as plural in MCA considering that example (2) applies to several cattle.

- (2) MCA *Acha7 mijax-wene vaaka-m heme-jik.*
 good be-FUT.IPFV.PL cow-PL 3PL-DAT
 ‘It will be good for cattle.’ (3.113.0133)

The future imperfective singular appears as *-nash-* when followed by another suffix, as in (3). (3a) shows it with the irrealis subordinator in the idiom *...pi mijaxwe* ‘must do ...’.

- (3) MCA a. *Pe-7-7uni-nash-pi mijax-we.*
 3SG.OBJ-2SG-teach-FUT.IPFV-IRR be-ST
 ‘You have to teach him’ (S&E 1019.712)

- b. *Kilj hax7i pe-j_7enan-nash-ka7 Ø.*
 NEG INDF.HUMAN 3SG-ACC__know-FUT.IPFV-IFUT be
 ‘No one is going to know it (the Cahuilla language).’ (S&E 832.587)
- c. *Pen e7 ne-7-max-nash-pi mijax-we*
 and 2SG.PRO 1SG.OBJ-2SG-give-FUT.IPFV-IRR.SUB be-ST.PRS
wa7i-7ch-i ne-tama-nga7.
 meat-ABS-ACC 1SG-mouth-LOC
 ‘Y tú me tienes que estar dando carne en mi boca. (And you have to be giving me meat in my mouth).’ (3.112.0089)

11.6.2.11. THE MODAL SUFFIXES. The modal suffixes include factive *-7i*, irrealis *-pu7 ~ -lu7*, and the hortative and imperative suffixes.

11.6.2.12. FACTIVE SUFFIX. Sauvel and Munro (1981) label the past-tense suffixes *-qa(a)7* and *-we7(e)* “imperfective” and call factive *-7i* “past perfective.” However, analysis of the texts in Sauvel and Elliott (2004) shows that the contrast between these two sets of suffixes in MCA is identical to that in DCA. While indeed *-7i* is never imperfective, *-qa7* and *-we7* appear frequently in perfective contexts, and *-7i* is only used for strong assertion, typically in sentences dealing with climactic events in a plot (as in (1d) below), or with events that are crucial to moving a plot forward. A good example is (1c), where the event was so important that the assertion is made twice.

The imperfective-perfective contrast can be seen in sequences where an imperfective verb provides background for such a plot-advancing event, as in (1a,b). However, we believe that the evidence from discourse supports the analysis by Fuchs (1970) and Seiler (1977) suggesting that *-7i* is a modal suffix. A significant difference between MCA and DCA, however, is that while in the Desert dialect *-7i* frequently appears following *-qal* and *-wen*, in MCA there are no combinations *-qa7-7i* or *-wen-7i*. Instead, the factive must be suffixed to the verb base, as in the examples in (1).

- (1) MCA a. *Cheqe7 iva7nuk mu7-qa7. Man muk-7i.*
 just suddenly sick-PST.SG and die-FCT
 ‘He just fell ill suddenly. And he died.’ (S&E 1004)

- b. *Cheme-teew-qa7. Penga p-ika pe-kavaj-ljew-7i pe7*
 3SG > 1PL-see-PST.SG then DIST-DAT CF-circle-GOPR-FCT DET
puwi-sh.
 roadrunner-ABS
 ‘He was looking at us. And then that roadrunner circled around (and left).’
 (S&E 1105)
- c. *Aj pish-7i Aj pish-7i ne-j_jikaw-max-i-sh Ø.*
 now arrive-FCT now arrive-FCT 1SG-ACC_gather-BEN-NMLZ-ABS be
 ‘She came [in a dream]. My late mother [she who gathered for me] came.’
 (S&E 1037-1038 723)
- d. *Aj pe-n-mekan-7i e-t.*
 now 3SG-1SG-kill-FCT PROX2-ABS
 ‘I have killed him.’ (S&E 1112)

While Seiler (1977) reports that the factive suffix *-7i* does not appear with negatives, this is not exactly true of Mrs. Sauvel’s MCA usage. Examples (2a-c) illustrate the expected form, without the factive suffix even though the sentence is in a factive mood, with action or event encoded with the verb base uninflected for tense, mood, or aspect. Note that the verbs in (2a-c) look exactly like CU past perfective verbs. However, in (2d), the factive suffix appears with a negative. This unusual situation (and it is not unique) involves the irregular and defective verb *hiw ~ qal ~ max* ‘stay, exist, live’. This verb does not appear with the *-qa7 ~ we7* suffixes, so the addition of the suffix is the only way to distinguish it from the non-factive past tense. But there are other exceptions to the “no negative factive” rule, as in (2e). These perhaps should be dismissed as slips.

- (2) MCA a. *Kilj ni-jik hem-kutash.*
 NEG 1SG-DAT 3PL.SUBJ-speak.FCT
 ‘They did not speak to me.’ (S&E 1005.704)
- b. *Kilj hicha-j qichi-7lj-i p-ax pe-hivin.*
 NEG INDF.INAN-ACC money-ABS-ACC 3SG-ABL 3SG.OBJ-take.FCT
 ‘She did not get any money from it.’ (S&E 1037 731)

- c. *Pe7 kilj ne-naqma7a qa-hax7i pi-sh mipa*
 FOC NEG 1SG.SUBJ-hear.FCT QA- INDF.HUMAN 3SG-INS ever
pish puni-qal-i-ve pe-nga.
 COMP eagle.dance-IPFV-ABLAUT-REAL.SUB DIST-LOC
 ‘I have never heard of anyone doing the eagle dance there.’ (S&E 697)
- d. *Kilj mipa i-ka Taxs-te-m hem-qal-7e pe7e.*
 NEG ever PROX-DAT Cahuilla-ABS-PL 3PL.SUBJ-live-FCT FOC
 ‘The Cahuilla Indians never lived there.’ (S&E 1015)
- e. *Suple7 tame-t pa7 Alwe-t sula kile7 pish-7i*
 one day-ABS FOC Raven-ABS grandson NEG arrive-FCT
hem-ki-jka.
 3PL-house-DAT
 ‘One day Raven’s nephew (sic)¹ did not come home.’ (3.112.0398)
¹ Gifford (1922:56) glosses *sula* (his < sola >) as ‘woman’s daughter’s child’. However, Raven is male in the story.

11.6.2.13. IRREALIS SUFFIX. The irrealis modal suffix is *-pu7*, or *-lu7* after *a*-ablaut, with the final glottal stop often being elided. It also appears as a component, with *-nash* and *-wen*, in polite usitatives discussed above in 11.6.2.8.

In its perfective form, without *-nash* and *-wen*, irrealis *-pu7/-lu7* seems to express hope and doubt, as in (1). In this sense it often appears with modal adverbs like *asán*, *wam*, and *jeja*, seen in these examples. Example (1a) is the joke that provides the title for Sauvel and Elliott’s (2004) collection of texts, *‘Isill Héqwas Wáxish – A Dried Coyote’s Tail*.

- (1) MCA a. *Isi-lj hé-qwas wax-i-sh e-he7an-pu7.*
 coyote-ABS 3SG-tail dry-ADJZ-ABS 2.OBJ-believe-IRR
 ‘A dried coyote’s tail might believe you.’ (S&E 1333 941)
- b. *Pe7 pe7 qa_mexenuk pe-teteja-max-a-lu asáne.*
 DET FOC QA_how 3SG.OBJ-say-BEN-ABLAUT-IRR wonder
 ‘I wonder what he would have said to her.’ (S&E 1075)

- c. *Pe7 ta7 kilj pich-a-lw-ipa7 pe7*
 FOC EMPH NEG arrive-ABLAUT-GOPR-DS FOC
qa__ne-mex-a-lu wam penga jeja.
 Q__1SG.SUBJ-do-ABLAUT-IRR I.guess then maybe
 ‘If he hadn’t come, I don’t know what I would have done.’ (S&E 1033)

The irrealis suffix appears in counterfactuals, as in (2). Note that in (2b) *hiw-nash* is the imperfective of the irregular verb *hiw* ~ *qal* ~ *max* ‘stay, live, etc.’.

- (2) MCA a. *Pe-tew-a-lu7: pe-nanal-pu7.*
 3SG.OBJ-see-ABLAUT-IRR 3SG.OBJ-ask-IRR
 ‘She could have seen him, she could have asked him.’ (S&E 1074)
- b. *Hani7 aj pe7 ne-pas hiw-nash-pu7, pen*
 now now DET 1SG-Older be.there-IPFV-IRR and
pe-kul-pu7.
 3SG.OBJ-make-IRR
 ‘Now if my older brother had been here, he would have done it.’ (S&E 695)
- d. *Pengax pe chem-penech-7e su~spul-m-i ngachi-sh*
 then 1PL-cross-FCT DISTR~one-PL-ACC sand-ABS
mu7u-wen-t-m-i hem-hela-we suple7 leewa7
 hill-ST-ABS-PL-ACC 3PL-wide-ST one league
me-chem-kavaj-pu7.
 3PL.OBJ-1PL-go.around-IRR
 ‘Then we crossed some sand dunes, extending one league, which we could have gone around (but did not).’ (3.113.0063)

The irrealis future is also used for indirect commands, as in (3).

- (3) MCA a. *Hema e-menvax-a-lu7 man ip-ika.*
 perhaps 2SG.SUBJ-come.FUT-ABLAUT-IRR and PROX-DAT
 ‘Perhaps you could come here.’ (S&E 1142)

- b. *Tulika ta7 pe7 pe-7-siichi-pu7 eva-7t-i,” ja-qa7,*
 in.morning EMPH FOC 3SG-2SG-milk-IRR that-ABS-ACC say-PST
“pe7i-j?”
 3SG.PRO-ACC
 ‘“In the morning could you milk her?” he said.’ (S&E 1032)
- c. *Pen cheme-7-mamajw-a-lu7.*
 and 1PL-2SG-help-ABLAUT-IRR
 ‘And you could help us.’ (S&E 1095)

The same structure is also found in (4), which is Adán Castillo’s rendering of a line from the Lord’s Prayer. It features an accusative-marked pronominal followed by a postposition. Since, in principle, an accusative suffix is normally final in a construction, we treat the pronominal here as a proclitic.

- (4) MCA *E-nu7en-7a pish-pu7 cheme-j ta7.*
 2SG-command-PSD arrive-IRR 1PL-ACC__over
 ‘Tu mandar llegue sobre nosotros. (Thy kingdom come.)’ (3.112.0468)

Sometimes the irrealis future is used in what are translated as statements of fact, as in (5). These may be another example of polite indirection, as hypothesized for the polite usitative forms in 11.6.2.8. In context, example (5a) is an indirect invitation.

- (5) MCA a. *Chem-7amu-law-a-lu7 i-ka7.*
 1PL.SUBJ-hunt-GOPR-ABLAUT-IRR PROX-DAT
 ‘We are going hunting.’ (S&E 809)
- b. *Iv7ax pe7 p-ika pe-7-tew-a-lu jewi*
 today;now FOC DIST-DAT 3SG-2SG-see-ABLAUT-IRR long.ago
pa7 hem-qal-ve.
 then 3PL-live-REAL
 ‘Today you can still see the spot where they used to live.’ (S&E 1015)

11.6.2.14. HORTATIVE. The MCA hortative suffix *-na* ~ *-n* is identical in form and usage to that in DCA (11.6.1.11). The variant *-n* appears after the *a*-ablaut vowel, as in (1d,e). As in DCA, negative directives can be constructed only with this suffix.

- (1) MCA
- a. *Mi-chem-pashxam-na.*
3PL.OBJ-1PL-wash-HORT
'Let's wash them!' (S&M 93)
- b. *Kaxóon-i pe-7em-jawichi-na.*
box-ACC 3SG.OBJ-2PL-carry-HORT
'Carry the box (pl.)!' (S&M 94)
- c. *Kilj mipa pe-7em-qwacha7-na.*
NEG ever 3SG-2PL-put.in.mouth-HORT
'Don't ever put it in your mouth!' (S&E 1012)
- d. *Kilj mipa pe-7em-jaw-a-n* *eva-7t-i.*
NEG ever 3SG-2PL-touch-ABLAUT-HORT PROX2-ABS-ACC
'Don't ever touch that!' (S&E 1012)
- e. *Kilj exenuk pe-7em-teteja-max-a-n.* *Kilj pe-7e-m-7uni-na*
NEG thus 3SG-2PL-say-BEN-ABLAUT-HORT NEG 3SG-2-PL-teach-HORT
exenuk.
thus
'Don't speak to her like that! Don't teach her like that!' (S&E 1145)

11.6.2.15. IMPERATIVE. Like their DCA counterparts, MCA singular imperatives have diverse forms.

Verbs with imperfective automatic reduplication (10.6.1) are unchanged, and appear in their reduplicated form, as in (1).

- (1) MCA *Iv7i ku~kul,* *e-t* *ku~kul.*
PROX IPFV~do.IMP.SG PROX2-ABS IPFV~do.IMP.SG
'Do this, do that!' (S&E 1329 936)

Bases ending in consonants other than *-n* are unchanged, as in (2).

- (2) MCA *Papúchaq*. ‘Jump!’ (S&M 84)

Verbs ending in *n* replace the *n* with a glottal stop, as in (3).

- (3) MCA *Tetewa-7*. ‘Count it!’ < *tetewan* (S&M 86)

The glide *w* is also replaced, as in (4).

- (4) MCA *Tee-7*. ‘Look at it!’ < *teew* (S&M 87)

Verbs ending in a vowel add a glottal stop, as in (5).

- (5) MCA *Tema-nga7* *puli-7*.
 ground-LOC drop-IMP.SG
 ‘Drop to the ground!’ (S&M 86)

Apparently in MCA there is no distinction between the intransitive *-i* class verbs and other vowel-final verbs. As in DCA, the ablauting verbs are variable, with some appearing with a suffix *-e* (6a), and some with *-7e*, where the *7* metathesizes with the preceding consonant (6b). All verbs with the first type of imperative belong to the ablauting class (see 10.6.1 (10) for a list of these in DCA).

- (6) MCA a. *Kus-e*. ‘Take it!’ (S&M 87)
 b. *We7s-e*. ‘Plant it!’ (S&M 87)

Plural imperatives add *-a-m* to the verb base, in (7), with one or two minor irregularities, as in (7c,d).

- (7) MCA a. *Kus-a-m*. ‘Take it (pl.)!’ (S&M 87)
 b. *Teew-a-m*. ‘Look at it (pl.)!’ (S&M 87)
 c. *Se7x-a-m*. ‘Cook it (pl.)!’ (< *sex*) (S&M 87)

- d. *Cheqe pi-a-m.* < pi7
 just bewitch-IMP-PL
 ‘Just bewitch him!’ (S&E 1130)

While imperative forms do not appear with accusative-marked nominal objects, they can appear with first person object prefixes, as in (8). However, no subject prefix is present. This contrasts with DCA, where if a first-person object prefix is present, it will be followed by a second person subject prefix (Seiler 1977:136).

- (8) MCA *Ne-ha~al.*
 1SG.OBJ-IPFV~look.for-IMP
 ‘Look for me!’ (S&M 88)

If the benefactive object is 1PL, the imperative form will be plural, as in (9).

- (9) MCA *Cheme-ha~al-a-m.*
 1PL.OBJ-IPFV~look.for-IMP-PL
 ‘Look for us!’ (S&M 88)

Singular imperative forms appear with 1PL subject prefixes, and object prefixes where needed, to form hortatives, but ones lacking the hortative suffix *-na*, discussed above in 11.6.2.14.

- (10) MCA a. *Chem-se7x-e.*
 1PL-cook-IMP
 ‘Let’s cook!’ (S&M 89)
- b. *Pi-che7-ma7x-e.*¹
 3SG.OBJ-1PL-give-IMP
 ‘Let’s give it to him!’ (S&M 89)
¹ with <mm> for 7m in S&M.
- c. *Mi-chem-te~tewa-7.*
 3PL.OBJ-1PL-IPFV~count-IMP
 ‘Let’s count them!’ (S&M 90)

Note that these hortatives with first person subjects have third-person object prefixes. Directives of this type can appear with accusative-marked objects (as in (11)).

- (11) MCA *Awa-ʔl-i pi-chem-vuʔku.*
 dog-ABS-ACC 3SG.OBJ-1SG-hit.IMP
 ‘Let’s hit the dog!’ (S&M 90)

11.6.2.16. ADJUNCT VERBS WITH EXPRESSIVE MODIFICATIONS. In 11.6.1.13 we described the adjunct-verb constructions with expressively modified verb roots and inflected forms of *jax*, that appear frequently in the DCA texts of Seiler (1970). Sauvel and Munro (1981:204) report it in the meaning ‘do a little’. It is possible that we have missed an example or two in the hundreds of pages of text in Sauvel and Elliott (2004), but we can state confidently that it is extremely rare in Mrs. Sauvel’s usage in that register. Harrington’s MCA consultant Adán Castillo did use it, although the construction is not as prominent in his speech as it is for Seiler’s DCA speakers. Examples appear in (1).

- (1) MCA a. *E::l jaxa-qal-ipaʔ qichi-l saveʔ-qaʔ awsen-ngax.*
 blo-o-ow do-IPFV.SG-DS money-ABS fall-PST.SG above-ABL
 ‘When the wind blew hard, money fell from above’ (3.112.0437)
- b. *Pen pe-ngax pe qawi-sh wil jax-we.*
 and 3SG-ABL FOC rock-ABS be.in.a.row do-ST.PRS
 ‘And there (where a hero vomited) the rocks are lined up in a row.’
 (3.112.0112)

11.6.1.17. PAST-TENSE SUFFIX -ʔA ON NOUNS. The past tense suffix that appears on nouns including derived nominalizations such as subordinate predicates, discussed for DCA in 11.6.1.14, also appears in MCA. In (1) there is an example of -ʔa on an immediate future construction.

- (1) MCA *Peʔ peʔ pa peniich-i-ka-te-m-ʔa Ø.*
 FOC FOC LOC pass-INT-IFUT-ABS-PL-PST be
 ‘They were going to pass through here.’ (S&E 845)

CHAPTER 12

SUBORDINATE-CLAUSE VERBS IN TONGVA AND SERRAN

12.0. INTRODUCTION. Throughout Takic, verb constructions in subordinate clauses have distinctive systems of inflection, different from those in main clauses. Most notably, many subordinate-clause predicate types resemble possessed nouns, with subject encoded by pronominal prefixes even when main-clause verbs do not have such prefixes, as in SE or in LU, or in non-past predicates in CU. These subordinate-clause predicates also have distinctive systems of tense-aspect marking. The complexities of these predicates are such that we have found it prudent to divide our presentation into two chapters, the present chapter on Tongva and Serran, and chapter 13 on Cupan.

12.1. SUBORDINATE-CLAUSE VERBS IN TONGVA. The scant data available for TV allow for no serious study of subordinate-clause patterns in that language, but a few interesting examples may be mentioned. First, there are examples of seriation with verbs of motion, where a single subject pronominal appears with two verbs, as in (1). Harrington translates these with Spanish *ir a* ‘go in order to’ or *venir a* ‘come in order to’, suggesting that they may be purpose clauses. In (1), where the first verb is the verb of motion, both verbs are future tense.

- (1) TV a. *Meaa-ro = n = 7e* *kwa7aa-ro.*
go-FUT = 1SG = IND eat-FUT
‘Ya me voy a comer. (Now I am going to eat.)’ (3.104.0336)
- b. *Noo = n = 7e* *meaa-ro* *uu-ro* *kotaa.*
1SG.PRO = 1SG = IND go-FUT get-FUT firewood
‘Voy ir a traer leña. (I am going to go to get firewood.)’ (3.104.0389)
- c. *Ne7-iikok* *kemaa-ro* *kwa7aa-ro.*
1SG-son come-FUT eat-FUT
‘Mi hijo va venir a comer. (My son is going to come to eat.)’ (3.104.0336)

In (2), where the verb of motion comes second, but preceding the object of the first verb, only the first verb is future tense.

- (2) TV *Uu-ro = n = 7e* *mii* *hongii-j*.
 get-FUT = 1SG = IND go meat-ABS
 ‘Voy a traer carne. (I am going to get meat.)’ (3.105.0375)

These constructions contrast with purpose clauses in Serran and Cupan, where a special immediate-future and irrealis subordinating suffixes mark the predicates of purpose clauses.

A second point of interest is a series of nominalizations in *-t\$(o)* (cf. 14.10.1). Most of these sparsely attested constructions are possessed, and apparently have absolutes in *-t* (as in (3b)). The examples in (3) are translated by Harrington as locational clauses.

- (3) TV a. *a-meaa-t\$* ‘onde se fue, onde iba, su huella (where he < *mii* ~ *meaa* ‘go’
 went, where he was going, his footprints)’ (3.105.0135)
 b. *xaroo-t\$o-t* ‘place where they were, a park’ < *xaa* ~ *xaroo* ‘be,
 (3.103.0079), dwell’
a-xaaro-t\$ ‘where he was’ (3.103.0079), *a-xaa-t\$o-nga*
 ‘onde vivían (where they [he] lived)’ (3.102.0068)
 c. *ne7-ooko-t\$* ‘mi cama, lit. mi dormitorio (my bed, lit. < *okoo-k* ‘lie’
 my place to sleep)’ (3.103.0304, 3.103.0423)

There is a single attestation (4) of a construction with *-vo*, a realis subordinator with cognates in SE and Cupan. The TV example shows the expected structure, with a subject prefix, and, in this example, a locative suffix, which is also seen with cognate constructions in the other languages. However, the suffix *-vo* might represent interference from LU, because we would expect *-t\$o-nga* based on the examples in (3).

- (4) TV *ne-\$iee7e-vo-nga*
 1SG-cure-REAL-LOC
 ‘where I cured’ (3.103.0470)

12.2. SUBORDINATE-CLAUSE VERBS IN SERRANO. In SE, as in the other Takic languages for which we enjoy sufficient documentation, we find a distinctive system of inflection for predicates in subordinate clauses, different from that in main clauses.

12.2.1. SERIAL PREDICATES IN SERRANO. Before turning to inflection in dependent clauses, we note that SE permits serial predicates, where there is more than one predicate covered by a single auxiliary, as in (1). The subject of both predicates is necessarily the same.

- (1) SE a. *Uvia hakup rap-k pyn-k, ky-j=n.*
 already very become.midday-K pass-K say-IND = 1SG
 ‘It was already well past noon, I (mean to) say.’
- b. *Kwyn hwa^R7m-hwa^R7m-k paah-ia chu7-chu7-k.*
 QUOT.3SG REP-jump-K three-times REP-squat-K
 ‘Squatting, he jumped three times.’
 <Kwan har’mhar’mpk paahif: chukchuk.> ‘He would jump three times while squatting.’ (R&E 161) (Sarah Martin’s verb *hwaa^Rnk* ‘jump’ has *n* rather than *7m*.)

Serial predicates are not restricted to verbs. The second predicate of (2), with the adjective *awaaki7* ‘dried up’, is a verbless complement clause.

- (2) SE *Oup = kwyn aa-p Wahi7 yk [a-waak-i7 Ø].*
 there = QUOT.3SG DIST-LOC Coyote lie ADJZ-dry-ADJZ be
 ‘Coyote lay there dried up.’

Other examples have a second predicate containing the immediate future (3). These tend to have a purposive sense. Though semantically more like the verb + verb constructions of (1), these figure as complements of zero-verb predicates and are structurally parallel to the adjectival predicate in (2).

- (3) SE a. *Pijum7-ky-j = m [chaa-t\$ua7-qa-m Ø].*
 gather-K-IND = 3PL song-VBLZ-IFUT-PL be
 ‘They gathered to sing.’

- b. *Hawai7ty = m pichy-j ii-p too^Rnga-va7 [ii-p*
 always = 3PL arrive-IND PROX-LOC summer-LOC PROX-LOC
tyhtyjy-ka-m Ø hiñi-p alveerchu7-p].
 work-IFUT-PL be INDF.PL-LOC apricot-LOC
 ‘They always came here in the summer to work here in the apricots.’

Similarly, the second predicate may have the immediate past, sometimes with an adverbial sense in translation, as in (4).

- (4) SE *Aa-pia = ny-7 y^Rn-y^R7-k [kuuman-i-t Ø].*
 DIST-LOC = 1SG-PST lie.face.up-RES-K sleep-IPST-ABS be
 ‘Then I was lying on my back having gone to sleep.’
 <‘Apya’nu’ ‘erner’erk kuumanit. > ‘I was lying on my back asleep at the time.’ (R&E 125)

Example (5) shows a sequence of immediate-past clauses as serial predicates. The second clause is marked with the same-subject subordinator *-nkw*, with the zero copula being replaced by the stem of *ñiha-j* ‘do’ to support the suffix.¹³⁵ The plural object marked within the pronominal *vy* covers the common object of the two verbs, *tavynin* ‘teach’ and *chaat\$u7nin* ‘make sing’. All these are figure as the complement *X* in *Ama7 X Ø* ‘He was X.’

- (5) SE *Ama7 [ni = vy [tavynin-i-t Ø] [chaat-t\$u7-nin-i-t*
 DIST COMP = 3SG > 3PL teach-IPST-ABS be song-VBLZ-CAUS-IPST-ABS
pana7 ñiaa-nkw]] Ø.
 thus be-SS be
 ‘He was the one who had taught them and had them sing like that.’
 <‘Ama’ ni’vu’ tavuninit chaacunit pana’ nyaawnk. > ‘He was the one who would teach them to sing like that.’ (R&E 306)¹

¹ In the R&E spelling, the ungrammatical apostrophe after the pronominal *vy* is from Elliott’s practice of writing a glottal stop after every word-final short vowel (as well as before every word-initial vowel) whether phonetically/grammatically present or not. The SE glottal stops are often hard to hear, but Elliott’s solution to the problem is unfortunate.

¹³⁵ We wonder if the same-subject subordinator *-nkw* is used to avoid a sequence of two zero (unmarked) copulas.

The structure of seriation is complicated when the concatenated predicates differ in transitivity. In the examples in (6), the second predicate has a plural object while the first does not. While the two clauses are dominated by a common quotative evidential *kwyn(y)* and have a common subject, the pronominal component, ‘3PL > no object’, of the inflected evidential *kwyny* applies only to the first clause, and the pronominal marker *my* ‘3PL > 3PL’ has to be used for the second, plural-object predicate, *ajaqam* ‘be going to get’ in (6a), and *qoo^Rnqam* ‘be going to kill’ in (6b).

- (6) SE a. *Ajay7=kwyny mi-j pa-jykja7* [[*my aja-qa-m*] \emptyset].
 then = QUOT.3PL go-IND PROX2-DAT 3PL > 3PL get(pl.)-IFUT-PL be
 ‘Then they went to get them.’
- b. *Uvia=kwyny chamaqaan* [[*my qoo^Rn-qa-m*] \emptyset].
 already;now = QUOT.3PL think 3PL > 3PL kill(pl.)-IFUT-PL be]
 ‘Now they were thinking of killing them.’

In example (7) there is again a difference in transitivity between the two clauses. Here both clauses are marked with the pronominal *-n* for 1SG subject, but there a difference can be seen by their respective glosses. The first *-n* marks the two arguments of the transitive construction involving the object *hoowkp-i* ‘one-ACC’ while the second *-n* marks the subject of a reflexive predicate. Reflexive constructions in SE are treated morphologically as intransitive (5.6.5). There is also a third instance of *-n* in *kyj=n* ‘I said’. This is the main clause, which dominates the indirect quotation (for another example, see (1a) above).

- (7) SE [[*Py-hpa7=kwyny=n yky-ka7* \emptyset *hoowkp-i*] [*ni-taqa=n*
 3SG-LOC = QUOT = 1SG > 3SG lie-IFUT be one-ACC 1SG-REFL = 1SG
pakup-k-ina-qa7 \emptyset *huwa-n*]] *ky-j=n*.
 cover-K-CAUS-IFUT be other-INS say-IND = 1SG
 ‘I said that I was going to lie on one (of the blankets) and (was going to) cover myself with the other.’

These examples show that serial predicates in SE are limited to sequences of predicates having the same valence. Sequences with other predicate types seem to

involve distinct clauses. Thus what looks like a straightforward sequencing of predicates, ones that appear to be the same as those in the examples in (1), is not that simple. The examples in (8), which superficially seem to have simple sequences of predicates, must instead be analyzed as having a series of two clauses, though they are constrained in that they must have the same subject. Zeros are inserted to represent the appropriate pronominals. The idea that the second-position evidential *kwyn* is at its own level of structuring separately from that of the pronominal arguments that morphologically adhere to it cannot be represented in any practical way through punctuation.

- (8) SE a. *Wahi7=kwyn pichy-j a-kut\$a-mia7 [Ø*
 Coyote=QUOT.3SG arrive-IND 3SG-firewood-COM 3SG > 3SG
wiin-t\$u7].
 drop-MOT
 ‘Coyote arrived with his firewood and went and dropped it.’
- b. *Kwyn mi-j tum haii-p [Ø a-puuch-i*
 QUOT.3SG go-IND DISTR INDF-LOC 3SG > 3SG 3SG-seed-ACC
ngaan-qa7 Ø].
 seek-IFUT be
 ‘She went somewhere to look for seeds.’

Example (9), by this analysis, has two clauses, the first a serial pair of intransitive predicates and the second a transitive clause. Again, the quotative evidential applies equally to both clauses.

- (9) SE *Kwyny = [vy-7 a-wo^Rchahav [mi-j] [tum haii-p ii-p nym]]*
 QUOT = 3SG-PST 3SG-husband go-IND DISTR INDF-LOC PROX-LOC walk
[Ø pyy-rakw-i ngaan].
 3SG > 3SG 3PL-food-ACC look.for
 ‘Her husband went somewhere looking for food for them (had gone walking all over looking for their food).’

In summary, serial predicates in SE are limited to sequences of predicates having the same valence, and may be restricted to sequences of intransitives. Sequences with other

predicate types involve distinct clauses. Thus what looks like a straightforward sequencing of predicates, ones that appear to be the same as those in the examples in (1), are often more complex and cannot be regarded as genuine examples of serial predicates.

12.2.2. THE TWO WORDS ANI, ADVERBIAL AND COMPLEMENTIZER. Alongside the clause linkage types with subordinating morphology to be discussed below, SE has a type where the particle *ani* appears before a subordinate clause. This type of relative clause is not attested for KI, and it definitely does not appear in the Cupan languages where relativization is accomplished entirely by suffixes on relative clause predicates. The particle *ani* can provide temporal linkage (the adverbial, *ani*₁), in which case it is glossed as ‘then’ or ‘and then’ or it can introduce a relative clause (the complementizer, *ani*₂). In SE, the majority of relative clauses include *ani*₂. Relative clauses introduced by *ani*₂ show no subordinating morphology. However, *ani*₂ can appear with other clause types, such as the complement clauses in (6) and (7) below, and in such cases subordinating morphology is present. Along with immediate-past and immediate-future relative clauses, clauses with *ani*₂ can appear with common arguments (Dixon 2010:314) in the first person and second person.

12.2.2.1. ADVERBIAL ANI. The examples in (1) illustrate the adverbial *ani*₁, where the first clause is temporally prior to the clause introduced by *ani*₁.

- (1) SE a. *Ajay7=kwyn ama7 nyyp^Rh-t kim ani₁=kwyn*
 then = QUOT.3SG DIST woman-ABS come and.then = QUOT.3SG
moo^Rmo^Rho^R7 aa-p nyyp-k ani₁=kwyny=vy-7 mymy7-k.
 anyway DIST-LOC sit-K and.then = QUOT = 3SG-PST die(sg.)-K
 ‘Then the woman came and then she sat there anyway and then she died.’
- b. *Uvia =kwyny chaak-t\$u7 ani₁=kwyny*
 already = QUOT.3PL > 3SG tire-MOT and.then = QUOT.3PL > 3SG
jyyvu-kja7 puka-j.
 outside-DAT throw-IND
 ‘They got tired of him and then they threw him out.’

Example (2) shows *ani*₁ used in a different-subject construction.

- (2) SE *Pahi7-ky-j=kwyn* *ani*₁ = *kwyny* – *rywyt-ky-j=kwyny*.
 dawn-K-IND = QUOT.3SG and.then = QUOT.3PL disappear-K-IND = QUOT.3PL
 ‘It was getting to be morning and then they – they disappeared.’

*Ani*₁ can also occur in single-clause sentences. As an introducer, it signals discourse continuity, as in (3).

- (3) SE *Ani*₁ = *kwyn* *Wahi7* *a-taq* *myt\$ykin*.
 then = QUOT.3SG Coyote 3SG-REFL feel.sorry.for
 ‘Then Coyote felt sorry for himself.’

It also may conjoin two predicates having a sequential relationship, as in (4).

- (4) SE a. *A-na7n* *a-huun* *mutu7* *hu7a-w=kwyn*
 3SG-father.GEN 3SG-heart still;yet burn-DS = QUOT.3SG > 3SG
wo^Rp-k-in *ani*₁ *my^Rny^R7-k-in*.
 grab-K-CAUS and.then swallow-K-CAUS
 ‘While his father’s heart was not yet burning, he grabbed it and then swallowed it.’
- b. *Ama7* *naash-t=tqa=vy-7* *uii7wyn* *a-chyyva7*
 DIST girl-ABS = INFR = 3SG > 3SG-PST want 3SG-following
a-mi-ik-t\$i *ani*₁ *mi-j*.
 3SG-go-IRR.SUB-ACC and.then go-IND
 ‘The girl must have wanted to go with him and [so] she went.’

Whether example (5) is properly understood as containing two clauses is problematic. If there are two clauses, then the first clause has a gapped verb (and also a gapped auxiliary). Since the SE verb is often or even prototypically clause final, it seems more likely that the first several words in the example are a complex adverbial introduction. This would mean that the quotative *kwyn* is in its normal second position. On the other hand, if this is a single clause, it is the only example found so far with adverbial material preceding *ani* within the clause.

- (5) SE *Ajay7 uvia a-taq-p ani₁ = kwyn py-my-va7 \$ii7.*
 then already 3SG-REFL-LOC then = QUOT.3SG 3-PL-LOC urinate
 ‘Then already [having done so] on himself, then he urinated on them (Then
 already on himself, then, it is said, on them he urinated).’

Example (6) has two different-subject clauses (marked by *-w*). It is unusual in having *ani₁* between the main-clause verb and its object. At first we thought this was an exceptional example of the complementizer *ani₂* (next section). Relative clauses with *ani₂* normally show no subordinating morphology, such as the same-subject subordinator *-w* in (6).

- (6) SE *Aa-pia = ny-7 huch-k-t\$u7o-w kjavaaju7-nu7*
 DIST-LOC = 1SG-PST fall-K-MOT-DS horse-ABL
ni-jy7 = vy-7 hii-hi ani₁ ny-pyy^Rv-i y^Rt\$awa7o-w.
 1SG-mother = 3SG > 3SG-PST DUR-see then 1SG-face-ACC bleed-DS
 ‘After I fell off the horse, my mother then saw my face which was bleeding.’
 <‘Apya’nu’ huchku’ow kavaayu’nu’ neye’vu’ hihii ‘ani’ nepeervi’ ‘ercuwa’ow.> ‘After I fell off the
 horse my mother took a look at my bloody face.’ (R&E 204)

12.2.2.2. COMPLEMENTIZER ANI. The complementizer *ani₂* makes no statement about any temporal sequencing. In fact, in many examples, the clause introduced by *ani₂* is semantically temporally prior to the sentence in which it is embedded, quite opposite to the ‘and then’ sense of *ani₁*. Further, while adverbial *ani₁* may anchor modals or evidentials within the clause (as in 12.2.2.1 (1, 2, 3, 5)), complementizing *ani₂* does not, though it does appear with the pronominal arguments of the embedded clause. Also, as mentioned above, relative clauses with *ani₂* have no special subordinating inflection on their predicates, but are identical to main clauses.

Examples of *ani₂* where the common argument is subject in the relative clause, and where the relative clause itself functions as a verbless complement, appear in (1).

- (1) SE a. *Paakiha-t\$ [ani₂ = vy qoo^Rn] Ø.*
 small.hawk-ABS COMP = 3SG > 3PL kill(pl.) be
 ‘Chicken Hawk is the one who killed them.’

- b. *Aa-m amaj7 [ani₂=m qat\$ qaii-ch*
 DIST-PL now COMP = 3PL be;live;dwell mountain-ABS.GEN
a-kupia-va7] Ø.
 3SG-above-LOC Be
 ‘They are now the ones that live (in the sky) above the mountains.’

- c. *Mia=t haii-piu7 ama7 [ani₂=m pichy-j ii-p] Ø.*
 DUB = IRR INDF-ABL DIST COMP = 3PL arrive-IND PROX-LOC be
 ‘I don’t know where it was that the ones that came here were from.’

In the examples in (2), the common argument is object in the relative clause. An example where the common argument is object in both clauses appears in (2b). Examples (2b,c) show *ani₂* in contracted form, *ni₂* (we retain the subscript in the examples of this section to make explicit the relationship to *ani₂*).

- (2) SE a. *Ivi7=tqa=vy-7 mym-k [ani₂ ah~av ama7*
 PROX = INFR = 3SG-PST be.true-K COMP REP~tell.story DIST
wyt\$y^R\$-t\$].
 man-ABS
 ‘What the man used to tell about must have been true.’ (‘This must be true, what that man used to tell about.’)
- b. *Mi=ta=vy-7 Annie Cotton ama7 ivi7 nyy^Rh-t ama7*
 DUB = IRR = 3SG-PST DIST PROX woman DIST
[ni₂=n wyra7n-ivana-qa7 ama-j] Ø.
 COMP = 1SG > 3SG talk-INST-IFUT DIST-ACC be
 ‘I guess Annie Cotton was the woman that I am going to talk about.’
 <Mitavu’ *Annie Cotton* ‘ama’ ‘ivi’ neert ‘ama’ nin werra’nivanaqa’ ‘amay.> ‘Annie Cotton was the woman that I am going to talk about’ (R&E 808)
- c. *Papi7a amaj7 [ni₂=m tywan7-k-in Soboba].*
 there now COMP = 3PL name-K-CAUS
 ‘There (is the place) that they call Soboba now.’
 <Papi’a’ ‘amay’nim tewa’nkin Soboba.> Now they refer to the place as Soboba’ (R&E 882)

Relativization with *ani*₂ can have an instrumental head in the relative clause, in which case the instrumental form of the distal demonstrative, *amatunga* ‘with it, about, for that reason’, will appear, as in (3). Example (3b) also shows *wyra*⁷*n-ivan*, a nominalization with the instrumental nominalizer *-ivan*.

- (3) SE a. *Ama*⁷ *waha*⁷ [*ama*⁷ *aap* *puchuk* *tyngk* *ama-tunga*⁷ [*ani*₂ = *m*
 DIST also DIST there very just DIST-INS COMP = 3PL
*kii-chu*⁷]] ∅.
 house-VBLZ be
 ‘That was also that with which they built houses there.’
 <‘Ama’ waha’ ‘ama’ ‘ap puchuk tengek ‘amatunga’ ‘anim kiichu’> ‘That was also something
 that they would make houses out of.’ (R&E 570)
- b. *Vy*-⁷ *huur-k* *tum* *haii-p* *moo*^R*mo*^R*ho*^R⁷ *ama-tunga*⁷ *ivi*⁷
 3SG-PST grow-k DISTR INDF-LOC anyway DIST-INS PROX
 [*ani*₂ = *n* *wyra*⁷*n-ivan*].
 COMP = 1SG talk-INST
 ‘There were things growing all over the place, like what I was talking about ...’
 <‘Vu’ huurk tum hayp mermerher’: ‘amatunga’ ‘ivi’ ‘anin werra’ nivan.> ‘There were things
 growing all over the place, like what I was talking about ...’ (R&E 477)

In (4), where the common argument is object in both clauses, shows that with *ani*₂, the predicate in the relative clause, which is a finite verb, has no accusative suffix. In a relative clause formed with a subordinating suffix, an accusative suffix would be present.

- (4) SE *Qaj*⁷ = *t*\$ *kwa*⁷ *hy*^R*nchkaa*^R*ht*\$*i-ch-i* *ama*⁷ [*ni*₂ = *m* *maqa*-*j*].
 PROH = 2SG eat nasty-ABS-ACC DIST COMP = 3SG > 2SG give-IND
 ‘Don’t eat the nasty stuff that she gives you.’

The examples in (5) show *ani*₂ with a relative clause where the common argument is first person. Suffixed relative clauses where the common argument is first or second person are restricted to the “verbless complement” type where for all practical purposes the suffixed construction is a main-clause predicate, as outlined in 11.2.3. Example (5a) shows “kintax” (5.6.4). The plural-object verb *qoo*^R*n* ‘kill’ collocates with the singular

object *myna7ni* ‘your father (acc.)’, with the implication being that your father and the other involved kin person (his brother in this case) were both killed (which is what had happened in the story). In (5), the pronouns *nyy7* ‘I’ in (4a) and *acham* ‘we’ in (5b) seem to have been raised out of their respective *ani* clauses; the introductory material, what precedes *ani* in both examples, is inflectionally third person singular.

- (5) SE a. *Nyy7=tq* [*ani₂=ny* *my-na7n-i* *qoo^Rn*] \emptyset .
 1SG.PRO = INFR.3SG COMP = 1SG > 3PL 2SG-father-ACC kill(pl.) be
 ‘It must be that [you think] I am the one that killed your father (and his brother).’
- b. *Ii-m acham* [*ani₂=ch* *kim*] \emptyset .
 PROX-PL 1PL.PRO COMP = 1PL come be
 ‘We are the ones that came.’

Ani₂ also can introduce an embedded question, as in (6) and (7).

- (6) SE a. *Kwy7=t\$* *maaja7* *tqamin-ñaa-nkw* [*ani₂=my=chi7* *pana7*]
 POT = 2SG > 3SG ask strangely-do-SS.SEQ COMP = 3PL = 1PL that.way
ky-j.
 say-IND
 ‘You ought to ask her why they are saying that to us.’
- b. *Ama-tunga7* [*ani₂=m* *py-hpa7* *chaat-\$u7* *a-mym7-k-i-t\$i*] \emptyset .
 DIST-INS COMP = 3PL 3SG-over song-VBLZ ADJZ-die-K-ADJZ-ACC be
 ‘That is why they sing over the deceased person.’
 < ‘Amatunga’ ‘anim pehpa’ chaachu’ ‘amempki’tti’. > (R&E 3)

Example (7) has the AUX *tqa = my7* at the end of the sentence. It looks as though there is some odd kind of agreement at work, with plural = *m* in the *ani₂* phrase being copied into the AUX which follows. However, the entire sentence preceding *tqa = my7* probably should be understood to be a complement, and the sentence to mean something like ‘They must have been ones who wanted it for that reason’.

- (7) SE *Ama-tunga7* [*ani*₂ = *m* *uii7wyn*] *tqa = my-7* \emptyset .
 DIST-INS COMP = 3PL want INFR = 3PL-PST be
 ‘That is probably why they wanted it. (That is why they wanted it, it must have been.)’
 <‘Amatunga’ ‘anim wi’wan txamu’.> (R&E 21)

A few exceptional examples are found in narratives in Ramón and Elliott (2000). In (8) an embedded clause is introduced by *ani*₂, but with a predicate marked for subordination. The verb of the subordinate clause, *ñiha-j* ‘do’, appears in the realis form that appears in complement clauses, *añiivaniv* ‘3SG having done it’. This may be a consequence of the fact that the *ani*₂ clause is introduced by *amatunga7*. *Amatunga7* is normally the instrumental of *ama7*, the distal demonstrative, but here (and elsewhere) it seems to function as a complementizer, analogous to CU *pəchi*, CA *pish*, both of which are either third person instrumentals or complementizers.

- (8) SE *Pana7 = my-7* *vyra7n* *ama-tunga7* [*ani*₂ *a-ñi-ivan-iv*
 thus = 3PL-PST talk DIST-INS COMP 3SG-do-NFUT.SUB-REAL.SUB
py-my-kja7] *taaqa-ta-m*.
 3-PL-DAT person-ABS-PL
 ‘The people talked that way about what had been done to them.’
 <Pana’mu’ werra’n ‘amatunga’ ‘ani’ ‘anyiivanif pemeka’ taaqtam.> ‘That’s what the people of long ago used to talk about.’ (R&E 89)

Example (9) has two clauses with *ani*₂. The second clause is embedded in the first.

- (9) SE [*Mi = ta = vy-7* *ama7* [*ni*₂ *ñiha-j* [*ani*₂ \emptyset
 DUB = IRR = 3SG-PST DIST COMP do;happen-IND COMP 3SG
mymy7 \emptyset]].
 die.CMP Be
 ‘Maybe that’s what happened such that she had died.’
 <Mitavu’ ‘ama’ ni’ nyihay ‘ani’ meme’.> ‘Maybe that is why she died.’ (R&E 878)

*Ani*₁ and *ani*₂ can cooccur. The examples in (10) have both *ani*₁ and *ani*₂ and should serve to highlight the contrast between the two.

- (10) SE a. “A-mym7-ki = m7 Ø. [Pa-t Ø [ani₂ = n chaat\$u7]
 ADJZ-die-K-ADJZ = 2SG Be PROX.2-ABS 3SG COMP = 1SG sing
 Ø] [ani₁ = m7 hiik],” ky-j = kwyn
 be and.then = 2SG breathe;come.to.life say-IND = QUOT.3SG
 py-jykja7.
 3SG-DAT
 ‘ “You were dead. I sang (it’s that I sang) and then you came back to life,”
 he said to him.’
- b. Ky-j = kwyn ani₁, “Ivi7 [ama7 ny-pulin
 say-IND = QUOT.3SG and.then PROX DIST 1SG-WoDa
 [ani₂ Ø pichy-j] Ø [ani₂ Ø kwa7-t\$u7
 COMP 3SG arrive-IND and COMP 3SG > 3SG eat(tr)-MOT
 ni-ñu-j]] Ø,” ky-j = kwyn.
 1SG-possession-ACC be say-IND = QUOT.3SG
 ‘And then she said, “This is my daughter that came and ate my stuff,” she
 said.’

Finally, a relative clause itself can function as subject of the sentence, as in (11). Here, the common argument is subject in both clauses.

- (11) SE Pana7 [ni₂ ama7 nyyp-k-t\$u7] Ø pa-pa7iu7
 thus COMP DIST settle.down-K-MOT 3SG PROX2-ABL
 kim-i-t Ø.
 come-IPST-ABS be

‘Thus the one who settled down (at San Manuel) had come from that place (Bear Valley).’

<Pana’ ni’ ‘ama’ nepkcu’ pa’pa’yu’ kimit. > ‘The man who came from there (Bear Valley) settled down there (San Manuel).’ (R&E 84)

12.2.3. SUBORDINATING SUFFIXES IN SERRANO. In subordinate clauses other than those introduced by the complementizer *ani₂* the verb is marked by some subordinating suffix. In relative clauses, the choice of suffix is governed both by whether the head of the

relative clause is subject or object in the main clause and by the tense/aspect of the relative clause in relation to that of the main clause.

The verbs marked by subordinating suffixation are of two major types: those that have pronominal agreement prefixes and those that do not.

The prefixed set (12.2.5) includes four subordinating suffixes: realis (*-iv*) and irrealis (*-ik*), nonfuture (*-ivaʔ/-ivan/-ivani*) and future (*-ihwaʔ*). In addition, a derivation with the nominalizing suffix *-ʔ* and a pronominal prefix can serve as a subordinate predicate. These prefixed constructions appear in relative clauses where the head is object in the relative clause, and the pronominal prefix on the relative clause verb encodes the agent. With this relativization type, only third-person common arguments are attested. All attested common arguments are either subjects or objects in the main clause. In SE and Cupan, the realis and irrealis subordinating suffixes that appear on predicates in object-headed relative clauses appear also in complements, embedded questions, and adverbial clauses.

The unprefixing type of subordinated predicate includes the switch reference constructions (12.2.4), which appear mainly in temporal adverbial clauses. A pair of subject nominalizations, a “perfect” form (the immediate past) and an “imperfect” form (the immediate future) appear in relative clauses headed by subjects. These inflections also appear in apparent main clauses, and in that function are treated in 11.2.3. Common arguments attested with these relativizing constructions include all persons, first and second as well as third. There are also some nominalizing suffixes which look very much like the immediate-past and immediate-future subordinators and may share a diachronic origin, but which synchronically seem quite distinct.

12.2.4. SWITCH REFERENCE IN SERRANO. Switch reference marking derives adverbial clauses, especially with temporal and conditional senses. The subordinating suffixes for switch reference are displayed in (1). The “different subject” and “same subject” designations are somewhat loose, as will be seen below. As adverbials, the switch-reference markers have no nominal inflection.

(1)	SE	different subject	-w ~ -u	DS
		same subject		
		simultaneous	-ivaju7 ~ -iv	SS.SIMUL
		immediate future	-ivi7-ka7	SS-IFUT (see 12.2.5.4.)
		sequential	-nuk(i) ~ -nkw	SS.SEQ

12.2.4.1. DIFFERENT-SUBJECT SUBORDINATOR. The different-subject subordinator -w (-u after a consonant) is relatively uncomplicated. No tense/aspect differences are marked with this subordinator. It occurs after the verb stem with no further morphological elaboration. Since it does not displace the stem-final vowel, the suffix is regarded as underlyingly -w. This vocalizes to -u where w is disallowed. Underlying short a and y preceding this ending are usually heard as o. Examples are given in (1).

- (1) SE a. [Pyveipa7=m huu7o-w] Ø hakup muur-k.
 if=3PL fart-DS 3SG very stink-K
 ‘When they (stinkbugs) fart it really stinks.’
 <Pavay’pa’m huu’ow hakup muurk.> (R&E 840)
- b. [Ama7 kiur-ko-w] ymi7=ta=m7 navyy^Rnu7 kiur-k-iv.
 DIST dive.in-K-DS 2SG.PRO=IRR=2SG next dive.in-K-FUT
 ‘If he goes in (first), you go in next.’
- c. Acham=ta=ch [Ø pahi7-ko-w] mi-iv.
 1PL.PRO=IRR=1PL 3SG dawn-K-DS go-FUT
 ‘We’ll go in the morning (when it dawns).’
- d. Ama7 huu7-t\$ pa-jykja7 [taamia-t chyyp-ko-w] qat\$y7.
 DIST star-ABS PROX2-DAT sun-ABS disappear-K-DS be.there
 ‘The star is over there when the sun sets.’
 <‘Ama’ huu’ch payika’ taamyat chepkow qace’.> ‘Those stars are (visible) there when the sun is setting.’ (R&E 400)

Example (2) shows the semantic slippage that will be discussed further below. The “different-subject” subordinator appears even though the common argument is the same

subject, 1SG, in both clauses. To highlight this exceptionality, we use scare quotes in the gloss.

- (2) SE [Aa-p haii-p hospital-p = ny-7 qat\$o-w]
 DIST-LOC INDF-LOC hospital-LOC = 1SG-PST be.there-“DS”
 aa-pia7 = ny-7 maamt\$.
 DIST-LOC = 1SG > 3SG-PST hear
 ‘While I was in the hospital somewhere I heard it there.’
 <‘Ap xhaip hospitalpnu’ qacew ‘apya’nu’ mamc.> ‘When I was in the hospital, I happened to hear.’
 (R&E 196)

The examples in (3) are interesting in that they show a SE style whereby an actor is named in the subordinate clause rather than in the main clause as it would have to be in English. The translation of (3a) in more normal English would be “That was because the teacher would whip us [if we did not learn [the music she taught us]]” and of (3b), “I see a man [who is following me].” Note that *wyt\$y^R\$t\$* ‘man’ in (3b) is nominative; this shows that it is part of the subordinate clause, not of the main clause where it would be accusative.

- (3) SE a. *Amatunga7 = chymy-7 \$akwi7 [qaj = ch ynano-w,*
 because = 3SG > 1PL-PST whip NEG = 1PL > 3SG learn-DS
[chyy-ñuu teacher = chymy-7 tavynin juu7nini7a-t\$-i]].
 1PL-possession teacher = 3SG > 1PL-PST teach music-ABS-ACC
 ‘That was because she would whip us if we did not learn the music our
 teacher taught us.’
 <‘Amatunga’chemu’ shaqwi’ qaych ‘ananow, cheenyu’ teacher chemu’ tavunin
 yuu’nini’a’chi’.> ‘That’s because she would whip us if we did not learn the music, she taught
 us.’ (R&E 292)
- b. *Hii~hi-j = n [wyt\$y^R\$-t\$ = vyn chyyva7-u].*
 DUR~see-IND = 1SG > 3SG man-ABS = 3SG > 1SG follow-DS
 ‘I see a man following me.’

The expression of modals/evidentials is restricted to main clauses. In (4), the inflected evidential *kwynyvy7* is found only in the main clause.

- (4) SE *Wahi7 = kwyny = vy-7* *churup-k* [*mutu7* *cho^Rnu7-wyno-w* *ama7*
 Coyote = QUOT = 3SG-PST enter-K still;yet stand-RSLT-DS DIST
Huunav-t].
 Badger-ABS
 ‘Coyote slipped through while Badger was still standing there.’
 <Wahi’ kwenevu’ cherrupk mutu’ chener’anow ‘ama’ huunaft.> (R&E 446)

A possible exception to this generalization, that modals are restricted to the main clause, appears in (5). It seems to show a modal/evidential in the subordinate clause. However, in this example, *ajay7 = kwyn* functions as a sentence introducer, with the evidential *kwyn* being repeated in the main clause after the subordinate clause and again in the repetition.

- (5) SE *Ajay7 = kwyn*, [*jyngy7-ko-w*] = *kwyn* *atiy^R7a-v-k*, *kwyn*
 then = QUOT.3SG time.pass-K-DS = QUOT.3SG big-become-K QUOT.3SG
atiy^R7a-v-k.
 big-become-K
 ‘Then, after a while, it (the whirlwind) got bigger and (it got) bigger.’

A non-verbal complement in a subordinate clause, as with the predicate adjective *namaa7i7* ‘soft’ in (6), requires an overt copula (*ñiaa-*) since the subordinating suffix *-w* requires a verb stem.

- (6) SE [*Aa-p* *ivi7* *tiy^Rva-t\$* *mutu7* *namaa7-i7* *ñiaa-w*] = *kwyn*
 DIST-LOC PROX earth;land-ABS still;yet soft-ADJZ be-DS = QUOT.3SG
aa-p *hwaa^Rt\$k*; *a-naa^Rvy^R7 = kwyn* *amaj7* *mutu7* *chi7aa7-k*.
 DIST-LOC climb-K 3SG-foot = QUOT.3SG now still;yet be.visible-K
 ‘There this earth was still soft there where he climbed; his footprints still show now.’

12.2.4.2. SAME-SUBJECT SUBORDINATORS. In contrast with the single different-subject subordinator, the same-subject subordinators are various and they have different meanings,¹³⁶ some of which are difficult to pin down.

The suffix ‘same subject, simultaneous action’ has two variants. Dorothy Ramón (the speaker represented in Ramón & Elliott 2000) always uses a form represented in that source as *-ivaju7*. Sarah Martin uses a shorter form, *-iv*. Mrs. Martin’s same-subject *-iv* can be distinguished from the realis subordinator *-iv* (see 12.2.5.6), because the same-subject predicates do not include a pronominal prefix, while constructions with realis *-iv* do. Future-tense *-iv* is also homophonous; it appears in main clauses with the irrealis modal *t(a)*.

Dorothy Ramón’s immediate-future subordinator *-ivi7-ka7* has not been found in data from Sarah Martin. Discussion of this suffix sequence is deferred until section 12.2.5.4.

Same-subject subordinate clauses show an interesting property of SE syntax that results from the portmanteau nature of the pronominals. For many languages, a same-subject subordinate clause will not have a copy of the subject marker. But in SE, if the verb in the subordinate clause is transitive (with a non-3SG object), the need to express the object requires that a pronominal must be included, cf. *ny* ‘1SG > PL’ in (1a). By comparison, no new marking is required in the intransitive clause in (1b) nor in the transitive clause in (1d) because of the 3SG object in that clause. Example (1a) shows the subordinate clause as the object of the verb *a^Rt\$a^R7kin* ‘get tired of’. The subordinate clauses in the other examples (1b-g) have the usual adverbial status.

- (1) SE a. *Aa-pia = n* *a^Rt\$a^R7-k-in* [*ny* *puhche-i7vaju7*].
DIST-LOC = 1SG > 3SG tire-K-CAUS 1SG > PL care.for-SS.SIMUL
‘I’m tired of taking care of you pl.’
< Apin ‘acar’kin nepuhcay’veyu’ > ‘I’m sick of taking care of you guys.’ (R&E 611)

¹³⁶ This pattern goes beyond Takic. Both Hopi and Tübatulabal (Voegelin 1935:123-127) have a single different-subject and several same-subject subordinators.

- b. *Mi = ta = vy-7 ama-tunga7 ani oo^Rvai7t mymy7 [hoo^Rm-ch*
 DUB = IRR = 3SG-PST DIST-INS COMP right.away die.CMP shaman-ABS
ñi-ivaju7].
 be-SS.SIMUL
 ‘Maybe it was because of that (the shamanic power) that she had died so soon,
 being a shaman.’ (Shamans do not live long.)
 <Mitavu ‘amatunga’ ‘ani’ ‘ervayt meme’ heermc nyiivayu’.> ‘Perhaps that’s why she died so
 young, because she was a shaman.’ (R&E 178)
- c. *Mi = t pahi7-k-in [chaat\$u-i7vaju7].*
 DUB = IRR.3SG dawn-K-CAUS sing-SS.SIMUL
 ‘He would spend all night singing.’
 <Mit pahi’kin chaacu’vayu’.> ‘He would sing on through until dawn.’ (R&E 241)
- d. [*Ama-tunga7 [ani = m pana7 ñiha-j]] = kwyn Ø,*
 DIST-INS COMP = 3PL > 3SG thus do-IND = QUOT.3SG be
[ynan-ivaju7 my-chaaj].
 know-SS.SIMUL 2SG-song-ACC
 ‘It’s what they would do if they knew your song.’
 <‘Amatunga’ ‘anim pana’ nyihay kwan, ‘enanivayu’ mecaay.> ‘That’s what you can do, if you
 know your song.’ (R&E 165)
- e. *Ho^Rqa^Rni-nu7 kima-qa-my = m chaat\$u7 [pahi7-k-in-iv].*
 Palm.Springs-ABL come-CHAR-PL = 3PL sing dawn-K-CAUS-SS.SIMUL
 ‘The people who had come from Palm Springs sang all night.’
- f. *Kwyn juu7 [yk-iv].*
 QUOT.3SG cry lie-SS.SIMUL
 ‘It cried as it lay [there].’
- g. *Ama7 = kwyn chynynyh-k [mi-iv].*
 DIST = QUOT.3SG roll-K go-SS.SIMUL
 ‘It (the basket) rolled as it went.’

Example (2), elicited in brief work by K. Hill with Louie Marcus, may illustrate another variant of the same-subject suffix, *-v*, with loss of the *i* after the verb-derivational

suffix *-t\$u(7)*. If this understanding is correct, the verb might be roughly translated as ‘make one hundred’. See 14.14.2 (18) for an alternative analysis, with *-v* maybe meaning ‘times’. But in the alternative analysis, *-t\$u* remains unidentified.

- (2) SE *Hoowkp sieentu7-t\$u-v=kwyn jaa7.*
 one hundred-VBLZ-SS.SIMUL = QUOT.3SG carry;do
 ‘He did it a hundred times.’ (cf. Spanish *ciento*)

The suffix for same-subject sequential actions is usually *-nkw*, from PTak **-nikwi* as in (3).

- (3) SE a. *Kwy7=t\$ mymy7-k [paa7-nkw], ky-j=m.*
 POT=2SG die-K drink-SS.SEQ say-IND=3PL
 ‘You could die after drinking it, they say.’
 <Kwa’c memek pa’nkw, keym.> ‘You could die if you drank it, they say.’ (R&E 847)
- b. *Ajay7=ny-7 [miaa-nkw] huur-kj-t\$u7.*
 then=1SG-PST go-SS.SEQ peek-K.CAUS-MOT
 ‘Then I went and peeked in.’
 <‘Aye’nu’ myaawnk huurrkicu’.> ‘I went over there to take a peek.’ (R&E 196)

After stem-final *u*, *-nkw* reduces to *-nk*, as in (4); there is no contrast *k* : *kw* in the coda of a syllable in *u*.

- (4) SE *Ama7=kwyny-vy hyvy7-k hiu-nk nyy^Rh-t gabriljaanu7*
 DIST = QUOT = 3SG > 3PL greet-K see-SS.SEQ woman-ABS Gabrielino
hii-t.
 INDF-ABS
 ‘The Gabrielino (Tongva) woman greeted them when she saw them.’
 <‘Ama’ kwenevu’ hevek hiwnk neert Gabrrilyaanu’ xhiit.> (R&E 48)

The fact that ‘see’ appears as *hiu-* in (4) suggests that *-nkw* is underlyingly *-nukwi* in SE. The underlying form of the root ‘see’ in SE is *hiy* and its root-final *y* has undergone the *y* > *u* assimilation (see 4.2.9). This assimilation depends on there being a *u* in the following

syllable. When the subordinator occurs in metrically strong position, as in (5), syncope does not take place and the underlying *u* is revealed.

- (5) SE a. *Nyyp-ky-nuk* $a^R t \$ a^R 7 \sim a^R t \$ a^R 7 - k - t \$$ *nyy7*.
 sit.down-K-SS.SEQ DISTR~tire.out-K-ADV(?) make.basket
 ‘She’d sit there and tirelessly keep on making baskets.’
 <Nepkenuk ‘acar’acar’kc ne’. > (R&E 586)
- b. *Waryngk pyn-uk = kwyny = vy-7* *hyiĩny-nuk* *my^Rka^Rn*
 truly 3SG-EMPH = QUOT = 3SG > 3SG-PST hunt-SS.SEQ kill(sg.)
ama-j ny-taah-i aa-p qat\$0-w a-ñu
 DIST-ACC 1SG-MoBr-ACC DIST-LOC be.there-DS 3SG-possession
tiy^Rva-v.
 land-LOC
 ‘He just ambushed and killed my uncle there on his own land.’
 <Warrêngk penewk kwenevu’ heynyenuk merkan ‘amay netahi’ ‘ap qacew ‘anyu’ tervav. >
 (R&E 673)

Further, when a clitic follows, apocope does not apply and the second vowel of the subordinator is revealed to be *i*, as seen in (6).

- (6) SE a. [*Kwyyt\$-ky-nuki*] = *m tuhtu7 ajay7 huwa-m ho^R~hoo^Rmi-m*.
 get.up-K-SS.SEQ = 3PL dance then other-PL PL~shaman-PL
 ‘The other shamans would get up and dance.’
 <Kweeckenukim tuhtu’ ‘ayee’ huwam herheermim. > (R&E 116)
- b. *Hytky-nuki = m tuhtu7 tyngk*.
 line.up.single.file-SS.SEQ = 3PL dance more.often.than.not
 ‘They would line up and dance.’
 <Hetkenukim tuhtu’ tengk. > (R&E 390)

The same form, *-nuk*, was collected from Sarah Martin in the examples in (7). Her pronunciation was difficult to hear and the suffix was transcribed as both *-nykw* and *-nukw*. Example (7c) shows an imperative-like usage of what is essentially an adverbial form. This is more or less the equivalent of an adverbial command like English “Quickly now!”.

- (7) SE a. *Nyyp-ky-nuk* = *kwyn* *ama-j* *kwa7-i*.
 sit.down-K-SS.SEQ = QUOT.3SG > 3SG DIST-ACC eat-IND
 ‘She sat down and ate it.’
- b. *Kwa7-i* = *kwyn* *nyyp-ky-nuk*.
 eat-IND = QUOT.3SG > 3SG sit.down-K-SS.SEQ
 ‘She ate as she sat.’
- c. *Turuh-ky-nuk*.
 quiet;still- K-SS.SEQ
 ‘Be still!’

The four SE allomorphs of the same-subject sequential subordinator, *-nkw*, *-nk*, *-nuk*, *-nuki* are manifestations of a common underlying form, *-nukwi*, as displayed in (8).

(8)	SE	context	after V	after <i>u</i>	after C	before clitic
		underling form	<i>-nukwi</i>	<i>hiy-nukwi</i>	<i>-nukwi</i>	<i>-nukwi</i> = ...
	a.	apocope	<i>-nukw</i>	<i>hiy-nukw</i>	<i>-nukw</i>	–
	b.	<i>y</i> > <i>u</i> assimilation	–	<i>hiu-nukw</i>	–	–
	c.	syncope	<i>-nk</i>	<i>hiu-nk</i>	–	–
	d.	delabialization	–	<i>hiu-nk</i>	<i>-nuk</i>	<i>-nuki</i> = ...

Final *i* is lost by apocope (6a) except when protected by a following clitic. The *u* affects the final *y* of *hiy*, making it *u* (6b). The *u* of the suffix syncopates (6c) in metrically weak position. The labialization of *-(n)kw* is lost after *u* (6d). All four of the processes apply in the derivation of *hiunk*. In no environment does the full underlying form remain unchanged.

12.2.4.3. SAME-SUBJECT/DIFFERENT-SUBJECT SLIPPAGE. Also found are rare appearances of “same-subject” suffixes with a change of subject, as in (1). While the pragmatic considerations taken into account by Dorothy Ramón in constructing these utterances are irretrievable, it seems likely that in these cases she considered the events in the subordinate clause and those in the main clause to be very closely linked. As discussed

below, SE exhibits pragmatic rather than syntactic control of switch reference, so perhaps these “same-subject” suffixes should be considered more generally as suffixes of discourse continuity, with subject continuity being only one of the factors that influences suffix choice. Note that in (1a), the main clause, with a second person subject, has its own embedded clauses (with the main-clause object as their subject), both marked with different-subject (or discourse-discontinuity) suffixes, in contrast to the same-subject suffix of the initial conditional clause.

- (1) SE a. [Pyveipa7 a7ayy-t\$ atuuk ñi-ivaju7] kwy7 = t\$ = py hiy7
 if;when good-ABS night be-“SS”.SIMUL POT = 2SG = 2 > 3PL see.IMP
 huu7-m [ku~kpaa-7no-w], [chi7aa7-ko-w ynaat\$].
 star-PL DUR~shine-ST-DS be.visible-K-DS nicely
 ‘When it is a good night, you can see the stars as they shine and are nicely visible.’
 <Pavay’pa’ ‘a’ayec ‘atuuk nyiivayu’ kwa’cpe’ hye’ huu’m kukpa’now, chi’akow ‘enaac.’ > ‘When the night is clear you can see those stars appearing.’ (R&E 430)
- b. [Taaq-ta-m ho^R~hoo^Rmi-m ñi-ivaju7], ama7
 person-ABS-PL PL~shaman-PL be-“SS”.SIMUL DIST
 myym-t = kwyny = vy aa-piu7 vyraa7n, chaat\$u7.
 ocean-ABS = QUOT = 3SG > 3PL DIST-ABL speak sing
 ‘If people were shamans, (they say) the ocean would speak to them from there, and sing.’
 <Taaqtam herheermim nyiivayu’, ‘ama’ meempt kwenevu’ ‘apyu’ werra’n, chaacu’. > ‘If you are a shaman, the ocean would reportedly speak or sing (to you) from there.’ (R&E 213)
- c. Waryngk hakup = kwy7 puju yym7-k [tiy^Rva-t\$-i kwa7-nkw
 indeed very = POT all end-K.IMP earth-ABS-ACC eat(tr)-“SS”.SEQ
 taaq-ta-m].
 person-ABS-PL
 ‘Indeed it could all end, if people eat up the earth.’
 <... warrêngt hakup kwa’ puuyu’ ‘empk terva’ci’ qwa’nkw taaqtam ... > ‘If the people eat all the earth there won’t be any land left.’ (R&E 128)

Similarly, the different-subject subordinator *-w* sometimes appears in same-subject contexts. Perhaps the suffix *-w* should be defined as a marker of discourse discontinuity,

pragmatically determined, instead of as a switch-reference suffix in the narrow sense, where we expect syntactic control. The pragmatic determination means that we cannot state precisely the conditions under which *-w* appears. But the situation in SE is consistent with the account advanced by Mithun (1993) for pragmatic control of switch reference in Northern Pomo.

Consider the examples in 12.2.4.2 above, with same-subject inflection: In (3a), being poisoned and dying follows logically upon drinking the toxic liquid. In (3b), the subject goes (to the window) precisely in order to peek out, and would not be able to do so without the prior “going.” In (4), greeting them followed upon her seeing them. In (5a), she sat down in order to make baskets. In (5b), the ambush preceded the death of the uncle. In (6) the ritual curers had to get up (6a) or line up (6b) in order to dance.

In contrast, consider example (2) below, where “different-subject” *-w* appears even though the subject has not changed. The old man who speaks does not expect his daughter’s unwelcome suitor to win the gambling game. Another possible reason for this may lie within the morphology of subject-object marking in SE. The change of the subject-object combination between the clauses entails a radical change in pronominal: *-m7* ‘2SG > 3SG’ vs. *chi7* ‘2SG > 1SG’. This morphological change may be sufficient to trigger the use of the different-subject marker. Another possibility is that maybe within the SE system, the change of subject is merely one of the pragmatic conditions that motivates the use of *-w* to mark discourse discontinuity. Regardless of the explanation, for convenience, we gloss the discourse-discontinuity suffix as different subject (DS), even though that may be but only one of its functions.

- (2) SE *Ni-\$uunga-j = ta = m7* *u-ii7v* [*pyveipa7 = chi7*
 1SG-man’s.daughter-ACC = IRR = 2SG > 3SG marry-FUT if = 2SG > 1SG
ñip-ko-w].
 defeat-K-“DS”
 ‘You can marry my daughter if you beat me.’

12.2.5. SUBORDINATE PREDICATES IN RELATIVE CLAUSES. Table 12.2.5 shows the system of suffixes that appear in SE relative clauses that are not introduced with the complementizer *ani*₂. Relative clauses with these suffixes are much less common and

some types are very sparsely attested. This rough schematic is an approximation and omits various complications.

Table 12.2.5. Tense-aspect suffixes on verbs in Serrano relative clauses

		common argument in relative clause				
		subject				object
head in main clause	subject	immediate past	<i>-i-t</i>	pl. <i>-i-m</i>	realis	<i>-iv(y)</i>
		immediate future	<i>-qaʔ</i>	pl. <i>-qa-m</i>	irrealis	<i>-ik(i)</i>
	object	past	<i>-i-t</i>	pl. <i>-i-m</i>	realis	<i>-ivy-j</i>
		future	<i>-qaʔ</i>	pl. <i>-qa-m</i>	irrealis	<i>-ik-t\$ʔi</i>

In addition there are the nonfuture (*-ivaʔ* ~ *-ivan* ~ *-ivani*) and future (*-ihwaʔ*) subordinators, discussed in 12.2.5.8. These are found with embedded questions and the like, where there is no common argument in the main clause.

12.2.5.1. SUBJECT-HEADED SUBORDINATE CLAUSES. Two suffixes, the immediate past *-i-t* (pl. *-i-m*) (IPST) and immediate future *-qaʔ* (pl. *-qa-m*) (IFUT), derive predicates in subject-headed relative clauses, where the common argument antecedent in the main clause can be subject or object. Somewhat confusingly, there are also derivational suffixes in *-i-t* and *-qaʔ* which must be differentiated from these; they will be discussed below. Similarly, plurals in *-i-m* are ambiguous. A plural form in *-i-m* could relate to a singular in *-i-t* or in *-i-ch*, the latter being a resultative nominalization, cognate with *-e-j* in TV and *-i-sh* in Cupan.

When the common argument is subject in the main clause and also in the subordinate clause, these nominalizations usually appear simply as apparent predicates of main clauses (as discussed in 11.2.3), so their identification as relative clause markers is somewhat abstract. However, this identification is consistent with their noun-like morphology, and the immediate-future suffix behaves in an even more noun-like manner in the Cupan languages.

Unfortunately, while the known test for their status as complements, namely the use of the overt copula *ñiaa-*, based on the lexical verb *ñiha-j* ‘do’, does not apply in main clauses, a confirmatory example with *ñiaa-* used with an embedded immediate-past predicate has fortunately been found. It is repeated from 12.2.1 (5) above.

- (1) SE *Ama7 ni = vy* [tavy-nin-i-t \emptyset] [*cha-a-t\$u7-n-i-t*
 DIST COMP = 3SG > 3PL put(sg.)-CAUS-IPST-ABS be song-VBLZ-CAUS-IPST-ABS
pana7 niaa-nkw].

thus be-SS.SEQ

‘He was the one who had taught them and had them sing like that.’

<‘Ama’ ni’vu’ tavuninit chaacunit pana’ nyaawnk.> ‘He was the one who would teach them to sing like that.’ (R&E 306) (Note that Elliott often writes <wnk> for *nkw*.)

The immediate past has a perfect sense. In main clauses this often translates as to “have just done” such and such, sometimes in the “reventive” (Freeland 1951:70) sense of having just come back from having gone and done such and such.¹³⁷ In dependent clauses it tends to have a less focused but still perfect sense, “have done” such and such.

The immediate future has an imperfect, realis sense. It states a present tendency or intention, usually translated as to “be going to do such and such”. It is distinct from the irrealis future-tense *-iv* in that future-tense verbs in *-iv* are accompanied by the irrealis modal *t(a)* while the realis immediate futures are not. The irrealis modal, however, is used with immediate futures in interrogatives.

12.2.5.2. IMMEDIATE PAST. In (1), we repeat examples where the immediate past looks like a main-clause predicate. Since we understand the immediate-past suffix to be a subordinator, not a main-clause inflectional suffix, constructions with it are regarded as examples of relativized verbless-clause complements. The examples in (1) are accordingly presented with a zero copula and brackets around the immediate-past inflected complement. In examples of this type, the common argument (the verbless-clause subject, which is often zero), can be first (and probably second) person, as in (1d,e) and (2).

In examples of this type, the usual sense of the SE immediate past corresponds to a perfect construction, to “have (just) done” something. While in most attested usages it corresponds to a present perfect, example (1f) shows a usage that translates as a past perfect. It suggests that the immediacy of the past marked by *-i-t* may have more to do with discourse context than specifically with the moment of speaking.

¹³⁷ This complicated, reventive sense is also that of the Hopi “postgressive” suffix *-ma* (pl. *-ma-ja*). Note that the Hopi perfective postgressive *-ma* is distinct from imperfective progressive *-ma*, (pl. *-wisa*).

- (1) SE a. [*Uvia kuuman-i-t*] = \emptyset \emptyset .
 already sleep-IPST-ABS = 3SG be
 ‘He already slept (He is the one who has already slept).’
- b. [*Uvia kuuman-i-m*] = \emptyset \emptyset .
 already sleep-IPST-PL = 3PL be
 ‘They already slept (They are ones who have already slept).’
- c. [*A-taq kwa-i7-t*] = \emptyset \emptyset .
 3SG-REFL eat-IPST-ABS = 3SG be
 ‘He has just eaten himself.’
- d. *Acham = ch* [*\$aaw-t-i kwah-kwa-i7-m*] \emptyset .
 1PL.PRO = 1PL bread-ABS-ACC DISTR(?)=eat-IPST-PL be
 ‘We have eaten the bread.’
- e. [*Ju7aa-nu7 kim-i-t*] = \emptyset \emptyset .
 pine.sp.;Big.Bear-ABL come-IPST-ABS = 3SG/1SG be
 ‘I’ve just come from Big Bear (“Los Pinos” [The Pines]).’
- f. *Ama7 Jesus- \emptyset a-n7u picture \emptyset [pa-pa7iu7*
 DIST Jesus.GEN 3SG-possession picture 3SG PROX2-ABL
kim-i-t haii-piu7 Soboba-nu7] \emptyset ; *aa-p ny-n7a*
 come-IPST-ABS INDF-ABL Soboba-ABL be DIST-LOC 1SG-relative
ny-taar-nuch a-kii-v = vy-7 juah-y7-k ama7.
 1SG-MoBr-DEC.GEN 3SG-house-LOC = 3SG-PST hang-RES-K DIST
 ‘That picture of Jesus had come from there, from somewhere, from Soboba; it
 used to hang there in my deceased uncle’s house.’ (The picture is now
 hanging in the speaker’s house.)
 <‘Ama’ Jesus ‘anyu’ *picture* pa’pa’yu’ kimit khaypyu’ Sobobanu’: ‘ap nenyu’ netaarnuch
 ‘akiivvu’ yoah’ek ‘ama’.> ‘That picture of Jesus comes from somewhere, from Soboba: it used
 to hang in the house belonging to my uncle, God rest his soul.’ (R&E 153)

In all of these examples except (1d) the subject pronominal is zero. The zero third person singular is totally regular. So too is the absence of the subject pronominal in (1b),

which is consistent with the usual non-occurrence of $=m$ '3PL.SUBJ' in clauses with the plural suffix $-m$ in pre-AUX position. The unsolved mystery remains the absence of the 1SG pronominal preceding *kimi-t* 'have come' in (1e), just as it is absent preceding the immediate-future verb *miaa-qa7* 'be going to go' (cf. (8.3.2.4 (2))), equally unexplained.

Whatever the explanation for the absence of the 1SG pronominal in (1e), it may be a peculiarity of Sarah Martin's usage, one not shared by Dorothy Ramón, as seen in (2), with the same verb *kimi-t* and a cliticized 1SG pronominal $=n$.

- (2) SE [Ny-*chaaqa-va7*]=*n* [*kim-i-t*] \emptyset .
 1SG-lower-leg-LOC = 1SG come-IPST-ABS be
 'I came on my legs.'
 <Necaqava'n kimit.> (R&E 49)

Example (3) shows another treatment of the verbless-clause subject, expressed as a pronominal with a finite main-clause verb in a serial predicate, but not repeated with the immediate-past construction.

- (3) SE *Aa-pia =ny-7* *y^rny^r7-y^r7-k* [*kuuman-i-t* \emptyset].
 DIST-LOC = 1SG-PST lie.face.up-RES-K sleep-IPST-ABS be
 'There I was lying on my back having gone to sleep.' [= 12.2.1 (4a)]
 <'Apya'nu' 'erner'erk kuumanit.> 'I was lying on my back asleep at the time.' (R&E 125)

No example of an immediate past has been encountered in a position immediately preceding auxiliary material, whether modals/evidentials or pronominals. In contrast, the immediate future appears frequently in this position, where it is followed by the indicative suffix, and where, as discussed in 11.2.3, it cannot be marked for subject plurality. This may be simply an accident due to a limited corpus in which immediate futures are much more frequent than immediate pasts, but the difference is striking.

In (4, 5, 6) are examples of the immediate past in which the common argument appears as subject of the main-clause verb. Examples where this common argument is subject in both the main clause and the relative clause are given in (4) and (5). In (4c) and (5), the immediate-past relative clause is topicalized.

- (4) SE a. *Ama7 = kwyny = vy uii7wyn ppy^R-q^R-i7k-t\$-i*
 DIST = QUOT = 3SG > 3PL want 3PL-die(pl.)-IRR.SUB-ABS-ACC
 [vy *puhcha-i7-t* Ø] *nyy^Rh-t.*
 3SG > 3PL care.for-IPST-ABS be woman-ABS
 ‘The woman who had been taking care of them wanted them to die.’
 <‘Ama’ kwenevu’ wi’wan peerqri’kci’ vu’ puhcayt neert.> ‘The woman who was taking care of them wanted them to die.’ (R&E 611)
- b. ... *uviht hiñi-m [ahkw hunu7-k-i-m] hiñi-m*
 long.ago INDF.PL-PL here move-K-IPST-PL INDF.PL-PL
xajku7-ja-m nyypk-t\$u7 papia.
 White.person-AUG-PL settle-MOT there
 ‘... the, uh, White people who, uh, moved here settled there a long time ago.’
 <[...]’uviht xhinyim ‘ahkw hunu’kim xhinyim Xay’ku’ya nepku’ papya’> ‘(They) settled long ago, those white people who moved in there.’ (R&E 703)
- c. *Ny~nyy^R-m [pana7 kur-u7-k-i-m] qo^R7a-j = m tyngk.*
 PL-woman-PL that.way fall-RES-K-IPST-PL get.sick-IND = 3PL just
 ‘As for women who were born like that, they would just get sick.’
 <Neneerm pana’ kurruhkim, qer’aym tengk.> ‘Women who were born like that, they would get sick.’
- (5) SE a. *Ajay7 ama7 wyt\$y^R\$-t\$ [aa-p waqaa-i7-t]*
 then DIST man-ABS DIST-LOC sponsor.fiesta-IPST-ABS
ama7 ni a-hiintua7 = vy-7 qat\$y7 chiinaru7 hii-t.
 DIST COMP 3SG-wife = 3SG-PST be Mexican INDF-ABS
 ‘As for the man who had sponsored the ceremony there, he had some Mexican woman as his wife.’
 <‘Aye’e’ ‘ama’ wecersh ‘ap waqayt ‘ama’ ni’ ‘ahintu’vu’ qace’ Chiinarru’ xiit.> ‘That man who was sponsoring the ceremony was married to a Mexican woman.’ (R&E 872)
- b. [Aa-piu7 kim-i-m] Ø Atiy^R7avia-ta-m Maarynga7-ja-m
 DIST-ABL come-IPST-PL 3PL big.one-ABS-PL prsn-AUG-PL
puu-ñu ppy-kichawan Ø.
 3PL-possession 3PL-lineage be
 ‘As for the ones who had come from there, Big Morongo was their lineage.’

<'Apyu' kimim 'Ate'evyatam Maarrênga'yam peenyu' peekichawan.> 'The people from there were of the 'Ate'evyatam Serrano tribe.' (R&E 84)

In the examples in (6), the common argument is object in the main-clause and subject in the relative clause. (6b) apparently begins with a relativization with the complementizer *ni* (contracted from *ani*₂) of the subject of the main clause.

- (6) SE a. *Pujuuhan hoowkp-i=kwyny my^Rka^Rn ama-j, [ama-j*
 all.together one-time=QUOT.3PL kill(sg.) DIST-ACC DIST-ACC
[ichu7-k-in-i-t hakwyñi7-ch-i] Ø.
 make-K-CAUS-IPST-ABS charm-ABS-ACC be
 'All together as one, they killed him, the one who had been making charms.'
 <Puyuuhan howpki' kwana' merkan 'amay, 'amay 'ichu'kinit hakwenyi'chi'.> 'They all ganged
 up and killed him, the one who made charms.' (R&E 791)
- b. *Ama7 [ni=kwyny=vy hii~hi a-qoo^Rha-m*
 DIST COMP=QUOT=3SG>3PL DUR~see 3SG-OLSS-PL
[miaa7-t\$u7-i-m] [hwa^Rt\$-k-t\$u7-i-m] Ø.
 go-MOT-IPST-PL climb-K-MOT-IPST-PL be
 'It is said she was the one who saw her older sisters, who had gone away, who
had gone off climbing.'
 <Ama' ni' kwenevu' hihii 'aqeerham mya'cu'em, hwarckcu'em.> 'She saw her older sisters
 going up into the sky.' (R&E 135)
- c. *Ani=vy kiinymy-t\$u7 aa-m [pich-i-m aa-p].*
 then=3SG>3PL visit-MOT DIST-PL arrive-IPST-PL DIST-LOC
 'And then he went to visit those who had arrived there.'
 <'Anivu' kiinamecu', 'aam pichim 'ap ...> 'He went and greeted them, those who had arrived.'
 (R&E 520)

12.2.5.2.1. TWO SUFFIXES IN -I-T. It should be noted that the immediate past is not the only suffix in *-i-t* that can apply to a verb stem. The other suffix *-i-t* (pl. *-i-m*), which is also discussed in 14.3.2, is uncommon and in at least one instance in the data at hand it serves to derive a noun from a verb: *wiiro^Ri7n-i-t* 'reed flute' < *wiiro^Ri7n* 'play a reed flute'. *Wiiro^Ri7n-i-t* is said to be synonymous with *wiiro^Ri7n-ihwa7-t*. The suffix *-ihwa7-t*, when added to a verb, means an instrument for doing the action of the verb.

Other nouns in *-i-t* are of a variety of patterns. In a couple of short nouns, *wichi-t* ‘songbird’, *pakii-t* ‘fog’, stem-final *i* is part of the root. In an example like *paa^Rkwyñi-t* ‘mud’, stem-final *i* is probably part of the root, though the TV cognate *kwenaa-r* ‘lodo (mud)’ (3.103.0287), with a different stem-final vowel, seems to suggest otherwise. However, *paa^Rkwyñi-t* falls into no larger pattern (nor does the KI cognate *paakwini-t* ‘clay, mud’ (3.98.0027)). Other examples seem to involve the derivational suffix *-vi-t*, not *-i-t*: *qava^Rvo^R-vi-t* ‘deaf one’ (cf. *qava^Rvo^R7* ‘do quietly’), *huwawy-vi-t* ‘blind one’, *paa^Rha-vi-t* ‘supernaturally powerful one’. This derivational *-vi-t* seems very much like the characterizing suffix *-qa7* (see 12.2.5.3.2, and see 14.11.3 for the “lacking” sense).

12.2.5.2.2. THREE SUFFIXES IN *-i-m*. It is important to distinguish between *-i-m* as the plural of the immediate past *-i-t* or of the nominalizer *-i-t* and *-i-m* as the plural of the nominalizer *-ich*, usually with a resultative meaning (see 14.1). The fact that the plural of the resultative nominalization is homophonous with the plural of the immediate past can be confusing and one must pay close attention to derivational details and to the meanings involved. For example (1), K. Hill asked about the singular of *tiy^Rmqim* and was told that was *tiy^Rmqich* ‘scared one, one who was scared’.

- (1) SE *Aa-piu7=kwyny* *ajay7* *aa-m* *wajaq-k* *tiy^Rmq-i-m*.
 DIST-ABL = QUOT.3PL then DIST-PL get.out-K be.scared-RES-PL
 ‘Then those scared people got out from there.’

Kuru7kim in example (2) is based on the verb *kurk* ‘fall (plural subject)’ (cf. singular-subject *huchk*) with the resultative suffix *-u7*. The sense of the example, with ‘lately, recently’ also supports the identification as immediate past. The verb *huchk* ‘fall’ is the usual way of saying ‘be born.’ The same verb appears in 12.2.5.2 (4b).

- (2) SE *Iviina7ik* *aa-m* *kur-u7-k-i-m* *qaj=m* *ynan* *ivi-j*.
 recently DIST-PL fall(pl.)-RES-K-IPST-PL NEG = 3PL > 3SG know PROX-ACC
 ‘Those who were born lately don’t know about it.’
 < ‘Ivina’ik ‘aam kurru’kim qaym ‘enan ‘ivi’. > (R&E 146)

In (3), *a7ichu7kinim* represents resultative *-i-ch* since the immediate past never occurs with a pronominal prefix. The unpossessed singular is *ichu7kinich* ‘s.th. made’.

- (3) SE *Py-my-mia7 hunu7-k a7-ichu7-k-in-i-m.*
 3-PL-with move.away-K 3SG-make-K-CAUS-RES-PL
 ‘He moved away with those things he had made.’
 <Pememya’ hunuk ‘a’ichu’kinim.> ‘He moved away with his creations.’ (R&E 67)

12.2.5.3. IMMEDIATE FUTURE. The immediate-future suffix is *-qa7*, with an ephemeral glottal stop, i.e., a glottal stop which appears only in word-final position. The initial consonant of the suffix assimilates to preceding material (see 11.2.3.1). The sense of this suffix seems to have to do with a present situation that is leading towards some expected situation. It is not an irrealis form; unlike true futures with *-iv*, it appears with the irrealis modal *t(a)* only in questions, as in (1).

- (1) SE *Juaa7-qa-j = ta ?*
 cry-IFUT-IND = IRR.3PL Q
 ‘Are they going to cry?’

When the immediate-future suffix precedes auxiliary material, whether modals/evidentials or pronominals, the verb with the immediate-future suffix behaves like an ordinary verb and adds indicative *-j*, as in (2). (Indicative *-j* also appears with question intonation, as in (1).) The plural suffix *-m* cannot appear on *-qa* in these constructions.

- (2) SE *Paa^Rvchana-qa-j = n ivi-j.*
 tell.a.story-IFUT-IND = 1SG > 3SG PROX-ACC
 ‘I’m going to tell this story.’

Constructions like those in (1) can appear only when the immediate future is a verbless complement masquerading as a main-clause verb (see 11.2.3). When it appears in subordinate clauses, it always shows a noun-like morphology, with *-qa7* for singular subject and *-qa-m* for plural subject.

The examples in (3) show *-qa7* in relative clauses where the common argument in the main clause is the subject of a finite verb, not of a verbless clause. In example (3a) the

common argument is subject in both the relative clause and the main clause. In (3b), the common argument is subject in the relative clause and object in the main clause. (In (3a), the copula is not a clitic, but since the inflected evidential *kwyny* is cliticized to the (overt) preceding word, our postulated \emptyset copula is caught in the middle and must be treated within our representational scheme as though it is cliticized.)

- (3) SE a. *Aa-m chichina-m* [[*maani-ch-i*
 DIST-PL boy-PL datura-ABS-ACC
tuhtu7-vi7-qa-m] = \emptyset] = *kwyny paa7 ama-j.*
 dance-become-IFUT-PL = be = QUOT.3PL drink DIST-ACC
 ‘The boys who were to become *maanich* (datura) dancers would drink that.’
 <‘Aam chichinam maani’chi’ tuhtu’vi’kam kwana’ pa’ ‘amay.’ > (R&E 108)

- b. “*Oo, nyy7=n ynan hii-t-i [kwy7 ama7*
 oh 1SG.PRO=1SG know INDF-ABS-ACC POT DIST
hamiñ-it hiiky-nia7n-qa7],” ky-j ama7.
 INDF.MANNER-(?) breathe-CAUS-IFUT say-IND DIST
 ‘ “Oh, I know something that could cure her somehow,” he said.’
 <“ ‘Oo, ne’n ‘enan hiiti’ kwa’ ‘ama’ xhaminyit hiikinya’nqa,’” key ‘ama.’ > ‘ “Oh, I know what
 could cure her,” he said.’ (R&E 866)

Derivations with the immediate future in subordinate clauses commonly express a sense of purpose, as in (4). In (4b) the evidential *kwyn* seems to be in the embedded clause; if it was in the first/main clause, it would appear after the first constituent, *ama7*, and failing that, if it was in construction with *puhcha7* ‘wait’, then *puhcha7* would be expected to be indicativized: *puhcha7-i*. This odd placement of *kwyn* probably represents a momentary disfluency. Note that in (4a-d) there is subject continuity in the purpose clause. In the Cupan languages, the immediate-future suffix appears only in this clause type, and an irrealis subordinator *-pi* appears when there is a change of subject. However, here example (4e) exhibits a change of subject, but the subordinating suffix is still the immediate future. (Another example of this type appears at 12.2.5.4 (4e).) Apparently in SE the immediate future is not sensitive to subject continuity. Furthermore, the irrealis and future subordinators apparently do not appear in purpose clauses.

- (4) SE a. *Pyjaany = ch mi-j tyngk [tyhtyjy-ka-m Ø].*
 far.away = 1PL go-IND sometimes work-IFUT-PL be
 ‘We would go far away to (find) work.’
 <Puyaanic mih tengk tehteyi’kam.> (R&E 107)
- b. *Ama7 puhcha7 [kwyn pīaa7-qa7 ama-j Ø].*
 DIST wait QUOT.3SG bewitch-IFUT DIST-ACC be
 ‘He waited [for an opportunity] to bewitch him.’
 <‘Ama’ puhca’ kwan pya’qa’ ‘amay.> ‘He (Frog) waited there for an opportunity to bewitch Him.’ (R&E 825)
- c. *Py-my-kja7 = ny-7 mi-j [myn tavynina-qa-m Ø].*
 3-PL-DAT = 1SG-PST IND 3PL > 1SG teach-IFUT-PL be
 ‘I went to them so they could teach me.’
 <Pemeka’nu’ mihmen tavuninaqam.> (R&E 1)
- d. *My katu7 [my kwa7-qa-m Ø].*
 3PL > 3PL cut 3PL > 3PL eat-IFUT-PL be
 ‘They would cut them up in order to eat them.’
 <Mu’ katu’: mu’ qwa’qam.> (R&E 106)
- e. *Kwyny = vy-7 kuuhan aa-ngkwa7 [vy a-ñaa-m
 QUOT = 3SG > 3SG-PST call;invite DIST-DAT 3SG > 3PL 3SG-relative-PL
 hiy-ka7 Ø].*
 see-IFUT be
 ‘(They say) he invited him there to see his relatives.’ (Morongos Come)

Immediate futures also appear as complement clauses (Dixon 2010:370) with ‘know’, ‘think’, ‘ask if’, ‘tell’, etc., as in (5), where the common argument figures as object in the main-clause verb and subject in the complement. In (5c), the 1SG pronominal, marked in the main clause, is not overtly repeated in the complement.

- (5) SE a. *Ynana-j = ny-7 [Ø mamq-qa7 Ø].*
 know-IND = 1SG > 3SG-PST 3SG laugh-IFUT be
 ‘I knew he was going to laugh.’

- b. *Ynana-j = n* [*ama7 wiin-qa7* \emptyset].
 know-IND = 1SG > 3SG DIST throw-IFUT be
 ‘I know he’s going to throw it away.’
- c. *Vyny-7* *tiy^R* [\emptyset *chaat\$ua7-qa7* \emptyset].
 3SG > 1SG-PST tell 1SG sing-IFUT be
 ‘He told me to sing.’
- d. *Qaj = chymy-7* *hyngia7n* *kwa7-qa-m* *hii-t-i* *pi\$ei7-t-i*.
 NEG = 3SG > 1PL-PST allow eat-IFUT-PL INDF-ABS-ACC sweet-ABS-ACC
 ‘He did not let us eat sweets.’
 <Qay’chemu’ hengya’n qwa’qam xhiiti’ pishay’ti’ > ‘He did not let us eat sweets.’ (R&E 689)

Sometimes the predicate governing such complements is not fully expressed, as in the examples in (6), where the complement expresses “future in the past”.

- (6) SE a. *Ynaat\$* *chivia7k* *a-paamkw* *puju* *tum* *hii-t-i* [[*pana7*
 nicely by.contrast 3SG-in.front all DISTR INDF-ABS-ACC thus
py-hpa7 *huch-ka7*] \emptyset], *maqajayp* *hii-t[-i]* *puju*
 3SG-LOC fall-K.IFUT be because INDF-ABS[-ACC] (false start?) all
ynan *tum* *hii-t-i* *a-paamkw*.
 know DIST INDF-ABS-ACC 3SG-in.front
 ‘But he [knew] well in advance that he was going to fall on it like that,
 because he knew everything in advance.’
 <‘Enaac chevêk ‘apamkw puuyu’ tum hiiti’ pana’ pehpa’ huchka’, maqayeewp xhiit puuyu’
 ‘enan tum hiiti’ ‘apamkw. > ‘He knew what was in store for Him, because He knew everything
 in advance.’ (R&E 837)
- b. *Ni-jyk* *py-mia7 = kwyny = n* *qat\$y-ka7* *jangk*
 1SG-mother.GEN 3SG-COM = QUOT = 1SG be;dwel-IFUT but
qaj = ny-7 *qat\$* *py-mia7*. *Mia = ny-7* *oo^Rvai7t*
 NEG = 1SG-PST be;stay 3SG-COM DUB = 1SG-PST right.away
haii-p *ii-p* *mi-j* *tyhty-ka7*.
 INDF-LOC PROX-LOC go-IND work-IFUT
 ‘(I said that) I was going to stay with my mother but I didn’t stay with her.
 Right away (it seems) I went to work somewhere.’

The immediate future can also appear in embedded questions, as in (7).

- (7) SE *Huwa-m taaq-ta-m kwahki-m py-my-va7 py-my-nu7=m ynan*
 some-PL person-ABS-PL young-PL 3-PL-LOC 3-PL-ABL=3PL know
pana7 ñiaa-nkw hamiaqat\$ wyra7n-qa-m¹ namyhunaqa-v.²
 thus do-SS.SEQ how speak-IFUT-PL in.public-LOC
 ‘Some of the young people with them learned from them how to speak in public.’
 <Huwam taaqtam kwahkim pemeva’ pemeu’m ‘enan ana’ nyaawnk hamya’qac werra’nqam
 namohunaqav. > ‘Some of the young people who were with them (the elders) would learn from
 them how to address the public.’ (R&E 787)
¹ The root ‘speak’ begins in *v-* in Sarah Martin’s usage. Whether this represents a difference
 between the speakers or a difference between K. Hill’s and Elliott’s perceptions is unclear.
² *-huunaqa* ‘spear’, cf. *a-huunaqana-n* ‘with his spear’ (R&E 705), may be involved in this expression.

There is overlap between the immediate future *-qa7* and the future subordinator *-ihwa7* (see 12.2.5.7 (9)). Compare (5a) and (8), which are semantically parallel but structurally quite different: ‘he was going to laugh’ in (5a) is a clausal complement while ‘[that] I was going to laugh’ in (8) is a nominalization. It is not unusual that a language should have more than one way to say something.

- (8) SE *Ynana-j = vy-7 ny-mamq-ihwa7-t\$i.*
 know-IND = 3SG > 3SG-PST 1SG-laugh-FUT.SUB-ACC
 ‘He knew I was going to laugh.’

12.2.5.3.1. TWO SUFFIXES *-QA7*. It is important to distinguish the immediate future, *-qa7₁* (pl. *-qam*), from the homophonous noun-forming suffix, *-qa7₂* (pl. *-qam*). Anderton (1988:143) refers to the KI equivalent of the latter as the “characterizing suffix” [CHAR], a term that fits in SE as well as it does in KI (see 14.4). We adopt Anderton’s label in this study.

The characterizing suffix has the same range of phonologically governed allomorphs as the immediate-future suffix, *-qa7₁*, but it is different in its behavior. It can attach to noun stems, as in (1), and to verb stems, as seen in (2).

- (1) SE a. *chaa-qa7* ‘ceremonial singer’ *chaa-t\$* ‘song’
 b. *kii-ka7* ‘householder’ *kii-ch* ‘house’
 c. *ñuu-ka7* ‘rich person’ *ñuu-ch* ‘store’

With verb stems there can be two very different senses, depending whether the suffix is to be identified as *-qa7₁* or *-qa7₂*, as seen in (2).

- | (2) SE | verb | <i>-qa7₁</i> sense | <i>-qa7₂</i> sense |
|--------|---|-------------------------------|--|
| a. | <i>cho^Riich-ka7</i> <i>cho^Riich-k</i>
‘shrivel up’ | ‘be going to shrivel’ | ‘shriveled thing’ |
| b. | <i>kima-qa7</i> <i>kim</i> ‘come’ | ‘be going to come’ | ‘one who came, is coming’ |
| c. | <i>puah-y7-ka7</i> <i>puah-y7-k</i> ‘be in a circle’ | ‘be going to be in a circle’ | ‘circle’ |
| d. | <i>qo^Rha^R7-qa7</i> <i>qo^Rha^R7</i> ‘be or get foamy’ | ‘be going to get foamy’ | ‘foam, s.th foamy’ |
| e. | <i>viuur-ka7</i> <i>viuur-k</i> ‘roll up (intr)’ | ‘be going to roll up’ | ‘a roll, a roll of s.th, s.th in a roll’ |
| f. | <i>yaip-ka7</i> <i>yaip-k</i> ‘get thin’ | ‘be going to get thin’ | ‘thin one’ |

Derived forms with possessive prefixes unambiguously have *-qa7₂* (which appears as *-ka7* in (3) by virtue of the absorption of thematic *-k*).

- (3) SE a. *pyy-vyrav-ka7* ‘their language’ *vyrav-k* ‘speak’
 b. *a-pahi7-ka7* ‘dawn’ (“its dawn”) *pahi7-k* ‘dawn’

One instance has been found of a derivationally unrelated homophonous pair with the two suffixes *-qa7*, shown in (4).

- (4) SE a. *wihaa-qa7₁* ‘be going to put (pl.)’ *wiha-j* ‘put (pl.)’
 b. *wihaa-qa7₂* ‘s.th. thorny, stickery’ *wihaa-t\$* ‘thorn, sticker’

Example (5) illustrates the fact that nouns derived with *-qa7₂* can have reference to the results of past action, quite different from the anticipatory sense inherent to *-qa7₁*.

Note that *kimaqam* ‘those who had come’ is definitely not a verb, since although it is immediately followed by the auxiliary pronominal in (5), no indicative suffix appears.

- (5) SE [Ho^Rqa^Rn-i-nu7¹ kima-qa₂-my] = m chaa-t\$u7 pahi7-k-in-iv.
 Palm.Springs-ABL come-CHAR-PL = 3PL song-VBLZ dawn-K-CAUS-SS.SIMUL
 ‘The people who had come from Palm Springs sang all night.’ [= 12.2.4 (1e)]

¹ Ho^Rqa^Rninu7 is the ablative of Ho^Rqa^Rnich, short for Paat\$ Ho^Rqa^Rnich ‘boiling water (water that has come to a boil)’, a reference to the hot springs there. In Spanish, Palm Springs was called *Agua Caliente* ‘Hot Water’ and *Agua Caliente* remains the name of the Desert CA reservation there.

The two endings *-qa7* differ seriously in transparency. The characterizing suffix *-qa7₂* is a derivational suffix with the attendant indeterminacies regarding related forms characteristic of such suffixes, while the immediate future *-qa7₁* is an inflectional suffix, fitting well within the regular verb patterns.

Not only are the two suffixes *-qa7* semantically different but the grammar also treats them differently. The examples in (6) are all in dependent clauses functioning as object of the main-clause verb. In such clauses, constructions in *-qa7₂* have the accusative form *-qa-ti*, as in (6a). (6a) contrasts with (6b,c), where the immediate futures, *qoo^Rnqam* and *mamqa7*, do not have accusative inflection.

- (6) SE a. *Pun-uk-ia = m chah~chamaqan [hii-t huwa-t\$i-
 3SG-EMPH-AUG = 3PL > 3SG REP~think.about INDF-ABS other-ABS-TIME
 kima-qa₂-ti ppy-cha-v].
 come-CHAR-ACC 3PL-song-LOC
 ‘They thought and thought about what came next in their song.’
 <Penewkim chahchamaqan hiit huwa’ci’ kimaqa’ti’ peychav.> ‘They would think over and
 over about what was coming in their songs (i.e., they would think about the lyrics).’ (R&E 163)*
- b. *Uvia = kwyny chamaqaan [my qoo^Rn-qa₁-m Ø].
 already = QUOT.3PL think 3PL > 3PL kill(pl.)-IFUT-PL be
 ‘Now they were thinking of killing them.’*
- c. *Ynana-j = ny-7 [Ø mamq-qa7₁ Ø].
 know-IND = 1SG > 3SG-PST 3SG laugh-IFUT be
 ‘I knew he was going to laugh.’ [= 12.2.5.3.1 (7a)]*

Returning to the homophonous examples *wihaaqa7* shown in (4), the difference in their behavior before auxiliary elements can be seen in (7). The immediate-future suffix *-qa7₁* takes indicative *-j* in this environment (7a.B) while the characterizing suffix *-qa7₂* does not (7b). Note that the morpheme-final glottal stop of both *-qa7₁* and *-qa7₂* does not appear before inflectional suffixes.

- (7) SE a. A: *li-p a-kupiaa-va7 wihaa-qa7₁ Ø.*
 PROX-LOC 3SG-above;up-LOC put(pl.)-IFUT be
 B: *Wihaa-qa₁-j = ny-7 wary7.*
 put(pl.)-IFUT-IND = 1SG-PST indeed
 A: ‘He’s going to put them up here.’
 B: ‘I was going to put them (up there) too.’
- b. *Wihaa-qa7₂ = vy-7 Ø.*
 thorn-CHAR = 3SG-PST be
 ‘It was stickery.’

The two suffixes *-qa7* then, are quite distinct and must be carefully distinguished in the study of subordinate clauses. The ending *-qa7₂* is definitely a noun-forming suffix. While *-qa7₁* is, in our treatment, a subordinating suffix, it does not form nouns that can be used independently.

12.2.5.4. SUBORDINATE-CLAUSES WITH -IVI7-KA7. A suffix sequence *-ivi7-ka7* marks a subordinate clause with what seems to be the immediate future, with plural in *-ka-m*. The sequence *-ivi7-ka7* has been found only in the Ramón and Elliott (2000) materials, as in (1); Sarah Martin’s usage provides no example. The component *-ivi7* appears to be a same-subject subordinator but it has been found only in this construction. Since the *-ivi7-ka7* apparently contains the immediate-future suffix, we regard the resulting structure as a complement and we mark zero copulas in the examples below.

- (1) SE a. *Qaj hami7 huwa-t\$ qat\$*
 NEG INDF.HUMAN other-ABS be
 [Ø *chaa-t\$u-i7vi7-ka7* Ø].
 3SG > 3SG song-VBLZ-SS-IFUT be
 ‘There was no one else to sing it.’ (re the songs of long ago)
 <Qay’ hami’ huwac qac chaacwi’vi’ka’.> ‘There was no one left to sing them.’ (R&E 497)
- b. *Amaj7 waryngk qaj hami7 hoo^Rm-ch qat\$*
 now indeed NEG INDF.HUMAN shaman-ABS be
 [Ø *maat\$-ivi7-ka7* Ø].
 3SG > 3SG hear-SS-IFUT be
 ‘Nowadays, however, there is no shaman to listen to it (to the songs in the wind).’
 <‘Amay’ warrêng qay’ hami’ heermc qac maachivi’ka’.> ‘Nowadays, however, there are no shamans left to listen.’ (R&E 475)
- c. *Mi = ta qaj ynan haii-m ii-m*
 DUB = IRR.3PL > 3SG NEG know INDF.HUMAN-PL PROX-PL
 [Ø *chaa-t\$u-i7vi7-ka-m* Ø].
 3PL > 3SG song-VBLZ-SS-IFUT-PL be
 ‘No [people] know how to sing it.’
 <Mita’ qay’ ‘enan haym ‘im chaachu’vi’kam.> ‘No one knows how to sing that.’ (R&E 460)
- d. [*Ama-tunga7* Ø *ynan-ivi7-ka-m* Ø], *kwyny = my-7* Ø.
 DIST-INS 3PL > 3SG know- SS-IFUT-PL be QUOT = 3PL-PST be
 ‘They (petroglyphs) were (said to have been) [done] so that they (the people) would recognize it (their land).’
 <‘Amatunga’ ‘enanivikam kwenemu’.> ‘This was so that they would recognize it (their land).’ (R&E 380)
- e. *Pana7 pyy-ma-j = m ichu7kin [ama-tunga7* Ø
 thus 3PL-hand-ACC = 3PL > 3SG make DIST-INS 3PL > 3SG
raakw-in-ivi7-ka-m Ø].
 eat(intr)-CAUS-SS-IFUT-PL be
 ‘They made their hands so they could eat with them.’
 <Pana’ peemaym ‘ichu’kin ‘amatunga’ rraaqwinivi’qam.> (R&E 417)

12.2.5.5. OBJECT SUBORDINATE CLAUSES. The suffixes that appear when the head is subject in the main clause and object in the subordinate clause are the realis subordinator *-iv(y)* (REAL.SUB) and the irrealis subordinator *-ik(i)* (IRR.SUB). The subject of the subordinate clause is encoded with a pronominal prefix in the subordinate verb construction, which often has no antecedent in the main clause.

In relative clauses, *-iv(y)* appears in realis or nonfuture clauses, and *-ik(i)* is in irrealis or future clauses. Both of these construction types have multiple functions beyond the derivation of object-headed relative-clause predicates; these are reviewed following the discussion of their role in relative clauses. *-iv(y)* is cognate with the *i*-ablauting Cupan **(-i)-vy*, (see 13.3.2.1); the initial *i* of SE *-iv(y)* may correspond to the ablaut vowel. In relative clauses, all attested common arguments with these constructions are third person. There is no such restriction apparent in complement and adverbial clauses of these types.

12.2.5.6. REALIS AND IRREALIS SUBORDINATORS. The difference between the realis and irrealis subordinators can be seen in example (1). The example consists of two clauses each of which has a main clause beginning in *ama7* ‘it’, a reference to the ceremonial bundle, the *moo^R7ch*, which is the object of both of the subordinators. In the first relative clause they, *pyy-*, the shamans, hid it, an event, expressed using the realis. In the second, we learn that they, *pyy-* again, would use the bundle ceremonially. This clause is not the report of an event but is rather a statement of purpose; this is expressed with the irrealis. The realis subordinator *-iv(i)* derives nonfuture relative clauses. In contrast with the immediate-past forms with *-i-t*, derivations with *-iv(i)* can appear in relative clauses where the head is the object.

- (1) SE *Ama7=kwyn qat\$ aa-p [pyy-myj7-k-in-iv], ama7*
 DIST=QUOT.3SG be DIST-LOC 3PL-hide-K-CAUS-REAL.SUB DIST
[ama-tunga7 pyy-waqa-7-ik] Ø.
 DIST-INS 3PL-ceremony-VBLZ-IRR.SUB be
 ‘It was there where they hid it, it was what they held ceremonies with.’
 <‘Ama’ kwan qac ‘ap peemëi’kiniv ‘ama’ ‘amatunga’ peewaqa’ik.> ‘It was out there where they hid
 it, what they used to hold ceremonies.’ (R&E 867)

The realis subordinator *-iv* is homophonous with Mrs. Martin's version of the same-subject-simultaneous suffix (2a) and with the future tense suffix (2b). These constructions are distinguished from the realis subordinator by having no pronominal prefix in the case with a same-subject suffix, while realis subordinators are always prefixed for subject, as above. With future *-iv*, again, there is no prefix in the verb construction and an irrealis modal will be present, as in (2b).

- (2) SE a. *Mutu7 aa-p = kwyny chyyp~chyyp-k kim-iv.*
 still DIST-LOC = QUOT.3PL REP~get.lost-K come-SS.SIMUL
 'They got lost there repeatedly as they were still coming.'
 <Mutu' 'ap kwana' chewpchewpk kimiv.> 'They got lost coming along the way.' (R&E 64)
- b. *Pajykja7 = ta = mt\$ nyyp-k-iv.*
 over.there = IRR = 1PL settle-K-FUT
 'We will live over there.'

In the two-clause examples in (3), the realis subordinator *-iv* appears in the second clause. The common arguments are verbless-clause subjects in the main clause and objects of the verb in the relative clause, which is the complement of the verbless clause. The pronominal prefixes on the relative clause verbs encode the subjects of those verbs.

- (3) SE a. *Ivi7 ii-p mutu7 qat\$y7; ivi7 [Q^Rykta-ch*
 PROX PROX-LOC still be.there PROX prsn-ABS
a-7ichu7-k-in-iv ii-p ty^Rva-v] Ø.
 3SG-make-K-CAUS-REAL.SUB PROX-LOC land;earth-LOC be
 'This is still here; this is what Q^Rykta^Rch made here on earth.'
 <'Ivi' 'ip mutu' qace' 'ivi' Qerktac 'a'ichu'kiniv 'ip tervav.> 'What Qerktac created has remained on the earth.' (R&E 67)
- b. *Ama7 [ani = n ty^R] Ø; ivi7 [ny7-ynan-iv*
 DIST COMP = 1SG > 2SG > 3SG tell be PROX 1SG-know;learn-REAL.SUB
hii-t-i uvih] Ø.
 INDF-ABS-ACC long.ago] be
 'It's what I'm telling you; this is what I learned about long ago.' (at the end of a discussion of an eclipse)

<‘Ama’ ‘anin teer ‘ivi’ ne’enanif xhiiti’ ‘uviht.> ‘And so I am telling about what I learned long ago.’ (R&E 127)

In (4), the common argument is object in the main clause and also in the relative clause. In these cases, the realis subordinating suffix *-iv(y)* is followed by an accusative-case suffix.

- (4) SE a. [*Pyy-nyv-k-in-ivy-j*] = *kwyny = vy* *waan7-k-in*.
 3PL-bury-K-CAUS-REAL.SUB-ACC = QUOT = 3SG > 3PL dig.up-K-CAUS
 ‘She dug up what they had buried.’
- b. *Ho^R-hoo^Rmi-m* *ama-j = m* *paa7-nin*
 PL-shaman-PL DIST-ACC = 3PL > 3SG drink-CAUS
 [*pyy7-ichu7-k-in-ivy-j*].
 3PL-make-K-CAUS-REAL.SUB-ACC
 ‘The shamans made the sick person drink what they had made.’
 <Herheermim ‘amaym pa’nin pee’ichu’kinivey.> (R&E 41)
- c. *Ama7 = mi = ta = vy-7* *hii-t-i* *chaat\$u7*
 DIST = DUB = IRR = 3SG > 3SG-PST INDF-ABS-ACC song-VBLZ
 [*a7-ynan-ivy-j*] *chaat\$i*.
 3SG-know-REAL.SUB-ACC song-ABS-ACC
 ‘He seemed to be singing something, a song that he had learned.’
 <‘Ama’ mitavu’ hiiti’ chaacu’ ‘a’enanivey chaachi’.> ‘He was singing a song which he had learned.’ (R&E 848)
- d. *Aa-m = kwyny = my-7* *maahwa7n* *aa-ngkwa7* *ama-j*
 DIST-PL = QUOT = 3PL > 3SG-PST burn(tr) DIST-DAT DIST-ACC
 [*hii-t-i* *pyy-maqa-jvy-j*].
 INDF-ABS-ACC 3PL-give-REAL.SUB-ACC
 ‘They burned there that which they (the others) had given.’
 <‘Aam kwenemu’ maahu’n ‘angkwa’ ‘amay xhiiti’ peemaqayvey.> ‘And they would burn what they had given to them.’ (R&E 639)

- e. *Mutu7 = tqa = ny-7* *chamaqaan* [*pana7 = n* *nyy7*
 still = INFR = 1SG > 3SG-PST think thus = 1SG > 3SG 1SG.PRO
 [*tq-ii-t-i* *ny-hi-ivy-j*], [*hii-t-i* *ny-maat\$-ivy-j*]
 INFR-INDF-ABS-ACC 1SG-see-FCT-ACC INDF-ABS-ACC 1SG-hear-FCT-ACC
amajay7 *taamia-t*].
 that.time sun;day-ABS

‘I must have still been thinking about what strange thing I had seen like that, what I had heard that day.’

< Mutu’ txanu’ chamaqaan pana’n ne’ txiiti’ nehiivey, xhiiti’ nemaacivey ‘amaye’ taamyat. > ‘I still must have been thinking about what I had seen, about what I had heard that day.’ (R&E 810)

Realis subordinators can occur where the common argument is subject in the relative clause. In such cases, the pronominals on the verb in the relative clause encode person and number of the common argument, as in (5).

- (5) SE a. *Ama7* [*mutu7* *hoowkp-ch* *a-kwaar7-k-in-iv*] \emptyset .
 DIST still one;same-GEN 3SG-make.sound-K-CAUS-REAL.SUB be
 ‘It is one that still makes the same sound.’ (comparison of different kinds of bells)

< ‘Ama’ mutu’howpkch ‘aqwarr’kiniv. > ‘It sounds the same.’ (R&E 169)

- b. *Mi = n* [*ny-maat\$-iv* *ajay7*] \emptyset .
 DUB = 1SG > 3SG 1SG-hear-REAL.SUB then be
 ‘I seem to be one that has only heard about it (the eagle dance).’
 < Min nemaaciv ‘ayee’. > ‘I just heard about it.’ (re the eagle dance) (R&E 161)

The irrealis subordinator *-ik(i)* derives future relative clauses where the head is object in the relative clause.

In (6) the head is subject in the main clause. In (6a) the relative clause is a verbless-clause complement. Note that the negative *qaj* is in constituency with *hiiiti*, the object of the complement clause, yielding the expression for ‘nothing’ found throughout Takic, here interrupted by AUX in second position, a very common type of discontinuity. Example (6b) shows a plural suffix with the irrealis subordinator, agreeing with the main-clause subject *huwam hiñim* ‘other things’. This example is structurally unique – the main

clause head is plural – and it provides the only attested example of plural agreement with this class of subordinator.

(6) SE a. [Qaj] = *kwyn* [hii-t-i a-jee-ik a-kii-jka7] Ø.
 NEG = QUOT.3SG INDF-ABS-ACC 3SG-take-IRR.SUB 3SG-house-DAT be
 ‘He had nothing to take home (There was nothing for him to take home).’

b. *Ani mi = ta = my-7 huwa-m hiñi-m qat\$*
 and.then DUB = IRR = 3PL-PST other-PL INDF.PL-PL be
 [*pyy-kwe-iki-m*].
 3PL-eat(tr)-IRR.SUB-PL

‘And there may have been other things which they ate.’

<‘Ani’ mitamu’ huwam xhinyim qac peeqwëykim. > ‘And there are others (other lizard species), I guess, which they probably also used to eat.’ (R&E 86)

If the common argument is object in the main clause and also in the relative clause, the relative clause predicate is in the accusative case, as in (7). This is the same behavior seen with the realis subordinator. However, the accusative-case suffix with the irrealis is *-t\$î*, not *-i* as with the realis.

(7) SE *Mutu7 qaj = ch hii-t-i hii~hi ama-tunga7 a-7ajy7-t\$î*
 STILL NEG = 1PL INDF-ABS-ACC DUR~see DIST-INS ADJZ-good-ACC
hii-t-i pyy-ñ-ik-t\$î icham-ika7 ty^Rva-v.
 INDF-ABS-ACC 3PL-do-IRR.SUB-ACC 1PL-DAT land-LOC

‘We still have not seen anything good that they have done for us on the land.’

<Mutu’ qaych hiti’ hihii ‘amatunga ‘a’aye’tti’ hiiti’ peenyiktti’ ‘ichameka’ tervav. > ‘We still have not seen any benefits for us on our lands.’ (R&E 11)

In (8) there is a zero pronominal ‘3PL > 3SG’; this omission of expected = *m* is not unusual when the subject ends with the homophonous plural suffix *-m*. (This pattern may have originated in a phonological collapse: *-m = m > m*.) Also of interest in this example is the verb *qoo^Rn*. *Qoo^Rn* means ‘kill (pl.obj.)’ and would be expected to collocate with a plural object. However, the object nominalization *pyy^Rkweik* ‘what they are to eat’ is grammatically a singular (in agreement with the zero subject-object clitic) though it clearly has reference to several animals killed: the plural object argument of *qoo^Rn*, is

also the object argument of *-kweik*. The topicalized noun phrase *iim jejeinam* ‘these animals’ is the overt representation (adjunct) of that argument.

- (8) SE *Ii-m je~jeina-m aa-m Ø qoo^Rn*
 PROX-PL PL~living.one-PL DIST-PL 3PL > 3SG kill(pl.)

[*pyy-kwe-ik-t\$*], *ky-j = m.*
 3PL-eat(tr)-IRR.SUB-ACC say-IND = 3PL

‘As for these animals, they kill [only] what they are to eat,’ they say.

<‘Eee ... ‘im yêyêynam ‘aam qeern peeqwêyktti’, keym. > ‘Uh ... those animals, they kill what they are going to eat, they say.’ (R&E 871)

Both realis and irrealis subordinator constructions are richly attested in subordinate-clause types other than relative clauses.

Irrealis subordinators can appear as apparent main-clause predicates. These are structurally verbless-clause complements and are in the nominative case. Two such structures appear in (9).

- (9) SE *Ama7 [ajay7 ny-hi-iv] Ø, ama7 [pana7*
 DIST then 1SG-see-REAL.SUB be DIST thus

pyy-ñih~ñi-ivan-iv uviht] Ø.
 3PL-DISTR~do-NFUT.SUB-REAL.SUB long.ago be

‘That is what I saw then, that is the way they did it long ago.’

<‘Ama’ ‘ayee’ nehiiiv, ‘ama’ pana’ peenyihnyivaniv ‘uviht. > ‘That’s just what I saw, when they did this long ago.’ (R&E 170)

Realis constructions with accusative suffixes occur in embedded questions, as in (10).

- (10) SE a. *My = n ty^R [haii-p a-nyvyh-y7-k-in-ivy-j] waha7.*
 3PL = 1SG tell INDF-LOC 3SG-bury-RSLT-K-CAUS-REAL.SUB-ACC also

‘They also told me where she was buried.’

<Men teer hayp ‘anevehekivinivey waha’. > (R&E 672)

- b. *Pyveipa7=t ivi7 kout-k-iv, ta=n ynan-iv*
 if=IRR.3SG PROX break-K-FUT IRR = 1SG > 3SG know-FUT
[jyyt\$a7-t a-mym7-k-ivy-j].
 which.one-ABS 3SG-die-K-REAL.SUB-ACC
 ‘If this breaks, I’ll know which one [of you] has died.’
- c. *Icham=ch – qaj=ch ynan [hamiaa-qat\$*
 1PL.PRO = 1PL > 3SG NEG = 1PL > 3SG know INDF.MANNER-be
pyy-ñi-ivy-j].
 3PL-do-REAL.SUB-ACC
 ‘We – we don’t know how they did it.’
 <‘Ichamc qaych ‘enan hamya’qatt peenyivey.> ‘We don’t know how they did it.’ (R&E 41)

Realis subordinator constructions appear in complement clauses that have a perfective or factive sense, representing actions and events that are temporally prior to those of the main verb. In these clauses, realis subordinator constructions take the accusative case, as in (11).

- (11) SE *Ani ama7 ajay7 ani=n ynan,*
 and.then DIST then COMP = 1SG > 3SG know
a-paavuha-7n-ivy-j amaj7 hyji-m.
 3SG-plant-VBLZ-REAL.SUB-ACC now aromatic.sumac-PL
 ‘And then that is what I know, that she now planted sumac [berries].’
 <‘Ani’ ‘ama’ ‘ayee’ ‘anin’ ‘enan, ‘apaavuha’ nivey ‘amay’ ‘uim.> ‘That’s all I know, namely that she planted ‘uim berries.’ (R&E 97)

The word *amym7kinivyj* in (12) seems to be based on a causative form of *mym7k* ‘die (sg.)’, *mymy7kin(a)*, and it has an object, *amaj*. Semantically, the causative of ‘die’ is ‘kill’, but ‘kill (sg.obj.)’ is *my^Rqa^Rn*. It seems fair to assume that the causative suffix *-in* is added such that the verb can take an object referring to someone who was affected by the action of the verb, consequently the translation ‘died on her’. *Mymy7kin(a)* is attested elsewhere in the non-literal meaning ‘hurt (sg.obj.)’.

- (12) SE *Qaj = ny-7* *ma~maat\$* [*a-mym7-k-in-ivy-j* *ama-j*].
 NEG = 1SG > 3SG-PST CMP~hear 3SG-die-K-CAUS-REAL.SUB-ACC DIST-ACC
 ‘I had not heard that he died on her.’
 <Qaynu’ mamaac ‘amempkinivey ‘amay.> ‘I did not hear that he passed away.’ (R&E 809)

The realis subordinator *-iv(y)* can appear with local case suffixes, as in the examples in (13). Local case suffixes are not documented in construction the other relative-clause subordinators. With local case suffixes, realis subordinator clauses function as temporal and locational adverbials. These clauses overlap in function with clauses marked for switch reference (12.2.4), but switch-reference verb constructions do not have pronominal prefixes.

- (13) SE a. *Kwyny = vy-7* *qat\$-i7a-t\$* [*aa-p* *a-qat\$-ivy-v*].
 QUOT = 3SG-PST dwell-AGNT-ABS DIST-LOC 3SG-dwell-REAL.SUB-LOC
 ‘The resident was there where he lived.’
 <Kwenevu’ qaci’ac ‘ap ‘aqacivev.> ‘He was there at the spot where He lived.’ (R&E 817)
- b. *Pyy-cha-j = m* *chaa-t\$u7* [[*pyy-kwahchumuk-ivy-v*]
 3PL-song-ACC = 3PL > 3SG song-VBLZ 3PL-dream-REAL.SUB-LOC
pyy-mat\$-iv].
 3PL-hear-REAL.SUB
 ‘They would sing their songs which they had heard while dreaming.’
 <Peychaym chaacu’ peekwahcemekivef peemaciv.> ‘They would sing the songs which they had heard in their dreams.’ (R&E 306)
- c. *Ama7 chyy-nyp* *a-hak-ivy-nu7*, *ani = m* *qo^R7a-j*.
 DIST 1PL-chief 3SG-say-REAL.SUB-ABL COMP = 3PL die(pl.)-IND
 ‘Because our Lord ordered it so, they became mortals (they were ones who died).’
 <‘Ama’ Cheenep ‘ahakivinu’, ‘anim qer’ay.> (R&E 30)
- d. *Kwyny pa-jykja7* *pichuu-t\$u7* *pyy-qat\$-ivy-jka7*.
 QUOT.3PL PROX2-DAT arrive-MOT 3PL-be.there;live; dwell-REAL.SUB-DAT
 ‘They got over there to where they lived.’

Realis subordinators can appear in other types of locational and adverbial clauses. Problems emerge here with the handling of case. Example (14) shows adverbial realis subordinators that are inexplicably marked for accusative case in adverbial clauses. However, it is worth noting that in Hopi adverbs often have accusative morphology. This may be a function of accusative morphology in SE as well.

- (14) SE *Uviht* *mutu7* *ny-kwaq-pa7,* *ni-nan-chui7v*
 long.ago still 1SG-youth-LOC 1SG-father-DEC
a-mym7-k-ivy-j, *hakup = chymy-7* *ho~houngan.*
 3SG-die-K-REAL.SUB-ACC very = 1PL-PST ADJZ~poor
 ‘Long ago when I was still young and my late father had died, we were very poor.’

The causative suffix in the realis subordinated verb *ahuchuchkinivyj* ‘that (when) he fell’ in (15) seems to indicate that the falling affected something. Elsewhere in the discourse we find that it was the earth that was affected.

- (15) SE *Pana7* *hawei7t* *a-tah~tamo^Ra-v* *ñiaa-qa7,* *tqa = vy-7*
 like.that always ADJ-DISTR~year-LOC do-IFUT INFR = 3SG-PST
uviht *pana7* *a-huch~uch-k-in-ivy-j.*
 long.ago like.that 3SG-fall~PL-K-CAUS-REAL.SUB-ACC
 ‘It has always through the ages been going to do that (earthquake); it must happened like that long ago when he (the creator god) fell.’
 <Pana’ hawayt ‘atahtamerav nya’qa’, txavu’ ‘uviht pana’ ‘ahuchuchkinivi’. > ‘Through the ages it has been doing this (quaking), ever since He fell.’ (R&E 149)

In (16), the noun phrase (*ama7 nyy^Rht₂*) that is coreferential with the third person singular prefix on the final word of the example, *a₂*-, is in the nominative rather than the genitive case, i.e., it is not *amach nyy^Rhty7*, as would be expected if the realis subordinator construction behaved grammatically as a possessed noun construction.

- (16) SE *Ani = kwyny = vy-7* *a-mi-iv –* *tqa = vy-7* *ama7*
 and.then = QUOT = 3SG-PST 3SG-go-REAL.SUB INFR = 3SG-PST DIST
nyy^Rh-t₁ – *kwyny = vy-7* *kut\$aa-t-i* *uu7* *ani*
 woman-ABS QUOT = 3SG > 3SG-PST stick-ABS-ACC get and.then

a-nyyp-k-ihwa7-p tavy-j, aa-p hawei7t ama7 nyy^Rh-t₂
 3SG-sit-K-INSTR-LOC put-IND DIST-LOC always DIST woman-ABS

a₂-nyyp-k-ivy-j.

3SG-sit-K-REAL.SUB-ACC

‘And then while he (the husband) was gone – it must have been that woman₁ (his mother) – she took a stick put it in her (the wife’s) chair there where the woman₂ (the wife) always sat.’

Like the realis subordinator *-iv(y)*, the irrealis subordinator *-ik* appears in a wide range of clause types beyond object relative clauses. It is very common as the complement of *uii7wyn* ‘want’ as in (17). In such complement clauses the subordinator takes the *-t\$*i** form of the accusative suffix. A stem glottal stop deletes in combination with this suffix, as in (17a) where the verb *kwa7* ‘eat’ underlies *a-kwe-ik-t\$*i**. In (17c,d) the subordinator reduces to *-kj-* by syncope. (17e) shows a sequence of two subordinators in an embedded serial predicate. The syntactic intricacies of structures with subordinators are many but are not studied here.

- (17) SE a. *Qaj = kwyn ama7 uii7wyn a-kwe-ik-t\$*i*.*
 NEG = QUOT.3SG > 3SG DIST want 3SG-eat-IRR.SUB-ACC
 ‘He did not want to eat it.’
- b. *Uii7wyna-j = vyn hawawa7n ny-ñi-ik-t\$*i*.*
 want-IND = 3SG > 1SG light.in.weight 1SG- be-IRR.SUB-ACC
 ‘He wants me to lose weight (He wants me to be light in weight).’
- c. *Aa-m = mychi7 acham-i uii7wyn cha-rywyt-kj-t\$*i*.*
 DIST-PL = 3PL > 1PL 1PL.PRO-ACC want 1PL-disappear-K.IRR.SUB-ACC
 ‘They want us to disappear.’
- d. *Uii7wyna-j = n vyn a-maq-kj-t\$*i*.*
 want-IND = 1SG > 3SG 3SG > 1SG 3SG-give-IRR.SUB-ACC
 ‘I want him to give it to me.’

- e. *Ny-7* *uii7wyn* ***ny-mi-ik-t\$*** ***ni-tyhtyj-ik-t\$***
 1SG-PST want 1SG-go-IRR.SUB-ACC 1SG-work-IRR.SUB-ACC
haii-ngkwa7 *ii-ngkwa7*.
 INDF-DAT PROX-DAT
 ‘I wanted to go and work somewhere.’

The irrealis subordinator appears in complements of other predicates when the complement encodes potential action or timeless possibility, as in (18).

- (18) SE a. *Qaj = kwyny = vy* *haii-m* *tyy^R* *myaa-t\$* *haii-ngkwa7*
 NEG = QUOT = 3SG > 3PL INDF.HUMAN-PL tell moon-ABS INDF-DAT
a-mi-ik-t\$
 3SG-go-IRR.SUB-ACC
 ‘The moon did not tell anyone where she was going.’
 <Qay kwenevu’ haym teer mäaac haynkwa’ amiktti’. > ‘She did not tell anyone where she was going.’ (R&E 15)
- b. *Qaj hii-t-i* *ynan* ***a-tyhtyj-ik-t\$***
 NEG INDF-ABS-ACC know 3SG-work-IRR.SUB-ACC
 ‘She didn’t know anything about working anywhere.’
- c. [...] *ty^Rmqa-j = m* *aa-p* ***pyy-qat\$-kj-t\$*** *aa-p*.
 be.afraid-IND = 3PL DIST-LOC 3PL-dwell-IRR.SUB-ACC DIST-LOC
 ‘[...] they were afraid to live there.’
 <[...] teermqaym ‘ap peeqacktti’ ‘ap.’ > (R&E 263)

Both accusative case (19a) and nominative-case constructions (19b-d) are attested as complements of *a7ay* ‘good’; it is unclear what the difference in meaning might be. In these examples, the irrealis subordinator does not seem to be the complement of a verbless clause, which would explain the absence of the accusative. We suspect the accusative in (19a) represents a disfluency that was corrected in (19b), the next sentence in the text.

- (19) SE a. *A7ajy = tq ymi7 my-jee-ik-t\$i ami7 mo^Rch pajykja7.*
 good-INFR.3SG 2SG.PRO 2SG-take-IRR.SUB-ACC and again over.there
 ‘It might be good if you were to take him and be back over there again.’
- b. *A7aj mo^Rch my-jee-ik.*
 good again 2SG-take-IRR.SUB
 ‘It would be good if you’d take him back again.’
- c. *Ivi7 tara7qa7 hunei7 a7-aj yy-jaanym-ik.*
 PROX cross more.so ADJZ-good 2PL-have-IRR.SUB
 ‘It is better for you to have this cross.’
 <‘Ivi’ tarra’qa’ hunay’ ‘a’ay ‘eeyanamik.> (R&E 59)

Irrealis subordinator constructions also appear as complements of *qat\$* ‘be there’ (and of *hamiaaqat\$*, *qahamiaaqat\$*, which are contractions of *hamin qat\$* ‘how be’, *qaj hamin qat\$* ‘no way be’), as in (20). In this context the subordinators appear in the nominative case. Complements of *-ik* with *qat\$* express possibility and potentiality. This construction is precisely parallel to constructions in the same meaning with copula from **mijx* and irrealis subordinator *-pi* in Cupan.

- (20) SE a. *Qa = hamin qat\$ ppy^R-my^Rka^Rn-ik.*
 NEG = INDF.MANNER be 3PL-kill(sg.)-IRR.SUB
 ‘There was no way for them to kill [either one of] them.’
- b. *Qaj hamiaa-qat\$y = ch chyy-mat\$-kj.*
 NEG INDF.MANNER-be = 1PL > 3SG 1PL-hear;understand-IRR.SUB
 ‘There was no way for us to understand it.’
 <Qay’ hamya’qacich cheemack.> ‘We had no way of understanding (because the prayers were spoken in jawbreaker Serrano).’ (R&E 830)
- c. *Aapana7 touun-qa7 qa-hamiaa-qat\$ a-jee-ik*
 right.there spend.night-IFUT NEG-INDF.MANNER-be 3SG-carry-IRR.SUB
ama-j a-my^Rka^Rn-Ø-i.
 DIST-ACC 3SG-kill(sg.)-NMLZ-ACC
 ‘He intended to stay right there all night [because] there was no way to take what he had killed.’ [= 12.2.5.3.1 (5c)]

- d. *Aa-p a7ajy-t\$ kjaama7 qat\$ aa-p a-kuuman-ik.*
 DIST-LOC good-ABS bed be.there DIST-LOC 3SG-sleep-IRR.SUB
 ‘There was a good bed there for him to sleep on.’
 <‘Ap ‘a’ayec kaama’ qac ‘ap ‘akuumanik.> ‘There was a good bed for him to sleep in.’ (R&E 268)

12.2.5.7. DECEDENT FORMS OF KIN TERMS. A suffix *-iv(y)*, similar to the realis subordinator, may have been involved in the formation of the suffix *-chui7v*, which marks the “decedent” form of kin terms. An example is *ninanchui7v* ‘my deceased father’, seen in 12.2.5.6 (14), above. Kin terms that are verbal forms are an areal feature, found also in CA and in the Yuman languages that are spoken along the Colorado River, east of Takic. It should be noted that for Dorothy Ramón, the decedent suffix is *-nuch*, as in *ny-taar-nuch* ‘my deceased uncle’ (Ramón & Elliott 2000:153) and *Candelaria-nuch* ‘the late Candelaria’ (p. 650).¹³⁸ Perhaps the *-ch* component of *-nuch* relates to the *-chu7* component of Sarah Martin’s *-chui7v*.

Though the *-chu7* component of the ending *-chui7v* may derive from the verb-deriving suffix **-tu7a*, synchronically this is no longer transparent. If there was a verb based on ‘my father’ with this ending, the expected form would be **nina7n-tu7*, not attested *ninanchu-* as in 12.2.5.6 (14). This is because the combining form of *-na7* ‘father’ is consonant-final *-na7n-* and consonant-final forms select the unlenited form of the suffix, i.e., *-tu7(a)*. Also synchronically, the verb-deriving ending in question means to make the noun, to actualize an instance of the noun, such as in *kii-chu7* ‘build a house’, *chaat\$u7* ‘sing (actualize a song)’, *wany-tu7* ‘flow (actualize an instance of flowing water)’ (see 14.15.1.2). Thus if the *-chu7-* component of the decedent kin terms relates to this suffix, it does so with an archaic, no-longer-used sense.

Be that as it may, examples of decedent forms appear in (1) with the possible derivation as realis subordinator forms of verbs indicated. Such derivations would translate literally as relative clauses, for instance, ‘the one who was my mother’. Note that these forms show the regular metathesis in which hypothetical underlying *-Tu7(a)-iv(y)* ‘VBLZ-REAL.SUB’ is pronounced as *-chu-i7v*.

¹³⁸ We have no explanation for the fact that *nitaarnuch* is recorded with the *r* allomorph of *taar/taah-* ‘cross uncle’ rather than the *h* allomorph, as in Sarah Martin’s decedent form *nitaahchui7v* ‘my late uncle’.

- (1) SE a. *ni-jyk-chu-i7v* ‘my late mother’; cf. *ni-jy7* ‘my mother’
 1SG-mother-VBLZ-REAL.SUB’
 b. *ny-kak-chu-i7v* ‘my late grandrelative’; cf. *ny-ka7* ‘my grandrelative’
 1SG-paternal.grandrelative-VBZLR-REAL.SUB’
 c. *ny-po^Rit-chu-i7v* ‘my late younger brother’; cf. *ny-po^Rit* ‘my younger brother’
 1SG-YoBr-VBLZ-REAL.SUB’
 d. *ny-qoo^Rh-chu-i7v* ‘my late older sister’; cf. *ny-qoo^Rr* ‘my older sister’
 1SG-OLsS-VBLZ-REAL.SUB’

The examples in (2) illustrate decedent forms in context. The now-combined ending *-chui7v* is consonant final and consequently selects the *-ti* form of the accusative suffix, rather than the structure seen above (e.g. in 12.2.5.6 (16)) with *-ivy-j*.

- (2) SE a. *Ama7 ty^Rchin-t = kwyn ñip-k*
 that youth-ABS = QUOT.3SG > 3SG defeat-K
ny-kak-chui7v-ti.
 1SG-paternal.grandrelative-DEC-ACC
 ‘That young man beat my late “grandfather” (at gambling).’ (The man Willy Boy defeated was a great uncle on Sarah Martin’s father’s side.)
- b. *Ny-qoo^Rh-chui7v-ti hiintu7.*
 1SG-OLsS-DEC-ACC marry.a.woman
 ‘He married my late older sister.’

However, in (3), the expected overt genitive construction in *-t* was not used. Perhaps the first word of the sentence would be better characterized as being a topicalization: “As for my late mother, this is her story.”

- (3) SE *Ni-jyk-chui7v a-paa^Rvchan Ø ivi7.*
 1SG-mother-DEC.GEN 3SG-story be PROX
 ‘This is my mother’s story.’

12.2.5.8. NONFUTURE AND FUTURE SUBORDINATORS. Two types of subordinators, unlike the realis and irrealis subordinators discussed in 12.2.5.6, do not appear in object relative

clauses. They are found in embedded questions, complements, and adverbial clauses. These are the nonfuture subordinators *-iva7* and *-ivan(i)* and the future subordinator *-ihwa7*. Constructions with these suffixes have subject prefixes. It is worth noting that *-ihwa7* is homophonous with the suffix *-ihwa7* which derives instrument nouns in both SE and KI. In KI, the instrument suffix in possessed nouns is *-ivana7* (see 14.7). This parallelism is unlikely to be a coincidence. Finally, SE has the valence-changing suffix *-ivan(a)*. The relationship between the subordinators and the instrument suffixes needs more exploration. (These suffixes are written postvocally beginning with *y*.)

The nonfuture subordinators are *-iva7*, *-ivan*, and *-ivani*. The last two seem to be a nominative–accusative pair, with *-ivan-i* appearing only in complements and embedded questions, never in adverbial clauses. There is no obvious difference in meaning between *-iva7* and *-ivan(i)* and they sometimes appear to be used interchangeably, as in (1), where Sarah Martin gave both as equivalents for the same English. It seems possible that the distinction may be structural rather than semantic, with *-iva7* being adverbial while *-ivan(i)* is nominal. In the examples the final glottal stop of the root *ja7* ‘run’ is absorbed by the suffix.

- (1) SE a. *Qaj = ny-7* *ynan* *a-je-i7van-i*.
 NEG = 1SG > 3SG-PST know 3SG-run-NFUT.SUB-ACC(?)
 ‘I didn’t know he was running.’
- b. *Qaj = ny-7* *ynan* *a-je-i7va7*.
 NEG = 1SG > 3SG-PST know 3SG-run-NFUT.SUB
 ‘I didn’t know he was running.’

Later she gave (2), equally well in *-iva7* but for a different meaning in English. This suggests that (1b) might be better understood as ‘I didn’t know it when he ran’. It must be noted that Mrs. Martin rarely provided translations other than for individual words. She would provide translations of English phrases into SE, but not the other way. As for stories, she would explain in English what was going on in the story, but it was up to K. Hill to come up with translations of the individual sentences.

- (2) SE *Ynana-j = n* *a-wiin-iva7*.
 know-IND = 1SG > 3SG 3SG-throw.away-NFUT.SUB
 ‘I know when he threw it away.’

When derived with the nonfuture subordinator, the tense of the subordinate clause is prior to or simultaneous with the tense of the main clause. Most of these constructions in the SE corpus involve a change of subject. However, this may be a phenomenon of discourse rather than syntax, because same-subject examples are also to be found, as in (3).

- (3) SE *Pyy-qat\$-iva7* *kwy7 = my-7* *tyy^R* *wyy~wy^Rh-t*
 3PL-live-NFUT.SUB POT = 3PL > 3SG-PST tell PL~much-ABS
pyy-ñih~ñia-t\$ *naamu-i-v* *huwa-m* *py-my-kja7*.
 3PL-REP~do.NMLZ-ACC fight-NMLZ-LOC other-PL 3-PL-DAT
 ‘If they had lived they would have been able to speak to others of their experiences during the war.’
 <Peeqattiva’ kwa’mu’ teer wuuwert peenyihnya’tti’ naamëif huwam pemeka’. > (R&E 28)

The examples in (4) show complement clauses. We understand the final *-i* to be an accusative suffix, since such a suffix appears in complement clauses with the realis and irrealis subordinators. In (4d), the instrumental form *amatunga7* seems to be functioning as a complementizer (COMP), analogous to the Cupan instrumentals, CU *pæchi* (13.3.3 (12)), CA *pish* (13.3.4 (12)).

- (4) SE a. *Pana7 = ny-7* *maat\$* *pyy-ñ-ivan-i*
 thus = 1SG > 3SG-PST hear 3PL-do-NFUT.SUB-ACC
pyy-wyrav-k-ivan-i.
 3PL-speak-K-NFUT.SUB-ACC
 ‘I heard them doing that, (I heard) them speaking.’
 <Pana’nu’ maac peenyivini’ peerwerrafkinivi’. > (R&E 690)
- b. *Ynana-j = ny-7* *a-mamq-ivan-i*.
 know-IND = 1SG > 3SG-PST 3SG-laugh-NFUT.SUB-ACC
 ‘I knew he was laughing.’

- c. *Ama-tunga7=n* *ynan* *wahi7* *a-qat\$-ivan-i*.
 DIST-INS = 1SG > 3SG know coyote 3SG-be.there-NFUT.SUB-ACC
 ‘With that I knew that it was a coyote[-like animal].’
 <‘Amatunga’n ‘enan wahi’ ‘aqacivini’. > ‘That is how I knew that it was a coyote-like animal.’
 (R&E 265)
- d. *Ama-j = ny-7* *tyy^R* *amatunga7* *ama-j*
 DIST-ACC = 1SG > 3SG-PST tell COMP DIST-ACC
ny-hi-ivan-i *wa7\$yvi-ch-i*.
 1SG-see-NFUT.SUB-ACC great.blue.heron-ABS-ACC
 ‘I told her about it, that I had seen that heron.’
 <‘Amaynu’ teer ‘amatunga’ ‘amay nehiiveni’ wa’shevi’chi’. > ‘I told her about seeing that stork.’
 (R&E 334)
- e. *Ynana-j = n* *ii-p* *a-püch-ivan-i*.
 know-IND = 1SG > 3SG PROX-LOC 3SG-arrive-NFUT.SUB-ACC
 ‘I know he got here.’

Examples of apparent embedded questions are shown in (5). However, since Mrs. Martin always used *-iva7* in such examples (3a,b), they are probably mis-translated with ‘when’. Instead, they are complements, and she was apparently structuring the predicate of the dependent clause as verbless, as shown. Dorothy Ramón used *-ivan-i* (3c-e) with the expected accusative. Example (5d), repeated from 5.5.3, displays an instance of *Suffixaufnahme*, with the possessor (“that fish”) being marked for accusative to match the possessed (“where it lives”).

- (5) SE a. *Ynana-j = n* [*a-qa^Rma^R7-k-iva7* \emptyset].
 know-IND = 1SG > 3SG 3SG-be.drunk-K-NFUT.SUB be
 ‘I know when (that (?)) he was drunk.’
- b. *Ynana-j = n* [*a-ju-iva7* \emptyset].
 know-IND = 1SG > 3SG 3SG-snow- NFUT.SUB be
 ‘I know it snowed [when it snowed?].’

- c. *Kwyny* = vy *tyy*^R *ju7-pa7* *hukaa-m* *ju7-pa7* *kii-ka-m*
 QUOT = 3SG > 3PL tell wild-LOC deer-PL wild-LOC dwelling-CHAR-PL
ama-tunga7 *pana7 = m* *ynan* *ajay7* [*hami7* *ivi7*
 DIST-INS like.that = 3PL > 3SG know then INDF.HUMAN PROX
a-kim-ivan-i].

3SG-come-NFUT.SUB-ACC

‘He would tell the deer in the wild, the ones living in the wild, so they would then know when someone was coming.’

<Kwenevu’ teer yu’pa’ hukaam, yu’pa’ kiikam ‘amatunga’ pana’m ‘enan ‘ayee’ hami’ ‘ivi’ ‘akimivini’. > ‘He (this fly) would tell the wild deer, the ones living out in the wild, so that they would know when someone was coming.’ (R&E 97)

- d. *Ama7* *ni = n* *ama-tunga7* *wyra7nivan* [*ama-j*
 DIST COMP = 1SG > 3SG DIST-INS talk.about that-ACC
kihuu-t-i ***a-qat-i-ivan-i***].

fish-ABS-ACC 3SG-be.there;live;dwel-NFUT.SUB-ACC

‘It’s that I talk about where that fish lives using it (the name Malki).’ (discussion of a sacred fish and of the propriety of changing the name Malki to Morongo for the Reservation)

<‘Ama’ nin ‘amatunga’ werra’nivan ‘amay kihuuchi’ ‘aqacivini’. > ‘I am speaking about where that fish is.’ (R&E 763)

- e. *Amaj7* *qaj* *hami7* *ynan* *ama-j*
 now;today NEG INDF.HUMAN know;recognize DIST-ACC
[a-wyn-ivan-i]].

3SG-be.there(inan)-NFUT.SUB-ACC

‘Nowadays no one recognizes it when it is growing.’

<‘Amay’ qay’ hami’ ‘enan ‘amay ‘awenivini’. > ‘Nowadays no one knows where it grows.’ (R&E 97)

The only examples of *-ivan* that appear in Dorothy Ramón’s speech are in embedded questions, as in (6). This suffix is identical to the base-deriving suffix *-ivan* which adds an instrumental argument (see 14.7.2). (An example is seen in (5d), above.) It is possible that in (6a) we see a zero nominalization of an instrumental derivation, *chaat\$u-i7van* ‘sing about’, since verbs with instrumentals often translate as ‘do a certain way, how it was done/doing’. But this is not the case in (6b).

- (6) SE a. *Punuk i7~ihma7 ama-j wyt\$ i7vy^R-t\$ a-chaa-j,*
 just REP~make.fun.of DIST-ACC old.man-ABS 3SG-song-ACC
[a-chaa-t\$u-i7van hamiaa-qat\$].
 3SG-song-VBLZ-NFUT.SUB INDF.MANNER-be
 ‘He was just making fun of that song of the old man, of the way he was singing it.’
 <Penewk ‘i’ihma’ ‘amay wehtivec ‘acaay, ‘avaacwivan hamya’qac.> ‘He was just making fun of the way the old man was singing.’ (R&E 227)
- b. *Mi = ta [hiñiki7 atamo^Ra7 a-miaa-t\$u-i7van].*
 DUB = IRR.3PL INDF.many year 3SG-go-MOT-NFUT.SUB
 ‘I don’t know how many years ago it was (“that it went”).’
 <Mita’ hinyiki’ ‘atamer’ ‘amya’cwi’van.> ‘I don’t know how many years ago this was.’ (R&E 89)

The examples in (7) illustrate the nonfuture subordinator in adverbial clauses.

- (7) SE a. *Ama7 Tyyj-t a-mi-iva7 tum haii-p = kwyn ama7*
 DIST Spirit-ABS 3SG-go-NFUT.SUB DISTR INDF-LOC = QUOT.3SG DIST
nym jyyvu-kja7 chichin-t.
 walk outside-DAT boy-ABS
 ‘When Spirit went somewhere, the boy would walk outside.’
- b. *Ama7 = kwyny = vy-7 ajay7 ty^Rva-t\$ kwaara7-k*
 DIST = QUOT = 3SG-PST then earth-ABS quake-K
a-huch~uch-k-iva7 tyyvy-va7.
 3SG-fall~REP-K-NFUT.SUB down-LOC
 ‘Then the earth quaked when he fell down.’
 <‘Ama’ kwenevu’ ‘ayee’ tervac qwaarraq ‘ahuchuchkiva’ tewva’.> ‘When he fell down the earth began to quake.’ (R&E 138)
- c. *Qaj = my aa-pia ichu7-k-in, ama7 mutu7*
 NEG = 3PL > 3PL DIST-LOC make-K-CAUS DIST still;yet
pyy-rywy7-k-iva7.
 3PL-be.absent-K-NFUT.SUB
 ‘They had not been made there, it was still when they were absent.’

<Qaymu' 'apya' 'ichu'kin, 'ama' mutu' peerrewqiva'.> 'They had not been made yet, they were not here yet.' (R&E 358)

Finally, there are several examples in the Ramón and Elliott (2000) text corpus that include what seems to be a nonfuture subordinator form with an unidentified extra final *-iv*, as seen in (8). This might be the realis subordinator, but how the combination of suffixes work together is not clear. In the examples in (8a,e) and maybe (8b) *-ivan* might be the instrumental suffix, in which case the structure is less puzzling. However, the structures in (8c,d,f) are very unlikely to be instrumental.

- (8) SE a. *Ama-j=m tywan-av puju ajaypa7-t-i hamiaa-qat\$*
 DIST-ACC = 3PL > 3SG name-CONT all various-ABS-ACC INDF.MANNER-be
pyy-qat\$-ivan-iv uviht.
 3PL-be.there;live; dwell-NFUT.SUB-REAL.SUB long.ago
 'They would name all the different ones, [telling about] how they lived long ago.'
 <'Amaym tewanaf puuyu'ayeewpa'ti' hamya'qac peeqaciviniv 'uviht.> 'They would talk about how the people had lived (i.e., the people whose images were being burned).'
- b. *Uvia py^R-na^R haky7-t\$u7 a-hak-ivan-iv*
 already 3SG-like say-MOT 3SG-say-NFUT.SUB-REAL.SUB
mitkin pana7 a-ñi-ik.
 seem.3SG that.way 3SG-do;happen-IRR.SUB
 'What he said would happen, it seems, is already coming to pass like that.'
 <'Uvya' penga'hake'cu' 'ahakiviniv mitkin pana' 'anyiik.> 'What He said would happen is already coming to pass.'
- c. *Qaj = n[y] haii-m uii7wyn my = n pyy-h-ik-t\$i*
 NEG = 1SG > 3PL INDF.HUMAN-PL want 3PL = 1SG 3PL-see-IRR.SUB-ACC
haii-ngkwa7 ny-mi-ivan-iv.
 INDF-DAT 1SG-see-NFUT.SUB-REAL.SUB
 'I don't want the others to see where I'm going.'
 <Qayn haym wi'wanmen peehiktti' haynkwa' nemiivaniv.> (R&E 384)

- d. *Ani ama7 qaj hami7 ynan ama-j muuki-ch*
 and.then DIST NEG INDF.HUMAN know DIST-ACC cemetery-ABS
aa-p a-qat\$-ivan-iv.
 DIST-LOC 3SG-be.there-NFUT.SUB-REAL.SUB
 ‘Then it’s that no one knows about that cemetery being there.’
 <‘Ani’ ‘ama’ qaj’ hami’ ‘enan’ ‘amay muukich [‘]ap ‘aqaciveniv.> ‘But no one knows about that
 cemetery being there.’ (R&E 629)
- e. *Ama7 ajay7 ny-hi-iv, ama7 pana7*
 DIST then 1SG-see-REAL.SUB DIST that.way
pyy-ñih-ñ-ivan-iv uviht.
 3PL-REP-do-NFUT.SUB-REAL.SUB long.ago
 ‘That’s what I saw then, it’s that they did it like way long ago.’
 <‘Ama’ ‘ayee’ nehiiv, ‘ama’ pana’ peenyihnyivaniv ‘uviht.> ‘That’s just what I saw, when they
 did this long ago.’ (R&E 170)
- f. *A7ajy-t\$ nurse a-qat\$-ivan-iv, ynaat\$ vy*
 good-ABS nurse 3SG-be.there-NFUT.SUB-REAL.SUB nicely 3SG > 3PL
nah-puhcha7.
 CUST-take.care.of
 ‘Because she was a good nurse, she took care of people properly.’
 <‘A’ayec nurse ‘aqacivaniv, ‘enaacvu’ nahpuhca’.> (R&E 152)

A future subordinator *-ihwa7* is attested mainly in accusative-case complement clauses. Note that the construction with main verb *qat\$(y)* has a deontic force (9b). This subordinator is homophonous with the suffix *-ihwa7* that derives instrumental nouns like *nyyp-k-ihwa7-t* [sit-K-INSTR-ABS] ‘chair’. These two suffixes appear to be unrelated.

- (9) SE a. *Kwy7 ja7 wary7ngk qa-hamiaa-qat\$ a-je-i7hwa7.*
 POT run.IMP indeed NEG-INDF.MANNER-be 3SG-run-FUT.SUB
 ‘He would run if he could (He could run except that there is no way for him to run).’
- b. *Ni-je-i7hwa7 qat\$.*
 1SG-run-FUT.SUB be
 ‘I have to run (There is for me to run).’

- c. *Qaj = ny-7* *ynan haii-ngkwa7 ny-mi-ihwa7-t\$i.*
 NEG = 1SG > 3SG-PST know INDF-DAT 1SG-go-FUT.SUB-ACC
 ‘I didn’t know where I was going.’
- d. *Ynana-j = n* *ny-dheeve7-k-ihwa7-t\$i.*
 know-IND = 1SG > 3SG 1SG-owe-K-FUT.SUB-ACC
 ‘I know I’ll owe him.’
- e. *Ynana-j = n* *a-qo^Rp-k-in-ihwa7-t\$i.*
 know-IND = 1SG > 3SG 3SG-break-K-CAUS-FUT.SUB-ACC
 ‘I know he’ll break it.’
- f. *Icham = ch* *cha-hiira-t\$i numia7n qa-hamiaa-qat\$*
 1PL.PRO = 1PL > 3SG 1PL-KNIFE-ACC break NEG-INDF.MANNER-be
cha7-ichu7-k-in-ihwa7.
 1PL-fix-K-CAUS-FUT.SUB
 ‘We broke our knives and can’t fix them.’ (Louie Marcus)

12.2.6. NOMINALIZATIONS IN -7 AND Ø. A final nominalization type in this series is less well attested and phonologically poorly understood. This nominalization type involves word-final glottal stop and non-final zero (but also with word-final zero). As with the subordinators, this nominalization type results in what are formally possessed nouns with the subject encoded by a pronominal prefix. Like the subordinators, this nominalization usually appears in relative clauses where the common argument is the object in the surface relative clause though sometimes it may be subject, especially in an underlying verbless clause. This may yield apparent deviations in case marking. Predicates of this type are attested in adverbial clauses. Like constructions with the *-7a* relativizer in Inland Cupan, these predicates sometimes seem to have a present-tense sense. Also like the Inland Cupan examples, they do not appear in complement clauses or in embedded questions. In example (1), the common argument is subject in the main clause, the object of the nominalization *wiaanch* in the first clause and of the possessed nominalization

awiaana7 in the second clause as well as the subject of the immediate-past complement *kimit* in the final clause.

- (1) SE *Kwyny = vy-7 haii-piu7 wiaan-Ø-ch*¹ Ø *ama7, hii-t*
 QUOT = 3SG-PST INDF-ABL send-NMLZ.RES-ABS be DIST INDF-ABS
chyy-nyp a-wiaana-7 Ø *haii-piu7 pyjaany-nu7 kim-i-t* Ø.
 1PL-chief 3SG-send-NMLZ be INDF-ABL far-ABL come-IPST-ABS be
 ‘He was one sent from somewhere; he was someone our Lord sent, one who had come from somewhere far away.’

<Kwenevu’ xhaypyu’ wêanch ‘ama’, xhiit Cheenep ‘awêana’ xhaypyu’ puyaananu’ kimit. > ‘He was sent from somewhere, someone sent by our Lord from far off (from outer space). (R&E 705)

¹ *Wiaanch* is a nominalization *wiaana* + *-i* + *-cha*, with resultative *-i* being lost by syncope.

The examples in (2) show *-7/-Ø* nominalizations as objects. Accusative suffixes appear on the relativized predicates in both examples and also on *hii-t* ‘what’ in (2b). The allomorph *-a-* is exemplified in (2a). The accusative suffix with *pyy-ñih~ñia-7* is *-t\$ì*, with loss of the glottal stop which occurs in the nominative singular (which appears in (4b) below). This suggests that the glottal stop of this suffix is phonologically something like the ephemeral glottal stop seen in, for example, the immediate-future suffix *-qà*, with allomorphs *-qa7* and *-qa-* (cf. plural *-qa-m*, with no glottal stop). However, the abstract vowel *à* is not subject to syncope or contraction, so whatever the underlying form of the *-7/-Ø* nominalization may be, it cannot be underlying *à*. The *-Ø* allomorph is seen in (2b), where *pyywini* ‘what they threw’ derives from underlying *pyy-wiina-Ø-jy* [3PL-throw-NMLZ-ACC] by regular rule, including vowel shortening and accusative contraction.

- (2) SE a. *Ah~avy-j = m* *pyy-ñih~ñia-Ø-t\$ì*
 CONT~tell.about-IND = 3PL > 3SG 3PL-DISTR~do-NMLZ-ACC
 ‘They’re telling about what they’ve done.’
- b. *Aamy = m* *hakup-ia = m* *jeej~je-j* *tum*
 3PL.PRO = 3PL very-AUG = 3PL > 3SG DISTR~grab-IND DISTR
hii-t-i *pyy-win-Ø-i* *aa-m*.
 INDF-ABS-ACC 3PL-throw-NMLZ-ACC DIST-PL
 ‘They – they were grabbing at whatever was being thrown.’

<‘Aamem hakupim yêyê tum hiiti’ peewini’ ‘aam.> ‘People were grabbing like crazy for the gifts they were throwing around.’ (R&E 714)

As seen in (3), these constructions can show up as apparent main-clause predicates. However, it is clear that in (3a) the subject of the discontinuous main clause is third person, so *nichaamqana7*, with a first person subject, cannot be the main-clause predicate. In (3b), where the construction in the apparent main clause is 3PL, if 3PL were the subject of that clause there should be a third-plural pronominal *my* following *ama7*. But this is absent, showing that the main-clause subject is in fact third singular. The usage with *-chaamqana7* meaning ‘what one thinks, in someone’s opinion’ (more abstractly, ‘what one’s thinking is’), as in (3a,b), is quite common.

- (3) SE a. *Wahma^Rt\$ py-hpa7 maha^Rt\$ = vy-7 [ni-chaamqana-7 Ø] ha*
 ten 3SG-LOC five = 3SG-PST 1SG-think-NMLZ be or
paa^Rvahi7 Ø.
 six be

‘She was fifteen, I think, or sixteen.’ (Willy Boy)

- b. *Ama7 [pyy-chamqana-7 Ø] paj = tqa = vy-7*
 that 3PL- think-NMLZ be three(false start) = INFR = 3SG-PST
paah-i atuuk Ø.
 three-times night be

‘They thought that it had been three nights.’

The *-7/-Ø* nominalization can appear with adverbial clauses, as in (4). In (4b) the adverbial clause predicate is *a-qat\$y-7*. The construction *a-ñih~ñia-7*, also in (4b) ‘what she was doing’ is a headless relative clause where the absent head is object.

- (4) SE a. *Ama7 qaj kwy7 haii-ngkwa7 Ø a-mia-Ø.*
 DIST NEG POT INDF-DAT be 3SG-go-NMLZ

‘She could not have gone anywhere (It cannot be to anywhere, [where] she went).’

<‘Ama’ qay’ kwa’ haynkwa’ ‘amyah.> (R&E 113)

- b. *Pana7 = vy-7* *qat\$* [[*ama7* *Candelaria-nuch*
that.way = 3SG-PST be;live; dwell DIST *Candelaria-DEC*
a-ñih~ñia-7 \emptyset], [*a-qat\$y-7* *ii-p*]].
3SG-CONT~do-NMLZ be 3SG-be.there;live;dwell-NMLZ PROX-LOC
'She lived like that, that's what the late Candelaria did when she lived here.'
<Pana'vu' qac 'ama', *Candelarianuch* 'anyihnya', 'aqaca' 'ip.> 'And that was the late
Candelaria's lineage here.' (R&E 650)
- c. *Pyt\$ = kwyn* *ho~houngan* *a-qat\$y-7*.
so.3SG = QUOT.3SG ADJZ~poor;pathetic 3SG-be.there-NMLZ
'He was so pathetic sitting there (as he was there).' (Flood)
- d. *Pyy-nym-iv = kwyn* *aa-p* \emptyset *pyy-ja~ja7*.
3PL-walk-REAL.SUB = QUOT.3SG DIST-LOC be 3PL-CONT~run.NMLZ
'Their footprints were there where they had been running around.'

Verb roots ending in *7a* show no additional glottal stop added in this set; instead, there is a metathesis of the underlying vowel + glottal stop sequence, as in (5a) *ni-tyaa7* 'my roast, what I roasted', from the verb *tyy7(a)* 'roast'. However, if the vowel preceding the glottal stop is *a*, then the result of the metathesis is invisible, as in (5b-e). However, forms like (5b-e) could equally well be treated as having the zero derivation, below.

- (5) SE a. *ni-tyaa7* 'my roast, what I roasted' < *tyy7(a)* 'roast (v.)'
b. *ny-paavuha7* 'my crop, what I planted' < *paavuha7* 'plant (v.)'
c. *ni-\$aa7* 'my feces, what I defecated' < *\$aa7* 'defecate'
d. *ny-\$aam\$a7* 'what I was selling' < *\$aam\$a7* 'sell'
e. *pyy-ja~ja7* 'where they were running around' < *ja~ja7* 'run around', cf. *ja7-i*
'run'

Some of the forms attested have a singular nominative that is identical to the verb; this is the \emptyset derivation. This is the derivation found with k-class verbs (6a) as well as with a few others. Note that in (6d) the indicative verb *mi-j* 'go' represents a rather extreme – but regular – contraction of underlying *miaa* 'go' + *-j* while the derived noun *-mia*, in turn, shows only word-final vowel shortening.

- (6) SE a. *ni-chi\$tk* ‘the one I love’ < *chi\$tk* ‘love’
 b. *pyy-rakw* ‘their food’ < *raakw* ‘eat (intr.), dine’
 c. *ny-hyiiñ* ‘my kill, what I hunted’ < *hyiiñ* ‘hunt’
 d. *a-mia* ‘where she went’ < *mi-j* ‘go’

Sometimes a subordinating nominalization is found in its own syntactic role. In (7) the subject of all three clauses is the nominalization *a7oo^R\$ana7* ‘petroglyph(s)”; it is the 3SG subject of *qat\$* ‘be’ in the first clause and the anaphor of *ama7* in the final clause, though it might refer to the act of marking rather than to the petroglyphs themselves. Even so, the 3SG subject prefix *a7-* in the nominalization *a7oo^R\$ana7* seems to be coreferential with the noun *chyy-nyp* in the final clause. Note the phrasal inflection in the discontinuous locational phrase *aap ty^Rvat\$ Sobobap* ‘there in Soboba country’, where *ty^Rvat\$* (Sarah Martin’s *tiy^Rvat\$*) ‘earth, land, country’ is unmarked for local case.

- (7) SE *Aa-p* *ty^Rva-t\$* *qat\$* *Soboba-p* *aa-p* *waha7=kwyn*
 DIST-LOC land-ABS be Soboba-LOC DIST-LOC also = QUOT.3SG
a7-oo^R\$ana-7 \emptyset *ama7* *hii-t* *chyy-nyp* *uviht* \emptyset .
 3SG-write;mark-NMLZ be DIST INDF-ABS 1PL-chief long.ago be;do

‘There are some there in Soboba country; there too there are said to be petroglyphs (what he marked), which is something our Lord [did] long ago.

<‘Ap tervac qac Sobobap ‘ap waha’ kwan ‘a’uushana’ ‘ama’ xhiit Cheenep ‘uviht.’ > ‘Over there at Soboba there are petroglyphs made by God (near Valley Vista).’ (R&E 417)

12.3. SUBORDINATE-CLAUSE VERBS IN KITANEMUK. Kitanemuk must have had a range of subordination strategies similar to those described above for SE, its close relative. However, only a very limited range of types is documented, since nearly all of the documentation of KI consists of single words and short sentences.

One problem in interpreting the KI data is that in KI, all verbs have a subject prefix. In contrast, in SE main-clause verbs do not have such prefixes. Instead, subject prefixes appear only in some of the subordinate constructions. This means that in SE it is easy to spot many of the subordinate verb constructions. This is not true for KI.

An example of the problem thus caused appears in (1). It is clear that the second clause of (1a) is subordinate, because the subject of the lower verb, ‘man’, is raised to be object in the main clause and is marked for accusative case. However, the verb of the

subordinate clause, while it resembles a SE *-7 ~ Ø* nominalization (cf. 14.2.2), is formally indistinguishable from a main-clause verb, such as the one in (1b). Furthermore, the subordinate clause in (1a) has its own tense clitic,¹³⁹ whereas in SE the tense-aspect of the main-clause auxiliary applies to the subordinate clause as well.

(1) KI a. *Ny7 ni-ta paat\$uka-taj a-hu7eaha = mat.*

1SG.PRO 1SG-put man-ACC 3SG-work = FUT

‘I will put this man to work.’ (3.100.0361)

‘I put this man to work.’ (Anderton 1988:125)

b. *Ni-hu7eaha = mat.*

1SG-work = FUT

‘I will work.’ (3.98.0269)

12.3.1. SERIAL PREDICATES IN KITANEMUK. As in TV and SE, in KI serial predicate constructions are attested. Seriation with verbs of motion is seen in (1) and (2). While these serial constructions do exist, constructions with the immediate future in *-ik(a)*, seen in the third verb in (1), are far more common.

In (1), the first two verbs, both with subject prefixes, make up a main clause, where *jaa* ‘carry’ and *kim* ‘come’ combine to yield the sense of ‘bring’ in the translation. The subordinate verb in this sentence, unprefixes *mak-ik* ‘to give’, is marked with the suffix *-ik(a)*, which Anderton (1988:226) calls “infinitive.” Though this suffix looks very much like the irrealis subordinator *-ik(i)* of SE, the second vowel, which appears only under certain conditions, is *a* in KI, and we analyze it as a reflex of the immediate future; see 12.3.3 below.

(1) KI *A-jaa7 = nehe a-kim = ivyn [mak-ik a-\$yy-j].*

3SG-carry = NEHE 3SG-come = 3SG > 1SG give-IFUT 3SG-flower-ACC

‘She brought me a (tied up) bunch of flowers.’ (3.98.0468; Anderton 1988:126)

¹³⁹ On the other hand, if the translation offered by Harrington, ‘I will put this man to work’, is correct, then the future tense marker which appears cliticized to the subordinate verb has the whole sentence as its scope. If the clitic is truly inappropriately attached to the subordinated verb, we may have here a highly unusual example of an “in subordinate” clause.

Example (2) has a pair of imperative verbs. This sentence is also an example showing that nominal objects of imperatives are not marked for accusative case.

- (2) KI *Mea uu7 paa-t\$ aamuk.*
 go.IMP get.IMP water-ABS over.there
 ‘Go over there and bring (me) some water.’ (3.98.0383; Anderton 1988:135)

In addition to the seriation with verbs of motion, an idiomatic construction with the verb *nihniw* ‘do’ is used to express immediate future, as in (3).

- (3) KI a. *Ni-nihniw ni-na-huts-k.*
 1SG-do 1SG-(?)-drop-TR
 ‘Ya voy a parir, said when ya duele, ya tengo dolor. (Now I am going to give birth, said when now it hurts, now I have pain. [The labor pains have begun.])’
 (3.98.0485; Anderton 1988:213)
- b. *A-nihniw a-kuh~kururu7.*
 3SG-do 3SG-DISTR~thunder
 ‘Ya va hacer trueno. (Now it’s going to thunder. [It’s about to thunder.])’
 (3.98.0053; Anderton 1988:213)
- c. *A-nihniw a-muk.*
 3SG-do 3SG-die
 ‘Ya se va acabar (la luna). (Now it [the moon] is going to end. [The moon is waning.])’ (3.99.0045; Anderton 1988:214)

12.3.2. NOMINALIZATIONS IN -T. Subject nominalizations in *-t* appear in KI. However, these are not attested as tensed predicates in KI. For instance, in (1) *yn-ana-t* ‘knowledgeable person’, from *yn-an(a)* ‘know’, is a verbless-clause complement, the syntactic status that we have suggested for apparent immediate-past main-clause predicates with *-t* in TV and SE. However, unlike similar derivations in TV and SE, it has no immediate-past implicature and is simply a general characterization of a person, as are the other deverbal nouns in this category, such as *na7-ihama-t* ‘brat, child who doesn’t mind’ from *na7-ihama* ‘tease customarily’ and *na-maka-t* ‘generous person’ from *na-maka* ‘give customarily’.

These are probably not immediate-past forms at all, but are examples of deverbal derivation with a nominalizing sequence that is a reflex of **-a7-ta*, discussed in (14.2).

- (1) KI *Numua-t\$ taaka-t, putsuk ymy7 yna-n-a-t Ø.*
 good-ABS person-ABS much 2SG.PRO know-CAUS-NMLZ-ABS be
 ‘You are a good fellow, sabes mucho, (eres muy vivo). (you know a lot, [you’re very smart/quick].)’ (3.98.0288; Anderton 1988:225)

12.3.3. NOMINALIZATIONS FROM **-KA*. SE and the Cupan languages have an immediate-future construction, a nominalization formed with a reflex of PTak **-ka(-ta)*. This encodes the immediate future in main clauses and purpose in subordinate clauses. The KI cognate appears in two guises, *-ik(a)* and *-jka7y*, which seem to have overlapping meanings. The initial *i/y* may be cognate with the ablaut vowel that is attested with the immediate-future suffix *(-i)-qa-t* in Inland Cupan.

First we consider *-ik(a)*, Anderton’s (1988:226) “infinitive.” This form of the suffix appears regularly in purpose clauses. The subordinate predicates with *-ik(a)* in KI do not take subject prefixes. In this regard they are like the SE immediate future *-qa7* and quite unlike the phonetically similar SE irrealis subordinator *-ik(i)*, which occurs only with subject prefixes.

Examples of the immediate future in *-ik(a)* with singular subjects appear in (1). After a vowel, as in (1c), the suffix reduces to *-k*. (In (1a), *-ik* retains its vowel because ‘see’ underlyingly ends in *w*. Thus *hiw-ik* with intervocalic *w* loss gives *hi-ik*.)

- (1) KI a. *Ja my-mii = mat hi-ik my-tsuuri7-taj.*
 well 2SG-go = FUT see-IFUT 2SG-MoMo-ACC
 ‘You are going to see your grandmother.’ (3.98.0462; Anderton 1988:200)
- b. *Mohmoho7k aa-p a-kim tsurup-k-ik.*
 rudely DIST-LOC 3SG-come enter-K-IFUT
 ‘Vino y se entremetió. (He came and butted in.)’ (3.98.0379; Anderton 1988:406)

- c. *Ny7 ni-ta hu7eaha-k.*
 1SG.PRO 1SG-put work-IFUT
 ‘I put him to work.’ (3.100.0361)

When we turn to examples with plural subjects, we find that these constructions are not identical to the SE immediate futures. An immediate future in SE with a plural subject takes a plural suffix *-m*, as in the KI example (2a). However, in the nearly identical attestation in (2b), there is no plural suffix, nor is there in the other plural-subject attestations in (2c-g). Limited data make the correct pattern, and hence a secure understanding of this suffix, impossible to determine.

- (2) KI a. *Tsa-mii-t\$ nakwah-ika-m.*
 1PL-go-IMP.PL play.a.men’s.game-IFUT-PL
 ‘Vamos a jugar. (Let’s go and play.)’ (3.98.0281; Anderton 1988:419)
- b. *Tsa-mii nakwah-ik.*
 1PL-go play.a.men’s.game-IFUT
 ‘Let’s go and play ball.’ (3.98.0340; Anderton 1988:419)
- c. *Tsa-mii tatsank-ik.*
 1PL-go play.stick.dice.game-IFUT
 ‘Let’s (go and) play this game (the stick dice game).’ (3.99.0614)
- d. *Tsa-mii tohi\$in-ik.*
 1PL-go play.chilecote.game-IFUT
 ‘Let’s go and play [the chilecote game].’ (3.99.0601)
- e. *Yy-mii nahwin-ik.*
 2PL-go deposit.at.shrine-IFUT
 ‘You two are going to deposit at [a] shrine’ (3.99.0678)
- f. *Pyy-mii ngaan-ik tsika-ta-j.*
 3PL-go seek-IFUT shellfish-ABS-ACC
 ‘They van a buscar almeja. (They’re going to look for shellfish.)’ (3.98.0085; Anderton 1988:200)

- g. *Tsa-mii = mat kwa7-jk.*
 3PL-go = FUT eat-IFUT
 ‘Vamos a comer. (Let’s go eat.)’ (3.100.0689)

In KI what may be a different (postvocalic) reflex of **-ka* ‘immediate future’, *-jka7j*, is also found in a few purpose-clause constructions, as in (3).

- (3) KI a. *Ni-mii = mat hi-jka7j ama-j paat\$ukah-taj.*
 1SG-go = FUT see-IFUT DIST-ACC man-ACC
 ‘I am going to visit that man.’ (3.98.0465; Anderton 1988:204)
- b. *A-kim = yvyn hi-jka7j.*
 3SG-come = 3SG > 1SG see-IFUT
 ‘He came to see me.’ (3.98.0464; Anderton 1988:196)
- c. *Ni-mii wa-jka7j.*
 1SG-go roast-IFUT
 ‘I am going out into hills or forests or fields to roast quite (I’m going to roast [it]).’ (3.98.0195) < *waw* ‘roast’, or *wahea* ‘roast, singe’ (*quite* is ‘yucca stalk’) >

We cannot determine just how *-jka7j* relates to *-ik(a)*. It may be a stylistic or even a dialectal variant of *-ik(a)* or maybe. The final *-j* is unexplained. It is not an accusative suffix, as it appears in the nominative forms of the nominalization illustrated below in (6) and, further, *-jka7j* has an accusative in *-t\$aj* (6b).

The example in (3c) appears in Anderton’s (1988) dictionary in two different versions, adapted from Harrington’s notes. Under *wahea* ‘singe, roast’ she gives <way-ka7y> (p. 559), while under *waw* ‘roast’ she gives <wa-ik-ka7y> (p. 565), as an interpretation of Harrington’s <wajka7j>. Our segmentation is *wa-jka7j*. The suffix-initial *j* may relate to the ablaut vowel *i* that appears before reflexes of **-ka(-t)* in Inland Cupan, as mentioned above in connection with *-ik(a)*. It also seems possible that immediate-future *-jka7j* may relate to the dative case suffix *-jyk*. The semantic similarities between the immediate-future notion of “going to” or “intend to”, and the dative “towards a goal” are consistent

with this possibility. This idea in turn raises the possibility that for all of Takic, the dative and the immediate futures in **k* all derive from a common source.

Suffixes identical to immediate-future *-ik(a)* and *-jka7j* also appear on deverbal nouns. In this usage *-ik(a)* is quite common and exhibits widely varying agentive meanings, much more so than the “people responsible for” usage most typical of the derivation in SE and the Cupan languages. These are not immediate futures, because they have pronominal prefixes. They should probably be assigned to the “characterizing” category, alongside *-ka7*. Examples with *-ik(a)* appear in (4) and (5). The single attested example with *-jka7j* is in (6). Both suffixes have a plural in *-m*, with *-jka7j* losing its final *7j*. It seems likely that some of these are reflexes of Anderton’s “characterizing” suffix *-ka7*, and that we are in the presence of a confusion like that discussed above for SE *-qa7₁* ‘immediate future’ and *-qa7₂* ‘characterizing’. However, the data are inadequate for a secure disentangling.

- (4) KI a. *hakk-ik* ‘pest’, pl. *hakk-ika-m* (3.98.0478) < *hakk* ‘annoy’
 b. *ky\$a7 winikay-k* [‘bad’ + ‘remember’ + -CHAR] ‘ingrate, no good heart’, pl.
ky\$a7 winikay-ka-m (3.98.0464) < *winikay7* ‘remember’
 c. *kwat\$imuky-k* ‘a man who has a guardian spirit’ (literally, ‘dreamer’), pl.
kwat\$imuky-ka-m (3.98.0376; Anderton 1988:375)
 d. *oo\$ana-k* ‘writer’, pl. *oo\$ana-ka-m* (3.100.0770) < *oo\$an* ‘write’

- (5) KI *Hii-ta = t aam a-huts-k-ik.*
 INDF-ABS = IRR DIST 3SG-fall-K-CHAR
 ‘¿Qué es ése que nació? (What is it [boy or girl] that got born?)’ (3.98.0349)

Nominalized forms are attested with *-jka7j*, seen in (6). These can be derived from both noun and verb stems, typical of characterizing suffixes.

- (6) KI a. *havy-ka7j* ‘a baptized person’, pl. *havy-ka-m* (3.99.0635) (cf. *havy7-tu* ‘to get dressed’ (3.99.0437))
 b. *kii-ka7j* ‘captain’, pl. *kikitam* (3.98.0364)
 c. *kwiha-ka7j* ‘woman’, pl. *kwi~kwihakam* (3.98.0290)
 d. *niw-ka7j* ‘rich person’, pl. *niw-ka-m* (3.100.0211) (cf. *-niw* ‘possession’)
 e. *pavuha-ka7j* ‘rainmaker’ (cf. *pavuha-t\$u* ‘to plant a crop’)

- f. *poho-ka7j* ‘black hairy caterpillar’, pl. *poho-ka-m* (3.99.0274) (cf. *-poho* ‘body hair’)
- g. *to7-ka7j* ‘pregnant one’ (3.98.0349) (cf. *-to7* ‘belly’)
- h. *a7-uu-jka7j* ‘novia ([his] fiancée)’, pl. *a7-uu-jka-m* (3.98.0210) < *uu7* ‘take, take a wife, for a man to marry a woman’

Sometimes *-jka7j* may reduce to *-jk* or *-jka-* as in (7).

- (7) KI a. *Jy\$ = my a7-uu-jk.*
 where = (?) 3SG-marry.a.woman-IFUT
 ‘¿Ónde está su novia? (Where is his fiancée?)’ (3.98.0210)
- b. *Ni-hiu = nehe my7-uu-jka-t\$aj.*
 1SG-see = NEHE 2SG-marry.a.woman-IFUT-ACC
 ‘Yo vide [a] tu novia. (I saw your fiancée.)’ (3.98.0210)

12.3.4. THE NONFUTURE SUBORDINATOR *-IVA7*. Also documented for KI is the nonfuture subordinator *-iva7*, seen in (1). It is documented only for adverbial clauses and Anderton (1988:234) glosses this as ‘if’. We regard it a realis nonfuture subordinator, in line with its SE cognate *-iva7* (cf. 12.2.5.8). Like the SE cognate, KI *-iva7* can appear in conditional clauses, as in (1a); compare SE *pyy-qat\$-iva7* ‘if they had lived’ in 12.2.5.8 (3). With derivations from verbs, these constructions appear with subject prefixes and any cooccurring subject noun is in the genitive case, as in (1c). There is no prefix in (1g), where what appears to be this suffix is attached to the numeral ‘one’, *hawkup-iva7*. Anderton (1988:305) suggests this may instead be a variant of locative *-vea*.

As “possessed” forms with pronominal prefixes, these never appear in construction with an absolutive suffix, and being adverbials, they do not cooccur with an accusative suffix. While many of the examples have same subject, the subject changes in (1a,b,c), suggest that this is not a switch-reference suffix. Anderton (1988:458) suggests that the construction in (1d) may be an example of *-ivy*, otherwise documented in KI only as a decedent suffix, but Harrington’s transcription clearly has *-iva7*, and a realis interpretation makes perfectly good sense.

- (1) KI a. *Ni-waw = mat = um my-juu7-jva7.*
 1SG-hit = FUT = 1 > 2SG 2SG-cry-NFUT.SUB
 ‘Te voy tirar, si lloras. (I’m going to hit you if you cry.)’ (3.100.0844; Anderton 1988:234)
- b. *A-vihing-yk ni-ra7w-k-iva7.*
 3SG-break-K.INTR 1SG-sit-K-NFUT.SUB
 ‘The box broke when I sat down on it.’ (3.100.0517; Anderton 1988:234)
- c. *A-pits-iva7 ni-na7n, ni-tyho, a-pits ii-p*
 3SG-arrive-NFUT.SUB 1SG-father.GEN 1SG-tell 3SG-arrive PROX-LOC
pat\$uka-t a7-yjyw = vyn ni-paala7-tsaj.
 man-GEN 3SG-steal = 3 > 1SG 1SG-shovel-ACC
 ‘When my father came, lo avisé, llegó un hombre y me robó mi pala. (When my father arrived, I told him, a man came here who stole my shovel from me.)’ (3.100.0539; Anderton 1988:255)
- d. *A-paameatu7-jva7 a-nip-yk.*
 3SG-be.thirsty-NFUT.SUB 3SG-die-K.INTR
 ‘He died of thirst.’ (3.98.0462; Anderton 1988:458)
- e. *Ni-kuuman-iva7 ni-ngryhyr-yk.*
 1SG-sleep-NFUT.SUB 1SG-edge.down-K.INTR
 ‘Bajé durmido. (I slid down [the bed] while sleeping.)’ (3.100.0441; Anderton 1988:234)
- f. *Ni-hi~hiu = nehe ni-kwah~kwat\$imuk-iva7.*
 1SG-DUR~see = NEHE 1SG-VBLZ~dream.of.the.dead-NFUT.SUB
 ‘I saw him in my dream.’ (3.98.0233; Anderton 1988:247)
- g. *Hawkup-iva7 pyy-tut\$.*
 one-NFUT.SUB 3PL-grow.up
 ‘Crecieron juntos. (They grew up together.)’ (3.98.0480)

12.3.5. ADVERBIAL CLAUSES WITH MAHMAT. Future adverbial clauses introduced with *mah = mat* ‘when, if’ do not have subordinating suffixes, as shown in (1).

- (1) KI a. *Mah = mat uvea a-nip-yk, aa-py tsa-purah-yk*
 when;if = FUT already 3SG-die-K.INTR DIST-DAT 1PL-go.out-K.INTR
ii-peaj.

PROX-ABL

‘Cuando ya está muerto el hombre, vamos a salir de aquí. (When the man dies, we will go there from here.)’ (3.98.0478; Anderton 1988:232)

- b. *Mah = mat ni-mii, naw = mat = um ni-hiu.*
 when;if = FUT SG-go NEG = FUT = 1 > 2SG 1SG-see
 ‘If I go, I will not see you anymore.’ (3.100.0540; Anderton 1988:233)

12.3.6. THE DECEDENT SUFFIX -IVY. The KI decedent suffix is *-ivy* (Anderton 1988:144) and *-jvy* after a vowel (1b) or vowel plus glottal stop (1c-e). This may be the same element as the *-iv* component of the SE decedent suffix *-chui7v*. Unlike SE, where the decedent forms are attested only with kin terms (see 12.2.5.7), KI allows the use of the suffix with non-kin words and even with words for living creatures, as in (1d), describing a useless cat, perhaps a cat as good as dead, and in (1e), where a divorced wife is referred to in the same way as a deceased wife.

Unlike SE again, these forms take the simple *-j* accusative as in (1a), not the consonantal accusative *-Taj* (compare SE *Ny-qoo^h-chui7v-ti hiintu7*. ‘He married my older sister [now deceased].’). When decedent forms are not possessed, as in (1b), an absolutive suffix *-t\$* is present. Furthermore, the form may appear with a noun plural suffix *-m*, as seen in (1c,d). (The SE forms are attested only possessed and only in the singular.)

- (1) KI a. *A7-yyjhuun = uvu7 a-majha-j (or a-majha-j-7ivy-j).*¹
 3SG-want;like;love-PST 3SG-son-ACC 3SG-SON-ACC-DEC-ACC
 ‘She loved her dead son.’ (3.99.0550)

¹ The double accusative is remarkable: the decedent suffix has its own case inflection.

- b. *aatsita-7jvyy-t\$* ‘perro que era (dead dog)’ (3.98.0391)
- c. *ni7-aatsita-7jvy* ‘my dead dog, dog that I had’, pl. *ni7-aatsita-7jvy-m* (cf. *ni7-aatsit* ‘my [live] dog’) (3.98.0391)
- d. *ni-hiintua7-jvy* ‘my dead relative’, *a-hiintua7-jvy-m* ‘3SG’s dead relatives’ (3.98.0368)
- e. *ni-nymihunga7-jvy* ‘my late wife, divorced wife’ (3.98.0367)
- f. *Uvea ky\$a7, ngaaty7-jvy.*
 already bad cat-DEC
 ‘Ya no sirve, es viejo el gato. (Now it’s no good, the cat is old.)’ (3.100.0067)
- g. *ni-po7-jvy*
 3SG-road-DEC
 ‘my old trail (said cuando ya no voy allá [when I no longer go there])’
 (3.98.0391)

We have found a pair of examples where the *-ivy* suffix is glossed by Harrington as past (2a) and recent past (2b).

- (2) KI a. *a7-aah-ivy* ‘se bañó (she bathed)’ (3.100.0066)
 b. *a-hu-ivy* ‘it had been burning just recently (estaba quemando poco antes)’
 (3.100.0014)

In (3) Harrington notes that the derivation in *-ivy* is distinct from past-tense = *uvu7*, and (3b) is given by Harrington as distinct from (1c). These examples bring into question the accuracy of the transcriptions cited in (2).

- (3) KI a. *a-tsuung-ivy* ≠ *a-tsuung=uvu7*
 3SG-suck-“DEC” 3SG-suck = PST
 “*atsūŋivə* said when cuando ya está seco (sic) la flor (when the flower is now dry), *atsūŋuvu* ‘lo chupaba antes (it [the hummingbird] was sucking on it earlier)’ (3.98.0390)

b. *Ni7-aatsit = uvu7.*

1SG-dog = PST

‘Era mi perro. (It was my dog.)’ (3.98.0391)

There are also a few deverbal nouns with *-ivy*, seen in (4). Here the suffix has a perfect sense rather than meaning ‘dead, former, worn out’ as in the examples above.

- (4) KI a. *a-kat\$-ivy* ‘el par [the placenta], means onde estaba (the baby) [where (the baby) was]’ (3.98.0048); acc. *a-kat\$-ivy-j* (3.98.0350)
 b. *mu-mu-jvy-t\$* ‘where they shot’ (in a place name, *Mumujvyt\$ Tykoht*) (3.100.0185) [*Tykoht* is a kind of pine.]

KI *-ivy* probably corresponds to the SE realis subordinator *-iv(y)*, and to the *i*-ablauting Cupan realis subordinator **(-i)-vy*. However, the KI corpus includes no example of a complement clause with *-ivy*.

12.3.7. ACTION NOMINALIZATIONS IN *-I*. Relatively well attested in the KI data is an action nominalization consisting of a verb base with a subject prefix and a suffix *-i*. Such nominalizations appear in complement clauses with a wide range of main-clause predicates, as in (1). They do not occur as same-subject complements of *-uuyhuun* ‘like, want’. The only same-subject desiderative construction in KI consists of a verb stem plus the derived suffix *-ihuun*. (1g) provides an attestation of the contrast. Anderton calls these nominalizations “participles”; we follow her lead and gloss them PTCP. However, given that complements in SE are usually marked for accusative case, it is possible that this *-i* is simply an accusative case suffix on a zero nominalization. This construction appears as a complement with a wide range of main-clause predicates.

(1) KI a. *Ni-hi~hiu a-kwa7-j.*

1SG-DUR~see 3SG-eat-PTCP

‘I watch him eating.’ (3.98.0284; Anderton 1988:228)

- b. *Uvea ni-ma7j ni-ty7uuh-i.*
 already 1SG-finish 1SG-count-PTCP
 ‘Ya acabo de contar. (I already finished counting.)’ (3.98.0231; Anderton 1988:228)
- c. *Uvea ni-ma7y ni-wits-k-in-i.*
 already 1SG-finish 1SG-irrigate-K-CAUS-PTCP
 ‘I (already) finished irrigating.’ (3.98.0285; Anderton 1988:228)
- d. *A7-yn a-rioo7in-i.*
 3SG-know 3GS-shear-PTCP
 ‘Sabe trasquilar. (He knows how to shear.)’ (3.98.0283; Anderton 1988:229)
- e. *Ama7j naw ni-mirin ni-tuhtu7-j.*
 now NEG 1SG-can 1SG-dance-PTCP
 ‘Ahora no puedo bailar. (I can’t dance now.)’ (3.98.0466; Anderton 1988:207)
- f. *A-puytsu7 a-tuhtu7-j.*
 3SG-begin 3SG-dance-PART
 ‘Él comenzó a bailar. (He began to dance.)’ (3.98.0458; Anderton 1988:542)
- g. *Pyy7-uujhuun ni-kyma-n-i, ty naw ni-kyma-n-ihuun.*
 3PL-want 1SG-make-CAUS-PTCP but NEG 1SG-make-CAUS-DES
 ‘They made me (wanted me to) make it, but I did not want to [make it].’
 (3.98.0466; Anderton 1988:225)
- h. *Ny7 nih~nih-jy-t ni-kyma-n-i paan-taj.*
 1SG.PRO REP~do-AG-ABS 1SG-make-CAUS-PTCP bread-ACC
 ‘Yo estoy bueno para hacer pan. (I’m good at making bread.)’ (3.98.0231; Anderton 1988:229)
- i. *Ivi-ch = ivyn a-mak ni-paameatu7-j.*
 this-ABS = 3 > 1SG 3SG-give 1SG-be.thirsty-PTCP
 ‘Este atole me da sed. (This [corn-flour drink] makes me thirsty.)’ (3.98.0381; Anderton 1988:229)

12.3.8. HEAD-INTERNAL RELATIVE CLAUSES. Anderton (1988:235) suggests that a few examples in the KI corpus may be analyzed as “head-internal” relative clauses. This idea is based on the absence of accusative suffixes on the nouns that are the apparent object of the main verb, suggesting that they are in fact subjects in a dependent clause. We might expect such subjects to be raised to object position, but this does not occur. Note that in (1a) the speaker has misidentified the adjectivalizing prefix *a-* of *a-waak-i7* ‘dry’ (1a) as the 3SG prefix such that it is replaced by 3PL *pyy-* in (1b). The adjectivalizing prefix *a-* remains unchanged in the plural in (1d).

- (1) KI a. *Ni-hiu a-waak-i7 kut\$aa-t.*
 1SG-see ADJZ-dry-ADJZ wood;stick-ABS
 ‘Yo vide un palo seco. (I saw a dry stick.)’ (3.100.0521; Anderton 1988:236)
- b. *Ni-hiu pyy-waak-i7 (sic) kut\$aa-m.*
 1SG-see 3PL-dry-ADJZ wood;stick-PL
 ‘Yo vide palos secos. (I saw dry sticks.)’ (3.100.0521; Anderton 1988:236)
- c. *Ny7 ni-hiu a-ty7a tymy-t.*
 1SG.PRO 1SG-see ADJZ-big stone-ABS
 ‘I saw a big stone.’ (3.100.0340; Anderton 1988:236)
- d. *Ny7 ni-hiu a-tyh~ty7a ty~tymy-t.*
 1SG.PRO 1SG-see 3SG-PL~big PL~stone-ABS
 ‘I saw a big stones.’ (3.100.0557; Anderton 1988:236)

This analysis might also explain the situation with numerals and other quantifiers, as seen in (2). These items may be functioning as predicates (numerals are verbs in the nearby Yuman languages). In (2a) the relative clause would be discontinuous, which is of course possible.

- (2) KI a. *Wyyr ni-hiu kut\$aa-t.*
 much;many 1SG-see wood;stick-ABS
 ‘Vide mucho. (I saw a lot [of wood].)’ (3.100.0396; Anderton 1988:236)

- b. *A-maka = vyn* *a-paano* *mahat\$*.
 3SG-give = 3SG > 1SG 3SG-egg five
 ‘Me dió 5 huevos. (He gave me five eggs.)’ (3.100.0452; Anderton 1988:236)

Other examples that Anderton translates as relative clauses are probably simply examples of juxtaposition, and the original Harrington translations are of that type, e.g., for (3a), ‘A man came and he wanted to drink water’. In (3a) the word for ‘man’ is in the nominative case while in (3b), repeated from 12.3.4 (1c), it is in the genitive case. This may indicate that in (3a) it is the main-clause subject while in (3b) it is a subordinate-clause subject. The introductory subordinate clause of (3b) also shows a genitive-case subject. We accordingly modify Anderton’s English translation by the insertion of “[that]”.

- (3) KI a. *A-pits = nehe* *paat\$uk* *a-paa-jhuun* *paa-t\$a-j*.
 3SG-arrive = NEHE man 3SG-drink-DES water-ABS-ACC
 ‘Llegó un hombre y quiso tomar agua. (A man arrived who wanted to drink some water.)’ (3.100.0540; Anderton 1988:237)
- b. *A-pits-iva7* *ni-na7n,* *ni-tyho,* *a-pits* *ii-p*
 3SG-arrive-NFUT.SUB 1SG-father.GEN 1SG-tell 3SG-arrive PROX-LOC
pat\$uka-t *a7-yjyw = vyn* *ni-paala7-tsaj*.
 man-GEN 3SG-steal = 3 > 1SG 1SG-shovel-ACC
 ‘When my father came, lo avisé, llegó un hombre y me robó mi pala. (When my father arrived, I told him [that] a man came here who stole my shovel from me.)’ (3.100.0539; Anderton 1988:255) [= 12.3.4 (1c)]

12.3.9. UNMARKED SUBORDINATION. Verbs in embedded questions are formally indistinguishable from main verbs, as seen in the pairs below.

- (1) KI a. *Ymy7* *my7-yn* [*hii-ta-j = t* *ni-mavi7*].
 2SG.PRO 2SG-know what-ABS-ACC = IRR 1SG-do
 ‘Tú sabes lo que estoy haciendo. (You know what I am doing.)’ (3.98.0477; Anderton 1988:223)

- b. *Hii-ta-j = t* *my-mavi7*.¹
 what-ABS-ACC = IRR 2SG-do
 ‘¿Qué estás haciendo? (What are you doing?)’ (3.98.0477)
¹ We assume that KI has the same pattern of intonation as SE (and English), where question-word questions exhibit no rising, question intonation.

- (2) KI a. *Ayn = atsi7* [*haii-pea = t* *a-kat\$*].
 show.IMP = 2SG > 1SG where-LOC = IRR 3SG-be; dwell; live
 ‘Show me where it is!’ (3.98.0469; Anderton 1988:223)

- b. *Haii-pea = t* *my-kat\$*.
 where-LOC = IRR 2SG-be; dwell; live
 ‘¿Ónde vives? (Where do you live?)’ (3.100.0383)

- (3) KI a. *Wirap-k-i* [*tym hamina = t = nehe* *my-hiu*].
 leave-K-CAUS.IMP like INDF.manner = IRR = NEHE 2SG-see
 ‘Leave it (the door) as you found it!’ (3.98.0479; Anderton 1988:223)

- b. *Ny = m* *ni-hiu*.
 1SG.PRO = 1 > 2SG 1SG-see
 ‘Yo te miré. (I saw you.)’ (3.100.0581)

Similarly, predicates in adverbial clauses with counterfactual conditionals have no special marking of subordination.

- (4) KI a. *Ty = mykwat\$u7* *ni-tsyk*, *a-juu7 = mykwat\$u7*.
 if = CFAC 1SG-stick;stab 3SG-cry = CFAC
 ‘If I had stuck him (with the scissors), he would have cried.’ (3.100.0538;
 Anderton 1988:233)

- b. *Ty = myk = nehe* *naw* *a-nip-yk*, *a-kat\$ = myk = nehe*
 if = CFAC = NEHE NEG 3SG-die-K.INTR 3SG-be; dwell; live = CFAC = NEHE
kii-vea.
 house-LOC
 ‘If he hadn’t died, he would still be living in the house, si no hubiera muerto, hubiera estado en la casa.’ (3.100.0844; Anderton 1988:233)

CHAPTER 13

SUBORDINATE-CLAUSE VERBS IN CUPAN

13.0. Introduction. The structure of the subordinate-clause predicate constructions is similar in all the Cupan languages, though with some minor differences. To facilitate identifying comparative details, this chapter is organized by subordinate-clause type, with the relevant structures for each language treated there. Since most of the suffixes that mark subordinate predicates in relative clauses also appear in other clause types such as complements, embedded questions, purpose clauses and other adverbial clauses, those clause types are treated in the same sections as the relative clauses.

One important difference between Cupan and the other Takic languages should be mentioned. The seriation-like constructions with motion verbs that appear in TV (12.1) and in the Serran languages (12.3, 12.8.1) are not attested in the Cupan languages. In Cupan, the corresponding functions are accomplished by derivation with motion suffixes or by purpose clauses with a subordinate predicate under a main-clause motion verb.

13.1. SWITCH REFERENCE IN CUPAN. The Cupan languages share one of the switch-reference suffixes with SE, a same-subject suffix from PTak **-nikwi* (perhaps **-nuki*); cf. SE *-nuk(i) ~ -nkw* (12.2.4.2).¹⁴⁰ This suffix appears mainly as *-nuk* in Cupan but a variant *-nik* occurs in both LU and MCA (3.112.0401). The variant *-nik* is found in the usage of Villiana Hyde (1971:220) and in Kroeber and Grace (1960:149, 191).¹⁴¹ The *-nik* variant underlies AC *-nak*, which results from the regular AC sound change, unstressed **i > a*. In Inland Cupan, *-nuk/-nik* is an *a*-ablauting suffix: *(-a)-nuk/(-a)-nik*.

The suffix from **-nikwi* has different temporal functions in the languages. In LU and CA, it encodes only prior time. In CU, it can mark both prior and simultaneous temporality. Only LU has a specialized inflection for simultaneous-time same-subject reference. In contrast, each language has distinct suffixes for change of subject. The LU different-subject suffix *-qala* encodes simultaneity in temporal adverbials. In CU, the

¹⁴⁰ The apparent Hopi cognate is *-nik*, a same-subject subordinator with an 'if/then' sense.

¹⁴¹ Kroeber and Grace (1960:149) cite the variant *-nik* in their discussion of the "gerund" *-nuk* but give no example. An example with *-nik* can be found on p. 191.

different-subject suffixes appear only in simultaneous-time temporal adverbial clauses. In CA, different-subject suffixes can encode diverse temporal relationships.

In Inland Cupan, switch-reference marking is largely restricted to adverbial clauses, as is same-subject tracking in Coastal Cupan. However, in LU different-subject tracking can be marked in a wider range of clause types including relative clauses and complements, as an alternative to marking with other types of subordination. DCA has a same-subject suffix for future relative clauses.

All of the Cupan languages have relatively rigid syntactic control for switch reference. For instance, for LU, with a large corpus of over a thousand pages of text, we have found fewer than half a dozen exceptions to this generalization. This is in contrast to SE, where subject reference is only one dimension of discourse continuity and discontinuity expressed through switch reference.

13.1.1. SWITCH REFERENCE IN COASTAL CUPAN. The LU and AC switch-reference suffixes are given in (1).

(1)	same subject	LU	AC
	prior	<i>-nuk ~ -nik</i>	<i>-nak</i>
	simultaneous	<i>-wunu-t ~ -a-t</i> , pl. <i>-wun-tu-m ~ -an-tu-m</i>	(?)
	different subject	<i>-qala</i>	<i>-qala</i>

13.1.1.1. SAME-SUBJECT SUBORDINATION. Two suffixes appear on verb constructions in adverbial clauses which have the same subject as the main clause: “prior” *-nuk ~ -nik* and “simultaneous” *-wunu-t ~ -a-t*. Only the first of these is attested in AC, as *-nak*. In AC, *a* is the regular correspondent of LU unstressed *i* (cf. AC accusative *-a* for LU *-i*), and it often corresponds to LU unstressed *u*. A probable AC cognate of *-wunu-t* is *-(w)an7-t*, but this sequence derives adjectives and has no role in switch reference.

Same-subject subordination with these suffixes is largely restricted to temporal and conditional adverbial clauses. Temporal adverbial clauses with predicates with LU *-nuk ~ -nik* and AC *-nak* are “prior” in relation to their reference clauses, and the two clauses can appear in either order. Examples are seen in (1).

- (1) LU a. *Pi7 om i-va7 tava7-a-an iví-j kulaawu-t*
 and 2SG.PRO PROX-LOC sit-INTR-FUT PROX-ACC stick-ABS
ku\$án-i-nuk.
 take-TR-SS.PRIOR
 ‘And taking this stick, you will sit here.’ (K&G 190 16)
- b. *Ano7=kunu7 pa7 chulúp-i-nik te7-jax punéj*
 coyote = QUOT then go.in-TR-SS.PRIOR prop-TR.PST.PFV 3SG.INAN.ACC
too-t.
 rock-ABS.ACC
 ‘It is said Coyote then, upon going in, propped up that rock.’ (K&G 191 23)
- c. *Pi7 kiika-tu-m mij-qu\$ awoo-nga,*
 and child(pl.)-ABS-PL be-PST.IPFV different-LOC
tap-a-nik.
 pass.away(pl.)-INTR-SS.PRIOR
 ‘But children were different when they died.’ (H&E 71)
 The ritual requirements following death were different from those for adults. The same-subject
 suffix expresses prior temporality.
- AC d. *Kalaw-tal poor-a7-nak iidh-a7 ech-ko-k.*
 stick-INS poke-TR-SS.PRIOR pry-TR.IMP high-ADJ-DAT
 ‘Inserting the point of a stick (under it), raise (pry) it up.’ (3.123.0483)
- e. *Ni-j=p xetch-a-q po-ma-j nakk-a-nak.*
 1SG.PRO-ACC = 3SG hit-TR-NFUT.SG 3SG-hand-ACC close-TR-SS.PRIOR
 ‘Me pegó con su mano cerrado, he hit me a blow with his fist.’ (3.123.0628)

With the addition of durative *-qa-* (< *-qal*, discussed in 13.3.2 below) before *-nik*, the subordinate clause has a more imperfective sense, with “the action going on a while longer” (Elliott 1999:43). This blurs the distinction of “prior” and “simultaneous” action; the examples in (2) all appear to permit a simultaneous interpretation. Kroeber and Grace (1960:149), though, “find no difference” between clauses with *-qa-nik* or with just *-nik*.

- (2) LU a. *Pi7 naqma-qa-nik noo wehma-l-i pilách-ax.*
 and hear-DUR-SS.PRIOR 1SG.PRO little-ABS-ACC learn-TR.PST.PFV
 ‘But by hearing it I learned a little bit.’ (H&E 304)
- b. *Poo-xa takwáj-ja i-va7 aaw-qa-nik.*
 3SG-own die-INTR.PST.PFV PROX-LOC dwell.SG.ANIM-DUR-SS.PRIOR
 ‘He just died while living here.’ (H&E 106)
- c. *Pi7 ataax-u-m mujuku-m ... pom-jaax pat-i-vichu-wun,*
 and person-AUG-PL many-PL 3PL-try shoot-TR-DES-PRS.PL
mokna-vichu-wun, \$uuka-t-i puloov-i winge7-qa-nik.
 kill-DES-PRS.PL deer-ABS-ACC good-ACC mistake-DUR-SS.PRIOR
 ‘And many men ... try to shoot and kill it, mistaking it for a real deer.’ (H&E 45)

The suffix sequence *-wunu-t* (pl. *-wun-tu-m*) ~ *-a-t* (pl. *-an-tu-m*) appears only when the subordinate-clause predicate is temporally simultaneous with the main-clause predicate, as in (3). We give several examples since this suffix sequence was not noted in the treatment of LU switch reference in Hill (2016).¹⁴² The allomorphs with initial *a*, as in (3f) and in (4c) below, appear with intransitive thematic verbs of the *-ax* class, with the *x* of the thematic suffix being lost (see 4.4.7).

- (3) LU a. *Ngaa-qu\$ aaw-wunu-t.*
 cry-PST.IPFV be.there.SG.ANIM-SS.SIMUL-ABS
 ‘He just stood there crying [He was crying standing there].’ (H&E 1356)
- b. *Po-j toow-wunu-t noo ijqu\$ pilách-i-qu\$*
 3SG.PRO-ACC watch-SS.SIMUL-ABS 1SG.PRO also learn-TR-PST.IPFV
punéj no-luvi7-i-pi-j.
 3SG.INAN.ACC 1SG-do-TR-IRR-ACC
 ‘By watching her I also learned how to do it.’ (H&E 745)

¹⁴² The suffix is listed under *-wut* in Elliott’s (1999) dictionary. This must be an error; the only examples in that entry of *-wu-t* are augmentatives on nouns.

- c. *Noo toj7-a-qat o-j chaqálaq-i-wunu-t.*
 1SG.PRO laugh-INTR-RPST.SG 2SG-ACC tickle-TR-SS.SIMUL-ABS
 ‘I was laughing while I tickled you.’ (Jacobs 1975:95)
- d. *Po-j o-jow-i-pi mij-q po-j toow-wunu-t.*
 3SG.PRO-ACC 2SG-aim-TR-IRR be-PRS.SG 3SG.PRO-ACC see-SS.SIMUL-ABS
 ‘You might take aim at it when you see it.’ (H&E 340)
- e. *O-j toow-wunu-t ngaa-maan.*
 2SG.PRO-ACC see-SS.SIMUL-ABS cry;weep;sing-FUT.IPFV
 ‘It will begin to sing when it sees you.’ (H&E 384)
- f. *Neech-i-qu\$ tacha~laach-a-a-t.*
 prowl-TR-PST.IPFV sparkle~REP-INTR-SS.SIMUL-ABS
 ‘It prowled around sparkling as it went.’ (H&E 867)

While the same-subject subordinators *-nik ~ -nuk* is not marked for concordance in number with the subject, the “simultaneous” suffix sequence *-wunu-t ~ -a-t*, with *-t* as an absolutive suffix, is so marked, with plural *-wun-tu-m ~ -an-tu-m*, as in (4). Jacobs (1975:95) states that constructions with *-wunu-t(u)* can also be marked for accusative case, in agreement with their subjects. However Jacobs provides no example, and we have not found any in Hyde and Elliott (1994). We would not expect accusative suffixation on an adverbial clause predicate.

- (4) LU a. *Wuna7 wiita-qu\$ chaam-i toow-wun-tu-m.*
 DIST.LOC stand-INTR-PST.IPFV 1PL.PRO-ACC watch-SS.SIMUL-ABS-PL
 ‘There they stood watching us.’ (H&E 982)
- b. *Pumóm waxáki-la-m wuna7 qal-wun-tu-m mujuk-m-i*
 3PL.PRO frog-ABS-PL DIST.LOC be.there-SS.SIMUL-ABS-PL many-PL-ACC
ku7áa-l-m-i qwa-xwa.
 fly-ABS-PL-ACC eat-PST.PFV
 ‘While those frogs were there they ate many flies.’ (Elliott 1999:781)

- c. *Oonu heel-uk ngór-a-an-tu-m wamki-jk.*
 PROX2 sing-USIT run(pl.)-INTR-SS.SIMUL-ABS-PL ceremonial.house-DAT
 ‘That’s what they would sing while running to the ceremonial house.’ (H&E 233)

Since *-wunu-t* can have singular subjects, it seems likely that it is cognate with the stative imperfective suffix in CU (*-wy(n)*, 11.5.2) and CA (*-wen*, 11.6.1.6). Jacobs (1975:188) derives the *-aa* ~ *-an* allomorphs from a suffix sequence *-ax-wun*. These are identical to the adjective-forming suffix in derivations like *áva-a-t* ‘red’, pl. *áva-an-tu-m*. AC has adjectival suffix sequences *-an7-t* following intransitive bases, and *<-want>* ~ *<-wont>* (probably *-wan7-t* ~ *-won7-t*) following transitive bases, but none of these appear in examples that suggest that reference tracking is being encoded. In (5a,b) the subject has changed, while in LU *-wunu-t* is a same-subject suffix. (5b) has an accusative suffix, not attested with the LU same-subject sequence. Here we gloss the suffix, following Elliott 1999, as ‘present participle’ (PRS.PTCP).

- (5) AC a. *Noo=n toow-q kalaw-t haves-x-an7-t.*
 1SG.PRO=1SG look;see-NFUT.SG wood-ABS thin-INTR-PRS.PTCP-ABS
 ‘I am looking at the thin board (the wood that is thin).’ (3.123.0542)
- b. *Noo=n tuk-man too-t*
 1SG.PRO=1SG carry.on.back-FUT.IPFV rock-ABS
wim7-x-an7-t-a.
 heavy-INTR-PRS.PTCP-ABS-ACC
 ‘Yo llevo en el hombro piedras pesadas. (I [will] carry heavy rocks [rocks that are heavy] on my shoulder.)’ (3.123.0592)
- c. *paa-l liwwa-wan[7]-t*
 water-ABS cold-PRS.PTCP-ABS
 ‘agua fría (cold water [water that is cold])’ (3.122.0045)

13.1.1.2. DIFFERENT-SUBJECT SUBORDINATION. Constructions with the different-subject suffix *-qala* always have a subject prefix. In contrast with the restriction of LU *-nuk* ~ *-nik* and AC *-nak* to adverbial clauses, *-qala* appears as well in complements, relative

clauses (with temporal simultaneity with the reference clause), and in embedded questions. Only rarely does *-qala* appear with accusative or a local case suffix.

The examples in (1) show *-qala* in temporal and conditional adverbial clauses.

- (1) LU a. *Heelaxi-sh [ataax po-takwaj-a-qala] mij-q.*
 song-ABS person 3SG-die(sg.)-INTR-DS be-PRS.SG
 ‘There is a song for when someone dies.’ (H&E 154)
- b. *Pa7=kunu=m [po-wax-a-qala] punéj hati7-uk*
 then=QUOT=3PL 3SG-dry-INTR-DS 3SG.INAN.ACC go-INTR.USIT
 ‘When it was dried, they would go.’ (K&G 183 8)
- c. *Man=\$u=n qaj, pi7 oonu axáninik wol-an, [qaj*
 or=Q=1SG NEG and PROX2 like grow-FUT NEG
no-7in-i-qala].
 1SG-remove-TR-DS
 ‘If I don’t, then it will grow, if I don’t remove it.’ (H&E 237)
- AC d. *amu7 tawpa-ch po-nol-qala*
 very;many year-ABS 3SG-pass.by-DS
 ‘muchos años pasados (many past years)’ (3.122.0169)

The suffix *-qala* is often found in locational clauses, as shown in (2).

- (2) LU a. *Pa7=kuna7 hati7-uk wuní-jk [paa-la po-mij-qala],*
 then=QUOT go-INTR.USIT DIST-DAT water-ABS 3SG-be-DS
[micha7 paa-la po-ja7-qala], [micha7 paa-la
 INDF.LOC water-ABS 3SG-run-DS INDF.LOC water-ABS
po-kwooj-a-qala].
 3SG-lie.flat-INTR-DS
 ‘They reportedly used to go to where there was water, where water ran, and where there was a pond.’ (H&E 1271)

- AC b. *Wona7 aa7qw [pom7-juun-qala].*
 DIST.LOC be.there.SG.ANIM.NFUT.SG 3PL-join.together(intr)-DS
 ‘Ay está en la junta. (He is there at the meeting [there where they are assembled].)’ (3.123.0409)

In this locational usage, different-subject *-qala* may seem to overlap with clauses with same-subject *-vu* and *-pi* (cf. 13.3.1). Example (3) suggests that relative tense may be involved, with *-qala* tending toward simultaneity and *-vu*, the realis subordinator, being more appropriate for priority or pastness.

- (3) LU *Pi7 no-jo7 ngee-ngi i-jk [wuna7 pepper tree*
 and 1SG-mother go.away-GO& PROX-DAT DIST.LOC
po-\$e7-qala], [cham-chox-ax-vu-nga].
 3SG-stand-DS 1PL-be.born-INTR-REAL.SUB-LOC
 ‘And my mother left for where the pepper tree was standing, where we were (had been) born.’ (H&E 716)

In the examples in (2) and (3), a locational specifier – a locative form of a demonstrative – appears in the locational clause. If no such specifier is present, *-qala* can be further suffixed with local suffixes, as in (4). Constructions with the object-relative-clause suffixes *-vu* and *-pi* (see 13.3) also behave this way (as with *chamchoxaxvunga* in (3)).

- (4) LU a. *Wuko7-uk uwo7-i-vuk-tu-m Miisi-nga po-j*
 arrive-USIT work-TR-AGTV-ABS-PL Sunday-LOC 3SG.PRO-ACC
[pom-7uwo7-a-qala-ngaj].
 3PL-work-INTR-DS-ABL
 ‘The workers would come home from work (from where they worked) on Sunday.’ (H&E 1049)

- b. *Pa7 = kuna7 pa7 po7 po-j hoti-j-m*
 then = QUOT then 3SG.PRO 3SG.PRO-ACC take-GO&-PST.PFV
i-jk a\$un-ik [pom-chuj-i-qala-jk].
 PROX-DAT 3SG.INAN-DAT 3PL-burn-TR-DS-DAT
 ‘And so she reportedly took her to the *chuyish* burning ceremony (to where they were burning).’ (H&E 1068)

The examples in (5) show *-qala* in complement clauses. As with the locational clauses, *-qala* in complements overlaps with complements with *-vu* and *-pi*. Complement clauses with *-vu* and *-pi* nearly always have accusative suffixes and the LU examples in (6) also show the accusative suffix. The AC example does not; we would expect accusative *-j*, based on examples like *na-maa-j* ‘my-sleeve-ACC’ (3.123.0607).

- (5) LU a. *Oonu axáninik noo ajál-i-qu\$ ijqu\$ [punéj*
 PROX2 like 1SG.PRO know-TR-PST.IPFV also 3SG.INAN.ACC
po-luvi7-i-vuta-qala-j].
 3SG-do-TR-POT-DS-ACC
 ‘I also knew that he could do it.’ (H&E 942)
- b. *Pi7 no-jo7 wam7 ajál-i-qu\$ [po-takwáj-ax-pi*
 and 1SG-mother already know-TR-PST.IPFV 3SG-die-INTR-IRR.SUB
po-mij-qala-j].
 3SG-be-DS-ACC
 ‘But my mother already knew that her time had come to pass away.’ (H&E 1085)
- c. *Qaj = up hax po-jk jax-án ivi7 [o-toow-qala-j*
 NEG = 2SG INDF.HUMAN 3SG.PRO-DAT say-FUT PROX 2SG-see-DS-ACC
i-va7].
 PROX-LOC
 ‘You will tell nobody what you have seen here.’ (K&G 209 28)

Unlike the examples above, those in (6) lack accusative suffixes. The conditions that permit this are unclear.

- (6) LU a. *Po7 axáninik po7 o7na-qu\$ [kwoot-ax-lu-t*
 DET like 3SG.PRO know-PST.IPFV get.up-INTR-IFUT.SG-ABS
po-mij-qala].
 3SG-be-DS
 ‘That way he knew that the person was going to get better.’ (H&E 160)

- AC b. *Noo=n naqma-77a-q na-jo pa-tkwej7-qala.*
 1SG.PRO=1SG hear-TR-NFUT.SG 1SG-mother 3SG-die-DS
 ‘I heard that my mother had died.’ (3.123.0395)

Relative clauses and embedded questions with *-qala* are shown in (7). These lack accusative suffixes. *-qala* appears to be the preferred subordinator in relative clauses where there is a change of subject between main and relative clause.

- (7) LU a. *Om=up qaj punéj luvi7-i-q [no-jaa-qala].*
 2SG.PRO=2SG NEG 3SG.INAN.ACC do-TR-PRS.SG 1SG-say-DS
 ‘You’re not doing what I told you.’ (H&E 1357)
- b. *Noo=nu=pu o-jk oov-i-n [choo7un hi-sh*
 1SG.PRO=1SG=IRR 2SG.PRO-DAT give-TR-FUT all INDF-ABS.ACC
o-ma7ma-qala].
 2SG-want-DS
 ‘I’ll give you everything you want.’ (H&E 1323)
- c. *Punéj noo luvi7-i-n [micha7 o-ma7ma-qala].*
 3SG.INAN.ACC 1SG.PRO do-TR-FUT something 2SG-want-DS
 ‘I will do whatever you want.’ (H&E 1348)
- d. *Unán-ax amaaju-m [po-j hii-cha po-jaw-ngi-qala].*
 know-PST.PFV youth-PL 3SG.PRO-ACC INDF-ABS 3SG-catch-GO&-DS
 ‘The boys realized what had gotten him.’ (H&E 1255)

- e. *Po-7aachu-m animal-u-m unán-ax [hax*
 3SG-dog-PL animal-AUG-PL know-PST.PFV INDF.HUMAN
po-mon-qala].
 3SG-come-DS
 ‘His dogs realized who had come.’ (H&E 1326)

The AC materials include a suffix *-qal*, which is used to form participles in complement clauses that have a different subject from that of the main verb in all the examples. This is not the same suffix as LU *-qala*, since there is no subject prefix in constructions with AC *-qal*. Some examples appear in (8).

- (8) AC a. *Noo=n qaj ajall-a7-qat wom7 tuukmo-nga mij-qal.*
 1SG.PRO=1SG NEG know-TR-RPST already night-LOC be-DS.PTCP
 ‘Yo no sabía que era tan noche. (I did not know that it was already
 nighttime.)’ (3.123.0442) [repeated from 11.4.3 (3c)]
- b. *Noo=n naqma-q xaal-qal.*
 1SG.PRO=1SG hear-NFUT.SG make.noise-DS.PTCP
 ‘Estoy oyendo el ruido. (I am listening to the noise.)’ (3.123.0646)

13.1.2. SWITCH REFERENCE IN CUPEÑO. CU switch-reference suffixes, shown in (1), appear only in temporal adverbial clauses. The same-subject suffix *-nuk* appears in both prior and simultaneous contexts. However, the different-subject suffixes are restricted to simultaneous temporal adverbial clauses. In prior temporal adverbials, constructions with the realis subordinator *-vy* are used; in rare cases of non-simultaneous subsequent temporal adverbials, the irrealis subordinator *-pi* appears.

- (1) CU same subject *-nuk*
 different-subject simultaneous *-qali/-wyni ~ -lyy*

Examples of the same-subject suffix *-nuk* appear in (2). The CU materials show that *-nuk* is *a*-ablauting, with the vowel *a* appearing following stressless verb roots or the suffixes *-qal*, *-wyn*, and *-jax* (the last is seen in (2b)). There are no subject person markers

in *-nuk* constructions, nor does any other inflection such as plural or case appear with these forms.

- (2) CU a. *Mu=ku7ut [pi_7am-i-nuk], pi_pý-myq.*
 and=QUOT 3SG.OBJ_knock.down-TR-SS 3SG.OBJ_3SG-kill(sg.)
 ‘And knocking him down, he killed him.’ (Hill 2005:406 (1a))
- b. *Ku7ut pymym awá-li-m sulul=pym-jax-wyn*
 QUOT DET.PL dog-ABS-PL go.in(pl.)=3PL-INTR-PST.IPFV.PL
pa-nga, [aja atáxa-j py-jik mujaq-jax-a-nuk].
 water-LOC now person-ACC 3SG-DAT go.out(pl.)-INTR-ABLAUT-SS
 ‘It is said those dogs went back into the water after revealing themselves to a person.’ (H&N 49-50[98-99] (15))

The different-subject simultaneous switch-reference suffixes are suppletive for number: *-qalì* ‘different-subject singular’ and *-wynì* ‘different-subject plural’. Constructions with these suffixes have pronominal prefixes; these appear following the verb root in the case of thematic verbs, as in (3a). The final *i* on these suffixes has a strong secondary stress. Examples appear in (3).

- (3) CU a. *Qaj=\$y=p [ni_naqma-qal-y-t*
 NEG=Q=2SG.ERG 1SG.OBJ_hear-PST.IPFV.SG-NMLZ-ABS
[i_kwaw=ny-qalì]] Ø?
 2SG.OBJ_call=1SG.TR-DS.SG be
 ‘Didn’t you hear me calling you?’ (Hill 2005:409 (5b))
- b. *Mu=ku7ut mi_pym-naqma-wyn [py7-muutu-wynì].*
 and=QUOT 3PL.OBJ_3PL-hear-PST.IPFV.PL 3PL-hoot-DS.PL
 ‘They heard them hooting like owls.’ (H&N 9[18] (20))

A special suffix *-lỳy* is used for different subject with the position verb *qal* as in (4), and with *wyn* ‘put (pl.obj.)’ in (5). The latter stem is also attested with *-qalì/-wynì*. In (4) the different-subject suffix appears in spite of the misleading English translation; the verb *yqalỳy* (with *l < l-l*; cf. 4.5.4.1) is the complement of a third-person-subject verbless

clause. A directive clause like that with *y-nengú-pi* is often expressed with *mijaxwy* ‘it is’, but it is \emptyset in this example, so the unexpressed subject (\emptyset at the beginning of the sentence) is something like English pleonastic “it.”

- (4) CU \emptyset [[*Y-naxachu-qali*] [*myn qaaw-i-sh y-qa-lỳy*]],
 3SG 2SG-become.old.man-DS or sick-NMLZ-ABS 2SG-be-DS
py-chi [*y-taxwi y-nyngú-pi*] \emptyset .
 3SG-INS 2SG-REFL 2SG-care-IRR.SUB be
 ‘It’s that when you get old or are sick, you have to take care of yourself with it.’
 (H&N 28[56] (27))

- (5) CU *My = kwy py-jka-ngax py-hisyxvy-j py-qish-ki7a-j*
 and = POT 3SG-DAT-ABL 3SG-goods-ACC 3SG-money-POSS-ACC
py-myn, kutvy7vy7y-sh py-vy wyn-á-lỳy axwá-nga.
 3SG-COM firetender-ABS 3SG-over put(pl.obj.)-ABLAUT-DS DIST-LOC
 ‘And the next time (he_i comes) with his_i goods, his_i money, the firetender_j puts
 them over him_j there.’ (Faye Images 258 30)

13.1.3. SWITCH REFERENCE IN CAHUILLA. The switch-reference suffixes of CA are given in (1). DCA and MCA appear to have the same systems, with the exception of restrictions on the future relative-clause suffix *-nax* in MCA.

- (1) CA same subject *-nuk*
 different subject *-ipa7*

As in SE, but unlike LU and CU, the suffix *-nuk* is used in CA only if the event of the adverbial clause is temporally prior to that of the main clause. However, unlike SE and LU, CA lacks a special same-subject suffix for simultaneous action. Instead, in such cases subordination is marked with *-qal-i-ve/-wen-i-ve* (see 13.3.3). These suffix sequences have many other functions and are not sensitive to syntactic subject control. The different-subject suffix *-ipa7* is found only in CA.

The examples in (2) show the same-subject, prior-event suffix *-nuk*. The same-subject suffix *-nuk* induces an ablaut vowel *a* when it follows the verb bases and suffixes listed in 10.6.1 (10). Thus, in (2a), ablaut *a* appears following *mekan* ‘kill (sg.obj.)’ (syncopated

to *mekn-* in the example), but not *p̄ii* ‘bewitch.’ Example (2a) also illustrates one of the lexicalized *-nuk* constructions, *exenuk* ‘thus’ (CU has *ixanuk*, literally ‘so doing’). Example (2c) shows *-nuk* in a conditional clause.

- (2) DCA a. *Exenuk hem-neken, pe-e-mekn-a-nuk*
 thus 3PL-come 3SG.OBJ-3PL-kill(sg.)-ABLAUT-SS
pe-em-p̄ii-nuk hem-nuk-a-j hem-tav-a-j
 3SG.OBJ-3PL-bewitch-SS 3PL-creature-NMLZ-ACC 3PL-put-NMLZ-ACC
*me-j_tav-i-ch-i.*¹
 3PL-ACC_put-NMZR-ABS-ACC
 ‘That is how they came after they had killed, after they had bewitched their creature, their maker, their creator.’ (Seiler 1970:63 328)
¹ At 10.6.2.1.3, *tav* is listed as the singular of a pair of verbs suppletive for number of object; perhaps it behaves differently in nominalizations.
- b. *Tuleka = el h̄iiche-qal huya-j pi-hivin-a-nuk.*
 morning = QUOT go-NFUT.SG arrow-ACC 3SG > 3SG-take(pl.obj.)-ABLAUT-SS
 ‘Early in the morning he went off, having taken his bow and arrows.’ (Seiler 1970:127 162)
- c. *Pe7e e-muk-pi mijax-we, pe7i-j*
 DET 2SG-die-IRR.SUB be-ST 3SG.PRO-ACC
pe-7-qwach-a-nuk, man pe-7-7aj-a-nuk.
 3SG.OBJ-2SG-eat-ABLAUT-SS or 3SG.OBJ-2SG-gather-ABLAUT-SS
 ‘You could die, if you were to eat it, or gather it.’ (S&E 1012)
- MCA d. *Tax_ne-chumn-a-nuk ne-taxwáa7-i wichiw peso*
 REFL_1SG-finish-ABLAUT-SS 1SG-work-ACC four dollar
tax_ne-mukn-i7i
 REFL_1SG-earn-FCT
 ‘When I finished my work, I had earned four dollars.’ (3.112.0018)

The different-subject adverbial subordinator *-ipa7* (also heard as *-epa7*) is not sensitive to temporal priority. The suffix can follow the uninflected verb base, as in (3a,b),

or the nonfuture suffixes *-qal* and *-wen*, as in (3c,d,e). Pronominal prefixes for subject are required in constructions with *-ipa7*.

- (3) DCA a. *Mawa ne-hich-ipa7 pe-7-temi-na kimu-7l-i.*
 tomorrow 1SG-go-DS 3SG.OBJ-2SG-lock-HORT door-ABS-ACC
 ‘Tomorrow, after I (shall) have left, lock the door.’ (Seiler 1977:145 (165))
- b. *Jewi taxliswe-te-m hem-7ijax-wen e-pich-a-lw-ipa7*
 long.ago person-ABS-PL 3PL-do-ST 2SG-arrive-ABLAUT-MOVL-DS
em-wajiki-ni-pi mijax-wen.
 3PL > 2SG-dine-CAUS-IRR.SUB be-ST
 ‘In the old days it was the custom with Indians, that when you came they had to feed you.’ (Seiler 1970:67 36)
- c. *E-muk-qal-epa7 em-suti-n-pi mijax-wen*
 2SG-die.SG-DUR.SG-DS 3PL > 2SG-tie-CAUS-IRR.SUB be-ST
ika-t-pa em-tavan-a-nuk em-jawichi-pi
 net-ABS-LOC 3PL > 2SG-put.in-ABLAUT-SS 3PL > 2SG-carry-IRR
em-chut-pi mijax-wen.
 3PL > 2SG-burn-IRR.SUB be-ST
 ‘When you died, they had to tie you up in a net; having put you in they had to carry you off to cremate you.’ (Seiler 1970:91 105)
- d. *Pen-teew-qal karil pi-7i-j*
 1SG > 3SG-see-NFUT.SG railroad 3SG-track-ACC
pe-em-ku~kul-wen-epa7.
 3SG.OBJ-3PL-IPFV~make-NFUT.PL-DS
 ‘I watched them laying the railroad tracks.’ (Seiler 1970:149 1)
- e. *Saaw jax-we pa hem-pich-a-law-wen-ipa7.*
 absent do-ST there 3PL-arrive-ABLAUT-GOPR-NFUT.PL-DS
 ‘All was gone when they arrived there.’ (Seiler 1977:149 (172), 178 (210))

- MCA f. *Naxaluve-l pe-teew-7i nek-epa7.*
 old.man-ABS 3SG.OBJ-see-FCT come-DS
 ‘The old man saw him coming.’ (3.112.0252)
- g. *Hem-pish-7i me-n-nu7en-qal-epa7.*
 3pl-arrive-FCT 3PL.OBJ-1SG-order-DUR.SG-DS
 ‘They approached when I ordered them. (3.113.0078)

Although they are far more common in temporal adverbials, Harrington’s MCA texts from Adán Castillo include examples of constructions with *-epa7* in relative clauses. Examples appear in (4).

- (4) MCA a. *Pe-7-teew-qa pe7-ij mi7a-7t-i pis-qal-epa7*
 3SG.OBJ-2SG-see-PRS.SG DET-ACC smoke-ABS-ACC come.out-DUR.SG-DS
pe-nga7?
 3SG-LOC
 ‘¿Miras aquel humo que está saliendo allá? Aquél es tu casa. (Do you see that smoke that is coming out there? That is your house.)’ (3.112.0125)
- b. *Hém-na7 pe-ngiñan-pu7 tum haxi-me-j pe-kul-epa7*
 3PL-father 3SG.OBJ-pay-IRR DISTR who-PL-ACC 3SG.OBJ-make-DS
pah aníja7-m-i.
 three ring-PL-ACC
 ‘El padre podía pagar (no le hace a quién podía pagar no le hace a quién si hiciera) tres anillos. (The father would pay whoever, it didn’t matter who, if they would make three rings.)’ (3.112.0193)
- c. *Tax-méxan-ka-t pe-7ajaw-qa7a pish pe-ngiñan-pi*
 REFL-property-CHAR-ABS 3SG-want-PST.SG COMP 3SG.OBJ-pay-IRR.SUB
metewe-7t-i qichi-7l-i tum haximeve-j [pi-jik
 much-ABS-ACC money-ABS-ACC DISTR whoever-ACC 3SG-DAT
pem-tav-epa7 supu-7l-i taxlos-t-i qawi-sh
 3PL-put-DS other-ABS-ACC person-ABS-ACC rock-ABS
helewen-pa7].
 flat-LOC

‘The rich man wanted to pay lots of money to whoever *si pusieran* a otra persona (would put another person) on the flat rock.’ (3.112.0262)

In addition to the switch-reference system in adverbial and relative clauses, in MCA different subordinators are used in future subject relative clauses depending on subject continuity (Sauvel & Munro 1988:260). In MCA relative-clause predicates derived with *-nax* appear only with same-subject relative clauses, while different-subject relative-clause predicates are derived with the irrealis suffix *-pi*. This point is treated in 13.2.3.

13.2. SUBJECT RELATIVE CLAUSES IN CUPAN. The Cupan languages have quite elaborate paradigms of subordinating suffixes in relative clauses. CU and the two varieties of CA share nearly identical suites of suffixes. Where the common argument is subject in the relative clause, LU has suffixes that appear only in that language. The only examples of possible relative clauses attested in AC use action nominalizations (see 13.2.2). All the Cupan languages have absolutive nominalizations as predicates in the subject relative clauses, and non-absolutive nominalizations in the object relative clauses, where the subject of that predicate (which is not the common argument, since that is the predicate object) is encoded in a pronominal prefix on the predicate. The exception is the *-qat/-qatum* sequence in LU, which appears in both subject and object relative clauses.

The syntax of relativization is similar in all of them, and similar in turn to that of SE. Common to all of the languages is that the relativized predicate will be marked for accusative if the common argument is a main-clause object. When the common argument in this context is a lexical noun, however, it is not always marked for accusative case, and the accusative suffix on the relativized modifier may count as phrasal case marking, which is of course well-attested with other types of noun phrases.

Subject relative clauses sometimes exhibit relative pronouns, that we label as determiners of the relative clause. However, these appear to be optional. “Headless” clauses where no lexical noun or pronoun is present, and only the modifying clause appears, are common.

In all the languages, most of the subordinating suffixes that appear in relative clauses also appear in other clause types, usually in complements and embedded questions but sometimes in adverbial clauses or, in the case of future-tense suffixes, in purpose clauses. In order to trace the functions of the suffixes, we discuss those clause types along with

the relative clauses in these sections. Object relative clauses are discussed separately in 13.3. However, in the tables in this section we introduce the entire suite of suffixes.

13.2.1. SUBJECT RELATIVE CLAUSE SUFFIXES IN COASTAL CUPAN. Here we discuss only LU and AC since Inland Cupan has an entirely different set of suffixes. There are only two or three relative clauses attested in the AC corpus, so this section will deal almost entirely with LU. Table 13.2.1, based on Hyde (1971:178), shows the subordinating suffixes that appear in LU relative clauses. This does not exhaust the possible types; relative clauses with subject discontinuity with the main clause can also be subordinated with the different-subject suffix *-qala*, as illustrated in 13.1.1 (8). The suffix sequences for the subject relative clauses are unique to LU and do not appear in the other Cupan languages.

Table 13.2.1. Tense-aspect suffixes on verbs in Luiseño relative clauses.

		corresponding argument in relative clause	subject		object
			singular	plural	
common argument in main clause	subject	past	<i>-mukw-i-sh</i>	<i>-mukw-i-chu-m</i>	<i>-vu</i>
		present	<i>-qa-t</i>	<i>-qa-tu-m</i>	<i>-qa-t</i>
		future	<i>-lu-t</i>	<i>-k(u)-tu-m</i>	<i>-pi</i>
	object	past	<i>-mukw-i-ch-i</i>	<i>-mukw-i-chu-m-i</i>	<i>-vu-j</i>
		present	<i>-qa-t</i>	<i>-qa-tu-m-i</i>	<i>-qa-t-i</i>
		future	<i>-lu-t-i</i>	<i>-ku-tu-m-i</i>	<i>-pi-j</i>

The final suffixes, *-t* and *-sh*, in the sequences *-qa-t* (present), *-lu-t* (future) and *-mukw-i-sh* (past) are absolutes, so no pronominal elements can appear in the constructions with these. As nominalizations, they take the plural suffix *-m* in agreement with the subject of the clause, and the accusative suffix *-i ~ -j* when the common argument is object in the main clause. Normally only the subject series appears with plural suffix agreement, but Jacobs (1975:207) reports rare instances of plural suffixes with *-vu* and *-pi* in object relative clauses where the subject is coreferential with that of the main clause. The same constraints hold for CU, but both dialects of CA permit plural suffixes with their cognates of *-vu* and *-pi*.

Hyde (1971), prepared as a pedagogical grammar of LU, initiated the practice of labeling the suffixes in relative clauses as past, present, and future tense. In Hyde (1971)

the examples presented clearly distinguish absolute tense relative to the moment of speaking in the relative clause. However, as will be evident from our examples, many considerations other than absolute tense appear to determine the choice of subordinating suffix. The subordinate-clause tense appears often to be relative to the tense of the main clause, not to the moment of speaking. The problem with tense labels becomes clear when we see the examples with *-qa-t* in (5) below which include instances in which the relative clause with *-qa-t/-qa-tu-m*, designated as present tense in Hyde (1971), clearly has past reference. Indeed, when it appears as a verbless clause complement, *-qa-t/-qa-tu-m* has been understood as a recent past suffix in a main clause. This suffix may encode nonfuture simultaneity: that the predicate of the relative clause must have the same temporal reference as the predicate of the main clause. But there is considerable overlap between clauses with *-mukw-i-sh/-mukw-i-chu-m* and clauses with *-qa-t/-qa-tu-m*.

13.2.1.1. SUBJECT RELATIVE CLAUSES WITH *-MUKW-I-SH*, *-MUKW-I-CHU-M*. The relativizing suffix sequence *-mukw-i-sh* is surely derived from the “recent past” suffix *-muk* (see 11.4), underlyingly *-mukw*, with nominalizing *-i-sh*, discussed in 14.1. Clauses bearing this suffix sequence do seem to be quite consistently past tense. In the first set of examples, in (1), the common argument is the subject in both relative and main clauses. If the common argument is plural, the suffix sequence will be *-mukw-i-chu-m*. Relative pronouns are often absent in the Hyde and Elliott (1994) text collection, but they are always present in sentences elicited from Mrs. Hyde for her pedagogical grammar (Hyde 1971). In LU, the relative pronoun must agree in person, number, case and animacy with the common argument. An example with a relative pronoun, *pumoom*, is seen in (1d).

- (1) LU a. *Po7* *po* [*chaam-i* *wol-ni-mukw-i-sh*] \emptyset .
 3SG.PRO FOC 1PL.PRO-ACC grow-CAUS-REL.PST-NMLZ-ABS be
 ‘He was the one who raised us.’ (H&E 91)
- b. *Supuul* *\$ungaa-l* [*waxaam* *takwáj-ax-mukw-i-sh*] *po7*
 one woman-ABS recently die-INTR-REL.PST-NMLZ-ABS FOC
 hi-sh *anki-ch-i* *jaw-qu\$*.
 INDF-ABS.ACC like-ABS-ACC have-PST.IPFV
 ‘One recently deceased woman had something like that.’ (H&E 49)

- c. *Pilék awó-m wuko7-ja amaju-m escuela-ngaj*
 right.then other-PL arrive-INTR.PST.PFV youth-PL school-ABL
wuná-j-wi-chu-m [tap-i-mukw-i-chu-m].
 there-ABL-GENT-ABS-PL finish-TR-REL.PST-NMLZ-ABS-PL
 ‘Right then some young people from there went by on their way home from
 school (some young people from there who had finished (school)).’ (H&E 609)
- d. *Ja7aj-chu-m [pumoom too\$axi-tu-m-i*
 man-ABS-PL 3PL.PRO cottontail-ABS-PL-ACC
qi7ee-mukw-i-chu-m] qaj po~pluvu-m aamu-vuk-tu-m Ø.
 kill(pl.)-REL.PST-NMLZ-ABS-PL NEG PL~good-PL hunt-NMLZ-ABS-PL be
 ‘The men who killed the rabbits are poor hunters.’ (Hyde 1971:169)

In (2) the relative pronoun is *puneemi*, a plural animate accusative. The relative clause in (2) is a verbless-clause complement. The common argument is subject in the relative clause but the object in the main clause. The construction with *-mukw-i-sh* has an accusative case suffix, and the common argument is also marked for accusative case. This does not always happen.

- (2) LU *Noo ajál-i-q awaa-lu-m-i [puneem-i o-j*
 1SG.PRO know-TR-PRS.SG dog-ABS-PL-ACC 3PL.ANIM.PRO.DET-ACC 2SG.PRO.ACC
ko7i-mukw-i-chu-m-i waxaam].
 bite-REL.PST-NMLZ-ABS-PL-ACC yesterday
 ‘I know the dogs that bit you yesterday.’ (Hyde 1971:174)

As shown in (3), the past-tense relativizer *-mukw-i-sh* can be preceded by a suffix *-qal* (which also appears before *-vu* and *-pi* in object relative clauses (see 13.3.1). Jacobs (1975) and Elliott (1999) gloss *-qal* as a durative.¹⁴³ LU *-qal* appears to share the

¹⁴³ Neither these authors nor Kroeber and Grace (1960) distinguish *-qal-* from the switch-reference suffix *-qala*. None of them recognized the phenomenon of switch reference in LU, switch reference being barely noticed in indigenous American languages until the work of William Jacobsen in the early 1980s (Jacobsen 1983). J. Hill (2016) argues that LU *-qala* is has a different historical source from CU and CA *-qal*; it is presumably also unrelated to the LU durative *-qal*.

imperfective sense of the same suffix in Inland Cupan It does not alternate with plural *-wun* in this context.

- (3) LU a. *To7wi-nga ivii-ta pitoo chaam-ik vindéer-wun iixwuna*
 field-LOC PROX-place now 1PL.PRO-DAT sell-PRS.PL now
[cham-miix-i cham-naachun-i punéj jumájk
 1PL-property-ACC 1PL-food-ACC 3SG.INAN.PRO.ACC long.ago
mij-qal-mukw-i-ch-i].
 be-DUR-REL.PST.SG-NMLZ-ABS-ACC
 ‘Now here in this field they are selling us what long ago used to be our
 property, our food.’ (K&G 187 35)
- b. *Wunaa-l=up ma7ma-q kaváj-i punéj-i [po7*
 DIST-ABS=3SG want-PRS.SG horse-ACC 3SG.INAN-ACC DET
too\$ax-t-i mujoo-ni-qal-mukw-i-ch-i].
 cottontail-ABS-ACC eat-CAUS-DUR-REL.PST-NMLZ-ABS-ACC
 ‘He wants the horse that was feeding the rabbit.’ (Jacobs 1975:93)

The suffix *-mukw-i-sh* also appears in clauses with the verb *noli-* ‘pass, of time’, in (4). This is apparently the only use of this suffix sequence outside of its role in past-tense relative clauses. In these adverbial clauses there is often an accusative suffix following *-mukw-i-sh*, as in (3a-c), but not in (3d). The factors that condition the presence or absence of the accusative case suffix in these time expressions remain mysterious. It may be that it has a focusing function like that seen in CU (see 6.4.2.5).

- (4) LU a. *[I-va7 anki-nga waxaam michát anki-nga weh, paahaj*
 PROX-LOC like-LOC recently how.many like-LOC two three
timé-t nol-i-mukw-i-ch-i] iva7 mon-qu\$.
 day-ABS pass-TR-REL.PST-NMLZ-ABS-ACC PROX-LOC travel-PST.IPFV
 ‘A couple of days ago, maybe two or three, it was going around this area.’
 (H&E 865)

- b. *Po7 takwaj-ja waxaam [tee paahaj, wasa7 tawpa-sh*
 3SG.PRO die-INTR.PST.PFV recently perhaps three four year-ABS
nol-i-mukw-i-ch-i.
 pass-TR-REL.PST-NMLZ-ABS-ACC
 ‘She died recently, perhaps three or four years ago.’ (H&E 777)
- c. [*Tawpa-sh nol-i-mukw-i-ch-i*] = *p = il no-na7*
 year-ABS pass-TR-REL.PST-NMLZ-ABS-ACC = 2SG = REAL 1SG-father
tumaam-ik hati7-ja.
 north-DAT go-INTR.PST.PFV
 ‘Last year, my father went up north.’ (Elliott 1999:615)
- d. [*Qaj waam nol-i-mukw-i-sh*], *waxaam michát anki-nga*
 NEG far pass-TR-REL.PST-NMLZ-ABS recently INDF.MANY like-LOC
chaam po-j tiiw7-jax weh-kun.
 1PL.PRO 3SG.PRO-ACC see-TR.PST.PFV two-times
 ‘Not long ago, just recently we saw it twice.’ (H&E 854)

13.2.1.2. RELATIVE CLAUSES WITH -QA-T(U-M). Unlike the other relativizers, the suffix sequence *-qa-t(u-m)* can be used when the common argument is either subject or object in the relative clause. The latter case is discussed below in 13.3.1.2. Although it closely resembles the Inland Cupan immediate-future suffix, LU *-qat(u-m)* never has a future or immediate-future sense; that sense is filled in LU by *-lu-t/-ku-tu-m*. LU *-qa(tu-m)* has a recent past sense when it appears in main clauses (11.4.3.2). In subordinate clauses it can have both present-tense and past-tense interpretations. For instance, the absolute tense reference in (1a) is to mythic time. In (1d) it is to ceremonies that ended with the generation before that of the speaker.

Examples with *-qa-t(u-m)* where the common argument is subject in main clause and relative clause are given in (1). In (1a-c) the relative clause is a verbless-clause complement.

- (1) LU a. *Cheexajim* [pumóm [tuupa-nga qal-qa-tu-m]] Ø.
 Pleiades 3PL.PRO sky-LOC dwell.ANIM.PL-REL.PRS-ABS-PL be
 ‘The Little Dipper¹ stars lived in the sky.’ (‘The Pleiades were [the ones [that lived in the sky]].’) (H&E 1290)
¹ The stars of the Pleiades are in a configuration that looks like a tiny dipper. The reference here is not to the conventional Little Dipper asterism in Ursa Minor.
- b. *Hii-cha* [po7 ngaa-qa-t tukva] Ø.
 INDF-ABS DET cry-REL.PRS.SG-ABS at.night be
 ‘It is something that cries at night.’ (H&E 557)
- c. *Oonu* [po7 i-va7 mon-qa-t] Ø.
 PROX2 DET PROX-LOC go-REL.PRS.SG-ABS be
 ‘There it goes. (‘That is [what went here].’) (H&E 996)
- d. *Pa7 pi7 miixani-sh* [won-qa-t] pumóm
 then and clothes-ABS be.there-REL.PRS.SG-ABS 3PL.PRO
punéj maa\$a-l jax-úk jumájk.
 3SG.INAN.PRO.ACC ceremonial.bundle-ABS say-USIT long.ago
 ‘And the clothes which were there used to be called *maa\$a-l*, a ceremonial bundle. (And then, as for the clothing that was there, long ago they used to call it a ceremonial bundle.)’ (H&E 492)

The examples in (2) again show that the “present tense” label used for *-qa-t(u-m)* is not strictly accurate. In (2), the main clauses have the past imperfective copula *mij-qu\$*, but the relative clauses have *-qa-t(u-m)*. These examples seem to suggest that *-qa-t(u-m)* has a “simultaneous” rather than strictly “present tense” sense.

- (2) LU a. *Pumóm* [Paala-nga qal-qa-tu-m] *San Felipe-ngaj pi7*
 3PL.PRO Pala-LOC live-REL.PRS-ABS-PL San Felipe-ABL and
Kuupa-ngaj mij-qu\$.
 Cupa-ABL be-PST-IPFV
 ‘The ones living in Pala were from San Felipe and Warner Hot Springs.’
 (‘Those [that were living in Pala] were from San Felipe and from Cupa.’)
 (H&E 907)

- b. *Po7 mij-qu\$ po7 [nol-a-qa-t maavaka-nga].*
 3SG.PRO be-PST.IPFV DET pass-INTR-REL.PRS-ABS coffin-LOC
 ‘He was the one who was going by in the coffin.’ (H&E 957)
- c. *Choo7unu-m amaaju-m pumóm [qal-qa-tu-m wuná7]*
 all-PL youth-PL 3PL.PRO live-REL.PRS-ABS-PL there
pom-mix mij-qu\$ pachxam-la-sh.
 3PL-belonging be-PST.IPFV do.laundry-INS.NMLZ-ABS
 ‘All the children who lived there used their laundry room.’ (‘As for all those children [that lived there], it was theirs, the laundry room.’) (H&E 3)
- d. *Pa7 po7 ja7á-sh [peew-lu-qa-t] po-7oovi-pi*
 then DET man-ABS friend-VBLZ-REL.PRS-ABS 3SG-give-IRR.SUB
mij-qu\$ hi-sh.
 be-PST.IPFV INDF-ABS.ACC
 ‘Then the man who was going to get married had to give something.’ (H&E 76)
- e. *No-peet po7 [mas waxaam takwáj-a-qa-t] po7*
 1SG-YoBr DET most recently die-INTR-REL.PRS-ABS 3SG.PRO
po-ma7max po-tiiw-i hi-sh mij-qu\$.
 3SG-like.NMLZ 3SG-see-TR.NMLZ INDF-ABS.ACC be-PST.IPFV
 ‘My younger brother, the one who died most recently, was always on the lookout, he was always careful (he was like that, seeing something).’ (H&E 359)

In (3), we see examples where the common argument is object of the main clause. These exhibit full concord for number and case, which does not always occur in other contexts. They also illustrate the absolute present-tense reading.

- (3) LU a. *Noo ajáli-q atáax-i puneej-i ki-sh*
 1SG.PRO know-PRS.SG person-ACC DET.ANIM-ACC house-ABS.ACC
waaq-i-qa-t-i.
 sweep-TR-PRS-ABS-ACC
 ‘I know the person who is sweeping the house’ (Hyde 1971:178)

- b. *Noo ajáli-q atáax-u-m-i punee-m-i ki-sh*
 1SG.PRO know-PRS.SG person-AUG-PL-ACC DET.ANIM-PL-ACC house-ABS.ACC
waaq-i-qa-tu-m-i.
 sweep-TR-PRS-ABS-PL-ACC
 ‘I know the people who are sweeping the house’ (Hyde 1971:180)

13.2.1.3. -QA-T(U-M) IN OTHER SUBORDINATE-CLAUSE TYPES. Predicates with *-qa-t(u-m)* appear in locational and temporal adverbial clauses (1a,b) and indirect questions (1c), as well as in relative clauses. Note that in (1b), in contrast to the temporal adverbials with *-mukw-i-sh* in 13.2.1.1 (4), the relative-clause predicate is not marked for accusative case. A particular mystery appears in (1a): An apparent pronominal prefix appears on the subordinate predicate *no7uwo7aqat*, which also has an absolute suffix. There are other examples of this type as well, but the conditions which permit this remain obscure. Kroeber and Grace (1960:159) provide a brief discussion of these rare constructions, suggesting that such coincidences of tense and possession, which “all occur in the borderline range of verbal nouns” may be “idiomatic.”

- (1) LU a. *Kii-cha \$e7-qu\$ [po7 no-7uwo7a-qa-t] San Diego-nga.*
 house-ABS stand-PST.IPFV DET 1SG-work-REL.PRS.SG-ABS San Diego-LOC
 ‘There was a house there where I worked in San Diego.’ (H&E 1046)
- b. *[Aaw-na-qa-t] noo ajál-i-qat.*
 be.there.SG.ANIM-CAUS-REL.PRS-ABS 1SG.PRO know-TR-RPST
 ‘I knew when I got here.’ (H&E 403)
- c. *Umóm = \$u = m qaj o7na-wun : [hax = \$u = pu*
 2PL.PRO = Q = 2/3PL NEG know-PRS.PL INDF.HUMAN = Q = IRR
mij-qa-t]?
 be-REL.PRS-ABS
 ‘Don’t you (pl.) know who it was?’ (H&E 956)

13.2.1.4. SUBJECT RELATIVE CLAUSES WITH -LU-T/-KU-TU-M. The immediate-future suffixes *-lu-t* (sg.) and *-ku-tu-m* (pl.) appear in relative clauses only when the common argument

is the relative-clause subject. Like the other relativizing suffixes, they appear in verbless clause complements, where they masquerade as main-clause predicates. Functionally, these suffixes resemble the immediate-future suffixes of SE and Inland Cupan, which are likewise, by our analysis, always verbless clause complements even when they appear to be main-clause predicates (with minor exceptions in SE). The *-lu* component of the singular *-lu-t* is probably cognate with the TV future *-ro*. Both of these may derive from reflexes of the purposive motion suffix PTak **-Lu7a*. The origin of the *-ku* of the plural remains unidentified. In Mrs. Hyde's speech, *-ku-tu-m* often contracts to *-tu-m*, as in (1b,c).

Examples of *-lu-t/-ku-tu-m* in future relative clauses where the relative-clause head is subject in both clauses appear in (1).

- (1) LU a. *Ataax [po7 exngaj wuko7-ax-lu-t] puloov Ø.*
 person DET tomorrow arrive-INTR-REL.FUT.SG-ABS good be
 'The person who is going to come tomorrow is nice.' (Hyde 1971:180)
- b. *Pumóm [lo7xa-Ø-tu-m punéj] qaj hi-sh*
 3PL.PRO.DET make-REL.FUT.PL-ABS-PL 3SG.INAN.ACC NEG INDF-ABS.ACC
pom-nech-i-pi mijx-uk.
 3PL-pay-TR-IRR.SUB be-USIT
 'The ones who were actually going to perform it (the ceremony) didn't have to pay anything.' (H&E 969)
- c. *Pi7 amaaju-m kika-tu-m [angaaji pilách-i-Ø-tu-m]*
 and little-PL children-ABS-PL at.first learn-TR-REL.FUT.PL-ABS-PL
pom-mix eechi mij-qu\$.
 3PL-area upstairs be-PST.IPFV
 'And the little children who were just beginning to learn had their area on the second floor.' (H&E 4)

In (2) the subject in the relative clause corresponds to the object in the main clause. In this situation, the future-tense relative-clause predicate is marked for accusative case, in agreement with case its head in the main clause.

- (2) LU a. *Om = \$u tiw7-jax awaa-l-i [pune-j]*
 2SG.PRO = Q see-TR.PST-PFV dog-ABS-ACC 3SG.ANIM.PRO.DET-ACC
exngaj pel-ax-lu-t-i ?
 tomorrow dance-INTR-REL.FUT.SG-ABS-ACC
 ‘Did you see the dog who will dance tomorrow?’ (Hyde 1971:180 C (2))
- b. *Noo ajál-i-q ataaxu-m-i [pune-m-i]*
 1SG.PRO know-TR-PRS.SG person-PL-ACC 3.ANIM.PRO.DET-PL-ACC
exngaj wuko7-ax-ku-tu-m-i.
 tomorrow arrive-INTR-REL.FUT.PL-ABS-PL-ACC
 ‘I know the people that are going to come tomorrow.’ (Hyde 1971:180)
- c. *Noo ajál-i-q na~natma-lu-m-i [pune-m-i]*
 1SG.PRO know-TR-PRS.SG PL~girl-ABS-PL-ACC 3.ANIM.PRO.DET-PL-ACC
exngaj ne-j nech-i-ku-tu-m-i.
 tomorrow 1SG.PRO-ACC pay-TR-REL.FUT.PL-ABS-PL-ACC
 ‘I know the girls who will pay me tomorrow.’ (Hyde 1971:181 (6))

Relative clauses with *-lu-t/-ku-tu-m* where the main-clause predicate is the past-imperfective copula *mijqu\$* and the relative clause is a copula complement have a “future in the past” sense, as in (3). (3b) also contains a purpose clause.

- (3) LU a. [*Wam7 po-j nap-i-Ø-tu-m*] *mij-qu\$*.
 already 3SG.PRO-ACC bury-TR-IFUT.PL-ABS-PL be-PST.IPFV
 ‘They were about to bury him.’ (H&E 787)
- b. *No-noo7u-m [[ne-j hot-i-tum] wuko7-ax-ku-tu-m]*
 1SG-chief-PL 1SG.PRO-ACC take-TR-REL.FUT.PL arrive-INTR-IFUT.PL-ABS-PL
mij-qu\$.
 be-PST.IPFV
 ‘My bosses were going to come and take me.’ (H&E 463)
- c. [*Po7 kwoot-ax-lu-t*] *hax mij-qu\$*.
 DET get.up-INTR-REL.FUT.SG-ABS INDF.HUMAN be-PST.IPFV
 ‘That was the person who was going to recover.’ (H&E 359)

- d. *Oonu pi7 [noo o-jk tila7-ax-lu-t] mij-qu\$.*
 PROX2 and 1SG.PRO 2SG.PRO-DAT tell-INTR-REL.FUT.SG-ABS be-PST.IPFV
 ‘That’s what I was going to tell you.’ (H&E 359)

13.2.1.5. -LU-T/-KU-TU-M IN OTHER SUBORDINATE-CLAUSE TYPES. Constructions with *-lu-t/-ku-tu-m* form the predicates of same-subject purpose clauses, as seen in (1). This function is well-documented for immediate-future constructions with *-qa-t/-qa-tV-m* in other Cupan languages, so our gloss here is ‘FUT’, not ‘REL.FUT’. Different-subject purpose clauses have a subordinate clause with *-pi*, the irrealis subordinator (see 13.3.1.4 (3d) for an example). This pattern, of same-subject purpose clauses subordinated with immediate future, and different subject with the irrealis subordinator, is found in all of the Cupan languages.

- (1) LU a. *Noo = n hati7-a-q nech-i-lu-t.*
 1SG.PRO = 1SG go-INTR-PRS.SG pay-TR-IFUT.SG-ABS
 ‘I went in order to pay.’ (K&G 145)
- b. *Chaam = cha hati7-ax-wun nech-i-k-tu-m.*
 1PL.PRO = 1PL go-INTR-PRS.PL pay-TR-IFUT.PL-ABS-PL
 ‘We went in order to pay.’ (K&G 145)
- c. *Ku-t po-7ee-jk wat-i-k po-piiva-j*
 fire-ABS 3SG-foot-DAT strike-TR-USIT 3SG-tobacco-ACC
tik-i-lu-t.
 light-TR-IFUT.SG-ABS
 ‘He would strike a match on his foot to light his cigarette’ (H&E 15-16)

The AC cognate of LU *-lu-t, -la-t*, is documented in purpose clauses, as seen in (2). *maxánnalat* in (2b) might also be analyzed as a headless relative clause.

- (2) AC a. *Manaa jami-jk ngaang-la-t.*
 walk.PRS woods-DAT cry-IFUT.SG-ABS
 ‘Él (va) a llorar en el monte. (He is going to the woods to cry.)’ (3.123.0339)

- b. *Noo = n* *o-jk* *joo-man* *maxann-a-la-t*.
 1SG.PRO = 1SG 2SG.PRO-DAT carry-MOVING.PRS give-TRS-IFUT.SG-ABS
 ‘Yo te traigo aquí para darte (= un regalo). (I am bringing you something to give to you [= a gift].)’ (3.123.0388)
- c. *Noo* *hatii7-ja* *topii-la-t*.
 1SG.PRO go-PST.INTR track-IFUT.SG-ABS
 ‘Yo fui a rastrear, I went to track him.’ (3.123.0478)

There are only a few examples of *-lu-t/-ku-tu-m* in what appear to be complement clauses, as seen in (3).

- (3) LU a. *Pitoo qaj hax* *ma7ma-q* [*hi-sh* *ko7xa-lu-t*].
 now NEG INDF.HUMAN like-PRS.SG INDF-ABS.ACC make-IFUT.SG-ABS
 ‘Nowadays no one likes to cook things.’ (H&E 491)
- b. *Momja-m* *qaj* *punéj* *churo7-ax* *hi-sh*
 White.person-ABS NEG 3SG.INAN.ACC settle-TR.PST.PFV INDF-ABS.ACC
 [*pom-jaa-qal-vu-j* *[oovi-Ø-tu-m]*].
 3PL-say-DUR-REAL.SUB-ACC give-IFUT.PL-ABS-PL
 ‘The White people didn’t give them the things that they had promised to give them.’ (H&E 903)
- AC c. *Noo = na = pa* *toochang-an* *po-j* *aama-la-t*.
 1SG.PRO = 1SG = IRR order-FUT 3SG.PRO-ACC hunt-IFUT.SG-ABS
 ‘I am going to send him to hunt.’ (3.123.0285)

13.2.2. ACTION NOMINALIZATIONS IN LU AND AC. Along with the subordinating constructions discussed in 13.1.2, a general action nominalization with a full range of nominal properties appears frequently in LU subordinate clauses. These derivations label actions and events. In its absolute state, this nominalization consists of a verb base suffixed with *-(i)-sh* (see 14.1), e.g. *aamu-ng-i-sh* ‘the act of coming from hunting’, *heelax-i-sh* ‘song’, *takwájax-i-sh* ‘sickness’. In the possessed state these constructions appear frequently in a predicate function, where they are verbless clause complements. The possessed forms of these nominalizations consist simply of the verb base and a possessive

prefix encoding subject person and number, parallel to the \emptyset nominalizations of SE discussed in 12.2.5.8. We posit a $-\emptyset$ here too, if only for expository convenience.

Frequently only the possessed state of these forms is attested. Unlike in CU and CA, where these constructions appear in past-tense relative clauses, in LU they are largely gerundial. In AC, these forms are attested primarily in the possessed state, with a few exceptions: *aa7val-a-ch* ‘history’ (3.123.0349), *chalúj-ch* ‘the Spanish language’ (3.123.0349), *ngool-x-ch* ‘drinking spree’ (3.123.0332), *xeel-x-ch* ‘song’ (3.122.0147).

Probably the most common context in which these constructions appear in LU is simply as a copula complement with *mijx* ‘be, happen’, as in the examples in (1). In these expressions *mijx* is attested in the present tense, as in (1a,b), in contrast to the relative clauses discussed above in 13.2.1, where present-tense relational sentences are nearly always verbless.

- (1) LU a. *No-\$un-ngaj* *po7* *tootwi-sh* *pom-7uho7van- \emptyset* *mij-q*
 1SG-heart-ABL DET prsn-ABS 3PL-believe-NMLZ be-PRS.SG
Indio-m *pom-mijx-i*.
 Indian-PL 3PL-custom-ACC
 ‘I think that a *tootwish* (a supernatural) is a part of what the Indians believe in.’ (H&E 54)
- b. *Qaj* *noo* *no-naqma- \emptyset* *mij-q*.
 NEG 1SG.PRO 1SG-hear-NMLZ be-PRS.SG
 ‘I never heard that they did.’ (H&E 89)
- c. *Qaj = su = pu* *no-takwáj-ax- \emptyset* *mij-qu\$* *pitoowili*.
 NEG = Q = IRR 1SG-die-INTR-NMLZ be-PAST.IPFV still;yet
 ‘It wasn’t my time to die yet.’ (H&E 546)
- d. *O-takwáj-ax- \emptyset* *mijx-maan*.
 2SG-be.sick-INTR-NMLZ be-FUT.IPFV
 ‘If you get sick.’ (H&E 159)

- e. *Pom-pat-ax-∅* *mij-qu\$* *waam*.
 3PL-shoot.gun-INTR-NMLZ be-PST.IPFV far
 ‘They were good shots from far off.’ (H&E 27)
- f. *Po7* *Indio* *po-lap-ax-∅* *po7* *mijx-uk* *ex-nga*,
 DET Indian 3SG-squat-INTR-NMLZ FOC be-USIT ground-LOC
jumájk.
 long.ago
 ‘The Indians just had to squat on the ground long ago.’ (H&E 212)
- g. *Pi7* *no-naqma-∅* *mij-qu\$* ... *No-naqmaa-∅* *mij-qu\$*
 and 1SG-hearing-NMLZ be-PST.IPFV 1SG-hearing-NMLZ be-PST.IPFV
jaxá-t.
 say-ABS
 ‘But I had heard ... I had heard it said.’ (H&E 369)

Although present-tense examples like (1a,b) with overt *mijx* occur, the same meanings can also be expressed using the expected present-tense verbless complements (which look on the surface like main-clause predicates), as in (2). These are attested in both LU and AC.

- (2) LU a. *Noo* *qaj* *no-tiiw-i-∅* *∅* *pi7* *no-naqma-∅* *∅*.
 1SG.PRO NEG 1SG-see-TR-NMLZ be and 1SG-hear-NMLZ be
 ‘I can’t see (them), but I can hear (them).’ (H&E 192)
- b. *Pi7* *Momja-m* *pom-lo7xa-∅* *∅* *wam7*.
 and White.person-PL 3PL-make-NMLZ be already
 ‘But it was written by White people.’ (H&E 300)
- c. *Qaj* *hax* *oonu* *po-wingé-ni-∅* *∅*.
 NEG INDF.HUMAN PROX2 3SG-deceive-CAUS-NMLZ be
 ‘No one made that up’ (H&E 155)

- d. *Qaj cham-tax cham-tiiw-i-∅ ∅ waam.*
 NEG 1PL-self 1PL-see-TR-NMLZ be long.time
 ‘We haven’t seen each other for a long time’ (H&E 1067) [repeated from 6.2.3 (1c)]
- AC e. *Amom om-7ajall-a-∅ om-karr-a-∅ ∅.*
 2PL.PRO 2PL-know-TR-NMLZ 2PL-play-TR-NMLZ be
 ‘You (pl.) know how to play [music].’ (3.123.0396)
- f. *Hame~hma-ch pa-7laq-x-nga-∅ ∅.*
 REP~easy-ABS 3SG-wake.up-INTR-GO&-NMLZ be
 ‘Es muy liviano de sueño, lit. es muy liviano para despertar. (He is very easy to wake up.)’ (3.123.0340)

These constructions also appear with other verbs, alongside their use in verbless and copula clauses.

- (3) LU a. *Hamuu7kaw-ngaj monaa ivi7 cham-mijx cham-7aamo-∅*
 the.first-ABL come.PRS.SG PROX 1PL-custom 1PL-hunt-NMLZ
\$uk-tu-m-i.
 deer-ABS-PL-ACC
 ‘From the beginning comes our custom of hunting deer.’ (K&G 182 5.1)
- b. *Po7 \$uwó~\$wu-qu\$ pom-wa7-i-∅.*
 3SG.PRO REP~be.fierce-PST.IPFV 3PL-bark-TR-NMLZ
 ‘Their barking was fierce.’ (H&E 366)
- AC c. *Na-naachxon na-miixan pa-nech-x-∅ huun7-q.*
 1SG-food 1SG-clothing 3SG-pay-INTR-NMLZ rise-NFUT.SG
 ‘El precio de mi grocerías y mi ropa subió. (The price of my groceries and my clothing went up, what is paid for my groceries and my clothing has gone up.)’ (3.123.0593)

- d. *Noo = n paa-l paa7a-q pe7 in7-q*
 1SG.PRO = 1SG water-ABS drink-PRS.SG and take.away-NFUT.SG
na-pa7cha-Ø.
 1SG-be.thirsty-NMLZ
 ‘Yo tomé agua y se me quitó la sed. (I drank water and it took away my thirst.)’
 (3.123.0608)

The complements in (4) are in the accusative case. In (4f,g) the action nominalization is subordinated to a different-subject switch-reference predicate.

- (4) LU a. *Pi7 noo awaa-l-m-i, pom-wa7-i-Ø-j naqma7-ax.*
 and 1SG.PRO dog-ABS-PL-ACC 3PL-bark-TR-NMLZ-ACC hear-PST.PFV
 ‘And I heard the dogs, I heard them barking.’ (H&E 366)
- b. *Wehma-l-i qaj noo ahújaxi o7na-q chaatu-sh*
 little-ABS-ACC NEG 1SG.PRO very know-PRS.SG song-ABS
po-heel-ax-Ø-i.
 3SG-sing-INTR-NMLZ-ACC
 ‘I only know a little about the magical *chaatush* songs.’ (H&E 48)
- c. *Punéj po-lo7xa-Ø-j tap-ax.*
 3SG.INAN.ACC 3SG-make-NMLZ- ACC finish-TR.PST.PFV
 ‘She finished cooking.’ (H&E 583)
- d. *Xaal-i hax awoo po-jk po-pat-i-Ø-y.*
 let-TR.IMP INDF.HUMAN other 3SG-DAT 3SG-shoot.gun-TR-NMLZ-ACC
 ‘Let someone else shoot.’ (H&E 836)
- e. *Pi7 = kunu7 supuu-l timé-t wooj-7a po-\$uun*
 and = QUOT one-ABS day-ABS think-INTR.PST.PFV 3SG-heart
po-hti7-ax-vichu-Ø supuul-ik qawii-jk po-tuong Qoolu.
 3SG-go-INTR-NMLZ-DES one-DAT mountain-DAT 3SG-name plcn
 ‘And it is said that one day he thought he would like to go to a mountain
 named Qoolu.’ (K&G 207 13.3)

- f. *Naqma-wun = cha* [*o-mahi-qala o-7uwo7-ax-Ø-i*].
hear-PRS.PL = 1PL 2SG-stop-DS 2SG-work-INTR-NMLZ-ACC
'We heard that you quit your job.' (H&E 121)
- g. *Pi7 pumóm* [*pom-7o7na-qala puné-y pom-wita7-i-Ø-y*].
and 3PL.PRO 3PL-know-DS 3SG.INAN-ACC 3PL-stop-TR-NMLZ-ACC
'But it would be even better if they knew how to stop it.' (H&E 283)
- h. *Ma7ma-qu\$ noo po-kwot-ax-Ø-i po-tiiw-i-Ø-y*.
want-PST.IPFV 1SG.PRO 3SG-wake.up-INTR-NMLZ-ACC 3SG-see-TR-NMLZ-ACC
'I wanted to wake her up so she could look.' (H&E 1316)
- i. *Pa7 po7 awoo po7 puloov po-ma7max-Ø mij-qu\$*
then DET other FOC GOOD 3SG-like-NMLZ be-PST.IPFV
po-juu-j po-7ajaal-Ø-i, po-miixan-i po-7ajaal-Ø-i
3SG-hair-ACC 3SG-fix-NMLZ-ACC 3SG-clothes-ACC 3SG-fix-NMLZ-ACC
'The other one liked to do her hair, to fix up her clothes.' (H&E 386)
- AC j. *Taliwwa7-q na-hmooja-Ø-j*.
look.at-NFUT.SG 1SG-be.ashamed-NMLZ-ACC
'Él miró mi vergüenza. (He looked at my shame.)' (3.123.0520)

Alongside the accusative forms, these action nominalizations can appear with a full range of local-case suffixes, as in (5).

- (5) LU a. *Po7 miich-ja a\$ún-tal no-takwáj-ax-Ø-tal*.
3SG.PRO choke-PST.PFV 3SG.INAN-INS 1SG-be.sick-INTR-NMLZ-INS
'He choked on my sickness.' (H&E 176)
- b. *Poo-xa po-7aaw-vichu-Ø-nga*.
3SG-alone 3SG-be-DES-NMLZ-LOC
'She was meant to live.' (H&E 181)

Possessed action nouns appear in adverbial clauses (6) and in relative clauses (7). These are less frequent than the complement constructions seen in (3) and (4) above.

- (6) LU a. *Pi7 om kwaavichu-maan [hik o-haq-i-Ø-y]*.
 and 2SG.PRO be.careful-FUT.IPFV INDF.MANY 2SG-inhale-TR-NMLZ-ACC
 ‘You’ve got to be careful how much you inhale.’ (H&E 495)
- b. [*Micha7 pa7 po-ngiini-Ø*] *aaw-q*.
 INDF.TIME then 3SG-be.earthquake-NMLZ be.there-PRS.SG
 ‘Whenever there is an earthquake, it is there.’ (H&E 47)
- (7) LU a. *Weh-chu-m kiika-tu-m hinge7ma-lu-m no-kwaavichu-Ø-m*
 two-ABS-PL child-ABS-PL small-ABS-PL 1SG-take.care-NMLZ-PL
chaam hati7-uk.
 1PL.PRO go-USIT
 ‘The two small boys whom I took care of and I would go there.’ (H&E 1046)
- b. *Loovi-ni aláxwi-ch-i hi-sh cham-lo7xa-Ø-y*.
 be.good-CAUS.IMP bad-ABS-ACC INDF-ABS.ACC 1PL-do-NMLZ-ACC
 ‘Forgive us our trespasses.’ (H&E 1119)
- c. *Pi7=cha=pu chaam loovi-ni-n awó-m aláxwi-ch-i*
 and=1PL=IRR 1PL.PRO be.good-CAUS-FUT other-PL bad-ABS-ACC
hi-sh pom-lo7xa-Ø-y.
 INDF-ABS.ACC 3PL-do-NMLZ-ACC
 ‘And we will forgive those who trespass against us.’ (H&E 1119)
- d. *Patkila-sh Ø hi-sh o-y pom-pat-i-Ø*.
 gun-ABS be INDF-ABS.ACC 2SG.PRO-ACC 3PL-shoot.gun-TR-NMLZ
 ‘They have guns to shoot you with.’ (H&E 137)

13.2.3. LUISEÑO IMPERSONAL CONSTRUCTIONS. The impersonal nominalization (IMPRS), which appears only in LU, is formed by adding the suffix *-law ~ -lu ~ -la* to the verb base, with a subject prefix that is almost always third person *po-* ‘3SG’ or *pom-* ‘3PL’. This construction encodes impersonal or “non-active” predicates (Jacobs 1975:95 uses the term “abstract nominals”). The absolutive corresponding to these constructions is derived by an action nominalization in *-i-sh*. The nominalizing *-i* does not appear in the forms

with subject prefixes, which can be understood as zero-derived like the gerundial action nominalizations in 13.2.2.

The impersonal suffix *-lu* is transcribed in Hyde (1971:220) and in Hyde and Elliott (1994) as <-lo>. Our representation as *-lu* is in line with our general treatment of the unstressed rounded vowel of LU as orthographic *u* rather than *o* (see 3.1.3). Kroeber and Grace (1960:148) recorded this suffix as *-law* from the usage of Felix Calac in 1909. Bright (1968), working with Mrs. Gertrude Chorre in the early 1960s, also heard it as *-law*. Grace's consultant Johnny McDowell pronounced the suffix as *-la*. Mrs. Hyde's *-lu* and McDowell's *-la* can both be easily understood as simplified forms of *-law*.

The suffix may be cognate with the Nahuatl "non-active" suffix *-lō*, which should reflect Proto-Aztecán **-li-wa* (Dakin 1982:111), from Proto-Uto-Aztecán **-lu-wa*. Granted this, then the LU suffix provides an example of the correspondence between LU *l* and Nahuatl *l*, a correspondence suggested by Merrill (2014) and discussed in 3.5.2.¹⁴⁴

Since this suffix has not been properly understood hitherto, we give several examples. We provide the glosses from the sources, and add notes to these. The first set of examples, in (1), show these constructions as copula subjects and complements. In these examples the reference of the pronominal *po-* seems to be entirely abstract.

- (1) LU a. *Oonu po-comenzár-lu mij-qu\$ ataax-u-m pom-qaal.*
 PROX2 3SG-begin-IMPRS be-PST.IPFV person-AUG-PL 3PL-living
 'In the beginning that used to be the people's place of residence.' (H&E 1262)
- b. *Po7 hamuulawi-sh pi7 po-7eek po-haj-lu mij-qu\$*
 DET first.time-ABS and 3SG-only 3PL-finish-IMPRS be-PST.IPFV
noo wuní-jk no-hati7-a-qala \$uvoowu-jk.
 1SG.PRO DIST-DAT 1SG-go-INTR-DS Soboba-DAT
 'That was the first time and the last time that I went to Soboba.' (H&E 583)

¹⁴⁴ Alternatively, the LU *l* in this formation may look like it could represent a lenition of **t* and perhaps be related to similar impersonal constructions in *-tiwa* in Hopi, e.g. *lavajtiwa* 'be spoken of, for talk of s.th. to be going around' (< *lavajta* 'talk about', pl. of *lalvaja*, cf. *lavaji* 'speech, talk'). However, this suggestion does not work. Hopi *-tiwa* is bimorphemic: *-t-iwa*, with *-t-* being one of the several Hopi verb suffixes in *-ta*, and *-iwa* representing PUA **-wa* with the Hopi suffixal vowel *-i* appended.

- c. *Wi7aa\$a-l ijq áx-a-a-t po-qwa7-lu mij-q.*
 acorn.sp.-ABS also tasty-INTR-ADJZ-ABS 3SG-eat-IMPRS be-PRS.SG
 ‘The *Quercus agrifolia* oak acorns are also delicious to eat.’ (H&E 572)
- d. *Puloov po-paa7-i-lu mij-qu\$.*
 good 3SG-drink-TR-IMPRS be-PST.IPFV
 ‘It’s good to drink.’ (H&E 1102)

Given that the construction can be a copula complement or subject, examples like those in (2) can be understood as verbless clause subjects or complements.

- (2) LU a. *Juvát-a-a-t no-\$un-ngaj qaj hikáhka-q*
 black-INTR-ADJZ-ABS 1SG-heart-ABL NEG be.difficult-PRS.SG
po-lo7xa-lu Ø.
 3SG-make-IMPRS be
 ‘I don’t think black paint was (is) hard to make.’ (H&E 153)
- b. *Aláxwi-ch=up naawinu-t po-mijx-lu Ø.*
 bad-ABS=3SG jealous-ABS 3SG-be-IMPRS be
 ‘It’s bad to be jealous.’ (H&E 292)
- c. *Po7 puloov po-qwa7-lu ijq Ø.*
 3SG.PRO good 3SG-eat-IMPRS also be
 ‘It is also good eating.’ (H&E 512)
- d. *Puloov po-paa7-i-lu Ø.*
 good 3SG-drink-TR-IMPRS be
 ‘It’s good to drink.’ (H&E 739)
- e. *Ivi7=su po-hix-lu Ø?*
 PROX=Q 3SG-say-IMPRS be
 ‘What does this mean?’ (H&E 120)

- f. *Noo qaj ajál-i-q tee po-hix-lu Ø ivi7.*
 1SG.PRO NEG know-TR-PRS.SG perhaps 3SG-mean-IMPRS be PROX
 ‘I don’t know what it means.’ (H&E 338)
- g. *Aláxwi-ch=up po-nee-chu-lu Ø*
 bad-ABS=3SG 3SG-old.woman-VBLZ-IMPRS be
po-naxaa-chu-lu Ø.
 3SG-old.man-VBLZ-IMPRS be
 ‘It’s no fun getting to be an old woman, getting to be an old man.’ (H&E 125)
- h. *Hikáhka-sh toonav-i-sh po-toonav-law Ø.*
 difficult-ABS make.basket-NMLZ-ABS 3SG-make.basket-IMPRS be
 ‘Basketmaking is tedious.’ (K&G 148)
- i. *Iví=p mij-q aamu-sh po-7ama-law Ø.*
 PROX=3SG be-PRS.SG hunt-ABS 3SG-be.set.down-INTR-IMPRS be
 ‘This is a rule of hunting.’ (K&G 148)
- j. *Jamáqaxu-t po-hedh-i-law Ø.*
 soft-ABS 3SG-open-TR-IMPRS be
 ‘It is easy to open.’ (K&G 148)
- k. *Wam7=\$u loovi-q po-qwa7-law Ø?*
 already=Q be.good-PRS.SG 3SG-eat-IMPRS be
 ‘Is it already good to eat?’ (K&G 148)
- l. *Pa7 pi7 po-chor7-i-lu Ø \$axá-t, po7*
 then and 3SG-chop-TR-IMPRS be willow-ABS 3SG.PRO
hikáh-qu\$ wehma-l-i, no-\$un-ngaj.
 be.difficult-PST.IPFV little-ABS-ACC 1SG-heart-ABL
 ‘And I think it was a little bit on the difficult side to chop arroyo willow.’
 (H&E 211)

- m. *Tee micha7 ij-q po-tiiwi-lu* \emptyset .
 perhaps something be.like-PRS.SG 3SG-see-TR-IMPRS be
 ‘But I also don’t know what it looks like.’ (H&E 565)

In the examples in (3) the construction *potiiwilu* is probably best understood as ‘while looking is going on, while someone is looking’. While these forms have 3SG prefixes, no antecedent actor is being referred to.

- (3) LU a. *Pa7 no-maa loovi-qu\$ po-tiiw-i-lu.*
 then 1SG-hand be.good-PST.IPFV 3SG-see-TR-IMPRS
 ‘And my hands looked all right (And my hands were all right to look at).’
 (H&E 741)
- b. *Po-tiiw-i-lu avál-a-an.*
 3SG-see-TR-IMPRS turn.red-INTR-PRS.PL
 ‘With your eyes you can see it turning red (It is turning red as one looks at it).’ (H&E 39)

The nominalization with *-law/-lu/-la* forms expressions with numerical bases meaning some number of times, shown in (4). These are all accusative-case forms, reminiscent of the “number of days ago” constructions with *nolimukwichi* seen in 13.2.1.1 (4). In these constructions the nominalizing *i* is not lost.

- (4) LU a. *Pa7=kuna7 wam7 po-weh-luw-i-j wam7 jaa*
 then=QUOT already 3SG-two-IMPRS-NMLZ-ACC already say.PST.PFV
po7 ...
 3SG.PRO
 ‘Then he reportedly said for the second time ...’ (H&E 1360)
- b. *Pa7 pi7 “wam7” po-paahaj-luw-i-j jax-úk.*
 then and already;now 3SG-three-IMPRS-NMLZ-ACC say-USIT
 ‘Then they would say “now” for the third time.’ (H&E 147)

- c. *Po-weh-luw-i-j* *mat-i-n* *ju7pan.*
 3SG-two-IMPRS-NMLZ-ACC end-TR-FUT again
 ‘They end the song for the second time.’ (H&E 204)
- d. *Pa7 pi7 wam7 po-paahaj-luw-i-j* *heel-a-an :*
 and then already 3SG-three-IMPRS-NMLZ-ACC sing-INTR-PRS.PL
mat-i-n.
 end-TR-FUT
 ‘And then after they have sung three times they stop singing.’ (H&E 204)
- e. *Pa7 pi7 po-weh-luw-i-j,* *po-paahaj-luw-i-j*
 and then 3SG-two-IMPRS-NMLZ-ACC 3SG-three-IMPRS-NMLZ-ACC
wam7 = kuna7 mas kunooj-mu-qu\$ kulaawu-t.
 already = QUOT more green-MOVING-PST.IPFV wood-ABS
 ‘Then by the second and third time the piece of wood was already getting greener.’ (H&E 187)

Another common usage is an accusative-case construction meaning ‘the last time’, with the verb *haj* ‘end, finish’, as seen in (5).

- (5) LU a. *Ivi7 = kun ataax po-\$uun mul-a-an*
 PROX = QUOT person 3SG-heart burn-INTR-FUT
po-haj-luw-i-j wam7.
 3SG-finish-IMPRS-NMLZ-ACC already
 ‘A person’s heart reportedly burns last.’ (H&E 312)
- b. *Po-haj-luw-i-j wam7 noo qaj loovi-k.*
 3SG-finish-IMPRS-NMLZ-ACC already 1SG.PRO NEG be.good-USIT
 ‘I wasn’t feeling too well towards the end.’ (H&E 603)
- c. *Tiiw-i ne-j, kwaan-i ne-j*
 look-TR.IMP 1SG.PRO-ACC turn.back-TR.IMP 1SG.PRO-ACC
wehma-l-i, po-haj-luw-i-j.
 a.little-ABS-ACC 3SG-finish-IMPRS-NMLZ-ACC
 ‘Look at me, turn back toward me a little, for the last time’ (H&E 1396)

- d. *Pa7 pi7 pel-uk po-haj-luw-i-j wam7.*
 then and dance-INTR.USIT 3SG-finish-IMPRS-NMLZ-ACC already
 ‘And then thereafter he would dance.’ (H&E 186)
- e. *Kuna7 wam7 po-haj-luw-i-j po-heel-ax-i*
 QUOT already 3SG-finish-IMPRS-NMLZ-ACC 3SG-song-INTR-ACC
heel-a-qu\$.
 sing-INTR-PST.IPFV
 ‘They say he would sing his last song.’ (H&E 188)

Alongside the abstract nominals in (5), the pronominals with non-accusative constructions with *haj* ‘finish’ can have specific reference, as in (6).

- (6) LU a. *mooma-t po-haj-law*
 ocean-ABS 3SG-finish-IMPRS
 ‘the seashore’ (K&G 148)
- b. *wanii-nga po-haj-la*
 river-LOC 3SG-finish-IMPRS
 ‘at the river’s edge’ (K&G 148)
- f. *Pa7 pi7 i-va7 eechi po-haj-luw-i-nga po7 banana*
 then and PROX-LOC high 3SG-finish-IMPRS-NMLZ-on 3SG.PRO
ankish Ø.
 like be
 ‘And then here on (its) top it resembles a banana.’ (H&E 524)

Jacobs (1975:95) states that the suffix *-lu/-law/-la* also yields ‘action nominals’, e.g. *cham-pa7-i-la* ‘our drinking’ or, as a relative construction with an object head, ‘what we always drink.’ In examples like those in (7), the pronominal prefix *po-* should be read as a possessive prefix, co-referential with the preceding noun:

- (7) LU a. *Po7 puloov po-7ajaal-i-lu hi-sh mij-qu\$.*
 3SG.PRO good 3SG-fix-TR-IMPRS INDF-ABS.ACC be-PST.IPFV
 ‘He was good at fixing things.’ (H&E 931)
- b. *Pumóm ataax-u-m ahújaxi po~pluvu-m*
 3PL.PRO person-AUG-PL very PL~good-PL
pom-top-i-lu Ø.
 3PL-track-TR-IMPRS be
 ‘The Indians are very good at tracking.’ (H&E 825)
- c. *Pom-naachaxan-lu wuko7-ja.*
 3PL-dine-IMPRS arrive-INTR.PST.PFV
 ‘It was their lunch time ((The time) for people to eat had arrived).’ (H&E 736)

The absolutive of the impersonal construction is *-law-i-sh* ~ *-luw-i-sh*, as seen in (8).

- (8) LU a. *Po7 hamuu-law-i-sh pi7 pu7eek po-haj-lu*
 DET first.time-IMPRS-NMLZ-ABS and only 3PL-finish-IMPRS
mij-qu\$ noo wuní-jk no-hati7-a-qala \$uvoowu-jk.
 be-PST.IPFV 1SG.PRO DIST-DAT 1SG-go-INTR-DS Soboba-DAT
 ‘That was the first time and the last time that I went to Soboba.’ (H&E 583)
 [= (1b)]
- b. *Po-haj-luw-i-sh kihuu-t mij-qu\$.*
 3SG-finish-IMPRS-NMLZ-ABS small-ABS be-PAST.IPFV
 ‘The last one was even smaller.’ (H&E 178)
- c. *cham-maki-law-i-ch-i, ... cham-maki-law-i-sh*
 our-be.ahead-IMPRS-NMLZ-ABS-ACC our-be.ahead-IMPRS-NMLZ-ABS
 ‘what lies ahead of us (acc. and nom.)’ (H&E 404)

Pohajluwish ‘the last one’ in (8b) and *chammakilawichi* ‘our future’ in (8c) are peculiar in having a subject prefix as well as an absolutive suffix (see also 13.2.1.2 (4)).

13.2.4. SUBJECT RELATIVE-CLAUSE SUFFIXES IN CUPEÑO. Table 13.2.4 (1) shows the subordinating suffix sequences that appear in CU relative clauses, mapped on to the grid of tenses designed by Hyde (1971) for the relative clauses of LU. However, this is a crude expository device: as with the LU materials, factors other than absolute tense can determine the choice of a relativizing suffix. Relative-clause predicates are often better understood as primarily modal rather than tensed, that is, realis instead of past, irrealis instead of future. And “present-tense” suffixes that appear in subordinate clauses may refer to the past, even the far, mythic past.

The analysis of CU subordinate clauses has been revised from the presentation in Hill (2005) in conformity with our comparative approach. Translations in the original sources have been adapted to clarify the structure of example sentences.

Table 13.2.4. (1) Tense-aspect suffixes on verbs in Cupeño relative clauses

corresponding argument in relative clause			subject		object	
			singular	plural	singular	plural
common argument in main clause	subject	past	<i>-i-sh</i>	<i>-i-chi-m</i>	<i>-vy</i>	
		present	<i>-qal-y-t</i>	<i>-wyn-ti-m</i>	<i>-7a</i>	<i>-a-m</i>
		future	<i>-qa-t</i>	<i>-qa-ti-m</i>	<i>-pi</i>	
	object	past	<i>-i-ch-i</i>	<i>-i-chi-m-i</i>	<i>-vy-j</i>	
		present	<i>-qal-y-t-i</i>	<i>-wyn-ti-m-i</i>	<i>-7a-j</i>	<i>-a-m-i</i>
		future	<i>-qa-t-i</i>	<i>-qa-ti-m-i</i>	<i>-pi-(j) (?)</i>	

13.2.4.1. SUBJECT RELATIVE CLAUSES WITH *-i-sh*, *-i-chi-m*, *-Ø-cha-m*. The past-tense relativizing sequences *-i-sh* (sg.) and *-i-chi-m* ~ syncopated *-Ø-cha-m* (pl.) are suffixed to a perfective base. They never appear with imperfective, present-tense, or stative suffixes. There are also resultatives in *-i-sh*, e.g. *kwa7-í-sh* ‘food’ (that which is eaten). However, the *-i-sh* derivations in subject relative clauses are action nominalizations that agree in number with their agent or subject.

The analysis of tense semantics in *-i-sh* nominalizations versus “present-tense” *-qal-y-t* ~ *-wyn-y-t* nominalizations is not straightforward. While Jacobs (1975) understands *-i-sh* nominalizations as past tense, and *-y-t* nominalizations as present, and J. Hill as well now takes this view (countering Hill 2005), both nominalizations can have both interpretations, depending on context. A number of examples of *-i-sh* forms functioning as verbless-clause complements are clearly present-tense in context, as in (1). (1b) is a

standard way to say “Goodbye”, a context where it clearly has a present-tense interpretation. Furthermore, the *-i-sh* forms appear with pronominals from the auxiliary complex, unlike past-tense predicates in main clauses, which require prefixes.

- (1) CU a. [Atáxa-j myqn-**i-sh**] Ø.
 person-ACC kill(sg.)-NMLZ-ABS be
 ‘(He) is a murderer.’
- b. Aja = n [ngij-**i-sh**] Ø.
 now = 1SG.AB go.away-NMLZ-ABS be
 ‘I am going away.’ (H&N 23[46] 16)
- c. My = sh wiw [ngij-**Ø-cha-m**] Ø.
 and = 1PL.AB both go.away-NMLZ-ABS-PL be
 ‘We’re both going away.’
- d. [Ngij-**Ø-cha-m**] = ysh Ø.
 go.away-NMLZ-ABS-PL = 1PL.AB be
 ‘Let us go away.’ (H&N 13[26] 185)

Example (2) even has a future sense. However, the adverb goes with the verbless (present-tense) clause such that the sentence is something like ‘Tomorrow we are the ones who are on our way’.

- (2) CU Tukumaj = ysh aja [ngij-**Ø-cha-m** Kupa-jka
 tomorrow = 1PL.AB now go.away-NMLZ-ABS-PL Cupa-DAT
 ny-ki-jka] Ø.
 1SG-house-DAT be
 ‘Tomorrow we go to my home at Cupa.’ (H&N 14[28] 208)

An important difference between *-qal-y-t*, *-wyn-y-t* sequences (see 13.2.4.2) and the *-i-sh* derivations is that only the latter appear as complements of a past tense copula, as in (3).

- (3) CU a. *Mu=ku7ut jykwin-Ø-cha-m py7-mijax-wyn.*
 and = QUOT fear-NMLZ.ABS-PL 3PL-be-ST.PST
 ‘And it is said they were afraid.’ (H&N 49[98] ix.10)
- b. *Py-taxwi myn-in-i-sh py-mijax-wyn.*
 3SG-self change-TR-NMLZ-ABS 3SG-be-ST.PST
 ‘He had changed his clothes.’ (H&N 52[104] xv.13)
- c. *Mu=ku7ut qaj py-ja-qál pym-na py-chi*
 and = QUOT NEG 3SG-say-IPFV.PST.SG 3PL-father 3SG-INS
chix-Ø-ch-am py7-mijax-wyn-i-vy.
 die(pl.)-NMLZ-ABS-PL 3PL-be-ST.PST-ABLAUT-REAL
 ‘And it is said their father was not saying of what they had died.’ (H&N 2[4] 52)

Examples of the *-i-sh* construction where the common argument is subject in the relative clause and in the main clauses are seen in (4). Both headed (4e-g) and headless (4a-d) clauses can be observed. The temporal reference of these clauses ranges from mythic times (4a,b), to perhaps 50 years before the moment of utterance (4c), to ‘two years ago’ (4d). The last three examples can be understood as present tense.

- (4) CU a. *Mu=ku7ut py7-y hamán-i-sh pijáma py-ngij*
 and = QUOT DET-CF be.ashamed-NMLZ-ABS always 3SG-go.away
tukuchí-7aw.
 sky-LOC
 ‘And they say that the one who was ashamed kept going away into the sky.’
 (Nolasquez Creation 20).
- b. *Mu=ku7ut pým-tyw [py-m syx-in-Ø-cha-m].*
 and = QUOT 3PL-see DET-PL burn-TR-NMLZ-ABS-PL
 ‘And it is said that the ones who were burning [her house] saw her.’ (H&N 9[18] 27)
- c. *[Y~7ywlu7-i-chi-m] pym-ju-j wak=py7-my-n-vy-j*
 PL~bleed-NMLZ-ABS-PL 3PL-hair-ACC comb = 3PL-PL-TR-REAL.SUB-ACC

ɟyʋ = py7-my-n ty7yw axwa-7aw.

bury = 3PL-PL-TR under DIST-LOC

‘The [girls] who had been initiated (lit. ‘were menstruating’) used to bury their hair combings right under there.’ (H&N 50[100] x.20)

- d. *My aja py7 mi7aw-i-sh ni_tyw-i-sh wih*
 and now DET arrive-NMLZ-ABS 1SG.OBJ__see-NMLZ-ABS two
tawpax-i-sh naaxchin-ax-i-sh.
 year-NMLZ-ABS pass-INTR-NMLZ-ABS

‘And now the one who came and saw me two years ago.’ (In answer to ‘What friend did you see?’) (Faye field notes 4-6-27)

- e. *Hax-mí7i py7 lypyk-jax-i-sh ku\$an iví-j.*
 who-INDF DET kneel-INTR-NMLZ-ABS get.FUT PROX-ACC
 ‘Anyone who kneels will get this.’ (Faye field notes 4-6-27)

- f. *Pytá7a-nim lypyk-jax-Ø-cha-m, chajaw-jax-a-m!*
 all-PL kneel-INTR-NMLZ-ABS-PL get.up-INTR-IMP-PL
 ‘All those who have kneeled, stand up!’ (Faye field notes 4-6-27)

- g. *Mik-chi-m pyk-chi-m a~7wylvy-m pyjka7maj qa7*
 INDF-ABS-PL DEF-ABS-PL PL~adult-PL still be.PRS.PL
 [*chuqym-jax-Ø-cha-m*].
 remain-INTR-NMLZ-ABS-PL

‘There are still a few old people who remain.’ (H&N 27[54] xv.19)

In (5) the common argument is subject in the relative clause and object in the main clause. In this circumstance, the relative-clause predicate has an accusative suffix.

- (5) CU a. *Mu = ku7ut mulu7nuk achi pym-nawík-tu-wyn*
 and = QUOT first long.ago 3PL-woman-VBLZ-PST.IPFV.PL
 [*ywlu7-i-ch-i*].
 bleed-NMLZ-ABS-ACC

‘And it is said that long ago first they would marry a woman who had been initiated [lit. ‘was menstruating’].’ (H&N 35[70] 39)

- b. *Mi_7u7n-i-qa* [ki-nga *mulu7nuk*
 3PL.OBJ__show-TR-PRS.SG house-LOC first
sulul-ax-mi7aw-i-ch-i *axwý-ch-i*.
 go.in-INTR-COMEPR-NMLZ-ABS-ACC DIST-ABS-ACC
 ‘He would show them that which had first come into his house.’ (H&N
 38[76] x.5)
- c. *Mu = ku7ut axwá-nga mi_py-chix-i-qual*
 and = QUOT there-LOC 3PL.OBJ__3SG-die(pl.)-TR-PST.IPFV.SG
 [*chuqym-jax-Ø-ch-am-i*].
 remain-INTR-NMLZ-ABS-PL-ACC
 ‘And it is said he killed the ones who remained.’ (H&N 14[28] 223)
- d. *Axwý-sh-m-i* [*nanvaxan-Ø-cha-m-i*] *pým-jy-m*
 DIST-ABS-PL-ACC finish-NMLZ-ABS-PL-ACC 3PL-mother-PL
mi_suunvi-wy.
 3PL.OBJ__pity-PRS.PL
 ‘Their mothers sympathize with those who have finished.’ (Faye Girls’
 Initiation 41)

13.2.4.2. PRESENT-TENSE SUBJECT RELATIVE CLAUSES. In present-tense relative clauses where the common argument is the relative-clause subject, the suffix sequences *-qal-y-t*, pl. *-qal-ta-m* and *-wyn-y-t*, pl. *-wyn-ti-m* appear. These relativized predicates also turn up as verbless complements, where they resemble main-clause predicates and add an “immediate past” to the tense system (see 11.5.2.1).

A short form of these constructions, without the suffixes *-qal* and *-wen*, appears in the case of defective verbs like *qal* ‘be there, animate pl.’, *wyn* ‘be there, inanimate’, *nynywyn* ‘walk around’, and *nyq* ~ *nyqyn* ‘come.’ Examples of this type appear in (1). The verb *chix-in* ‘kill (pl.obj.)’ in (1a) is not defective; the circumstances in which short forms of this agentive nominalization can be used with non-defective verbs are not clear. The examples show that the proper interpretation of this relativized construction is that it is simultaneous with or immediately prior to the main-clause event or action. It is certainly not restricted to absolute present tense, since in the examples in (1), except for (1a), the

event or action of the relative clause took place at times ranging from the mythic era to merely many years before the time of the utterance.

- (1) CU a. [Atáx-m-i mí_chix-n-y-t] yl7ýl7-i-sh Ø.
 person-PL-ACC 3PL.OBJ_die(pl.)-TR-NMLZ-ABS bad-NMLZ-ABS be
 ‘One who kills people is bad.’
- b. Mu=ku7ut atáx7a-m pymym [kilma-ngax
 AND=QUOT person-PL 3PL.PRO outside-ABL
 qal-Ø-ta-m] ki-jka sulul-pym-jax.
 be.there(anim.pl.)-NMLZ-ABS-PL house-DAT enter(pl.)-3PL-INTR
 ‘They say the people staying outside went into the house’ (Faye Kisilj Pywik 17)
- c. Qaj py hax hiwchu-qa mip-nga
 NEG FOC who know-PRS.SG INDF.TIME-LOC
 chyx=py-jax-i-vy pa-l a-tíng-vy
 appear=3SG-INTR-ABLAUT-REAL.SUB water-ABS ADJZ-hot-REAL.SUB
 [Kupa-7aw wyn-y-t] chym-ki-7aw.
 Cupa-LOC be.there.INAN-NMLZ-ABS 1PL-house-LOC
 ‘No one knows when they were created, the hot springs that were at our homes at Cupa.’ (Faye Springs 1)
- d. Mu=ku7ut pymym [wyn-Ø-ti-m]
 and=QUOT 3PL.PRO be.there(inan)-NMLZ-ABS-PL
 patish=pym-jax-wyn pym-pisá7-wyn.
 swell=3PL-ITR-PST.IPFV.PL 3PL-rot-PST.IPFV.PL
 ‘And they say the ones lying dead there were swelling up, they were rotting.’
 (Faye Creation 62)

- e. *My atáx7a-m Kupa-ngax nyq-a-ti-m qaj*
 and person-PL Cupa-ABL come-NMLZ-ABS-PL NEG
pym-hiwchu-wyn mykwá-sh-m-i
 3PL-know-PST.IPFV.PL flea-ABS-PL-ACC
 ‘And the people who came from Cupa were not acquainted with fleas.’
 (Nolasquez Leaving Warner’s II.33)
- f. *Apút=ny myqy-qa, my nyqn-y-t ny-xaku-j*
 already = 1SG.ERG kill(sg.)-PRS.SG and come-NMLZ-ABS 1SG-strap-ACC
ku\$-í-qat.
 take-ABLAUT-IFUT
 ‘I’ve already killed it, and I’ve come to get my carrying straps.’ (Faye Kisilj
 Pywik 122)

With non-defective verbs, the suffixes *-qal/-wyn* are nearly always present in present-tense subject relative-clause predicates, as in (2). The suffixes *-qal/-wyn* are past imperfectives in main-clause predicates, with the present-tense suffixes *-qa-wy* derived from these by truncation. Truncation is blocked in main-clause predicates by following vowel-initial clitics (see 11.5.2.2 (5)). Thus it makes sense to think of the *-qal/-wyn* suffixes in relative clauses as present-tense suffixes, with truncation blocked by the vowel-initial relativizing sequence *-y-t*. Many of the examples in (2) and (3) have present-tense readings. However, past-tense readings also appear, when these are relative to (and relevant for) the tense and other content of the main clause, as in (2a,d) and (3b).

Examples (2d,e,f) show the contrast between the present-plural constructions and the stative constructions. Active-voice constructions like *wimjaxwyntim* ‘those who are heavy’ in (2d) and *nyngúwyntim* ‘those who possess’ in (2f) require a noun plural suffix *-m* in addition to the present-plural suffix. In contrast, the stative constructions in (2e) and (2f), both with the same form, *nanvajaxwynyt* ‘(the one who/those who) are prepared/ready’ do not exhibit subject number concord.

- (2) CU a. *My py7 naxáni-sh [myqa-qal-y-t] qaj hi-sh*
 and DET man-ABS kill(sg.)-PRS.SG-NMLZ-ABS NEG INDF-ABS
py-ku\$-qal a-kúlji7i wa7i-ch-i.
 3SG-take-PST.IPFV.SG ADJZ-little meat-ABS-ACC
 ‘And the man who had made the kill did not take even a little piece of meat.’
 (Faye ‘What they used to eat’ 3)
- b. *Iví-7aw = yn Su7i-sh Py-ki-7aw a\$-qal-y-t.*
 PROX-LOC = 1SG.AB Jackrabbit-ABS 3SG-house-LOC bathe-PRS.SG-NMLZ-ABS
 ‘I have been bathing here at Jackrabbit’s House.’ (Faye Kisilj Pywik 165)
- c. *Nga~ngaa-qal-y-t.*
 REP~cry- PRS.SG-NMLZ-ABS
 ‘She is crying.’ (Nolasquez Doves 6)
- d. *Mu = ku7u = l pymym [pym-\$uun*
 and = QUOT = 3PL.AB 3PL.PRO 3PL-heart
wim-jax-wyn-Ø-ti-m] tulu-wy pym-7is-a-j.
 be.heavy-INTR-PRS.PL-NMLZ-ABS-PL finish-PRS.PL 3PL-paint-NMLZ-ACC
 ‘And they say that those who are patient finish what they are painting.’ (Faye
 Girl’s Initiation 38)
- e. *Py7 [nanva-jax-wyn-y-t] ha\$a-qa ny-t-i*
 DET prepare-INTR-ST-NMLZ-ABS go-ITR-PRS.SG chief-ABS-ACC
py-jik.
 3SG-DAT
 ‘The one who is ready goes to the chief.’ (Faye Funeral II 2)
- f. *My = kwy = my pymym [nanva-jax-wyn-y-t],*
 and = POT = 3PL.ERG 3PL.PRO prepare-ITR-ST-NMLZ-ABS
[nyngú-wyn-Ø-ti-m] ny-t-i py-jik ha\$a-a7a.
 have-PRS.PL-NMLZ-ABS-PL chief-ABS-ACC 3SG-DAT go-POT
 ‘Then the ones who were ready, who had something, could go to the chief.’
 (Faye Funeral II 4)

When the common argument in the relative clause is object in the main clause, the *-y-t* construction has an accusative suffix, as in (3).

- (3) CU a. *My = \$y = kwy = n* *mij7a* *ny-\$uun = kwy* *icháa-chu,*
 and = DUB = POT = 1SG.AB be.POT 1SG-heart = POT good-INCH.POT
ix-qal = yn *imi_tyw-á-nuk* *ny-ngax = kwy = my*
 say.thus-PRS.SG = 1SG.AB 2PL.OBJ__see-ABLAUT-SS 1SG-ABL = POT = 3PL.ERG
ixan-i, *ivt-j* *[ni_wim-i-qal-y-t-i],*
 take.away-TR.POT PROX-ACC 1SG.OBJ__be.heavy-TR-PRS.SG-NMLZ-ABS-ACC
[ni_syt-i-qal-y-t-i].
 1SG.OBJ__press-TR-PRS.SG-NMLZ-ABS-ACC
 ‘It must be that my heart becomes glad, I say, upon seeing you take from me
 this which weighs upon me, which presses on me.’ (Faye Funeral II 23).
- b. *My = kwy = my* *axwý-sh-m-i* *[qaj hi-sh*
 and = POT = 3PL.ERG DIST-ABS-PL-ACC NEG INDF-ABS
nyngú-wyn-Ø-ti-m-i] *a-ngax* *ki-ngax* *aj7ani-ngax*
 have-PRS.PL-NMLZ-ABS-PL-ACC DIST-ABL house-ABL big-ABL
mi_ma7a.
 3PL.OBJ__give.POT
 ‘And to those who had nothing, they would give them something from the big
 house.’ (Faye Funeral II 16)
- c. *My = kwy = my* *supu-l-m-i* *atáx-m-i* *pym-ny7y-m*
 and = POT = 3PL.ERG some-ABS-PL-ACC person-PL-ACC 3PL-relative-PL
[tan-in-wyn-Ø-ti-m-i] *mi_max-wyny* *qichi-lj.*
 dance-TR-PST.IPFV.PL-NMLZ-ABS-ACC 3PL.OBJ__give-CUST.PL money-ABS
 ‘And their relatives give money to some of the people who are dancing.’
 (H&N 38[76] 45)

In addition to appearing in relative clauses, constructions in *-qal-y-t/-wyn-y-t* are attested in complements (4).

- (4) CU *Ny-jaja = n ny-nyy7a-j tul-vichu-qal-y-t* Ø.
 1SG-try = 1SG.AB 1SG-basket-ACC finish-DES-PRS.SG-NMLZ-ABS be
 ‘I tried to finish my basket.’

There are also many resultative derivations in *-wyn-y-t* on intransitive bases, e.g. *pal hiwjaxwynyt* ‘warm water’, *ljawjaxwynyt* ‘a hole, something dug out’, *suksukjaxwenet* ‘a bundle, something tied up’, *julaxwynyt* ‘a prisoner, someone punished’.

13.2.4.3. FUTURE-TENSE SUBJECT RELATIVE CLAUSES. Future-tense relative clauses where the common argument is subject in the relative clause are encoded with the immediate-future suffix sequences *-qa-t*, *-qa-ti-m*. As discussed in 11.5.3.1, immediate-future constructions are very common as apparent main-clause predicates (really underlying verbless-clause complements). They also appear in purpose clauses.

Examples of future relative clauses appear in (1).

- (1) CU a. *Mip-nga pyp-nga my = kwy = p [axwý-ch-i py-chi*
 INDF-LOC DEF-LOC and = POT = 3SG.ERG DIST-ABS-ACC 3SG-INS
imi__tew-í-qa-t] taxwi-lj chajaw-jax-wyny.
 2PL.OBJ__see-ABLAUT-IFUT-ABS body-ABS get.up-INTR-ST.CUST
 ‘That which is somehow going to see you can rise up on his hind legs.’ (H&N
 12[24] 151)
- b. *I7i = m py7 naxáni-sh [ni__m[a]xána-qa-t]¹ Ø.*
 PROX = MIR DET man-ABS 1SG.OBJ__betray-IFUT-ABS be
 ‘This is the man who will betray me.’ (Faye field notes)
¹ The vowel in square brackets was omitted in Faye’s notes, probably in error. The object proclitics do not interact with the root to induce vowel syncope.
- c. *Suplywy-t py7 pina7wyx-qa-t jaw-in-ny*
 one-ABS DET sing.enemy.song-IFUT-ABS sing-TR-CUST.SG
py-pina7wyx-a-j.
 3SG-sing.enemy.song-PSD-ACC
 ‘The one who is going to lead the dance sings her enemy songs.’ (Faye
 Women’s Dance 2)

These future relative clauses have accusative inflection if their head is object in the main clause. No example of this appears in the CU text corpus, but Jacobs elicited the example in (2). Recall that immediate futures in SE do not appear with accusative suffixes, so this is an important difference between Serran and Cupan; the Cupan forms are “nounier” than are those in SE.

- (2) CU *awá-l-m-i* [py7 *hunwy-t-i* *mamajyw-qa-t-m-i*]
 dog-ABS-PL-ACC DET bear-ABS-ACC help-IFUT-ABS-PL-ACC
 ‘the dogs (obj.) that helped the bear’ (Jacobs 1975:202)

Immediate-future constructions can often be interpreted as encoding a responsibility to act, or a custom of acting. This sense is often especially clear when an immediate future is a relative-clause complement of an overt copula, which is required in non-present sentences (see chapter 9).

- (3) CU a. *My=kwy aja py7 ny-t chinga isaxw-qa-t*
 and =POT now DET chief-ABS if sing.men’s.song-IFUT-ABS
mijax-wyny, my=kwy=p mikpuk jaw~jaw-i
 be-ST.CUST and =POT = 3SG.ERG some.few REP~sing-TR.POT
py-7isaxw-a-j.
 3SG-men’s.song-NMLZ-ACC
 ‘And then if the chief was one who sang, he would sing some few of his songs.’ (H&N 38[76] 47)
- b. *My nú-\$u pina7wyyx-qa-t py-mijax-wyn.*
 and 1SG-MoMo sing.enemy.song-IFUT-ABS 3SG-be-ST.PST
 ‘And my mother’s mother was going to lead the dance (she was the one who led the singing of the enemy songs).’ (H&N 32[64] iv.4)

While immediate-future constructions are the usual way to express future-tense subject relative clauses in CU, tucked away in the corpus are two examples with a different future suffix, *-nax*. This suffix also appears in CA, and the CU examples may represent interference from that language. It is also possible that the usage is an

archaism; (4a) is a line from the ritual oration of instruction at the girls' initiation ceremony, where a usage lost in everyday speech might survive.

- (4) CU a. *Iví-m=ył* [pymym *i* myqny-nax-ta-m] \emptyset
 this-PL = 3PL.AB DET.PL 2SG.OBJ kill(sg.)-IFUT-ABS-PL be
i~7itú-qali.
 DISTR~steal-DS.SG
 'These are the ones who are going to kill you when you steal.' (H&N 34[68]28)
- b. *Qaj na-li-m* *pym-qal* [*miisi-nax-Ø-ta-m*].
 NEG father-ABS-PL 3PL-be.PST say.mass-NMLZ-ABS-PL
 'There were no priests to say mass (who would say mass).' (H&N 27[54] xv.16)

13.2.4.3.1. IMMEDIATE FUTURES IN OTHER CLAUSE TYPES. Immediate futures appear at a very high frequency in purpose clauses where there is subject continuity between the main clause and the purpose clause. Examples are given in (1). If there is a change of subject, then the purpose clause will be subordinated with irrealis *-pi*, and will have a pronominal prefix encoding the subject, as in the examples in 13.3.3.3.

- (1) CU a. *Pym-hiwchu-wyn* [*py-mi7aw-lu-qal-i-vy-j*
 3PL-know-PST.IPFV.PL 3SG-arrive-GOPR-PST.IPFV.SG-ABLAUT-REAL-ACC
[ku\$-i-qa-t *axwý-ch-i* *pym-na7akwa7-i]*.
 take-ABLAUT-IFUT-ABS DIST-ABS-ACC 3PL-child-ACC
 'They knew that he had come in order to take away their child.' (H&N 32[64] v.4)
- b. *Mu=ku7ut* *aja* *pym-ngij* [*tutuvchi-qa-ti-m*].
 and=QUOT now 3PL-go.away tell-IFUT-ABS-PL
 'And it is said then they went off to tell [people].' (H&N 14[28] 206)

- c. *Suplj-ish chy7-ma~max-wyn kwini-lj-i*
 some-times 1PL-DISTR~grind-PST.IPFV.PL black.oak.acorn-ABS-ACC
 [*paj-i-qa-ti-m wiwi-sh*].
 eat.mush-TR-IFUT-ABS-PL acorn.mush-ABS
 ‘Sometimes we ground acorns in order to eat wiwish (acorn mush).’ (H&N
 47[94] iii.6)
- d. *My y-vy = ku7ut py7 wa7i-sh pi_pý7-myq*
 and PROX2-LOC = QUOT DET meat-ABS 3SG.OBJ__3PL-kill(sg.)
 [*atáx-m-i mi_max-í-q-ta-m*].
 person-PL-ACC 3PL.OBJ__give-ABLAUT-IFUT-ABS-PL
 ‘And it is said they slaughtered meat there to give to the people.’ (H&N
 22[44] 16)

Roscinda Nolasquez’s speech includes interesting examples which show that immediate futures cannot be in complements of predicates other than the copula. Thus the copula will be the predicate of the complement clause itself, with the immediate future as a lower predicate, the copula complement, as in (2).

- (2) CU a. *Mi_py-tutuchiny-qal atáx-m-i nang7aw-qa-ti-m*
 3PL.OBJ__3SG-tell-PST.IPFV.SG person-PL-ACC make.image-IFUT-ABS-PL
py7-mijax-wyn-i-vy-j.
 3PL-be-PST.IPFV.PL-ABLAUT-REAL.SUB-ACC
 ‘He told the people that they were going to make images.’ (Nolasquez
 Burning 10)
- b. *Mu = ku7ut aja pým-jax pychi pym-fjeesta icháajwi-qa-ti-m*
 and = QUOT then 3PL-say COMP 3PL-fiesta make-IFUT-ABS-PL
py7-mijax-wyn-i-vy-j.
 3PL-be-PST.IPFV-PL-ABLAUT-REAL.SUB-ACC
 ‘And they say then they said that they had to hold their fiesta.’ (Nolasquez
 Eagle I 36)

13.2.5. SUBJECT RELATIVE CLAUSE SUFFIXES IN CAHUILLA. The systems of relativizing morphology in both varieties of CA are very similar to that in CU. There are minor

differences in the array of suffixes. As in the other Tadic languages, the subordinating suffixes that appear in relative clauses all have other subordinating functions as well.

13.2.5.1. SUBJECT RELATIVE-CLAUSE SUFFIXES IN DESERT CAHUILLA. Table 13.2.5 shows the distribution of subordinating affixes attested in DCA relative clauses.

Table 13.2.5.1. Tense-aspect suffixes on verbs in Desert Cahuilla relative clauses

		corresponding argument in relative clause		subject		object	
			singular	plural	singular	plural	
head in main clause		nonfuture ₁	<i>-i-sh</i>	<i>-i-che-m</i>	<i>-i-sh</i>	<i>-i-sh</i>	<i>-7a</i> <i>-a-m</i>
		nonfuture ₂	<i>-qal-e-t</i> <i>-wen-e-t</i> <i>(-we-t?)</i>	<i>-wen-e-te-m</i> <i>(-we-te-m)</i>	<i>-ve</i>		
	future	<i>-ka7</i> <i>-nax</i>	<i>-kate-m</i> <i>-nax-te-m</i>	<i>-pi</i>			
	nonfuture ₁	<i>-i-ch-i</i>	<i>-i-chi-m-i</i>	<i>-i-7ch-i</i>	<i>-i-sh-m-i</i> <i>-7a-j</i> <i>-a-m-i</i>		
	nonfuture ₂	<i>-qal-e-7t-i</i>	<i>-wen-e-(7)t-i</i>	<i>-ve-j</i>			
	future	<i>-ka ~ -ik</i>	<i>(?)</i>	<i>-pi(-j)</i> <i>(-ka ~ -ik ~ -k)</i>			

The tense grid developed for LU, which is not completely unrealistic for CU, really does not work for DCA. For instance, DCA does not have a past-present distinction in main clauses (the distinction is factive vs. nonfuture), so to recognize one in relative clauses would go against the general principle that there will be fewer distinctions in subordinate than in main clauses. Hence, both the *-i-sh* ‘past’ and *(-qal ~ -wen)-e-t* ‘present’ constructions should be understood as simply nonfuture, as represented in the table. The immediate future *-ka ~ -ik* is indicated in parentheses in the bottom right cell in the table. It also may appear when the relativized referent is an object as seen in the examples in 13.2.5 (14).

The treatment of relative clauses in Seiler (1977) is minimalist. Examples of relative clauses are sparse in the DCA corpus; many examples translated as relativized by Seiler in fact have no subordinating morphology, and in his brief discussion in the grammar Seiler emphasizes that paratactic constructions appear at a high frequency. In order to

reconstruct the DCA system, we have depended on Sauvel and Munro's (1981) more detailed treatment of relativization in MCA.

13.2.5.1.1. DESERT CAHUILLA NONFUTURE SUBJECT RELATIVE CLAUSES WITH *-i-sh*. The examples in (1) show subject relative clauses derived with *-i-sh*. In these examples, the common argument is subject in the main clause as well.

- (1) DCA a. *Muk-7i taxat pe7 taxliswe-t [pi-ka tamja-t-i pi-jik*
 die.SG-FCT EMPH DET person-ABS 3SG-DAT sun-ABS-ACC 3SG-DAT
ngij-ljew-i-sh].
 go.off-GOPR-NMLZ-ABS
 'Then the man died, [the one] who had gone to visit the sun.' (Seiler 1970:91 103)
- b. *Ñichi-lj muk-7i [nea-t-i ne-j_max-i-sh]*.
 woman-ABS die.SG-FCT basket-ABS-ACC 1SG-ACC_give-NMLZ-ABS
 'The woman who gave me the basket died.' (Seiler 1977:249 (76))

When the subject of the relative clause with these suffixes corresponds to the object in the main clause, the relative-clause predicate has accusative *-i ~ -j* following the subordinating suffix, as in the second relative clause in (2). The relative clauses in (2) are "ceremonial couplets," which are well documented in CA and the other Cupan languages.

- (2) DCA *Tuku jax-qal-e chem-na7 [cheme-j_nuk-i-sh*
 yesterday say-NFUT.SG-FCT 1PL-father 1PL-ACC__make-NMLZ-ABS
cheme-j_tav-i-sh] ... *pish pe-j_chut-ka-te-m ivi-j*
 1PL-ACC__put-NMLZ-ABS COMP 3SG-ACC__burn-IFUT-ABS-PL PROX-ACC
[cheme-j_nuk-i-7ch-i cheme-j_tav-i-7ch-i].
 1PL-ACC__make-NMLZ-ABS-ACC 1PL-ACC__put-NMLZ-ABS-ACC
 'Yesterday our father, who created us, who made us, said ... that they should burn (cremate) this one who created us, who made us.' (Seiler 1970:55 212)

Constructions with *-i-sh* frequently appear as apparent main-clause predicates. The examples in (3) and (4) are relative clauses that are verbless-clause complements. Like all verbless clauses in Takic, these have a present- or nonfuture-tense interpretation. The examples in (3) have subject proclitics, a predicate nominal construction that can be observed with non-derived nouns as well (cf. 8.3.6, 9.4.12).

- (3) DCA a. *Hen*_{__} [*muk-i-sh*] \emptyset .
 1SG_{__}sick/dead(sg.)-NMLZ-ABS be
 ‘I am sick/dead.’ (Seiler 1977:96 (75i))
- b. *Esh*_{__} [*chex- \emptyset -che-m*] \emptyset .
 1PL_{__}sick/dead(pl.)-NMLZ-ABS-PL be
 ‘We are sick/dead.’ (Seiler 1977:96)

The examples in (4) have third-singular agents and thus lack a subject proclitic.

- (4) DCA a. *Aj jal [hunwe-t vuk_{__}méni-i-sh]*¹ \emptyset .
 already QUOT bear-ABS VUK_{__}turn-NMLZ-ABS be
 ‘He had already turned into a bear.’ (Seiler 1970:143 5)
¹ sic: transcribed by Seiler with long vowel: <vukméniš>
- b. [*Pe-j_{__}7ajv-i-sh* *acha7e*] \emptyset .
 3SG-ACC_{__}like-NMLZ-ABS very be
 ‘He’s very fond of him.’ (Seiler 1970:189 22.3)

13.2.5.1.2. DESERT CAHUILLA NONFUTURE SUBJECT RELATIVE CLAUSES WITH -QAL-E-T ~ -WEN-E-T. Derivations with the relativizing suffix sequences *-qal-e-t* ~ *-wen-e-t*, where *-wen* is stative or nonfuture plural, overlap with *-i-sh* predicates in tense-aspect interpretation. They are always understood as durative. As in CU, defective verbs are suffixed only with *-e-t*. In both DCA and MCA, the nominalizing vowel with *nek(e)* ‘come’ is *a*, as in (1a,b), identical to the vowel in the absolutive nouns from object nominalizations in *-7a*; see 14.2.4 (6). However, it is always *e* elsewhere, including with other defective verbs.

- (1) DCA a. *E* [e-t ne7i-j ni-jk nek-a-t] Ø.
 2SG.PRO PROX2-ABS 1SG.PRO-ACC 1SG-DAT come-NMLZ-ABS be
 ‘You’re the one who came to me.’ (Seiler 1970:85 36)
- b. [Ne7i-j ni-jk nek-a-te-m] e-t meete-che-m
 1SG.PRO-ACC 1SG-DAT come-NMLZ-ABS-PL PROX2-ABS many-ABS-PL
hem-neken pi-nga hem-chumi-a-law-wen.
 3PL-come road-LOC 3PL-finish-ABLAUT-GOPR-NFUT.PL
 ‘As for those who came to see me, many came and along the road they died.’ (Seiler 1970:85 38)
- c. *A-nga pa hichi-a-m [pe-nga nawxa-nga*
 PROX2-LOC here go-IMP-PL DIST-LOC middle-LOC
hiwen-e-t-i] pe-7em-7aj-nem [acha7e wax-a-j].
 stand.INAN-NMLZ-ABS-ACC 3SG.OBJ-2PL-pick-FUT good dry-NMLZ-ACC
 ‘Go again and bring the ones standing in the middle that are quite dry.’
 (Seiler 1970:47 101)

Examples of *-qal-e-t/-wen-e-t* derivations in regular verbs are given in (2). These sometimes have a present-tense sense (as do *-i-sh* derivations), but their temporal scope can extend some indeterminate distance into the past, since they cooccur with the adverb *jewi* ‘long ago’ in (2a) and *tuku* ‘yesterday’ in (7).

- (2) DCA a. *Pe jal pe-nga hiw-qal pe7 [pe*
 FOC QUOT DIST-LOC be.there.ANIM.SG-NFUT.SG 3SG.PRO DET
jewi puwax-i-sh tax_xa~xju-qal-e-t].
 long.ago shaman-NMLZ-ABS REFL__DISTR~compete-NFUT.SG-NMLZ-ABS
 ‘The one who long ago competed to be the best medicine man just sat there.’ (Seiler 1970:71 86)
- b. *Pi-j_jaw-wen-e-te-m pe7-me~mekan.*
 3SG-ACC__take-NFUT.PL-NMLZ-ABS-PL 3PL>3SG-DISTR~kill;hurt(sg.)
 ‘Those who were taking care of him beat him.’ (Seiler 1970:187 16.2)

Derivations with *-qal-e-t/-wen-e-t* are marked for accusative case if the relative-clause head is the object in the main clause, as in (3).

- (3) DCA *E-t* *nawishma-l* *a-nga-pa* *pish-7i*
 PROX2-ABS girl-ABS PROX2-LOC-LOC arrive-FACT
pe-teew-qal *pe7i-j* *naxani-7ch-i* [*pe-nga* *tuku*
 3SG > 3SG-see-NFUT.SG 3SG.PRO-ACC man-ABS-ACC DIST-LOC yesterday
pe-kavaj-ñe-qal-e-7t-i].
 CF-go.around-DISTR(?)NFUT.SG-NMLZ-ABS-ACC
 ‘This girl came to see the man who was running around there the other day.’
 (Seiler 1970:187 18.1)

The sequence *-wen-e-t* with an accusative suffix is illustrated in (4), where the head of the relative clause is a stative subject in the relative clause, but an object in the main clause. In (4), we see a typical pattern, where there is no plural suffix *-m* with the nominalized stative construction.

- (4) DCA *Pe=l* *u-mun* *ka~kva-m-wen-e-7t-i*¹
 FOC=QUOT all PL~have.hole-DISTR-ST-NMLZ-ABS-ACC
pe-em-te~tma-an-wen.
 3SG.OBJ-3PL-DISTR~close-CAUS-NFUT.PL
 ‘They filled up the holes (the ones that had holes).’ (Seiler 1970:125 145)
¹ Changed from <kakwam->. The verb root is <-kávi-> (Seiler & Hioki 1979:72).

Relative clauses derived with *-e-t* can appear as verbless-clause complements, as in (5).

- (5) CA [*Cheme-j_nu7in-qal-e-t*] \emptyset .
 3SG > 1PL-ACC__lead-NFUT.SG-NMLZ-ABS be
 ‘He is our leader.’ (Seiler 1977:99 (82))

13.2.5.1.3. -WE-T, -WE-TE-M AS ALLOMORPHS OF -WEN-E-T. Seiler (1977:98-99) considers the *-e-t* suffix in the *-qal-e-t/-wen-e-t* constructions and *-we-t*, which follows uninflected verb bases, to be allomorphs of the same suffix. If this is correct, then this *-we-t* has fallen together with deverbalizing habitual agentive *-we-t* from **-wy7-t* (14.5). The suffix *-we-t*

is an *i*-ablauting suffix, as shown by examples with the verb *kwa7* ‘eat’ in (1b) and (2b). Like other nominalizers, *-we-t* can take plural and accusative suffixes.

Nominalizations with *-we-t* appear with noun plural *-m* and object case *-i*. They appear in relative clauses (1), as verbless clause complements (2), and also in apparent purpose clauses (3), where they have a near-future sense. They are often interpreted as ‘habitual’.

Examples of *-we-t* in present-tense relative clauses appear in (1).

- (1) DCA a. *Pen muljak tataxasi-lj [i kelawe-t ñash-we-t],*
 and lizard little.lizard-ABS PROX tree-ABS sit-NMLZ-ABS
pe7i-j pe-em-nu7in-wen “Ax_7e-ñash-nem e-nga
 3SG.PRO-ACC 3SG.OBJ-3PL-order-NFUT.PL AX_2SG-sit-FUT PROX2-LOC
mavij-pish.”
 night-during
 ‘They told the lizard, that lizard that sits on the tree trunk, “You must sit up there in the night.” ’ (Seiler 1970:49 150)
- b. *Pe7 [taxlis-te-m me-j_kwa7-i-we-t]*
 DET person-ABS-ACC 3PL-ACC_eat-ABLAUT-NMLZ-ABS
hé-sun-i we-k pe-n-jax-7i.
 3SG-heart-ACC cu-u-u-ut 3SG.OBJ-1SG-do-FCT
 ‘I am slowly cutting open the heart of the ogre (lit. ‘the one that eats them’).’ (Seiler 1970:119 84)
- c. *Pe pe-ngax neken Vaanin-ngax [chex-che-m*
 FOC DIST-ABL came Banning-ABL die(pl.)-NMLZ.ABS-PL
me-j_hivin-we-t].
 3PL-ACC_pick.up-NMLZ-ABS
 ‘The undertaker (lit. ‘the one who picks them [the dead] up’) came from Banning.’¹ (Seiler 1970:159 22)

¹ Banning is the town adjacent to the Morongo Indian Reservation.

The suffix *-we-t* appears in verbless clause complements, yielding a surface main-clause predicate, a point which was recognized by Seiler (1977), who translates these as relative clauses.

- (2) DCA a. *Esh* [taxmu-**we-te-m**] \emptyset .
 1PL__sing-NMLZ-ABS-PL be
 ‘We are ones who habitually sing/We are singers.’ (Seiler 1977:275 (21))
- b. [*Ku-7t-i* *pe-j* kwa7-i-**we-t**] \emptyset .
 fire-ABS-ACC 3SG-ACC__eat-ABLAUT-NMLZ-ABS be
 ‘He is the one who eats fire.’ (Seiler 1977:99 (83))
- c. *Aj* [*tumaw-law-**we-t***] \emptyset .
 now attack-GOPR-NMLZ-ABS be
 ‘He was prepared for a fight.’ (Seiler 1970:115 (41))

The suffix sequence *-we-t* sometimes derives what Seiler interprets as purpose clauses, as in (3). Like purpose clauses with immediate *-ka*, these should probably be read as relative clauses.

- (3) DCA a. *Pen* *hen* hichi-**ka** *supu-le-m* *me-n* hal-law-**we-t**.
 and 1SG__go-IFUT some-ABS-PL 3PL.OBJ-1SG__search-GOPR-NMLZ-ABS
 ‘I’m going out to look for others.’ (Seiler 1970:129 172)
- b. *Hichi-ka* *a-nga7-pa* *yekaw-law-**we-t***.
 go-IFUT PROX2-LOC-LOC gather-GOPR-NMLZ-ABS
 ‘She was about to leave to gather [herbs].’ (Seiler 1970:125 141)

13.2.5.1.4. DESERT CAHUILLA FUTURE-TENSE SUBJECT RELATIVE CLAUSES. The future relative markers *-ka* ~ *-ik* and *-nax*, with plural *-ka-te-m*, *-ik-te-m*, *-nax-te-m*, appear in a greater variety of subordinate clauses than do the nonfuture relativizing suffixes *-ish* and *-qalet* ~ *-wenet* ~ *-wet*. Furthermore, *-ka/-ka-te-m* appears far more frequently than the other subordinators as the apparent predicate in main clauses, where we (and other scholars) have identified it as fully installed in main-clause tense inflection as an immediate future (see 11.6.1.5). These future relative markers are cognate with the immediate-future suffixes CU *-(-i)-qa-t(i-m)* and SE *-qa7/-qa-m*. In Inland Cupan these are *i* ablauting suffixes.

We have found only three examples of subject relative clauses in the DCA corpus that are subordinated with an immediate future. In (1a) the common argument (*kichi* ‘house(acc.)’) is subject in the relative clause (where the predicate is a verb-adjunct construction *hakawen ... jaxik*) and object in the main clause. However, the immediate-future relativizer in its ablauted form, *-ik*, apparently does not permit accusative suffixation. In (1b,c) the common argument is subject in both clauses (in spite of Seiler’s misleading translation of (1c)). In these examples there is a change of subject between the predicates of the two clauses. When there is no change, *-nax* is used, as in (2).

- (1) DCA a. *Pe7 ki-ch-i pe-em-jul-wen taxat ache-kwen*
 FOC house-ABS-ACC 3SG.OBJ-3PL-build-NFUT.PL EMPH good-ADVZ
[umum kilje mivax hakawen pe-qi jax-i-k].
 all NEG how open 3SG-EMPH do-ABLAUT-IFUT
 ‘They built a sturdy house without an opening anywhere (that just is not going to open any way).’ (Seiler 1970:89 95)
- b. *Aj pe-qi ni-jax-qal [e pe-qi*
 now 3SG-EMPH 1SG-say-NFUT.SG 2SG.PRO 3SG-EMPH
et_jax-i-k].
 2SG_say-ABLAUT-IFUT
 ‘What I say is just what you (pl.) would (are going to) say.’ (Seiler 1970:39.19)
- c. *[Pe7i-j pe-j_kul-ka] pe i7 Ø.*
 3SG.PRO-ACC 3SG-ACC__do-IFUT FOC PROX be
 ‘This is what he wanted to do (what he is going to do to it).’ (Seiler 1970:71 73)

The examples in (2) show the other future relative suffix, *-nax*. In DCA *-nax* appears only in relative clauses, and not in purpose clauses. Constructions with *-nax* appear only with same-subject relative clauses, as in (2), while different-subject relative clauses appear with the immediate future, as in (1) (Jacobs 1975:202). Jacobs’s example (2b) with *-nax* optionally followed by *-ka* is puzzling. In (2c), with *wajiki* ‘dine, take a meal, get fed, eat (intr)’, the common argument is subject in both clauses.

- (2) DCA a. *Pe7* [pe7 pe pe-j_pii7-nax] Ø.
 3SG.PRO DET FOC 3SG > 3SG-ACC__bewitch-FUT.REL be
 ‘He was the one who would bewitch him.’ (Seiler 1970:51 173)
- b. *awa-l pe7 hunwe-t-i mamajaw-nax(-ka7)*
 dog-ABS DET bear-ABS-ACC help-FUT.REL(-IFUT)
 ‘the dog that will help the bear’ (Jacobs 1975:203 1)
- c. *Mawa* [pe-qi pe-wajiki-nax] pe-wajiki-qal ta7.
 later 3SG-EMPH CF-dine;be.fed-FUT.REL CF-dine-NFUT.SG EMPH
 ‘He (a dog) will only eat what he is fed (Then he eats only when he is fed).’
 (Seiler 1970:189 22.5)

13.2.5.1.5. -NAX AND -IK, -KA, ETC. IN OTHER SUBORDINATE-CLAUSE TYPES. Relative clauses with *-nax* may appear as verbless clause complements, as in (1). The plural of *-nax* is *-nax-te-m*, also seen in (1). This plural form suggests that *-nax* (underlyingly *-naxa* – see above) is from **-na-ka*.

- (1) DCA *Esh__ [taxmu-nax-te-m]* Ø.
 1PL__sing-FUT.REL-ABS-PL be
 ‘We are ones who are supposed to sing.’ (Seiler 1977:275 (23))

In the DCA corpus, constructions with *-ka* ~ *-ik* ~ *-k* (< underlying *-ika*) and their plural forms are common in complements. The examples in (2) have the same subject in both clauses, which in a relative clause would predict *-nax*. However, *-nax* does not appear in complement clauses. In (2a), the allomorph *-ka* can be accounted for by the underlying glottal stop in the verbalizing suffix *-lu7*; this glottal stop is subsequently elided. Similar explanations probably apply to other examples of *-ka* found phonetically after vowels in other examples below. We expect accusative marking on complement clause predicates, but none of these examples have it. Complements of this type do not appear in CU, where a complement of ‘want’ is always a construction with the irrealis subordinator *-pi* (or, in the case of subject continuity, a tensed construction with desiderative *(-i)-vichu* can be used).

- (2) DCA a. *Penga pe ajax pe-em-7aja-wen*
 then FOC like 3SG.OBJ-3PL-want-NFUT.PL
 [*pe-j_welisew-lu-ka-te-m*].
 3SG-ACC__marry-VBLZ-IFUT-ABS-PL
 ‘They wanted to marry him.’ (Seiler 1970:69 55)
- b. *Chem-em-7ajaw-wen* [*cheme-j_chex-n-ik-te-m*].
 1PL.OBJ-3PL-want-NFUT.PL 1PL-ACC__die(pl.)-CAUS-IFUT-ABS-PL
 ‘They want to kill us.’ Seiler 1970:77 76)
- c. *Pe-n-7ajaw-qal* *pe-n_namajn-ik*
 3SG.OBJ-1SG-want-NFUT.SG 3SG.OBJ-1SG__try-IFUT
pe-n-kwa7-i-k *hema kenma pish mijax-wen-ive.*
 3SG.OBJ-1SG-eat-ABLAUT-IFUT perhaps tasty COMP be-ST-REAL
 ‘I want to try to eat it (to see) if it is delicious.’ (S&H 51)
- d. *Pe-em-namaan-wen* *ne-muchi* *hichi-ka-te-m.*
 3SG.OBJ-3PL-try-NFUT.PL 1SG-in.front go-IFUT-ABS-PL
 ‘They tried to go ahead of me.’ (S&H 112)
- e. *Hishte* [*hen_7i~7k-ik*] *ne-7ajax-we.*
 seems.like 1SG__IPFV~play-IFUT 1SG-be.like-ST
 ‘I thought I could play’ (Seiler 1977:244 (59))

In (3) (and (4c)) are complement clauses with a change of subject. Examples (3a-c) have the expected accusative suffixes on the subordinated predicates. Curiously, the examples where the relative-clause subject is plural (3d) – see also (4c) – do not have the expected accusative case marker on the relative-clause predicate.

- (3) DCA a. *Ne-kawija-qal-7e* *hen_tevxá-ka-t-i* *pi-jik.*
 3SG > 1SG-hire-NFUT.SG-FCT 1SG__work-IFUT-ABS-ACC 3SG-DAT
 ‘He hired me to work for him (hired me to be the one to work for him).’
 (S&H 73)

- b. *Pe-n-nu7in-qal* *pe-j__teew-i-ka-t-i*
 3SG.OBJ-1SG-tell-NFUT.SG 3SG-ACC__see-ABLAUT-IFUT-ABS-ACC
 ‘I tell him to find it.’ (S&H 129)
- c. *Pe-n-qami-7i* *hichi-ka-t-i*
 3SG.OBJ-1SG-let-FCT go-IFUT-ABS-ACC
 ‘I let him go.’ (S&H 165)
- d. *Me-7u~7úne-qal* *nea-t-i*
 3SG > 3PL-DISTR ~ show-NFUT.SG basket-ABS-ACC
pi-j__kul-ka-te-m
 3SG-ACC__make-IFUT-ABS-PL
 ‘She is teaching them to make baskets.’ (S&H 226)

The suffix *-ka* ~ *-ik* ~ *-k* derives predicates in purpose clauses with verbs of motion. The examples in (4) have the same subject in both clauses. Purpose clauses with a change of subject use the irrealis subordinator *-pi*.

- (4) DCA a. *Ne-neken* *pe-n-7aj-ik* *meñiki-7ch-i*
 1SG-come 3SG.OBJ-1SG-pick-IFUT mequite.bean-ABS-ACC
 ‘I’m coming to pick mesquite beans.’ (Seiler 1977:341 2)
- b. *Hem-hichi-wen* *taxat* *kup-ka-te-m* *pa-nga7* *pe*
 3PL-go-NFUT.PL EMPH sleep-IFUT-ABS-PL water-LOC FOC
 ‘They went off to sleep in the water.’ (Seiler 1970:97 79)
- c. *Mutúleka* *i-ka* *chem-em-waji-wen* *ish__hichi-ka-te-m*,
 in.morning PROX-DAT 1PL.OBJ-3PL-invite-NFUT.PL 1PL__go-IFUT-ABS-PL
ish__wex-law-ik-te-m
 1PL__sing.enemy.songs-GOPR-IFUT-ABS-PL
 ‘They have asked us to go over there in the morning to sing enemy songs.’
 (Seiler 1970:109 91)

The suffix *-ka* ~ *-ik* ~ *-k* appears in kin terms. In (5a) there are two such expressions. The first, *tax__mingkiktem*, means ‘the ones who are related to each other’. The second,

tax_juuljkatem, means ‘the ones who are brothers to each other’. The two in (5b) include *pej_misik* ‘the one who is daughter-in-law to her’, and the second, the complex form *pej_qalehjek* means ‘the one who is mother of her grandchild by her son’ (that is, ‘daughter-in-law’). In (5c) we encounter *ney_qalaka7ti* with a factive, ‘the one who was father’s mother to me’. These verbal kin terms are unique to CA among the Tatic languages, but they appear as well in the Yuman languages such as Mojave (Langdon 1978a), neighboring CA on the east. Yuman kin terms are often verbs meaning ‘to call someone (kin term)’. The Cahuilla terms below translate as ‘who is (kin term) to someone’, where ‘someone’ is encoded with an object proclitic.

- (5) DCA a. *Hem-qal-e me-páh, tax_mingki-k-te-m, me-wíh*
 3PL-be-FACT 3PL-three REFL_relative-IFUT-ABS-PL 3PL-two
tax_juulj-ka-te-m pen hém-je7.
 REFL_YoBr-IFUT-ABS-PL and 3PL-mother
 ‘There were three people there who were related, two brothers and their mother.’ (Seiler 1970:65 1)
- b. *Penga pe pe7 ñish-lju-ve-l*
 then FOC DET age,of.woman-VBLZ-REAL.SUB-ABS
pe-j_misi-k pe-j_qale-hí-je-k
 3SG-ACC_daughter.in.law-IFUT 3SG-ACC_SoCh-3SG-mother-IFUT
 “Meme7,” *jax-qal.*
 stop.it say-NFUT.SG
 ‘Then the old woman said to her daughter-in-law, to the mother of her son’s child, “Stop that.” ’ (Seiler 1970:77 38)
- c. *Ne7 pe-n-kijn-qal-e-ve mijax-wen*
 1SG.PRO 3SG.OBJ-1SG-go.with-NFUT.SG-ABLAUT-REAL.SUB be-ST
ne-j_qala-ka-7t-i.
 1SG-ACC_FaMo-IFUT-ABS-ACC
 ‘I used to go with my late grandmother.’ (Seiler 1970:185 1.6)

13.2.5.2. SUBJECT RELATIVE CLAUSES IN MOUNTAIN CAHUILLA. For MCA, we benefit from a well-organized review of relativization in Sauvel and Munro (1981), which includes

examples of nearly every possible construction type. The inventory of relativizing suffixes in Table 13.2.5.2 comes from their treatment. To their examples we have added a few from the MCA text collection in Sauvel and Elliott (2004) and from the Harrington archive.

Table 13.2.5.2. Tense-aspect suffixes on verbs in Mountain Cahuilla relative clauses

		common argument in relative clause		subject		object		
		singular	plural	singular	plural			
common argument in main clause	subject	past			-ve ~ -ive	-ve-m		
			-i-sh ~ -sh	-i-che-m		-i-che-m		
		present	active	-qal-e-t	-qal-e-te-m	-7a	-a-m	
			stative	-wen-e-t	-wen-e-te-m	-qal-ive ~ -wen-ive		
			future		-ka7	-ka-te-m	-pi ~ -p	-pi-m
					-nax	-nax-te-m		
	object	past			-ve-j ~ -ive-j	-ve-j		
			-ich-i	-i-chi-m-i	-i-7ch-i	-i-sh-m-i		
		present	act.	-qal-e-t-i	-qal-e-te-m-i	-7a-j	-a-m-i	
			st.	-wen-e-(7)t-i	-wen-e-te-m-i	-qal-ive-j ~ -wen-ive-j		
			future		-ka-t-i	(?)	-pi(-y) ~ -p	-pi-m-i
					-nax-a-7t-i	-nax-te-m-i	(-ka ~ -ik ~ -k)	

In MCA, there is a past-present distinction in main clauses, and the tense differences between the past and present relative clauses are more clear-cut in this language than in either DCA or CU. There are, however, still areas of overlap. For instance, Katherine Sauvel (in Sauvel & Elliott 2004), speaking around the turn of the 21st century, always referred to her mother, who died in 1940, as *pe7 nej_jikawmaxish* ‘the one who gathered for me’ (e.g. p. 709), with the past-tense subject relativizer *-i-sh* (she and Elliott translate this usage as ‘my mother, God rest her soul’). However, speaking of a kind of grass that yielded edible seeds, which can no longer be found, she called it *pe7 i7ixinga welqalet* ‘that which grew out in the desert’ (p. 943), with the present-tense subject relativizer *-qal-e-t*. Since the major development of White-dominated communities in the Coachella

Valley took place in the 1950s, the loss of this resource probably dates to that period, fifty years before Mrs. Sauvel talked to Eric Elliott. Sauvel and Munro (1981:266) observe that the past-tense object relativizer *-7a* is often used for present-tense reference, “especially when referring to states rather than events.” So it is clear that subtle considerations beyond absolute tense distinctions shape these usages.

13.2.5.2.1. PAST-TENSE SUBJECT RELATIVE CLAUSES IN MOUNTAIN CAHUILLA. The relativizing suffix for past-tense relative clauses where the common argument is relative-clause subject is *-i-sh*, with plural *-i-che-m*. Examples where the common argument is subject in the main clause as well appear in (1). The *i* of the suffix sequence does not appear with vowel-final verb stems like *sengee* ‘smile’ in (1a).

- (1) MCA a. *Iswe-t senge-e-sh qingi-7ch-i pe-j__nemi-ka.*
 wolf-ABS smile-NMLZ-ABS squirrel-ABS-ACC 3SG-ACC__chase-IFUT
 ‘The wolf that was smiling is going to chase the squirrel.’ (S&M 230)
- b. *Taxliswe-t heñw-i-sh ne-teew-qa7*
 person-ABS be.angry-NMLZ-ABS 1SG.OBJ-see-PST.SG
 ‘The person who was angry found me.’ (S&M 231)
- c. *Nangxani-che-m pe-j__mekn-i-che-m hunwe-7t-i*
 man-ABS-PL 3SG.OBJ-ACC__kill(sg.)-NMLZ-ABS-PL bear-ABS-ACC
hem-chex-we.
 3PL-be.sick(pl.)-PRS.PL
 ‘The men who killed the bear are sick.’ (S&M 233)
- d. *Penga7 pe7 pe hem-qal-7e wihkwa pe*
 then DET FOC 3PL-be.there.anim-FCT both FOC
pe-j__7iva-ngi-Ø-che-m pe-ngax skweela-ngax.
 3SG-ACC__run-GOING-NMLZ-ABS-PL 3SG-ABL school-ABL
 ‘And then the two of them that ran away from school were there.’ (S&E 1148)

When the common argument is object in the main clause, an accusative suffix will follow the relativizing suffixes. If there is a head noun or pronoun it can also be suffixed for accusative case, as in (2a), but phrasal marking as in (2b) is common.

- (2) MCA a. *Eqwashma-7l-i pe-7-tew-qa chengen-i-7ch-i?*
 boy-ABS-ACC 3SG.OBJ-2SG-see-PRS.SG dance-NMLZ-ABS-ACC
 ‘Do you see the boy who danced?’ (S&M 232)
- b. *Kikita-m hem_ ngang-i-sh-m-i mi-chem-kichúngin-we*
 baby.pl-PL 3PL_ cry-NMLZ-ABS-PL-ACC 3PL.OBJ-1PL-kiss-PRS.PL
 ‘We are kissing the babies who cried.’ (S&M 236)
- c. *E-t nek-7e me-j_ hivin-ka mete-che-m*
 PROX2-ABS come-FCT 3PL-ACC_ take-IFUT.SG many-ABS-PL
pe-j_ qwa7-i-sh-m-i
 3SG-ACC_ eat-NMLZ-ABS-PL-ACC
 ‘It comes to take away the ones who have eaten (during eclipse).’ (S&E 834)

As with other relative-clause types, these past-tense subject relatives can be complements of copula or verbless clauses, as in (3). These examples help clarify the range of past tense, which extends into to mythic time.

- (3) MCA a. *Ne7 hen_ chex-i-sh qwansuple-vi-sh ne-ma7-chumi*
 1SG.PRO 1SG_ appear-NMLZ-ABS six-TIMES-ABS 1SG-hand-finish (10)
pe-ta7 wih tawpa-sh penich-i-7ch-i Ø.
 3SG-on two year-ABS pass-NMLZ-ABS-ACC be
 ‘I was born 62 years ago.’ (3.112.0013)
- b. *Pe7 tuku pe7 chum-a-law-i-sh Ø.*
 3SG.PRO yesterday;just DET finish-ABLAUT-GOPR-NMLZ-ABS be
 ‘She is the one who just died.’ (S&E 1270)

13.2.5.2.2. PRESENT-TENSE SUBJECT RELATIVE CLAUSES IN MOUNTAIN CAHUILLA. According to Sauvel and Munro (1981), the present-tense suffix sequences are active *-qal-e-t*, stative

-wen-e-t. The plural of the active sequence is *-qal-e-te-m*, as in their example in (1c), not *-wen-e-tem* as in DCA. However, this description is not confirmed in Katherine Sauvel's usage as recorded in Sauvel and Elliott (2004). In that source, the active plural is *-wen-e-te-m*, as in (1d,e).

- (1) MCA a. *Naxani-sh paagri-j pe-j_mamajaw-qal-e-t ne7*
 man-ABS priest-ACC 3SG-ACC__help-PRS.SG-NMLZ-ABS 1SG.PRO
ne-na7 Ø.
 1SG-father be
 'The man who is helping the priest is my father.' (S&M 233) (cf. Sp. *padre*)
- b. *Pe7 pi-ka u7mu ja7i pa7 peniichi-qa7 penga7 pe7*
 DET 3SG-DAT all wind LOC pass-PST.SG there DET
ki-sh pi-ka jul-wen-e-t hungan-ax.
 house-ABS 3SG-DAT build-ST-NMLZ-ABS back-ABL
 'The wind would pass all through there, through the shed built out back.'
 (S&E 947)
- c. *Na~nwishma-lje-m hem_taxmu-qal-e-te-m ne-teew-we.*
 PL~girl-ABS-PL 3PL__sing-PRS.ACT-NMLZ-ABS-PL 1SG.OBJ-see-PRS.PL
 'The girls who are singing see me.' (S&M 233)
- d. *Pe7e-m a~7amiva-m pe7e-m pe-j_7iva-ni-wen-e-te-m*
 DET-PL PL~elder-PL DET-PL 3SG-ACC__run-CAUS-PRS.PL-NMLZ-ABS-PL
penga7 Sex-nga7 pe7 pen pi-ka hem-pax-we7.
 there (boil;cook)-LOC FOC and 3SG-DAT 3PL-enter-PST.PL
 'Those elders, the ones who ran the ceremony there in Palm Springs ("at the place where the water boils"), would come in ...' (S&E 1080)
- e. *Exenuk ku pish achakwe pish chem-em-kul-ve*
 thus EMPH COMP good COMP 3PL.OBJ-3PL-do-REAL.SUB
pe7e-m casino pe-j_jaw-wen-e-te-m.
 DET-PL 3SG-ACC__hold-PRS.PL-NMLZ-ABS-PL
 'In that way we have benefited from what the casino owners have done for us.' (S&E 1191)

The defective verbs simply take the suffix sequence *-e-t*, as in (2). In MCA as well as in CU and DCA we see unexpected *a* with *neke* ‘come’ in (2c).

- (2) MCA a. *Juumo-m, u7mu ajxenuk pe7em qal-Ø-te-m*
 Yuma-PL all like 3PL.PRO be.there.ANIM.PL-NMLZ-ABS-PL
qawi-sh pa7 me-m-tewaj-we ivi-m-i
 mountain-ABS LOC 3PL.OBJ-3PL-name-PRS.PL PROX-PL-ACC
taxlos-t-m-i xakwícha.
 person-ABS-PL-ACC (ethn)
 ‘The Yumas, like all who live in the mountains, call these people
 Xakwícha.’ (3.113.0068)
- b. *Pe7e metewet hichaxi supu-l iv7ax nami-we*
 DET many thing other-ABS now cross-ST.PRS
jewi kilj hiw-wen-e-t penga7 ne-tuvxwa-qal-ipa7.
 long.ago NEG be.there.INAN-NMLZ-ABS there 1SG-work-DUR.SG-DS
 ‘There are lots of new things on exhibit, things which were not there when I
 worked there.’ (S&E 1351)
- c. *Pe7em supu-le-m pep7i-ngax miv-ax p-ax*
 3SG.PRO other-ABS-PL far-ABL INDF-ABL 3SG-ABL
nek-a-te-m.
 come-NMLZ-ABS-PL
 ‘The other ones are (those who came) from somewhere else further away’
 (S&E 1234)

Examples where the common argument is object in the main clause and the relativized predicate is accusative appear in (3).

- (3) MCA a. *Nawishma-7l-i pe7 pe pe-n-7e7nan-qa*
 girl-ABS-ACC DET FOC 3SG.OBJ-1SG-know-PRS.SG
taxmu-qal-e-7t-i.
 sing-PRS.SG-NMLZ-ABS-ACC
 ‘I know the girl who is singing.’ (S&M 234)

- b. *Temajawe-t me-kul-7e u7mu pa-nga7*
 prsn-ABS 3PL-make-FCT all water-LOC
hiwqal-e-t-m-i
 be.there.ANIM-NMLZ-ABS-PL-ACC
 ‘Temayawet hizo todos los que son del agua. (Temayawet made all those [creatures] who live in the water.)’ (3.112.0097)
- c. *Jewi wala-ngax qamexenuk pish chem-em-nuk-ve*
 long.ago base-ABL how COMP 1PL.OBJ-3PL-create-REAL.SUB
i-pa pe7 pe chemem hish_taxswe-t-m-i
 PROX-LOC DET FOC 1PL.PRO 1PL_Cahuilla-ABS-PL-ACC
hish_7ivilju-wen-e-t-m-i
 1PL_speak.Cahuilla-PRS.PL-NMLZ-ABS-PL-ACC
 ‘Long ago in the beginning (this was how) we were created here, we who are Cahuilla, we who speak the Cahuilla language’ (S&E 874)

13.2.5.2.3. FUTURE-TENSE SUBJECT RELATIVE CLAUSES IN MOUNTAIN CAHUILLA. There are two relativizing suffixes for future-tense relative clauses with respect to subject. Where both main and relative clause have the same subject, the suffix is *-nax*, plural *nax-te-m*, as in (1a-c). Where the subject is different in the two clauses, the relativizing suffix is the immediate-future suffix *-ka* ~ *-ik*, plural *-ka-te-m*, *-ik-te-m*. Examples (1c), with *-nax*, and (1d) with *-ik*, show the difference very clearly. These two sentences appear in this order in a text. The first has subject continuity, while the second has a change of subject. The difference between the two constructions resides entirely in the syntactic context.

- (1) MCA a. *Wikikma-lj taxmu-qa [hing-nax].*
 bird-ABS sing-PRS.SG fly-FUT.REL
 ‘The bird that will fly is singing.’ (S&M 231)

- b. *Miv-ika í-je hichi-7i e-j_jawi-nax*
 INDF-DAT 2SG-mother go-FCT 2SG-ACC__hold-FUT.REL
e-j__kusi-nax.
 2SG-ACC__take-FUT.REL
 ‘Where has your mother gone, the one who will hold you, the one who will take you?’ (line of a lullaby) (S&E 877)
- c. *Pen hani aj pe7em hem-qal-7e hawin-nax-te-m.*
 and then now 3PL.PRO 3PL-be.there.ANIM-FCT sing-FUT.REL-ABS-PL
 ‘And then there were the singers.’ (S&E 965)
- d. *Pe7 pe hawin-ik-te-m hem-jax-we*
 DET FOC sing-IFUT-ABS-PL 3PL-say-PRS.PL
 ‘And they call those professional singers *hawiniktem*. (*Hawinaxtem* and *hawiniktem* are synonyms.)’ (S&E 965)

The examples in (2) show the case where the common argument is object in the main clause. (2c) is an interesting example, showing that a topicalized common argument of this type need not have accusative inflection.

- (2) MCA a. *Wikikma-7lj-i [hing-naxa-7t-i] kilj pe-n-jaw-7i.*
 bird-ABS-ACC fly-FUT.REL-ABS-ACC NEG 3SG.OBJ-1SG-catch-FCT
 ‘I did not catch the bird that will fly.’ (S&M 232)
- b. *Pe7 pe kilj mipa7 me-m-chexin-we pe7e-j*
 DET FOC NEG when 3PL.OBJ-3PL-kill(pl.)-PRS.PL DET-ACC
ningki-sh-m-i majlju-ka-te-m-i ku pe.
 female.PL-ABS-PL-ACC give.birth-IFUT-ABS-PL-ACC EMPH FOC
 ‘They never kill pregnant females (females that are going to give birth).’
 (S&E 1261)

- c. *Pe7 majju-ka-te-m pe7 me-j_jaw-an-ik-te-m*
 DET give.birth-IFUT-ABS-PL DET 3PL-ACC__have-CAUS-IFUT-ABS-PL
muchi7-ika supu-l-m-i penga7 pe7 pe pe7i-j
 in.front-DAT other-ABS-PL-ACC then DET FOC 3SG.PRO-ACC
me-chem-kiiva-we.
 3PL.OBJ-1PL-spare-PRS.PL
 ‘As for the pregnant ones, those that will give life to others, we spare them.’ (S&E 1260)

13.2.5.2.3.1. -IK, -KA AND THEIR PLURALS IN OTHER SUBORDINATE-CLAUSE TYPES. As in DCA, *-ik*, *-ka*, and their plurals in MCA, as in DCA, are common in complements and in same-subject purpose clauses. A few examples from the Harrington MCA texts appear in (1).

- (1) MCA a. *Pe-7ajaw-qa7a pish nenm-ik u7mu-l pa7 tema-l-pa7.*
 3SG.OBJ-want-PST.SG COMP travel-IFUT all-ABS LOC earth-ABS-LOC
 ‘He wanted to travel through all the world.’ (3.112.0115)
- b. *Pengax pe ne-ngij-7i ne-tuxwáa-ka maakina-nga7 sama-7t-i*
 then FOC 1SG-go-FCT 1SG-work-IFUT machine-LOC hay-ABS-ACC
sut-um-ni-va-sh.
 tie-DISTR-CAUS-AGTV-ABS
 ‘Then I went off to work on a hay-baling machine’ (3.112.0118)

There is also an example in the Harrington texts of the future relative suffix *-nax* in a complement clause, shown in (2).

- (2) MCA *Ne7 me-n-nu7en-7e pah soldáado-m-i pen*
 1SG.PRO 3PL.OBJ-1SG-order-FCT three soldier-PL-ACC and
sargéento7-i pen vakéero7-i u7mun pish
 sergeant-ACC and cowboy-ACC all COMP
me-m-haal-pi pen chem-kija-nax-te-m.
 3PL.OBJ-3PL-IPFV.search-IRR.SUB and 1PL-stay-FUT.REL-ABS-PL
 ‘I ordered three soldiers and a sergeant and a cowboy, all together, to search for them, and that we should remain.’ (3.113.0371)

Kin terms in MCA, as in DCA, are often expressed as immediate-future relative clauses, as in (3).

- (3) MCA *Pe7 pe7 cheme-j_nuk-i-sh, cheme-j_nuk-i-che-m*
 DET FOC 1PL-ACC__create-NMLZ-ABS 1PL-ACC__create-NMLZ-ABS-PL
ya7 me-wih-7a pe7em tax_juul-ka-te-m
 just 3PL-two-PST DET.PL REFL__YoBr-IFUT-ABS-PL
tax_hé-pas-ka-te-m.
 REFL__3SG-OlBr-IFUT-ABS-PL
 ‘We had [a creator,] just two creators, those two brothers (those who were related to each other as younger brother, and related to each other as older brother).’ (S&E 874)

13.2.5.2.4. DECEDENT SUFFIXATION ON KIN TERMS IN MOUNTAIN CAHUILLA. The fact that a decedent form of a kin term takes an object proclitic rather than a possessive prefix suggests that such terms are subordinate-clause forms. An example is given in (1). Unfortunately, we have not been able to align decedent *-k* with any subordinator.

- (1) MCA *Cheme-j_qala-k nishljuve-lj ta7 pe-n-7e~7nan-qa*
 1PL-ACC__FaMo-DEC old.woman-ABS EMPH 3SG.OBJ-1SG-IPFV~know-PRS.SG
pe7i-j.
 3SG.PRO-ACC
 ‘However, I do remember my paternal grandmother (our deceased paternal grandmother).’ (S&E 1002) [= 11.6.2.3 (1c)]

13.3. OBJECT RELATIVE CLAUSES IN CUPAN. Where the common argument is object in the relative clause, the Cupan languages have a contrast between two ablauting suffixes: realis **(-i)-vy* and irrealis *(-a)-pi*. (The ablaut vowels occur only in Inland Cupan.) Further, CU and both varieties of CA share a “present-tense” or nonfuture *-7a*, *-a-m*, while LU has present-tense *-qa-t*, which also appears in subject relative clauses.

The range of functions of these suffixes in non-relativizing subordination is similar across the languages. The main differences involve different-subject adverbial clauses. In CU, the realis subordinator *-vy* appears in temporal adverbials where the adverbial clause time is prior to that of the main clause, and *-pi* appears when the adverbial clause time

is subsequent. The CU different-subject switch-reference suffixes encode simultaneity, and cannot be used in these contexts. In CA, the situation is slightly different, in that the CA same-subject suffix also encodes simultaneity. In non-simultaneous clauses the suffix sequences *-qal-i-ve/-wen-i-ve* are employed. However, the CA different-subject subordinator is neutral in regard to temporal correspondences, and can be used in non-simultaneous adverbial clauses. Finally, in CA, according to Jacobs (1975) and Sauvel and Munro (1981), the subordinators *-ve* and *-pi* agree with subjects in number. There are very few attestations of this type. Jacobs states that this kind of agreement is also found, but very rarely, in object-headed relative clauses in LU.

Table 13.3 shows the suffixes of the Cupan object relative clauses on a single grid. As with the subject-headed relative clauses, the “past” vs. “present” distinction is quite unstable. The contrast between **(-i)-vy* and **(-a)-pi* is often realis vs. irrealis modality rather than past vs. future tense. Especially in DCA, but also in MCA, both the “present” and “past” suffixes should be thought of as simply “nonfuture” in relation to the temporality of the main clause. We are suspicious that the “present-tense” derivations in *-7a* are simply the non-absolute forms of the immediate past. For individual tables below for DCA and MCA, past and present are *nonfuture₁* and *nonfuture₂*. As discussed in 13.2.1, senses of LU *-qa-t*, a “recent past” in main clauses, include present and past. Constructions with *-7a* in CU may appear with the adverb *apút* ‘already’, which in main clauses appears with present-tense verbs, but not with the past tense. Thus the label “present tense” may be more appropriate for CU than for CA, but the scope of this category includes the recent past, including *tuku* ‘yesterday’, which in CU can appear with the past/realis clitic =*yp* and verbs with full past-tense inflection.

Table 13.3. Object relative clause tense-aspect suffixes in Cupan

		LU	CU		CA	DCA	MCA	
		sg./pl.	sg.	pl.	sg.	pl.	pl.	
head in main	subject	realis – past	<i>-vu</i>	<i>(-i)-vy</i>		<i>(-i)-ve</i>	<i>(-i)-ve-m</i>	
		nonfuture – present	<i>-qa-t</i>	<i>-7a</i>	<i>-a-m</i>	<i>-7a</i>	<i>-a-m</i>	<i>-a-m</i>
		irrealis – future	<i>-pi</i>	<i>(-a)-pi</i>		<i>(-a)-pi</i>		<i>(-a)-pi-m</i>
	object	realis – past	<i>-vu-j</i>	<i>(-i)-vy-j</i>		<i>(-i)-ve-j</i>		<i>(i-)-ve-m-i</i>
		nonfuture – present	<i>-qa-t-i</i>	<i>-a-y</i>	<i>-a-m-i</i>	<i>-7a-y</i>	<i>-a-m-i</i>	<i>-a-m-i</i>
		irrealis – future	<i>-pi-j</i>	<i>(-a)-pi-j</i>		<i>(-a)-pi(-j)</i>		<i>(-a)-pi-m-i</i>

13.3.1. OBJECT RELATIVE CLAUSES IN LUISEÑO. The subordinating suffixes for LU relative clauses where the common argument is the object are shown in the leftmost column of Table 13.3, above. There is no number agreement in such suffixes, either with the relative-clause subject or with the object. The forms for the present-tense suffix are the same as the singular suffixes in the subject relative clauses.

13.3.1.1. PAST-TENSE OBJECT RELATIVE CLAUSES IN LUISEÑO. Past-tense predicates in object relative clauses where the common argument is subject in the main clause are suffixed with the realis subordinator *-vu*, as seen in (1). The realis subordinating suffix *-vu* is cognate with CU *-vy* and CA *-ve*, and with SE *-iv(y)*. This suffix can appear with accusative and local-case suffixes, but does not appear with the plural suffix. Constructions with *-ve* require a pronominal prefix that encodes the subject.

- (1) LU a. *Pi7 po7 hingeema-l [no-7o7nan-vu] po7 axáninik*
 and DET boy-ABS 1SG-know-REAL.SUB 3SG.PRO like
lo7x-uk po-piit-i puneej-i.
 do-TR.USIT 3SG-YoSs-ACC 3SG.ANIM.PRO-ACC
 ‘And the boy that I knew would do things like that to his little sister.’ (H&E 1095)
- b. *Peshli-sh [po7 waxaam no-7eskan-i-vu] jawajwi-sh.*
 bowl-ABS DET recently 1SG-paint-TR-REAL.SUB beautiful-ABS
 ‘The bowl that I painted yesterday is beautiful.’ (Hyde 1971:175)
- c. *Ja7aj-chu-m [pumoom waxaam o-tiiv-i-vu]*
 man-ABS-PL 3PL.PRO recently 2SG-see-TR-REAL.SUB
chi~shpóm-ka-tu-m.
 PL~tell.lie-AGTV-ABS-PL
 ‘The men whom you saw yesterday are liars.’ (Hyde 1971:175)

There are no attested constructions with the suffix *-vu* in AC, where we would expect *-va**. This may be due to a gap in the data. It may also be due to an AC preference for object relative clauses subordinated, with a different derivation, cognate with the *-7a* derivations in CU and CA. AC examples are *pa-7aam-a* ‘his hunting’, *pa-teel-a-y* ‘his

language’, *pa-7jal-a* ‘one who knows’. These are transitive examples. Intransitives have final *-x*, as in *pa-nech-x* ‘its price’. However, there are no clear examples of relative clauses with these constructions.

In (2), the common argument is also object in the main clause, in which case *-vu* appears with an accusative suffix.

- (2) LU a. *Ku\$án-i punéj chenkila-sh iipi-t-i [o-jk*
 get-TR.IMP 3SG.INAN.DET.ACC scissors-ABS new-ABS-ACC 2SG-DAT
no-samsa-vu-j].

1SG-buy-REAL.SUB-ACC

‘Get those new scissors which I bought you.’ (Elliott 1999:1010)

- b. *Om = \$u tiiw-i-q hunwu-tu-m-i puneem-i*
 2SG.PRO-Q see-TR-PRS.SG bear-ABS-PL-ACC 3PL.ANIM.DET-ACC
[ja7á-sh po-qe7ée-vu-j].

man-ABS 3SG-kill(pl.)-REAL.SUB-ACC

‘Did you see the bears that the man killed?’ (Hyde 1971:217)

- c. *Pa7 = kunu7 ano7 woko7-i-nik tiiw-i-q po-simbraar-i*
 then = QUOT coyote arrive-TR-SS see-TR-PRS.SG 3SG-garden-ACC
[too\$axi-t po-kwa7a-vu-j].

cottontail-ABS 3SG-eat-REAL.SUB-ACC

‘When he arrived the coyote saw his garden, which the cottontail rabbit had eaten.’ (K&G 189 6.4)

13.3.1.2. PRESENT-TENSE OBJECT RELATIVE CLAUSES IN LUISEÑO. The present-tense suffix *-qa-t* is used in both subject relative clauses and object relative clauses. In object relative clauses the plural form *-qa-tu-m* does not appear.

In (1), the relative-clause head is subject in the main clause and the corresponding argument is the relative-clause object. Example (1b) shows the problem of assigning these forms tense references. “Alec” is Mrs. Hyde’s younger brother, who died many years before this telling, and the “woman” is someone who died before him. However, at the time of the telling, the woman has just appeared to him in the form of a bird, a flicker. Example (1c), with an unexpected pronominal prefix, shows the restriction on number

where the common argument is object in both clauses: no plural suffixation appears here, even though both the common argument and the subject of the relative-clause predicate are plural.

- (1) LU a. *Awaa-l [po7 Maríja poji7j-i-qat] puloov.*
 dog-ABS DET Maria play-TR-REL.PRS good
 ‘The dog that Maria is playing with is nice.’ (Hyde 1971:179)
- b. *Po7 \$ungaa-l mij-qu\$ [Alec pumól-i-qat].*
 DET woman-ABS be-PST.IPFV remember-TR-REL.PRS
 ‘It was the woman that Alec remembered.’ (H&E 806)
- c. *Naawa-m pomóm cham-lo7xa-qat jawájwi-chu-m*
 dress-PL 3PL.DET 1PL-make-REL.PRS beautiful-ABS-PL
 ‘The dresses that we are making are beautiful’ (Hyde 1971:180)

In (2), the object in the relative clause is also object in the main clause. Here an accusative suffix on the relative-clause predicate is required, agreeing with the object status of the head noun *awaa-l* in the main clause. The relative pronoun *puneej* is also accusative, in agreement with its head. In (2b) the relativized predicate remains singular although it modifies a plural noun. (2b) also provides another case of an unexpected pronominal prefix with this construction.

- (2) LU a. *Noo ajál-i-q awaa-l-i [puneej-i Maríja*
 1SG.PRO know-TR-PRS.SG dog-ABS-ACC 3SG.ANIM.PRO-ACC Maria
poyi7j-i-qat-i].
 play-TR-REL.PRS.SG-ACC
 ‘I know the dog that Maria is playing with.’ (Hyde 1971:179)
- b. *Noo tiiw7-jax naawa-m-i ponéj o-lo7xa-qat-i*
 1SG.PRO see-PST.TR dress-PL-ACC DET.INAN.ACC 2SG-make-REL.PRS-ACC
 ‘I saw the dresses that you are making.’ (Hyde 1971:180)

13.3.1.3. FUTURE-TENSE OBJECT RELATIVE CLAUSES IN LUISEÑO. The examples in (1) illustrate irrealis *-pi* in relative clauses where the head of the relative clause is the object in that clause but subject in the main clause.

- (1) LU a. *Peshli-sh* [po7 *nawítma-l* *po-7eskan-i-pi*] *loovi-q.*
 pot-ABS DET woman-ABS 3SG-paint-TR-IRR.SUB be.good-PRS.SG
 ‘The pot that the girl is going to paint is good.’ (Hyde 1971:217)
- b. *\$ungaa-l* [po7 *Juan* *po-peewlu-pi*] *jawájwi-sh.*
 woman-ABS DET Juan 3SG-marry-IRR.SUB beautiful-ABS
 ‘The woman whom Juan will marry is beautiful.’ (Hyde 1971:180)

In (2) are sentences where the head of the relative clause with irrealis *-pi* is the object in both main and relative clauses and takes an accusative suffix.

- (2) LU a. *Om = \$u* *tiiwi-q* *hunwu-tu-m-i* [puneem-i *ja7á-sh*
 2SG.PRO = Q see-PRS.SG bear-ABS-PL-ACC 3PL.PRO-ACC man-ABS
po-qe7ée-pi-j?
 3SG-kill(pl.obj.)-IRR.SUB-ACC
 ‘Did you see the bears that the men are going to kill?’ (Hyde 1971:217)
- b. *Noo* *tiiw7-jax* *awaa-l-i* [*Juan* *po-wot-i-pi-j*].
 1SG.PRO see-TR.PST.PFV dog-ABS-ACC Juan 3SG-hit-TR-IRR.SUB-ACC
 ‘I saw the dog that Juan will hit.’ (Elliott 1999:708)
- c. [*Toomavi-sh* *ataax* *qaj* *po-lovi7-i-pi-j*] *po7* *lo7x-uk.*
 blind-ABS person NEG 3SG-do-TR-IRR.SUB-ACC 3SG.PRO do-USIT
 ‘What another blind man couldn’t do, he did.’ (H&E 16)

13.3.1.4. THE SUBORDINATORS -VU AND -PI IN OTHER TYPES OF SUBORDINATE CLAUSES. The suffixes *-vu* and *-pi* appear in other types of subordinate clauses besides relative clauses. Only *-pi* is attested in embedded questions, illustrated in (1). In these constructions, the subordinate predicate is in the accusative case.

- (1) LU a. *Huu7un-i-qu\$ chaam-ik [micha7 axáninik kii-sh*
 teach-TR-PST.IPFV 1PL.PRO.DAT some.way like house-ABS.ACC
cham-limpiár-pi-j].
 1PL-clean-IRR.SUB-ACC
 ‘They would teach us how to clean house.’ (H&E 2)
- b. *Chaam o7na-qu\$ [hi-sh cham-luvi7i-pi-j].*
 1PL.PRO know-PST.IPFV INDF-ABS.ACC 1PL-do-IRR.SUB-ACC
 ‘We knew what to do.’ (H&E 4)
- c. *Pi7 tiiw-i-vichu-qu\$ [tee pi7 po7 punéj*
 and see-TR-DES-PST.IPFV perhaps and 3SG.PRO 3SG.INAN.ACC
po-luvi7i-vuta-qal-pi-j man tee qaj].
 3SG-do-POT-DUR-IRR.SUB-ACC or perhaps NEG
 ‘And I wanted to see whether he could do it or not.’ (H&E 940)
- d. *Po-j toow-wunu-t noo ijqu\$ pilách-i-qu\$*
 3SG.PRO-ACC see-PROG-ABS 1SG.PRO also learn-TR-PST.IPFV
[punéj no-luvi7-i-pi-j].
 3SG.INAN.ACC 1SG-do-TR-IRR.SUB-ACC
 ‘By watching her I also learned how to do it.’ (H&E 745)
- e. *Man qaj chaam ajál-i-qu\$ ijqu\$ [hi-sh*
 or NEG 1PL-PRO know-TR-PST.IPFV also INDF-ABS.ACC
cham-lovi7-i-pi-j].
 1PL-do-TR-IRR.SUB-ACC
 ‘Or we didn’t know what else we were supposed to do.’ (H&E 1093)
- f. *Pi7 pa7 \$ungaa-l tu~tuvjung choo7un tukumi-t*
 and then woman-ABS REP~ask.PST.PFV all night-ABS
[po-jax-pi-j [micha po-aa7qwal-vu-j]].
 3SG-say-IRR.SUB-ACC where 3SG-be-REAL.SUB-ACC
 ‘And then the woman spent the entire night asking him to tell her where he
 had been.’ (K&G 210 41)

Both *-vu* and *-pi* are commonly found in complement clauses, as exemplified in (2). In complement clauses these predicates are treated as objects of the main-clause verb, and are marked with accusative suffix.

- (2) LU a. *Pi7=mo=ka micha7 choo7un-nga naqma-an*
 and = 3PL = COND where all-in hear-FUT
 [*o-tkwaji-vu-j*].
 2SG-die-REAL.SUB-ACC
 ‘And surely everywhere they will hear that you have died.’ (K&G 203 30)
- b. *Po7 Mómngaa-sh [po7 ne-j maamaju-mukw-i-sh [ivi7*
 DET White.man-ABS DET 1SG-ACC help-REL.PST-NMLZ-ABS PROX
libro no-luvi7i-vu-j]], po7 po-peew takwá-ja.
 book 1SG-make-TR-REAL.SUB-ACC DET 3SG-wife die-INTR.PST.PFV
 ‘As for the White man who helped me to make the book, his wife died.’
 (H&E 622)
- d. *\$uwoo7-qu\$ [po-j pom-jul-i-pi-j].*
 be.afraid-PST.IPFV 3SG-ACC 3PL-lock-TR-IRR.SUB-ACC
 ‘He was afraid that they would lock him up’ (H&E 411)

There are examples of apparent inconsistencies in accusative marking. Here, the subordinate clause is somehow not the true object of the main-clause predicate. In (3a), with the sense ‘should’, we would expect *mijq*, as in (4b,c,d), but instead the clause is verbless, as in (3a). Thus the complement clause is really the verbless clause and not the clause with *-pi*. In (3b) the clause with *-vu* has apparently been topicalized (hence Hyde and Elliott’s colon), which may account for the absence of the accusative. In (3c,d) the main-clause verbs are not transitive. (3d) provides an example of a different-subject purpose clause.

- (3) LU a. *Police = kuna7 axii-ji jaa, [ataax po7 qaj*
 police = QUOT someone-ACC say.PST.PFV person FOC NEG
po-haaj-ax-pi ku-jk i-jk] Ø.
 3SG-approach-INTR-IRR.SUB fire-DAT PROX-DAT be
 ‘The police reportedly told someone that nobody should go near the fire.’
 (H&E 677)
- b. [*Pom-ki-j pom-kii-chu-vu*]: *po7eek-i noo*
 3PL-house-ACC 3PL-house-VBLZ-REAL.SUB only-ACC 1SG.PRO
punéj ajál-i-q.
 3SG.INAN.ACC know-TR-PRS.SG
 ‘I only know that they built houses there.’ (H&E 637)
- c. *Pi7 hikáh-qu\$ [po-pilách-i-pi].*
 and be.difficult-PST.IPFV 3SG-understand-TR-IRR.SUB
 ‘And it was hard to understand.’ (H&E 1)
- d. *Wam7 loovi-q [o-ngee-pi].*
 already be.good-PRS.SG 2SG-go.away-IRR.SUB
 ‘It’s time for you to go now.’ (H&E 1333)

Constructions with *-pi* appear as complements of the main-clause verb *mijx* ‘be, happen’ to form expressions of necessity and possibility, often translated with ‘must’ and ‘can’. Examples are shown in (4), including an AC example in (4e). All examples of the irrealis subordinator in AC include a suffix *-la*, yielding a sequence *-la-pa*. The identification of *-la* is uncertain (perhaps the MOTPR motion suffix, LU *-lu7*). In examples (4e) and (7c) the sequence is, mysteriously, *-la-p*; the vowel of the irrealis subordinator does not usually apocopate (except with *a*-ablauting in CA).

- (4) LU a. *Pa7 po7 ja7á-sh [peewlu-qat] po-7oovi-pi mij-qu\$*
 then DET man-ABS marry-REL.PRS.SG 3SG-give-IRR.SUB be-PST.IPFV
hi-sh.
 INDF-ABS.ACC
 ‘Then the man who was going to get married had to give something.’ (H&E
 76)

- b. *Pi7 no-jo7 qaj poo-tu cham-nolax-pi mij-q.*
 and 1SG-mother NEG 3SG-by;from 1PL-escape-IRR.SUB be-PRS.SG
 ‘We can’t escape my mother.’ (H&E 1391)
- c. *Pi7 ne-j o-7uho7van-pi mij-q.*
 and 1SG.PRO-ACC 2SG-believe-IRR.SUB be-PRS.SG
 ‘You’ll have to trust me.’ (H&E 1348)
- d. *Toowi-sh po-juu-j wak-i-tu-m, po-j*
 dead.person-ABS 3SG-hair-ACC comb-TR-REL.FUT-PL 3SG.PRO-ACC
jul-a-ni7i-tu-m oonu ijq om punéj
 dress-INTR-CAUS-REL.FUT-PL PROX2 also 2SG.PRO 3SG.INAN.ACC
o-nech-i-pi mij-q.
 2SG-pay-TR-IRR.SUB be-PRS.SG
 ‘You also have to pay for it when they comb the dead person’s hair and dress him.’ (H&E 281)
- AC e. *Na-huun-a7-la-p mij-q.*
 1SG-climb-TR-MOTPR(?) -IRR.SUB be-NFUT.SG
 ‘Tengo que subirlo. (I must climb it.)’ (3.123.0593)

The suffixes *-vu* and *-pi* appear with inflections of main-clause *mijx* to form past perfects, “future in past”, and “future in present” expressions.

- (5) LU a. *Too\$axi-t [po-ngee-vu mij-qu\$] rancheero po-jk*
 cottontail-ABS 3SG-go-REAL.SUB be-PST.IPFV rancher 3SG-DAT
tuutupi-lut po-jk ano7 po-mon-qala.
 tell-IFUT.SG 3SG-DAT coyote 3SG-come-DS
 ‘The cottontail rabbit had gone to the rancher to tell him that the coyote was coming.’ (K&G 191 33)
- b. *Po-mon-ngi-vu mij-qu\$.*
 3SG-go-GO&-REAL.SUB be-PST.IPFV
 ‘He had been there.’ (H&E 624)

- c. *Hamu7 pom-luvi7-i-vu mij-qu\$ po-peet po-jk.*
 before 3PL-do-TR-REAL.SUB be-PST.IPFV 3SG-YoBr 3SG-DAT
 ‘They had done the same thing before to his younger brother.’ (H&E 1278)
- d. *Pi7 o-j pom-maamaju-pi mij-q.*
 and 2SG.PRO-ACC 3PL-help-IRR.SUB be-PRS.SG
 ‘They will assist you.’ (H&E 407)

Both *-vu* and *-pi* can be inflected with local case suffixes to form locational clauses, as seen in (6). Examples (6d,e,f) include the suffix *-qal*, discussed below in 13.3.1.5.

- (6) LU a. *Pi7=kuna7 a\$ún-nga [po-puluch-i-vu-nga] paa-la*
 and = QUOT 3SG.INAN-LOC 3SG-go.out-TR-REAL.SUB-LOC water-ABS
po\$-ja.
 spring.out-PST.PFV
 ‘And at the place where he went out a spring of water appeared.’ (K&G 210 39)
- b. *Hot-i-ja-m ne-j a\$ún-ik micha7 [ne-j*
 take-TR-GO&.IMP-PL 1SG.PRO-ACC 3SG.INAN-DAT INDF.LOC 1SG.PRO-ACC
o-hot-i-vu-ngaj].
 2SG-take-TR-REAL.SUB-ABL
 ‘Take me back where you got me from.’ (H&E 748)
- c. *Po-sun-ngaj mix-qu\$ [po-puluch-ax-pi-j a\$ún-nga*
 3SG-heart-ABL be-PST.IPFV 3SG-go.out-INTR-IRR.SUB-ACC 3SG.INAN-LOC
[po-chulupi-vu-ngaj]].
 3SG-go.in-REAL.SUB-ABL
 ‘He thought that he would go out at the place where he had come in.’ (K&G 210 37)

- d. [Kii-nga pom-hati7a-qal-**vu-jk**] mujuk naachaxani-sh
 house-in 3PL-go-INTR-DUR-REAL.SUB-DAT much food-ABS
 wuna7 won-qu\$.
 there be-PST.IPFV
 ‘In the house they had gone to there was a lot of food.’ (H&E 967)
- e. Pi7 chaam hati7-ja [wuna7 pom-pel-a-qal-**pi-jk**].
 and 1PL.PRO go-INTR.PST.PFV there 3PL-dance-INTR-DUR-IRR.SUB-DAT
 ‘And we went where they were going to dance.’ (H&E 1093)
- f. \$oovini-chu-m pom-heelax [\$uk-tu-m-i pom-7aamo-qal-**pi-nga**]
 prsn-ABS-PL 3PL-song deer-ABS-PL-ACC 3PL-hunt-DUR-IRR.SUB-LOC
 ‘the \$oovinish family’s song which they sang before going deer hunting’
 (H&E 1200)

In AC, the suffix sequence *-la-pa* is used to construct purpose clauses, either same-subject purpose clauses (as in (7a)) or different-subject (as in (7b,c)). Such constructions are more common in the AC data than are purpose clauses with the immediate future. Examples appear in (7). In (7c) the present-plural suffix is part of the construction; it may contribute a durative sense, like LU *-qal* discussed below in 13.3.1.5.

- (7) AC a. *Noo = n o\$ka-q na-sinva-ka-j*
 1SG.PRO = 1SG save-NFUT.SG 1SG-money-PSD-ACC
na-ngool-x-la-pa aach.
 1SG-be.drunk-INTR-MOTPR(?) -IRR later
 ‘I am mezquineando mi dinero para emborracharme después (saving my money for getting drunk later).’ (3.123.0565)
- b. *Noo = n po-j pavé77-a-lat na-kii-nga pajaamonga*
 1SG.PRO = 1SG 3SG.PRO-ACC put.in-TR-FUT 1SG-house-LOC always
pa-7aw7-la-pa.
 3SG-be(sg.anim.)-MOTPR(?) -IRR
 ‘Yo voy a poner el hombre en mi casa para que viviera siempre. (I am going to put him in my house so he will always live there.)’ (3.123.0355)

- c. *Machá7 qaal cham7-kott-a-la cham7-naach-x-on-la-p.*
 where be.there 1PL-cover-TR-INS 1PL-eat-INTR-PRS.PL- MOTPR(?)-IRR
 ‘¿Ónde está el mantel de nosotros para comer? (Where is our tablecloth for us to eat?)’ (3.123.0652)

13.3.1.5. THE LUISEÑO SUFFIX -QAL WITH -VU AND -PI. The durative suffix *-qal*, which can appear before past tense *-mukw-i-sh* in subject relative clauses, also appears before *-vu* and *-pi*.

With *-vu*, the suffix *-qal* apparently can contribute a past perfect sense, as in (1).

- (1) LU a. *Po7 ataax po7 punee-ji Taakwi-ch-i*
 DET person DET 3SG.ANIM.PRO-ACC prsn-ABS-ACC
tiiw-i-mukw-i-sh o7na-qu\$ hax po-mij-qala
 see-TR-REL.PST-NMLZ-ABS know-PST.IPFV INDF.HUMAN 3SG-be-DS
 [*punee-ji Taakwi-sh po-jaw-mu-qal-vu-j*].
 3SG.ANIM.PRO-ACC prsn-ABS 3SG-take-MOVING-DUR-REAL.SUB-ACC
 ‘The man who had seen the Taakwish knew who the person was whom the Taakwish had taken.’ (H&E 857) [= 13.3.1 (4)]
- b. *Momja-m qaj punéj churo7-ax [hi-sh*
 White.person-PL NEG 3SG.INAN.ACC settle-TR.PST.PFV INDF-ABS.ACC
 [*pom-jaa-qal-vu-j oovi-tum*].
 3PL-say-DUR-REAL.SUB-ACC give-IFUT.PL
 ‘The White people didn’t give them the things that they had promised to give them.’ (H&E 903)
- c. [*Kii-nga pom-hati7a-qal-vu-jk mujuk naachaxani-sh*
 house-LOC 3PL-go-INTR-DUR-REAL.SUB-DAT much food-ABS
wuna7 won-qu\$.
 there be-PST.IPFV
 ‘In the house they had gone to there was a lot of food.’ (H&E 967)

Constructions with *-qal* before *-pi*, as in (2), have a subsequent or “future in the past” sense.

- (2) LU a. *Pi7 tiw-i-vichu-qu\$ [tee pi7 po7 punéj*
 and see-TR-DES-PST.IPFV perhaps and 3SG.PRO 3SG.INAN.ACC
po-luvi7i-vuta-qal-pi-j man tee qaj].
 3SG-do-POT-DUR-IRR.SUB-ACC or perhaps NEG
 ‘And I wanted to see whether he could do it or not.’ (H&E 940)
- c. *Pi7 chaam hati7-ja [wuna7 pom-pel-a-qal-pi-jk].*
 and 1PL.PRO go-INTR.PST.PFV there 3PL-dance-INTR-DUR-IRR.SUB-DAT
 ‘And we went where they were going to dance.’ (H&E 1093)

The examples in (3) permit usitative readings.

- (3) LU a. *Jumájk kiika-tu-m pom-na-m pom-jo-m pom-\$uun*
 long.ago child-ABS-PL 3PL-father-PL 3PL-mother-PL 3PL-heart
taván-uk axii-ji [pom-kaamaju-m pom-peewlu-qal-pi[-y]].
 put-TR.USIT who-ACC 3PL-child-PL 3PL-marry-DUR-IRR.SUB-ACC
 ‘Long ago the children’s parents decided who their children would marry.’
 (H&E 905)
- b. *\$oovini-chu-m pom-heelax [\$uk-tu-m-i pom-7aamu-qal-pi-nga]*
 prsn-ABS-PL 3PL-song deer-ABS-PL-ACC 3PL-hunt-DUR-IRR.SUB-LOC
 ‘the \$oovinish family’s song which they sang before going deer hunting’
 (H&E 1200)

13.3.2. OBJECT RELATIVE CLAUSES IN CUPEÑO. The inventory of suffixes that appears in CU relative clauses where the common argument is object in the relative clause is seen in Table 13.3.2. Note that in CU, the “present tense” (nonfuture) clauses can exhibit number agreement with respect to the common argument. This is unlike the situation in such clauses in LU, where only singular inflections appear. However, plural marking with CU *-vy* and *-pi* is not attested, though it does occur with CA *-ve* and *-pi*.

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Table 13.3.2. Cupeño relative clause suffixes where common argument is object in the relative clause

head in main	subject	realis	sg	-vy	pl
		nonfuture	-7a	-a-m	
		irrealis	-pi		
	object	realis	-vy-j		
		nonfuture	-a-j	-a-m-i	
		irrealis	-pi-j		

The semantic scope of the suffixes in CU is better captured with the labels “realis, nonfuture, irrealis” than with the tense labels, “past, present, future” (cf. Table 13.3). In CU, these object relativizations are all inflected for subject with the appropriate pronominal prefix. Further, when the common argument that they modify is a main-clause object, they take the accusative suffix, *-i ~ -j*. Similarly, they may take local case suffixes in locational constructions. Only the *-7a* constructions can cooccur with the plural suffix, as *-a-m*, in agreement with the number of the common argument.

13.3.2.1. OBJECT RELATIVE CLAUSES WITH THE REALIS SUBORDINATOR -VY. The realis subordinating suffix *-vy* is cognate with LU *-vu* and CA *-ve*, and with SE *-iv(y)*. It is suffixed to an inflected past-tense verb. In CU *-vy* induces an ablaut vowel *i* on preceding stressless roots and on the suffixes derived from these, *-jax*, *-qal*, and *-wyn*.

The examples in (1) show *-vy* in relative clauses where the relative-clause head is subject in the main clause.

- (1) CU a. *Naxáni-sh* [py7 *chym-tyw-í-vy*] *y-ki-j*
 man-ABS DET 1PL-see-ABLAUT-REAL.SUB 2SG-house-ACC
hum-i-qa-t.
 paint-TR-IFUT-ABS
 ‘The man that we saw is going to paint your house.’ (Jacobs 1975:148 69
 059)

- b. *Myt7i-ch=y py-\$y7y tywy axwá-7aw [qaj mipa*
 many = CF 3SG-flower grow.PRS DIST-LOC NEG ever
ny-tyw-í-vy].
 1SG-see-ABLAUT-REAL.SUB
 ‘There were many flowers growing there that I had never seen.’ (Faye field notes)
- c. *I7=am [py7 ny-tuvjung-vy] Ø.*
 this = MIR DET 1SG-ask-REAL.SUB be
 ‘This is what I asked.’ (Faye field notes)

Where the relative-clause head in *-vy* constructions is the main-clause object, *-vy* is followed by the accusative suffix, as in (2). With a thematic verb like *wak-in* ‘comb’ (2a), the pronominal prefix follows the verb root, just as in the main-clause inflection. Examples (2b,c) are important in that they provide rare attestations of a plural object. Unlike in CA, there is no number concord between this plural object and the *-vy* predicate in the relative clause. However, we expect an accusative suffix, and it is not present in the source. It may be that these should be analyzed as complements of a verbless clause that is itself the complement of the highest predicate (see discussion of 13.3.2.1.1 (4)).

- (2) CU a. *Y~7yw-lu7-i-chi-m pym-ju-j [wak=py7-my-n-vy-j]*
 PL~blood-VBLZ-NMLZ-ABS 3PL-hair-ACC comb = 3PL-PL-TR-REAL.SUB-ACC
jyv=py7-my-n-wyn ty7aw axwá-7aw.
 bury = 3PL-PL-TR-PST.IPFV.PL under DIST-LOC
 ‘The [girls] who were initiated (lit. who had menstruated) used to bury their hair combings (what they had combed) right under there.’ (H&N 50[100] x.20)
- b. *Mi_nyl-i-qa [py-ma-ngax juj-ika pa-jka*
 3PL.OBJ_look.at-TR-PRS.SG 3SG-hand-ABL cold-DAT water-DAT
suunvish=pym-ja-ngij-wyn-i-vy-j].
 suffer = 3PL-INTR-go-PST.IPFV.PL-ABLAUT-REAL.SUB-ACC
 ‘He sees those who have suffered for his sake in the cold, in the water.’
 (Faye Images FN 68-69, H&N 36[72] viii.22)

- c. *Mangin jywájwy-qa miví-m-i py-m-i*
 slowly speak.about-PRS.SG INDF-PL-ACC DET-PL-ACC
mi_piljyv-qal-i-vy(-j).
 3PL.OBJ_break.long.obj-PST.IPFV.SG-ABLAUT-REAL.SUB(-ACC)
 ‘Slowly he speaks of the ones who are going to be forgotten (lit. ‘that he has been breaking’)’ (Faye Images I 12)
- d. *Mi_tytywa-qa axwý-sh-m-i*
 3PL.OBJ_name-PRS.SG DIST-ABS-PL-ACC
mi_wyl-nin-pi-ch-i.piljyv-qal-i-vy(-j).
 3PL.OBJ_break.long.obj-PST.IPFV.SG-ABLAUT-REAL.SUB(-ACC)
 ‘He names each of those who are going to be forgotten (lit. ‘that he has been breaking’).’ (Faye Images I 14)

Most examples of relative clauses with *-vy* in the CU corpus include the suffixes *-qal/-wyn* ‘past imperfective singular/plural’. Paul-Louis Faye collected contrasting examples like those in (3). (3b,d,e) suggest that *-vy* with *-qal/-wyn* is imperfective or durative, while *-vy* alone, as in (3a,c) yields a perfective. But in (3f,g) Faye provided perfective glosses.

- (3) CU a. *I7 = am [py7 tang = ny-n-vy] Ø.*
 this = MIR DET pile = 1SG-TR-REAL.SUB be
 ‘This is what I piled up.’ (Faye field notes)
- b. *I7 = am [py7 tang = ny-Ø-qal-i-vy] Ø.*
 this = MIR DET pile = 1SG-TR-PST.IPFV.SG-ABLAUT-REAL.SUB be
 ‘This is what I was piling up.’ (Faye field notes)
- c. *I7 = am [py7 ny-hamuch-in-vy] Ø.*
 this = MIR DET 1SG-hit-CAUS(?)-REAL.SUB be
 ‘This is what I hit.’ (Faye field notes)
- d. *I7 = am [py7 ny-hamush-qal-i-vy] Ø.*
 this = MIR DET 1SG-hit-PST.IPFV.ST-ABLAUT-REAL.SUB be
 ‘This is what I was hitting.’ (Faye field notes)

- e. *Ny7=ny tyw-qá7 [sul = 7-i-qal-i-vy-j].*
 1SG.PRO = 1SG.ERG see-PRS.SG tie = 2SG-TR-PST.IPFV.SG-ABLAUT-REAL.SUB-ACC
 ‘I saw what you have been tying.’ (Faye field notes)
- f. *Y-t=am [py7 py-7ajyw-qal-i-vy] Ø.*
 PROX2-ABS = MIR DET 3SG-want-PST.IPFV.SG-ABLAUT-REAL.SUB be
 ‘That is what she wanted.’ (Faye field notes)
- g. *[Py-7ajyw-qal-i-vy-j] pú-ku\$.*
 3SG-want-PST.IPFV.SG-ABLAUT-REAL.SUB-ACC 3SG-take
 ‘She got what she wanted.’ (Faye field notes)

For the examples in (4), Faye provided a present-tense translation. Sauvel and Munro (1981:265) observe that similar constructions in MCA can also have a present-tense reading.

- (4) CU a. *[Py-hiwchu-qal-i-vy] qaj hi-sh myt7i-sh Ø.*
 3SG-know-PST.IPFV.SG-ABLAUT-REAL.SUB NEG INDF-ABS much-ABS be
 ‘What she knows is not much.’ (Faye field notes)
- b. *I7=am [py7 ny-naqma-qal-i-vy] Ø.*
 this = MIR DET 1SG-hear-PST.IPFV.SG-ABLAUT-REAL.SUB be
 ‘This is what I am hearing.’ (Faye field notes)

The examples in (5) show *-vy* with *-wyn*, the past imperfective plural. This suffix is homonymous with the past-tense stative, which appears in complements, embedded questions, and adverbial clauses. The examples in (5) are surely past tense, and are probably best interpreted as “usitative” in aspect.

- (5) CU a. *Mulu7wy-ti-m=\$y=7yt py7 pym-7umnan-wyn ishmiví-j*
 ancestor-ABS-PL = Q = ? FOC 3PL-store-PST.IPFV.PL something-ACC
[tyw = py7-my-n-wyn-i-vy-j].
 see = 3PL-PL-TR-PST.IPFV.PL-ABLAUT-REAL.SUB-ACC

‘The ancestors must have stored away something that they had found.’ (H&N 27[54] 24)

- b. *Qaj chym-y kwanan-ngax-wi-sh ti7ing-lju-wy yxwý-sh*
 NEG 1PL.PRO-CF half-ABL-GENT-ABS reach-GOPR-PRS.PL DIST-ABS
pymym mulu7-wy-ti-m [pym-7ichájwin-wyn-i-vy-j].
 DET.PL first-CHAR-ABS-PL 3PL-do;make-PST.IPFV.PL-ABLAUT-REAL.SUB-ACC
 ‘As for us we do not achieve half of what those first people used to
 accomplish.’ (Faye Domingo Moro Speech 8)

13.3.2.1.1. OTHER TYPES OF SUBORDINATION WITH -VY. Realis *-vy* is quite productive, appearing in many types of subordinate clauses. Constructions with *-vy* appear as verbless complements and as complements of the past-tense copula *mijaxwyn*, as in (1). Note that the first clause in (1a) is a different-subject adverbial clause, with “prior time” reading not permitted by the different-subject switch-reference suffixes *-qalí*, *-wyní*, *-lỳy*, which require “simultaneous” readings.

- (1) CU a. *Tami-t nanvax-py-jax-i-vy* \emptyset , *Tymájawy-t hi-sh*
 day-ABS be.ready-3SG-INTR-ABLAUT-REAL.SUB be prsn-ABS INDF-ABS
py-jax-í-vy \emptyset .
 3SG-do-ABLAUT-REAL.SUB be
 ‘When the day was over, Temayawet did something.’ (H&N 1[2] 20)
- b. *Supu-l tawpaxi-sh myt7i-sh chym-chi7-vy* \emptyset .
 some-ABS year-ABS much-ABS 1PL-gather-REAL.SUB be
 ‘Some years we have gathered a lot.’ (Jacobs 1975:223)
- c. *Axwý-ch-i=yp chym-tywí-vy py-mijax-wyn.*
 DIST-ABS-ACC = REAL 1PL-see-REAL.SUB 3SG-be-ST.PST
 ‘That is what we saw.’ (Jacobs 1975:21 124)

When *mijaxwy* in the present tense appears with *-vy* complements, the interpretation is a past perfect construction, as in (2). In (2d) the copula is past tense *mijaxwen*, but the interpretation seems to be the same.

- (2) CU a. *Ha\$í=py-jax-vy mijax-wy.*
 go = 3SG-INTR-REAL.SUB be-ST.PRS
 ‘He has gone.’ (Jacobs 1975:146 69)
- b. *Achi tawpaxi-sh naaxchinax-i-sh tum miví-ta py-ta*
 long.ago year-ABS passed-NMLZ-ABS really INDF-place DEF-place
chym-chi7-pi mijax-wy kapyl=py-jax-wyn-i-vy.
 1PL-gather-IRR.SUB be-ST.PRS open = 3SG-INTR-ST.PST-ABLAUT-REAL.SUB
 ‘In past years any place where we might gather had been open to us.’
 (Jacobs 1975:223 4)
- c. *Y-tyw-í-vy = \$y mijax-wy?*
 2SG-see-ABLAUT-REAL.SUB = Q be-ST.PRS
 ‘Have you ever seen it?’
- d. *Mipa py-mijax-wyn axwý-chi-m atáx7a-m pym-yvy7aw*
 when 3SG-be-ST.PST DIST-ABS-PL person-PL 3PL-for
y-tyvxáa-qal-i-vy ?
 2SG-work-PST.IPFV.SG-ABLAUT-REAL.SUB
 ‘When was the last time you worked for those people?’

Constructions with realis *-vy* are especially common in complement clauses and embedded questions. In such clauses, constructions with *-vy* have accusative suffixes, as in (3).

- (3) CU a. *Tew-qa7=ny [jaq=pym-jax-wyn-i-vy-j].*
 see-PRS.SG = 1SG.ERG be.absent = 3PL-INTR-PST.IPFV.PL-ABLAUT-REAL.SUB-ACC
 ‘I see that they are all gone.’ (Faye field notes)
- b. *My py-jax [py-nyqn-í-vy-j waw-ngax \$a7vi-ta-m*
 and 3SG-say 3SG-come-ABLAUT-REAL.SUB-ACC far-ABL Mexican-ABS-PL
pym-ki-ngax].
 3PL-house;home-ABL
 ‘He said that he came from far away, from Mexico.’ (H&N 51[102] xv.3)

- c. *Ny7 py-jik ny-jax [axmí7i*
 1SG.PRO 3SG-DAT 1SG-say INDF.HUMAN
py-mijax-wyn-i-vy-j].
 3SG-be-ST.PST-ABLAUT-REAL.SUB-ACC
 ‘I told him who he was.’ (H&N 51[102] xii.9)
- d. *Axwý-sh=py pijáma mijax-wyny asta*
 DIST-ABS=IRR always be-ST.FUT until
[py-hiwyn=py-jax-a-pi [hu\$=py-n-vy-j]].
 3SG-stop=3SG-INTR-ABLAUT-IRR.SUB smoke=3SG-TR-REAL.SUB-ACC
 ‘He’s going to be (sick) until he stops smoking.’
- e. *Pym-hiwchu-wyn [py-mi7aw-qal-i-vy-j*
 3PL-know-PST.IPFV.PL 3SG-arrive-PST.IPFV.SG-ABLAUT-REAL.SUB-ACC
[ku\$-i-qa-t axwý-ch-i pym-na7akwa-j]].
 take-ABLAUT-IFUT-ABS DIST-ABS-ACC 3PL-child-ACC
 ‘They knew that he had come to take their child.’ (H&N [64] v.4)

The examples in (4) at first glance appear to be exceptions to the rule that the subordinated predicate in a complement clause will be marked with accusatives. However, in all of these cases, an analysis is available where the unmarked predicates are in fact secondary complements within a verbless clause, so that no accusative suffix is required. The verbless higher clause provides no anchor for the suffix. The embedded question in (4d) has an overt copula, but it does not have subordinating morphology.

- (4) CU a. *My=kwy=my aja mixanuk hiwchu-wyny*
 and=POT=3PL.ERG now INDF.MANNER know-FUT.IPFV.PL
[ny-7ash [py-hiw-qal-i-vy] Ø].
 1SG-animal;pet 3SG-live-PRS.SG-ABLAUT-REAL.SUB be
 ‘So how will they know my pet is [one who is] alive?’ (H&N 13[26] 161)

- b. *Mu = ku7ut iví-ngax py7 pym-hiwchu [Sywy-t*
 and = QUOT PROX-ABL FOC 3PL-know Rattlesnake-ABS
[mi_py-qy7yn-vy] Ø.
 3PL.OBJ_3SG-bite-REAL.SUB be
 ‘And it is said that from this they knew that Rattlesnake was the one who
 had bitten him.’ (H&N 2[4] 53)
- c. *Pym-\$uun py-7ylyl7i-chu-qal [pym-ki-j*
 3PL-heart 3SG-be.bad-VBLZ-PST.IPFV.SG 3PL-house-ACC
[pym-tywá\$-vy] Ø.
 3PL-lose-REAL.SUB be
 ‘They were sad about losing their homes (about the homes that they had
 lost).’ (H&N 22[44] 18)
- d. *Qaj = ny hiwchu-qa, my = \$y [mikchi-m-i*
 NEG = 1SG.ERG know-PRS.SG and = Q INDF.QUANT-PL-ACC
pykchi-m-i suq-ta-m-i [mi_py-chix-ni-vy]
 DEF.QUANT-PL-ACC deer-ABS-PL-ACC 3PL.OBJ_3SG-die(pl.)-CAUS-REAL.SUB
mijax-wy.
 be-ST.PRS
 ‘I do not know, how many are the deer he has killed?’ (Faye field notes,
 Carolina Nolasquez 31-12-20 fp 3)

Complements of *jax* ‘say’ as in (5) often have a complementizer *pychi* ‘about’, literally ‘with it’, where *-chi* ‘with’ is instrumental. This complementizer is always present in similar structures in CA, where it appears as *pish*, but is optional in CU (it is absent in (3b) above, for instance). With *pychi* present, there is no accusative suffix following *-vy*.

- (5) CU a. *Mu = ku7ut py-jax py7 Tymájawy-t pychi*
 and = QUOT 3SG-say DET prsn-ABS COMP
py-7ajyw-qal-i-vy atáx7a-m pym-chix-pi
 3SG-want-PST.IPFV.SG-ABLAUT-REAL.SUB person-PL 3PL-die(pl.)-IRR.SUB
 ‘And it is said that Temayawet said that he wanted people to die.’ (H&N
 4[8] 27)

- b. *Mu=ku7ut aja Isi-lj pý-jax pychi, qaj hi-sh*
 and = QUOT now Coyote-ABS 3SG-say COMP NEG INDF-ABS
pym-kwa7-i py-wyn-í-vy.
 3PL-eat-NMLZ 3SG-put-ABLAUT-REAL.SUB
 ‘And it is said that Coyote said that they had no food put away.’ (H&N 60[120] 4)
- c. *Mu=ku7ut qaj py-ja-qál pým-na pychi*
 and = QUOT NEG 3SG-say-PST.IPFV.SG 3PL-father COMP
chix-Ø-cha-m py-mijax-wyn-i-vy.
 die(pl.)-NMLZ-ABS-PL 3SG-be-ST.PST-ABLAUT-REAL.SUB
 ‘And it is said their father was not saying of what they had died.’ (H&N 2[4] 52) [repeated from 13.2.4.1 (5c)]

Constructions with *-vy* suffixed with local-case markers appear in manner, locational and temporal adverbial clauses. In (6) are examples of locational clauses.

- (6) CU a. *Mu=ku7ut py-mi7aw-lu [py-hiw-qal-i-vy-nga].*
 and = QUOT 3SG-arrive-GOPR 3SG-be-PST.IPFV.SG-ABLAUT-REAL.SUB-LOC
 ‘And it is said he arrived where it was.’ (H&N 11[22] 117)
- b. *Ku7ut py-ta pi_pý-tav [kyláwy-t*
 QUOT 3SG-place 3SG.OBJ_3SG-put wood-ABS
tang=py-jax-wyn-i-vy-nga].
 pile = 3SG-INTR-ST.PST-ABLAUT-REAL.SUB-LOC
 ‘She put it down where the wood was piled up.’ (H&N 26[52] xii.8)
- c. *Iví-7aw=yn nynywyn-y-t aki7a-7aw*
 PROX-LOC = 1SG.AB go.around-NMLZ-ABS land.allotment-LOC
Su7i-sh Py-ki-7aw, [y-7ash
 Jackrabbit-ABS 3SG-house-LOC 2SG-animal;pet
py-hiw-qal-i-vy-7aw].
 3SG-be-PST.IPFV.SG-ABLAUT-REAL.SUB-LOC
 ‘I have been right here going around on my property at Jackrabbit’s House, where your pet lives.’ (H&N 12[24] 154)

- d. *My axwá-7aw [mi_pym-7icháajwin-wyn-i-vy-7aw],*
 and DIST-LOC 3PL.OBJ__3PL-make-PST.IPFV.PL-ABLAUT-REAL.SUB-LOC
pym-ny7y-m mi_nangin-in-wy axwý-sh-m-i
 3PL-relative-PL 3PL.OBJ__pay-TR-PRS.PL DIST-ABS-PL-ACC
mi_7icháajwin-wyn-Ø-ti-m-i.
 3PL.OBJ__make-PRS.PL-NMLZ-ABS-PL-ACC
 ‘And there where they were making them, the relatives pay those who are making them.’ (H&N 41[82] x.65)
- e. *Mu=ku7ut ha\$í=py-ja-qal a-jka [nawíshma-l*
 and=QUOT go=3SG-INTR-PST.IPFV.SG DIST-DAT girl-ABS
py-hiw-qal-i-vy-ka].
 3SG-be-PST.IPFV.SG-ABLAUT-REAL.SUB-DAT
 ‘And it is said he would go there where the girl lived.’ (H&N 32[64] v.2)

Where a locative *pyta* ‘place’ appears immediately before the clause, as in (7), the subordinated predicate need not have a local case marker *-nga*, as in (6f).

- (7) CU *Y-t=y py-ta [ny-mixan-vy] Ø.*
 PROX2-ABS=CF 3SG-place 1SG-do-REAL.SUB be
 ‘That is where I have done something.’ (Faye field notes 4-6-27 7 154)

The examples in (8) show the same local-case suffixes, but used in reason and temporal senses.

- (8) CU a. *Chimi_jul=py7-my-n-wyn [chym-nanakwi-vy-ngax].*
 1PL.OBJ__punish=3PL-PL-TR-PST.IPFV.PL 1PL-be.naughty-REAL.SUB-ABL
 ‘They punished us for being naughty.’ (H&N 46[92] 12)
- b. *Axwý-ch=am qaaw-i-sh naxáni-sh*
 DIST-ABS=MIR sick-NMLZ-ABS man-ABS
[py-nawíktu-vy-ngax].
 3SG-marry.woman-REAL.SUB-ABL
 ‘That man has been sick since he got married.’

- d. *Ramóna = yp hiwyn = py-jax haw-i-nuk aja*
 Ramona = REAL stop = 3SG-INTR sing-TR-SS now
 [*chyx = py-jax-i-vy-nga*].
 appear = 3SG-INTR-ABLAUT-REAL.SUB-LOC
 ‘Ramona, having sung, stopped then when it was dawn.’ (Jacobs 1975:154
 70)

In the complex construction in (9), irrealis *-pi* encodes the future years of life, while realis *-vy* follows it to form a factive construction. This is a unique example and suggests the productive potential of this system of suffixes.¹⁴⁵

- (9) CU *Pijáma = ny = py i_mum7ytu-nash asta*
 always = 1SG = IRR 2SG.OBJ_hate-FUT.IPFV.SG until
 [*ny-hiw-nash-pi-vy-nga*].
 1SG-be-FUT.IPFV.SG-IRR-REAL.SUB-LOC
 ‘I’ll hate you as long as I live.’

13.3.2.2. NONFUTURE OBJECT RELATIVE CLAUSES WITH -7A. In CU, subordinate-clause predicates with pronominal prefixes *-7a/-a-m* are quite common. The base is the past perfective of the verb, with a pronominal prefix encoding the subject. Relativized predicates with *-7a* have a nonfuture sense, as in (1). It is likely that these are simply the gerundial or non-absolute forms of the immediate past (11.5.2.1). Unlike the relativizers *-vy* and *-pi*, *-7a* appears with the plural suffix *-m* and exhibits number concord with the object head of the relative clause.

- (1) CU a. *Ku7ut py-na7akwa Sywy-t py-hiw-qal*
 QUOT 3SG-child Rattlesnake-ABS 3SG-be.there-PST.IPFV.SG
 [*py-ma7max-7a*].
 3SG-love-NMLZ.SUB
 ‘It is said his child Rattlesnake, whom he loved, was there.’ (H&N 1 [2] 32)

¹⁴⁵ J. Hill cannot remember whether she (embarrassingly) failed to follow up on this example, or whether she tried and could not get Miss Nolasquez to produce any similar constructions.

- b. *Chy7-matisma pú-ju wa~wvashi-sh Ø [chym-7ash-nin-7a].*
 1PL-OLsSCh 3SG-hair PL~long-ABS be 1PL-bathe-CAUS-NMLZ.SUB
 ‘Our nephew has long hair which we bathed.’ (H&N 13[26] 166)
- c. *Ku7ut syv7-l iva-wy-t xyy-py-n iv7-m*
 QUOT wind-ABS strong-CHAR-ABS blow-3SG-TR PROX-PL
am = py7-my-n-7a nangi-w-ta-m.
 drop = 3PL-PL-TR-NMLZ.SUB fight-CHAR-ABS-PL
 ‘They say a strong wind blew, that these warriors had sent’ (Faye Kisilj Pywik 16)
- d. *I7 = am py7 ny-hiwchu-7a Ø.*
 PROX = MIR DET 1SG-know-NMLZ.SUB be
 ‘This is what I know.’ (Faye field notes)
- e. *My = ny = py ny-ki-j jylich-in, nyqyn = kwy = l*
 and = 1SG-IRR 1SG-house clean-TR.FUT come = POT = 3PL.AB
 [[*ny-hiwchu7-a-m*] *ni__tyw-7-q-ta-m*] Ø.
 1SG-know-NMLZ.SUB-PL 1SG.OBJ__see-ABLAUT-IFUT-ABS-PL be
 ‘I will clean my house because friends (ones that I know) are coming to see me.’ (Faye field notes Future 2.353)

When the head is object of the main clause, it is marked for accusative case, as in (2). These constructions do not appear with object proclitics. 3SG proclitics are optional, but other object proclitics are not, except with these *-7a* derivations. Note that in (2a) where the verb *wyn* requires a plural object, the expected 3PL object proclitic, *mi__*, does not appear. The relative-clause constructions with *-vy* and *-pi*, which cannot appear with plural suffixes, do permit the presence of object proclitics/prefixes.

- (2) CU a. *My = kwy = my aja py py axw7y-ch-i ty7y7yw*
 and = POT = 3PL.ERG now FOC FOC DIST-ABS-ACC see.POT
 [*pym-wyn-a-j*].
 3PL-put(pl.)-NMLZ.SUB-ACC
 ‘And then they could see what they had put down.’ (H&N 39[78] 13)

- b. *Amáj pyykyi py-7ykym-qal py7 ku7u-t py7*
 now also 3SG-give.food-PST.IPFV.SG. DET elderberry-ABS DET
yxwý-ch-i py-tinga-la7a, [py7 yshpý7y ku7u-t py-chi
 DIST-ABS-ACC 3SG-heat-INS DET formerly elderberry-ABS 3SG-INS
py-7icháajwin-a-j].

3SG-make-NMLZ.SUB-ACC

‘Now she also gave him elderberry, that medicine of hers, that she had earlier made with elderberry.’ (F. Bosley, Medicines, 3)

- c. *Ny7=yyp ný-tyw [py7 hum=py-n-a-m-i].*
 1SG.PRO=REAL 1SG-see DET paint=3SG-TR-NMLZ.SUB-ACC
 ‘I saw what (pl.) he painted.’ (Jacobs 1975:31 115)

In (3), in an exception to the absence of object proclitics in *-7a* subordination, an object pronominal *pi-* is attested. This is probably a disfluency, given the immediately following main-clause verb in the same meaning that looks like a correction.

- (3) CU *Mu=ku7ut [py-\$a7i-nga pi_suk=py-n-7a] Ø, py-7ami-nga*
 and=QUOT 3SG-belly-LOC 3SG.OBJ_tie=3SG-TR-NMLZ.SUB be 3SG-waist-LOC
pi_suk=py7-my-n.
 3SG.OBJ_tie=3PL-PL-TR
 ‘And it is said he was tied up around his waist, they tied him around his waist.’
 (H&N 43[86] 8)

As seen in (4) (and in (2c, 3)), in *-7a* nominalizations of thematic verbs, the pronominal prefixes appear following the root in the cliticized complex which contains the thematic suffix just as in finite main-clause verbs. In (4b), the translation refers to plural objects and the reduplicated verb roots also require them, but the noun phrase is singular, consistent with a tendency not to pluralize inanimate nouns.

- (4) CU a. *My aja nanva-jax-qa [py7 tywan=py7-my-n-7a].*
 and now get.ready-INTR-PRS.SG DET name=3PL-PL-TR-NMLZ.SUB
 ‘And then (the time) comes that they named.’ (H&N 37[74] 7)

- b. *My = \$y = t* *axwý-ch-i* *tykwájy*
 and = Q = 3SG.AB DIST-ABS-ACC recently
pi_wyj~wyj = py7-my-n *axwý-ch-i* *ajxa-t-i*
 3SG.OBJ__PL~tear.down = 3PL-PL-TR DIST-ABS-ACC old-ABS-ACC
ki-sh [*achi* *mulu7wy-ti-m*]
 house-ABS long.ago first.person;ancestor-ABS-PL
jut~jut = py7-my-n-a-j.
 DISTR~stand.up = 3PL-PL-TR-NMLZ.SUB-ACC
 ‘I wonder if they recently tore those down, all those old houses built long ago
 by the first people.’ (H&N 50[100] xii.10)

13.3.2.2.1. SUBORDINATING SUFFIX -7A IN OTHER CLAUSE TYPES. When they are not in object relative clauses, constructions with the suffix *-7a* are usually best understood as action nominalizations. In this role they often appear as verbless-clause complements, thereby masquerading as main-clause predicates, as in (1). In (1a) the *-7a* construction appears with the adverb *apút* ‘already’. Since this adverb does not cooccur with main-clause past tense constructions, the whole of (1a) is a complement of a zero copula.

- (1) CU a. [*Apút* *aja* *ny-tul-7a*] \emptyset .
 already now 1SG-finish-NMLZ.SUB be
 ‘I have already finished it.’ (Faye field notes)
- b. *Py7 = ku7ut* *mymjy-m* [*pym-wyl-nin-7a*] \emptyset .
 3SG = QUOT White.person-PL 3PL-grow-CAUS-NMLZ.SUB be
 ‘It is said the Whites raised him.’ (H&N 48[96] v.10)
- c. *Mi_nylin-wy* *axwý-sh-m-i* *pym-puj-xa-7a-m-i* \emptyset .
 3PL.OBJ__look.at-PRS.PL DIST-ABS-PL-ACC 3PL-dine-BEN-NMLZ-PL-ACC be
 ‘They look at those who had feasted for them.’ (Faye Images I 56)

Action nominalizations with *-7a* can appear in adverbial clauses. Those attested have ablative *-ngax* ‘from, because of’ as a suffix, as in (2a). In (2b) a periphrastic version of this construction appears. (2b) was collected forty years after (2a), and the periphrasis may be a symptom of attrition for one of the last first-language speakers of CU. However,

the periphrasis is not ungrammatical. The examples in (2) are functionally gerunds; they do not agree with any object in the main clause.

- (2) CU a. *Am=py7-my-n=ku7ut py-pa-7a-ngax.*
 drop = 3PL-TR-PL = QUOT 3SG-drink-NMLZ.SUB-ABL
 ‘It is said they let him go because of his drinking.’ (Faye field notes)
- b. *Axwý-ch-i=m qaawi-sh py-pa-7a py-ma-ngax.*
 DIST-ABS-FOC = MIR sick-ABS 3SG-drink-NMLZ.SUB 3SG-hand-ABL
 ‘He is sick because he drinks.’

They are also attested in complements, as in (3).

- (3) CU a. *My axwá-nga py7 ny-hiwchu [ny-mymjylu-7a-y].*
 and DIST-LOC FOC 1SG-learn 1SG-speak.English-NMLZ.SUB-ACC
 ‘And I learned to speak English there.’ (H&N 23[46] x.70)
- b. *[Py-tul-qalì [py-qiini-7a-j]] my=m=py maan*
 3SG-finish-DS 3SG-plow-NMLZ.SUB-ACC and = 3PL.ERG = IRR let
py-ngij-pi.
 3SG-go.away-IRR.SUB
 ‘When he has finished plowing, they will let him go.’ (Faye field notes)

13.3.2.3. OBJECT RELATIVE CLAUSES WITH THE IRREALIS SUBORDINATOR *-PI*. The irrealis subordinator *-pi*, like the identical LU and CA suffixes, appears in future relative clauses where the common argument is object in the subordinate clause. It is also found in diverse other environments. Its functional distribution is nearly identical to that of CU realis *-vy*, but *-pi* has an irrealis or future sense, which yields complements of ‘want’ and purpose clauses, in addition to other types of adverbial clauses. The suffix *-pi* induces an ablaut vowel *a* on preceding stressless verb roots and the suffixes *-qal*, *-wyn*, and *-jax*.

The examples in (1) and (2) illustrate *-pi* in relative clauses. Straightforward examples of this type are poorly attested. They very often invite irrealis mood readings, rather than future-tense readings. In (1), the common argument is object in the relative clause and subject in the main clause.

- (1) CU a. *My = \$y = 7yt qaj hax ami7an py-hiw-qal*
 and = Q = 3SG.AB NEG INDF.HUMAN close 3SG-be-PST.IPFV.SG
[pu-ku-jka py-kyláw-ika hyty = py-jax-a-pi] Ø.
 3SG-fire-DAT 3SG-wood-DAT crouch = 3SG-INTR-ABLAUT-IRR.SUB be
 ‘There must be nobody living there who can sit by his fire.’ (H&N 10[20] 58)
- b. *Myn chym qaj hax-íj [chym-tyw-á-pi] Ø.*
 and 1PL.PRO NEG who-ACC 1PL-see-ABLAUT-IRR.SUB be
 ‘And there was nobody that we could see.’ (Girl’s Initiation 21)
- c. *I7 = am qaj suqa-t [[nawíka-t pý-kwa-pi] mijax-wyn].*
 this = MIR NEG deer-ABS woman-ABS 3SG-eat-IRR.SUB be-ST.IPFV
 ‘This deer was not for a woman to eat (was not what a woman could eat).’
 (H&N 15[30] v.5)

In the examples in (2), the common argument is object in both clauses. Jacobs (1975) and Sauvel and Munro (1981), the latter discussing MCA, state that in such constructions *-pi* is followed by an accusative suffix *-j*, parallel to the cases with *-ve-j* seen in 13.3.3.1 (2). In this environment, if the suffix is indeed present, it is not easy to hear, and neither Seiler (1970, 1977) in DCA nor J. Hill (Hill and Nolasquez 1973, Hill 2005), recorded it. However, the suffix is probably present, and we note it here in parentheses.

- (2) CU a. *Qaj ishmiví-j hi-sh pý-tyw [pý-kwa7-pi(-j)]*
 NEG something-ACC INDF-ABS 3SG-see 3SG-eat-IRR.SUB(-ACC)
myn pý-myq-a-pi(-j)].
 or 3SG-kill-ABLAUT-IRR.SUB(-ACC)
 ‘He didn’t see anything to eat or to kill.’ (H&N 67[134] x.19)
- b. *Supu-l ny-t py-ny7y-m-i wih-cha-m-i*
 other-ABS chief-ABS 3SG-relative-PL-ACC two-ABS-PL-ACC
na~nxani-sh-m-i mi_max-qa [pym-7icháajwin-pi(-j)].
 PL~man-ABS-PL-ACC 3PL.OBJ_give-PRS.SG 3PL-make-IRR.SUB (-ACC)
 ‘He gives to two men related to the other chief what they are to make.’

13.3.2.3.1. SUBORDINATING SUFFIX *-pi* IN OTHER CLAUSE TYPES. Predicates with *-pi* appear as modifiers of locational clauses, where the location is expressed with postpositional constructions like *pyta* ‘definite place’ or *miví7ipa* ‘indefinite place’, as in (1).

- (1) CU a. *Achi tawpaxi-sh naaxchinax-i-sh [tum miví-ta py-ta*
 long.ago year-ABS pass-NMLZ-ABS DISTR INDF-place 3SG-place
chym-chi7-pi mijax-wy] kapy1=py-jax-wyn-i-vy.
 1PL-gather-IRR.SUB be-ST.PRS open = 3SG-INTR-ST.PST-ABLAUT-REAL.SUB
 ‘In past years any place where we might gather was open to us.’ (Jacobs
 1975:223 4)
- b. *My aja na~nxani-sh-m-i mi_ja-qá7 tywan-i-qa*
 and now PL~man-ABS-PL-ACC 3PL.OBJ__say-PRS.SG name-TR-PRS.SG
 [*miví7i-pa-j py-7am7i-pi(-j)*].
 INDF-place-ACC 3SG-hunt-IRR.SUB(-ACC)
 ‘And then to the men he mentions, he names, places to hunt.’ (H&N 36[72]
 18)
- c. *Mu=ku7ut axwá-nga aja pi_jut=py7-my-n py7-y*
 and=QUOT there-LOC now 3SG.OBJ__put.up = 3PL-PL-TR DET-CF
py-ki-j [py-ta py-nash-pi].
 3SG-house-ACC 3SG-place 3SG-sit-IRR.SUB
 ‘And then they built a cage for him to sit in (as a place where he would sit).’
 (H&N 43[86] 15)

While local case suffixes can appear in locational clauses with *-vy*, examples of *-pi* with local case suffixes all have a temporal reading, as in (2).

- (2) CU a. *Iví-ta = n ki-chu-qa-t asta*
 PROX-place = 1SG.AB house-make-IFUT-ABS until
 [*ny-nishwi-pi-jka*].
 1SG-become.old.woman-IRR.SUB-DAT
 ‘I am going to live here until I am old.’

- b. *Iví-7aw = ny = py hiw-nash asta*
 PROX-LOC = 1SG = IRR be-FUT.IPFV.SG until
 [*hiwyn = 7y-jax-a-pi-jka*].
 stop = 2SG-INTR-ABLAUT-IRR.SUB-DAT
 ‘I’ll be waiting here until you stop.’ (Faye field notes 9 19 6)

Subordinate predicates with *-pi* appear modifying an instrumental postpositional construction, *py-chi*. In the main clause, it is the object of *-chi* ‘instrumental’, encoded in the third singular prefix on *-chi*. In (3c) the common argument, *kyláwat* ‘wood’, is an object. In the adverbial clause, it is the object of *-chi*.

- (3) CU a. *My mijax-wy ku-t [py-chi ni_syx = 7y7-my-n-pi]*.
 and be-ST.PRS fire-ABS 3SG-INS 1SG.OBJ_burn = 2PL-PL-TR-IRR.SUB
 ‘And there is fire for you to cremate me with.’ (H&N 3[6] 120)
- b. *Ú-push mijax-wy [py-chi ý-tyw-a-pi]*.
 2SG-eye be-ST.PRS 3SG-INS 2SG-see-ABLAUT-IRR.SUB
 ‘Your eyes are to see with.’ (H&N 66[132] 9)
- c. *Mu = ku7ut py7-y myxí-lj-y py-nynywyn axwá7-aw*
 and = QUOT DET-CF dove-ABS-CF 3SG-go.around.PST DIST-LOC
wijika py-hal-ngij-qal kyláwa-t [py-sii-j
 around 3SG-look.for-GOING-PST.IPFV.SG wood-ABS 3SG-nest-ACC
py-chi py-7icháajwin-pi].
 3SG-INS 3SG-make-IRR.SUB
 ‘And it is said Dove was coming there, he was going around looking for sticks with which to make his nest.’ (H&N 75[150] xviii.2)

Perhaps the most frequent use of constructions with *-pi* is as complements of *mijax*, the copula, which forms an idiom with a potential or directive sense. In these cases, the subject of the *-pi* construction is subject in its clause. These are seen in (4).

- (4) CU a. *Qaj mijax-wy chý7-myq-a-pi*.
 NEG be-ST.PRS 1PL-kill-ABLAUT-IRR.SUB
 ‘We cannot kill him.’ (H&N 17[34] 63)

- b. *Qaj = ku7ut py-mijax-wyn py-7icháa7-chu-pi.*
 NEG = QUOT 3SG-be-ST.PST 3SG-good-VBLZ-IRR.SUB
 ‘It is said he could not get better.’ (H&N 5[10] 58)
- c. *Mu = ku7ut qaj py-mijax-wyn kwyl = py-jax-a-pi.*
 and = QUOT NEG 3SG-be-ST.PST get.up = 3SG-INTR-ABLAUT-IRR.SUB
 ‘And it is said he could not get up.’ (H&N 5[10] 64)

Constructions with *-pi* appear as verbless-clause complements, parallel to the examples in (4), with directive force, but with *mijax* absent in the present tense. Examples of this type can be seen in (5).

- (5) CU a. *My axwý-ch-i [py-chi chym-taxwi*
 and DIST-ABS-ACC 3SG-INS 1PL-self
chym-tyw-í-vymax-pi pu-much-ika] Ø.
 1PL-see-ABLAUT-COMING.FUT-IRR.SUB 3SG-forward-DAT be
 ‘And we have to look ahead for ourselves.’ (H&N 28[56] 39)
- b. *Myn ymym na~nwik-ta-m qaj [wijika*
 or 2PL.PRO PL~woman-ABS-PL NEG around
ngyl-yl-an = 7y7-my-n-pi ki~ki-7aw] Ø.
 roam-CONT-AAN = 2PL-PL-TR-IRR.SUB DISTR~house-LOC be
 ‘And you women, don’t be roaming from house to house.’ (H&N 28[56] 29)
- c. *My = py chinga ishmiví-j typin-nash, my pijáma*
 and = IRR if something-ACC track-FUT.IPFV.SG and always
[pi-t nyl-in-nash-pi] Ø.
 road-ABS look.at-TR-FUT.IPFV.SG-IRR.SUB be
 ‘And if you are tracking something, always watch the trail.’ (H&N 66[132] 10)
- d. *Iví-ta py7 [ixan-pi] Ø.*
 PROX-LOC FOC do.thus-IRR.SUB be
 ‘Do it this way.’ (H&N [132] ix.8)

Constructions with *-pi* often occur in complements with an irrealis sense, as in (6). As seen in (6a), Jacobs (1975) wrote complement predicates with an accusative case suffix on the irrealis subordinator, *-pi-j*. This is consistent with the comparative evidence and with evidence from complements in *-vy-j*.

- (6) CU a. *Chym = chymy qaj jukich-in-wyn-Ø-ti-m*
 1PL.PRO = 1PL.INC NEG believe-TR-PRS.PL-NMLZ-ABS-PL
nish-lju7-vy-l-i py-ngij-pi-j ki-ngax.
 age.of.woman-VBLZ-REAL.SUB-ABS-ACC 3SG-go.away-IRR-ACC house-ABL
 ‘We didn’t think that the old woman would leave the house.’ (Jacobs 1975: 142 68)
- b. *Mu = ku7ut pým-jax pý-myq-a-pi(-j).*
 and = QUOT 3PL-say 3SG-kill(sg.)-ABLAUT-IRR.SUB(-ACC)
 ‘And they said that he would kill it.’ (H&N 44[88] 18)
- c. *Pulñi-sh = yp ny-hiw-qal my qaj hi-sh*
 baby-ABS = REAL 1SG-be-PST.IPFV.SG and NEG INDF-ABS
ny-hiwchu-qal ny-7icháajwin-pi(-j).
 1SG-know-PST.IPFV.SG 1SG-do-IRR.SUB(-ACC)
 ‘When I was a child, I didn’t know how to do anything.’ (H&N 46[92] ii.1)
- d. *Ku7ut Tymájawy-t py-7ajyw-qal puchi-lj wih-ngax*
 QUOT prsn-ABS 3SG-want-PST.IPFV.SG eye-ABS two-ABL
py-mijax-wyn-a-pi(-y).
 3SG-be-ST.PST-ABLAUT-IRR.SUB(-ACC)
 ‘It is said Temayawet wanted faces to be on both sides.’ (H&N 1[2] 14)
- e. *Pyjka7maj = yn qaj icháa ny-ngij-pi(-j).*
 still = 1SG.AB NEG good 1SG-go-IRR.SUB(-ACC)
 ‘It is still not good for me to go.’ (H&N 9[18] 36)

- f. *Pym-nyt~nytyng-wyn amáj pychi py7-mixan ishmí7i*
 3PL-REP~ask-PST.IPFV.PL today COMP 3PL-crop something
pym-7a7chiwin-pi(-y).
 3PL-make-IRR.SUB(-ACC)
 ‘They asked just that they should raise some crops.’ (H&N 27[54] xv.15)

Constructions with *-pi* appear in embedded questions, illustrated in (7). Probably these have accusative suffixes, like embedded questions with realis *-vy-j*.

- (7) CU a. *Qaj py-hiwchu-qal miví-jka py-ngij-pi(-j).*
 NEG 3SG-know-PST.IPFV.SG INDF-DAT 3SG-go.away-IRR.SUB(-ACC)
 ‘She did not know where to go.’ (H&N 18[36] 57)
- b. *My=7yp y7y qaj chimi_hija-qa*
 and=2SG.ERG 2SG.PRO NEG 1PL.OBJ_say-PRS.SG
mi_chy7-mixan-pi(-j) my=chy=py ixan-pi(-j).
 3PL.OBJ_1PL-do-IRR.SUB(-ACC) and=1PL=IRR do-IRR.SUB(-ACC)
 ‘And you do not tell us what to do to them, what we are to do to them.’
 (H&N 2[4] 70)
- c. *My=\$y py-ngax qaj chimi_jax-í-vichu-qa py-chi*
 and=Q 3SG-ABL NEG 1PL.OBJ_say-ABLAUT-DES-PRS.SG 3SG-INS
pym-ngij-pi(-j)?
 3PL-go-IRR.SUB(-ACC)
 ‘Why does he not want to tell us how they are to go?’ (H&N 2[4] 90)

Irrealis *-pi* appears in purpose clauses where the subject of the main clause and the purpose clause is different, in contrast to purpose clauses with *-qat*, seen in 13.2.4.3 (4), where the subjects are the same.

- (8) CU a. *Iví-ta=ny=py iví-ta si7áj-i-sh juch-in*
 PROX-place=1SG=IRR PROX-place crack.acorn-NMLZ-ABS soak-TR.FUT
hyvyl=py-jax-a-pi.
 soak-TR.FUT be.soft=3SG-INTR-ABLAUT-IRR.SUB
 ‘I am here soaking my cracked acorns so they will get soft.’

- b. *Qaj = ku7ut mixanuk pym-tyw-á-pi,*
 NEG = QUOT INDF.MANNER 3PL-see-ABLAUT-IRR.SUB
pym-kup-wynì = ku7ut ha\$ì = py-ja-qal pa-jka.
 3PL-sleep-DS.PL = QUOT go = 3SG-INTR-PST.IPFV.SG water-DAT
 ‘So that they would not see, he went to the water while they were asleep.’
 (H&N 3[6] 106)
- c. *Nishma-li-m-i = ku7ut mi_pym-7yw-lu7-nin-wyn*
 girl(pl.)-ABS-PL-ACC = QUOT 3PL.OBJ_3PL-blood-VBLZ-CAUS-PST.IPFV.PL
py-chi qaj pym-chix-pi.
 3SG-INS NEG 3PL-die(pl.)-IRR.SUB
 ‘They used to initiate the girls in order that they would not die.’ (H&N
 33[66] vii.1)
- d. *Mu = ku7ut pijáma axwá-7aw kawísi-sh wijika*
 and = QUOT always DIST-LOC fox-ABS around
mykwy = py-ji-ngij-qal, mixanuk pyxanuk
 go.around = 3SG-INTR-GOING-PST.IPFV.SG INDF.MANNER DEF.MANNER
 [[*chulup = py-ja-qal-pi*] Ø] [[*gajiina7-i py-ku\$íj-pi*] Ø].
 go.in = 3SG-INTR-PST.IPFV.SG-IRR.SUB be chicken-ACC 3SG-take-IRR be
 ‘And still the fox kept on going around in circles so he might one way or
 another to get in to take a chicken.’ (H&N 71[142] xiii.13)

13.3.2.4. OBJECT RELATIVE CLAUSES WITH ABSOLUTIVE SUFFIXES. Constructions with *-vy* and *-pi* have non-possessed forms with absolutive suffixes, as in (1). Constructions with *-vy* form absolutive nouns with *-l*, and constructions with *-pi* appear with absolutive suffix *-sh*. The subject is, of course, not marked on these absolutive forms, which are object nominalizations. These constructions can appear with plural suffixes (as in (1b)); these plurals agree with the object. Unfortunately, there is not enough information to determine exactly what conditions favor these absolutive constructions, as opposed to the non-absolutive forms discussed above.

- (1) CU a. *Mu=ku7ut py-jy py-jax py-na-j*
 and = QUOT 3SG-mother 3SG-say 3SG-father-ACC
myqn-í-vy-l
 kill(sg.)-ABLAUT-REAL.SUB-ABS
 ‘And it is said his mother said that his father had been killed.’ (H&N 10[20] 67)
- b. *pymy-jik muutu-wyn-i-vy-li-m*
 3PL-DAT hoot-PST.IPFV.PL-ABLAUT-REAL.SUB-ABS-PL
 ‘those against whom they used to be hooting’ (Faye field notes 2-6-27 424)
- c. *hunwy-t-i py7 mamajyw-vy-l-i*
 bear-ABS-ACC DET help-REAL.SUB-ABS-ACC
 ‘the bear that was helped’ (Jacobs 1975:209 23)

Constructions with *-vy-l* appear in locational clauses and place names, derived from adverbials in *-vy*, as in (2).

- (2) CU a. *Wawam y-ki Kupa, Pa-l A-tíngvy,*
 far 2SG-house Cupa water-ABS ADJZ-be.hot-REAL.SUB
y-pa-w-7a py-wyn-í-vy,
 2SG-water-PSD-PSD 3SG-lie-ABLAUT-REAL.SUB
myqn-í-vy-li-m py-mijax-wyn-i-vy.
 kill(sg.)-ABLAUT-REAL.SUB-ABS-PL 3SG-be-ST.PST-ABLAUT-REAL.SUB
 ‘Your home is far away at Cupa, Hot Spring, where your water lies, where he was killed.’ (H&N 10[20] 68)¹

¹ Mistranslated as “where they were killed” in H&N.

- b. *Y-t-y py7 py-ta mi_syx-in-vy-li-m.*
 PROX2-ABS-CF DET 3SG-place 3PL.OBJ_burn-TR-REAL.SUB-ABS-PL
 ‘That is the place where they were burned.’
- c. *I7 = am py nyqn-í-vy-l*
 PROX = MIR FOC come-ABLAUT-REAL.SUB-ABS
 ‘This is where they came.’ (Faye 2-6-27 446)

The suffix *-pi* appears with the resultative suffix sequence *-i-sh* (see 14.1) to form noun/adjectives with a “potential” sense, as in (3). As with *-vy-l* nominalizations, these constructions can have plural suffixes that agree with the object, not the subject.

- (3) CU a. *Axwý-chi-m my = m = py kwa7 maajis-i*
 DIST-ABS-PL and = 3PL.ERG = IRR eat.FUT corn-ACC
wyl-nin-pi-ch-i.
 grow-TR-IRR.SUB-ABS-ACC
 ‘They will eat the corn that will be grown.’ (Jacobs 1975:70)
- b. *Axwý-ch = am qawí-sh atíra wim-jax-wy*
 DIST-ABS = MIR rock-ABS very weigh-INTR-ST.PRS
chi7ín-in-pi-sh.
 pick.up-TR-IRR.SUB-ABS
 ‘That rock is too heavy to lift.’
- c. *Wa7i-ch-y icháa7i kwa7-a-pi-sh.*
 meat-ABS-CF good eat-ABLAUT-IRR.SUB-ABS
 ‘Meat is good to eat.’ (Faye field notes 4-6-27 239)
- d. *Myt7i-chi-m yla-ti-m wy7 nymxa-la-7aw nymxa-pi-chi-m.*
 many-ABS-PL skirt-ABS-PL be.PRS sell-INS-LOC sell-IRR.SUB-ABS-PL
 ‘There were many skirts at the store for sale.’ (Faye Bancroft 82(10) 240)

13.3.3. OBJECT RELATIVE CLAUSES IN DESERT CAHUILLA. The subordinating suffixes in DCA relative clauses headed by a relative-clause object, appearing in Table 13.3.3, are *-ve* ‘realis’, *-7a* ‘nonfuture tense’, and *-pi* ‘irrealis’, like the corresponding suffixes in CU.

Table 13.3.3. Desert Cahuilla suffixes in relative clauses where common argument is object in the relative clause

			singular	plural
head --- subject	in --- subject	realis (past)	<i>-ve</i>	<i>-ve-m*</i>
		nonfuture (present)	<i>-7a</i>	<i>-a-m</i>
		irrealis (future)	<i>-pi</i>	<i>-pi-m*</i>

object	realis (past)	<i>-ve-j</i>	<i>-ve-m-i*</i>
	nonfuture (present)	<i>-a-j</i>	<i>-a-m-i</i>
	irrealis (future)	<i>-pi-j</i>	<i>-pi-m-i*</i>

While *-7a* seems to be restricted to relative clauses (and has also a possessive function; see 14.2.5 (6)), as in CU, both *-ve* and *-pi* also appear on predicates in complements, embedded questions, and adverbial clauses. They are restricted to modifying objects only in the case of object relative clauses; in other clause types, the subjects of these constructions can be subjects in the subordinate clause. Constructions in *-7a* appear with plural suffixes, in agreement with the number of their objects. Jacobs (1975:207) states that in CA, unlike CU and LU, such plurals appear with *-ve* and *-pi* as well, giving, for instance, *pe-mamajaw-pi-m* ‘the ones who he (?) will help’. However, these constructions are barely attested. Only one plural of this type is attested in the Seiler corpus for DCA; it appears in 13.3.4.1 (1c). Furthermore, there are examples where we expect concord, but it does not appear. The same problem appears in MCA, where Sauvel and Munro (1981) state that *-ve-m* and *-pi-m* are possible, and give examples. However, they are vanishingly rare in the sizable corpora of MCA texts in Sauvel and Elliott (2004) or in the Harrington archive of the MCA speech of Adán Castillo.

13.3.3.1. OBJECT RELATIVE CLAUSES WITH *-VE*, THE REALIS SUBORDINATOR. Constructions with the realis subordinator *-ve* appear in object-headed relative clauses, complements of verbless clauses, embedded questions, complement clauses, and diverse types of adverbial clauses including locational, temporal, and reason. Constructions with *-ve* use the pronominal prefix set for ordinary verbs, including the 3PL subject prefix. This is in contrast to the usage with the subject relativizers discussed in the previous sections, which appear with the set of prefixes used with nominalizations. The realis suffix *-ve* induces the presence of the ablaut vowel *i* following the verb roots listed in 10.6.1 (15), as well as following the durative suffixes *-qal* and *-wen*, the motion suffixes, and the inchoative suffixes.

Realis relative clauses with *-ve* where the common argument is the object of the relative-clause verb and subject of the main-clause verb appear in (1). An interesting detail of subordinated predicates in these clauses, shared with CU, is that object prefixes/proclitics can be present, but only when the object is plural, as in (1a, 2b). But

there is no singular object prefix in (1b, 2a); only the subject prefix is present. Note that in (1a, 2b) there is no plural suffix on the relativized predicate, although the object is plural. In (1c), with the plural suffix, there is no object pronominal in the verb construction. It may be that these two structural elements cannot appear together, with only one position in the construction assigned to object number, but there are insufficient data to be sure about this. The examples in (1) and (2) include all attestations we could find of *-ve* in object relative clauses. However, it is worth remembering that in CU plural object proclitics are nearly always present with *-ve* and *-pi* predicates in object relative clauses, and there are no instances of plural suffixes. However, Jacobs (1975:207) reports rare instances of plural concord in LU, which does not have object pronominals in any verb constructions.

- (1) DCA a. *I7 jal te7i-lj i-pa [hiche7a-m-i taxis-te-m*
 PROX QUOT bone-ABS PROX-LOC INDF-PL-ACC person-ABS-PL
hem-te7i-j [pa7 me-kwa-qal-i-ve] [mijax-wen].¹
 3PL-bone-ACC DET 3PL.OBJ-eat-NFUT.SG-ABLAUT-REAL be-ST
 ‘He (Takush) liked to eat the bones of all sorts of people. (They say that these bones here, people’s bones were what he ate.)’ (Seiler 1970:129 173)
¹ The square brackets around *mijaxwen* are Seiler’s. They are unexplained but may mean that *mijaxwen* was not in his audio recording.
- b. *Hiw-qal-e naxaa-sh [Muntakwe-t hem-jax-wen-i-ve]*.
 be-NFUT.SG-FCT man-ABS prsn-ABS 3PL-say-NFUT.SG-ABLAUT-REAL
 ‘There was a man there that they called Muntakwet.’ (Seiler 1970:49 135)
- c. *E-nga7=el na~nishma-le-m me-wih hem-qal,*
 PROX2-LOC=QUOT PL~girl-ABS-PL 3PL-two 3PL-be.there.ANIM.NFUT
jewi hivin-qal-i-ve-m taxliswe-te-m.
 long.ago pick.up-NFUT.SG-ABLAUT-REAL.SUB-PL person-ABS-PL
 ‘There were two girls there, people that he had kidnapped long ago.’ (Seiler 1970:127.169)

We expect that where the common argument is object in both the main and relative clauses, that *-ve* will be followed by an accusative suffix, as in (2a).

- (2) DCA a. *awa-l-i* [pe7 *hunwe-t* *mamajaw-ve-j*]
 dog-ABS-ACC DET bear-ABS help-REAL.SUB-ACC
 ‘the dog that the bear helped’ (Jacobs 1975:209 20)
- b. *Pen me-em-kwa-wen*
 and 3PL.OBJ-3PL-eat-NFUT.PL
 [[*me-em-chex-en-wen-i-ve*] Ø].
 3PL.OBJ-3PL-die(pl.)-CAUS-NFUT.PL-ABLAUT-REAL.SUB-ACC be
 ‘And they ate what (it was that) they had killed.’ (Seiler 1970:149 5)

13.3.3.1.1. REALIS SUBORDINATOR -VE IN OTHER CLAUSE TYPES. The examples in (1) show constructions with *-ve* as complements in verbless clauses. In these cases the common argument can be a subject in the subordinate clause. Note that in these complements prefixes encoding singular objects appear, as in (1b).

- (1) DCA a. “*Pe7 tukmija-t* [pe7 *cheme-7aqjaw-ve*] Ø.”
 DET night-ABS DET 3SG > 1PL-rock-REAL.SUB be
 ‘It is night who is rocking us.’ (Seiler 1970:39 18)
- b. [*Pe7 Isi-lj* *pe* [*pi-sh* *pe-kul-ve*]
 DET Coyote-ABS FOC 3SG-INS 3SG > 3SG-make-REAL.SUB
jewi Ø], [[*hém-na-j*
 long.ago be 3PL-father-ACC
pe-nuk-qal-e-ve] Ø].
 3SG > 3SG-make.image.feast-NFUT.SG-ABLAUT-REAL.SUB be
 ‘Coyote prepared it long ago, he was commemorating their father. (Coyote prepared long ago what was the image ceremony for their father).’ (Seiler 1970:59 270)

When the present-tense form of the copula *mijaxwe* appears with a complement subordinated with *-ve*, the sentence usually has a usitative sense, as in (2). Seiler and Hioki (1979:111) give examples suggesting that there is a contrast between a usitative with *mijaxwe* and *-qal-i-ve/-wen-i-ve*, and a pluperfect sense where the nonfuture durative suffixes are not present. They give the contrasting examples in (2).

- (2) DCA a. *Pe-n-7aj-qal-i-ve* *mijax-we.*
 3SG.OBJ-1SG-pick-NFUT.SG-ABLAUT-REAL.SUB be-ST
 ‘I used to pick it.’ (S&H 111)
- b. *Pe-n-7aj-i-ve* *mijax-we.*
 3SG.OBJ-1SG-pick-ABLAUT-REAL.SUB be-ST
 ‘I have picked it before.’ (S&H 111)

However, as seen in other examples from their corpus, like (3) where there is no nonfuture durative, but the example is interpreted as usitative, the contrast between a usitative and a pluperfect sense is not stable.

- (3) DCA *Jewi hem-julu-ka-j pe-ta pe-em-7u7-ve*
 long.ago 3PL-head-on-ACC 3SG-on 3SG.OBJ-3PL-carry.on.head-REAL.SUB
mijax-we.
 be-ST
 ‘In the old days they used to carry on the head.’ (S&H 227)

The suffix *-ve* subordinates realis complements of diverse predicate types (4). In DCA, these complement clauses do not usually include accusative-case marking on the predicate, unlike LU and CU. In his discussion of (4a), Seiler (1977) observes that the accusative suffix is optional, and it never appears in MCA. (4a) is unusual in that there is no complementizer *pish*, which is nearly always present in complements (see additional examples in (5)). We speculate *pish* may be absent in (4a) because the complement clause precedes the main verb, but there are too few examples to be sure.

- (4) DCA a. *Chemem [nuka-te-m hem-hichi-ve(-y)] chém-jax-wen.*
 1PL.PRO create-ABS-PL 3PL-go-REAL.SUB(-ACC) 1PL-say-NFUT.PL
 ‘We say that the (created) people went.’ (Seiler 1977:245 (63))
- b. *Joe jax-qal [Aswe-t Se7i [pish hichi-ve*
 say-NFUT.SG Eagle-ABS Flower COMP go-REAL.SUB
Kupa-jka]].
 Cupa-DAT
 ‘Joe said that Eagle-Flower went to Cupa.’ (Seiler 1977:244 (62))

- c. *“Iswe-t”* *jax-qal-e* [*pish*
Mountain.lion;Wolf-ABS¹ say-NFUT.SG-FCT COMP
pe-tewn-i-ve].
3SG > 3SG-name-ABLAUT-REAL.SUB
'He said that he had named him “Mountain Lion”.' (Seiler 1970:189 22.2)
¹ There is confusion about ‘wolf’ and ‘mountain lion’. CA *iswet* is literally ‘big coyote’, but this needs to be appreciated in its folkloristic context: The SE word *wanat*\$ meant ‘mountain lion’ for Sarah Martin, but other reports had *wanat*\$ meaning ‘wolf’. Mrs. Martin said that whichever animal SE *Wanat*\$ may be identified with, he is Coyote’s older brother.
- d. *Pi-jk* *ne-chungish-ljew-qal* [*pish* *ne-hichi-ve*].
3SG-DAT 1SG-tell.lie-VBLZ-NFUT.SG COMP 1SG-go-REAL.SUB
'I lied that I had gone.' (S&H 36)
- e. *Pen* *pe-qi* *pe-n-7e7nan-qal* [*karûl*
and 3SG-EMPH 3SG.OBJ-1SG-know-NFUT.SG railroad
pi-7i-j *pish* *pe-em-kul-ve*].
3SG-track-ACC COMP 3SG.OBJ-3PL-make-REAL.SUB
'And I just knew that they were working on the railroad tracks.' (Seiler 1970:149 1)
- f. *Chepéev* [*pish* *pe-e-mux-ve* *Willie Boy*?]
true COMP 3SG.OBJ-3PL-shoot-REAL.SUB
'Is it true that they shot Willie Boy?' (Seiler 1977:26 (6))
- g. *Kenma* *acha7e* [*pish* *huv-ve* [*e-sex-7a*]].
tasty very COMP smell-REAL.SUB 2SG-cook-NMLZ
'Your cooking smells delicious.' (S&H 62)

The particle *pish* often appears with embedded questions. In (5), this complementizer cooccurs with a question particle *qa* that is a proclitic on constructions with the indefinite *mi*- (the usual copula, *mijaxwen*, is one of these). In (5a) we see the proclitic on *mijax-qal* ‘do something or other’. (5b) has *qa__mi-vi* (with unidentified *-vi*), (5c) has *qa__mi-k* (with probably dative *-k*), and (5d) has *qa__mexenuk* (unanalyzed). In (5e), *qa__* appears on *hiche*

‘anything, whatever’. The presence of *pish* appears to block the presence of an accusative suffix on the subordinated predicates.

- (5) DCA a. *Ax_pe-7-teew-nem* [*pish* *qa_mijax-qal-i-ve*].
 AX_3SG.OBJ-2SG-see-FUT COMP Q_do-NFUT.SG-ABLAUT-REAL.SUB
 ‘You will see what he does.’ (Seiler 1970:49 150)
- b. *Che-wa7aqi* *pe-n-tehuj-k* *e-tama-j* *qa_mi-vi*
 CF-open.wide.IMP 3SG.OBJ-1SG-see-IFUT 2SG-mouth-ACC Q_INDF(?)
ajax-wen *pish* *hilj-kw-i-ve* *pish* *pa7*
 be.like-ST COMP wide-VBLZ-CAUS-REAL.SUB COMP FOC
ne-7-mengkwa-pi.
 1SG.OBJ-2SG-swallow-IRR.SUB
 ‘Open your mouth so I can see if it’s wide enough for you to swallow me.’
 (Seiler 1970:137 72)
- c. *Ki-ch-i* *pe-n-namaan-qal* *qa_mi-k* *pish*
 house-ABS-ACC 3SG.OBJ-1SG-measure-NFUT.SG Q_INDF-DAT(?) COMP
wavu-kw-i-ve.
 be.long-VBLZ-ABLAUT-REAL.SUB
 ‘I am measuring the house (to find) how long it is.’ (S&H 119)
- d. *Cheme-tetija-max-qal* *ivi-j* *qa_mexenuk* *taxs-te-m*
 3SG > 1PL-tell-BEN-NFUT.SG PROX-ACC Q_INDF.MANNER person-ABS-PL
jewi *pish* *hem-vuk-meni-wen-i-ve*, *hunwe-te-m*
 long.ago COMP 3PL-hit(?)-turn-NFUT.PL-ABLAUT-REAL.SUB bear-ABS-PL
pish *hem-hunwe-le-wen-i-ve*.
 COMP 3PL-bear-VBLZ-NFUT.PL-ABLAUT-REAL.SUB
 ‘He told us how the people of long ago changed themselves, they turned
 themselves into bears.’ (Seiler 1970:139 1)
- e. *Pe* *hé-7ash* *awa-l* *pe-nanal-qal* *qa_hichea-y* *pish*
 DET 3SG-animal dog-ABS 3SG > 3SG-ask-NFUT.SG Q_anything-ACC COMP
pe-7e7nan-qal-e-ve.
 3SG > 3SG-know- NFUT.SG-ABLAUT-REAL.SUB

‘And he asked his dog if he knew anything.’ (Seiler 1970:65 9)

The complementizer *pish* also occurs in questions without the question element *qa*, as in the examples in (6). Examples (6b,c), with no question word, may have had question intonation in the original, with the highest pitch on *-we*, *-wen* of the main verb, if CA is like CU.

- (6) DCA a. *Hiche7a ajax-wen pish teeng-i-ve.*
 what be.like-ST COMP appear-ABLAUT-REAL.SUB
 ‘What does he look like? (What is his appearance like?)’ (S&H 205)
- b. *Mijax-we pish pep-kw-i-ve.*
 be-ST COMP be.far-VBLZ-ABLAUT-REAL.SUB
 ‘How far is it?’ (S&H 149)
- c. *Mijax-wen pish wavu-kw-i-ve.*
 be-ST COMP be.long/tall-VBLZ-ABLAUT-REAL.SUB
 ‘How long/tall is it/he/she?’ (Seiler 1977:314 (102))

The suffix *-ve* appears in locational adverbial clauses in predicates modifying an (often unmentioned) place, as seen in (7). Such clauses have a subordinating particle *pa7* ‘where’. In (7a,b) the relative clause is treated as an object, with an accusative suffix following *-ve*. However, the accusative suffix in (7e) is mysterious.

- (7) DCA a. *Pe-n-teew-qal [pa7 pe-hem-mekn-i-ve-j].¹*
 3SG.OBJ-1SG-see-NFUT.SG where 3SG.OBJ-3PL-kill(sg.)-ABLAUT-REAL.SUB-ACC
 ‘I see where they killed him.’ (Seiler 1977:85 (55ii))
¹ sic with <m-m> for expected 7-m or Ø-m.
- b. *Penga7 jal me-teew-qa7l-e me-wih hunwe-te-m*
 then QUOT 3SG > 3PL-see-NFUT.SG-FCT 3PL-two bear-ABS-PL
hem-7i-j [pa7 hem-peniichi-ve-j].
 3PL-track-ACC where 3PL-pass-REAL.SUB-ACC
 ‘Then he saw the tracks of two bears where they went by.’ (Seiler 1970:
 139 6)

- c. *I-pa7 mijax-wen hé-7i7 [pa7 pax-pul-i-ve].*
 PROX-LOC be-ST 3SG-track where enter-COMEPR-ABLAUT-REAL.SUB
 ‘Here are his tracks where he came in.’ (Seiler 1970:135 67)
- d. *I pe mijax-wen [pa7 chem-qani-ve].*
 PROX FOC be-ST where 1PL-grow.in.egg-REAL.SUB
 ‘This is where we were formed.’ (Seiler 1970:43 57)
- e. *Jan i chaqe [naxani-sh pa7 hichi-ve-j] ajax-wen.*
 but PROX just man-ABS where go-REAL-ACC be.like-ST
 ‘But here it looks exactly like where a man walked.’ (Seiler 1970:79 56)
- f. *Hé-ma umun haaxalju-sh iv-i um pe-qekwich-an-qal*
 3SG-hand all misshapen-ABS PROX-ACC all CF-scar-DISTR-NFUT.SG
[pa7 pe-m-ke~k7-an-wen-i-ve
 where 3SG.OBJ-3PL-DISTR~bite-DISTR-NFUT.PL-ABLAUT-REAL.SUB
sew-ta-m].
 rattlesnake-ABS-PL
 ‘His hand was misshapen and scarred where the snakes had bitten him
 repeatedly.’ (Seiler 1970:153 12)

The presence of *pa7* (as in (7)) may be in complementary distribution with local case markers following *-ve*, as in (8), but there are too few examples to be sure.

- (8) DCA a. *Tamja-t pis-qal-e-ve-jka hing-7i.*
 sun-ABS go.out-NFUT.SG-ABLAUT-REAL.SUB-DAT fly-FCT
 ‘He flew to where the sun rises.’ (Seiler 1970:121 110)
- b. *Penga hem-na7ani-ve-nga pe7 taxat mu-pi~plje-m-qal*
 there 3PL-make.fire-REAL-in FOC EMPH MU-DISTR~roll-DISTR-NFUT.SG
taxat, nishxi-sh pa7.
 EMPH ash-ABS LOC
 ‘He got up and there where they had a fire he rolled himself in the ashes.’
 (Seiler 1970:95 58)

Predicates with *-ve* appear in adverbial clauses of reason. The examples in (9) have the same subjects in the two clauses. A different type of construction, with the adverb *sunuxwenepa7* ‘because’, which has the shape of a different-subject stative predicate with *-ipa7*, occurs with both same and different subjects.

- (9) DCA a. *Hem-ngaang-we7n-e* *hém-sun* *eléle-kw-al-i-ve.*
 3PL-cry-NFUT.PL-FCT 3PL-heart bad-VBLZ-NFUT.SG-ABLAUT-REAL.SUB
 ‘They cried because they were sad.’ (Seiler 1977:242 (57ii))
- b. *Naxani-sh* *sunháman-qa7l-e* *ku* *pe7* *kilje* *puu-l*
 man-ABS be.ashamed-NFUT.SG-FCT EMPH FOC NEG doctor-ABS
mijax-wen-i-ve.
 be-ST-ABLAUT-REAL.SUB
 ‘The man was ashamed because he was not a powerful doctor.’ (Seiler 1977:246 (69iii))

While temporal adverbials with different subject usually are subordinated with *-ipa7* (discussed in 13.1.3), examples with *-ve* do occur, as in (10).

- (10) DCA a. [*Hem-pis-wen-i-ve* *kimu-jka*]
 3PL-come.out-NFUT.PL-ABLAUT-REAL outside-DAT
me-em-chex-in-wen.
 3PL.OBJ-3PL-die(pl.)-CAUS-NFUT.PL
 ‘They killed them as they came out of the house.’ (Seiler 1970:77 27)
- b. [[*Pa7* *puli-ve(-j)*] *pe-n-kwa7isni-ve*]
 when be.born-REAL.SUB(-ACC) 3SG.OBJ-1SG-write-REAL.SUB
mijax-wen.
 be-ST
 ‘I used to write it up when the baby was born.’ (Seiler 1977:85 (54ii))
- c. [*Ni-jk* *ku~kutash-qal-e-ve*] *ne-taatusne-qa.*
 1SG-DAT IPFV~talk-NFUT.SG-ABLAUT-REAL.SUB 3SG > 1SG-tell.lie-NFUT.SG
 ‘When talking to me, he lied.’ (S&H 199)

Clauses with *-qal-i-ve/-wen-i-ve* are the only way to construct temporal adverbial clauses with a same-subject, simultaneous-action sense, as in (11a,b). The same-subject suffix *-nuk*, discussed in 13.1.3, encodes only prior action. However, as seen in (10), the *-qal-i-ve/-wen-i-ve* suffixes can also be used when there is a change of subject.

- (11) DCA a. [*Ne-chi7a-wen-i-ve*] *ne-kup-qal*.
 1SG-sit-ST-ABLAUT-REAL.SUB 1SG-sleep-NFUT.SG
 ‘While I was sitting I slept.’ (S&H 239)
- b. *Pe-n-pe-ñuchaj-qal* *waxachi-l-i* [*pe-ta*
 3SG.OBJ-1SG-CF-squash-NFUT.SG frog-ABS-ACC 3SG-on
ne-ñash-qal-i-ve].
 1SG-sit-NFUT.SG-ABLAUT-REAL.SUB
 ‘I squashed a frog when I sat on it.’ (S&H 131)
- c. *Pe-n-teew-qal* [*karñil* *pí-7i-j*
 3SG.OBJ-1SG-see-NFUT.SG railroad 3SG-track-ACC
pe-em-ku~kul-wen-epa7], [*muun* *ivi*
 3SG.OBJ-3PL-IPFV~make-NFUT.PL-DS (gesture vocable?) PROX
ne-7ajax-wen-i-ve].
 1SG-be.like-ST-ABLAUT-REAL.SUB
 ‘I watched the railroad tracks being laid when I was about this big.’ (Seiler 1970:149 1)

Constructions with *-ve* appear with the past-tense suffix *-7a*, which can also appear on nouns (see 11.6.1.14). Seiler (1977:238) labels the suffix *-7a₁* to distinguish it from the suffix on the deverbal nouns in *-7a₂* that appear in object relative clauses and action nominalizations.¹⁴⁶

- (12) DCA *Ax__7ijax-nem* *qa__mexenanuk* *pish* *chem-qal-ve-7a*
 AX__say-FUT Q__how COMP 1PL-be-REAL.SUB-PST

¹⁴⁶ In the text corpus Seiler transcribes phrase-final *-7a₁* as <-7ah>. In fact, Seiler’s practice seems to be to write <h> after any phrase-final vowel; we omit this embellishment in the cited examples.

qa_mexenanuk pish chem-pis-i-ve-7a.
 Q__how COMP 1PL-come.out-ABLAUT-REAL.SUB-PST
 ‘You will tell how we lay (in the egg) and how we came out.’ (Seiler 1970:
 41 21)

A final point regarding *-ve* is that absolutive forms of deverbal constructions with *-ve* are formed with absolutive suffix *-l*, as in (13).

- (13) DCA a. *chenen-ve-l* ‘wheel’ (< *chenen-* ‘roll’)
 b. *cheqi-ve-l* ‘diapers, loincloth’ (< *cheqi-* ‘stick between’)
 c. *jumu7-ve-l* ‘hat’ (< *jumu7-* ‘put on the head’)
 d. *kwa7-i-ve-l kijalawish* ‘leftover food’ (< *kwa7-* ‘eat’)
 e. *na7ani-ve-l* ‘fire place’ (< *na7ani-* ‘light fire’)
 f. *ñash-ve-l* ‘chair, seat’ (< *ñash* ‘sit’)
 g. *teklu-ve-l* ‘noon, midnight’ (< *tek-lu-* ‘be quiet’, ‘stop [as rain, wind, etc.]’)

13.3.3.2. OBJECT RELATIVE CLAUSES WITH SUBORDINATING SUFFIX -7A. The present-tense predicates in object-headed relative clauses are suffixed with *-7a* (*-7a₂* for Seiler 1977). This is the non-absolutive form of *-a-t*, from **-a7-t* (see 14.2). Seiler observes that it has multiple functions. Along with its absolutive form *-at*, it is “the most frequent and semantically general suffix forming verbal abstract nouns” (Seiler 1977:89). In relative clauses the suffix can encode the present tense, but its interpretation can also extend into the past, and in DCA it should be considered a nonfuture. Examples appear in (1), where the common argument is object in the relative clause and subject in the main clause. There is no subject prefix on the *-7a* construction in (1a) because third singular subject is zero in the CA pronominal paradigm. As in CU, object proclitics do not occur in constructions in *-7a*.

- (1) DCA a. *Pe=l i-pa qawi-sh qal-7e,* [aj
 FOC = QUOT PROX-LOC rock-ABS be.there-FCT now
siw-ne-7a], pajxwa-l
 become.hot-CAUS-NMLZ small.flat.stone-ABS
 ‘There was a flat stone lying there that had already been heated.’ (Seiler
 1970:137 76)

- b. *Uumun ajax sa7i-j hem-wipis-7a pi-ka umun*
 all like guts-ACC 3PL-pull.out-NMLZ DIST-DAT all
muma7aqi-wen ajax.
 pile.up-ST.NFUT like
 ‘All his guts that they pulled out were piled up all over.’ (Seiler 1970:139
 11)
- c. *Kenma acha7e [pish huv-ve [e-sex-7a]].*
 tasty very COMP smell-REAL 2SG-cook-NMLZ
 ‘Your cooking (what you have cooked) smells delicious.’ (S&H 62)
- d. *Pe7-ij pa7 waxachi-lj pe7 pe qachin-7a i-pa7*
 DET-ACC LOC frog-ABS DET FOC poke-NMLZ PROX-LOC
mu mijax-wen iv7ax.
 still be-ST.NFUT now
 ‘The marks made by the poking can be seen on frogs to this day.’ (Seiler
 1970:51.182)

Like CU, DCA permits number agreement in derivations with *-7a*. For the relativizing suffix *-7a*, Seiler (1977) gives the two clauses in (2a,b) to illustrate that number agreement is with the object.

- (2) DCA a. *gajūna7-a-m [isi-lj ejetu-[7]a-m]*
 chicken-AUG-PL coyote-ABS steal-NMLZ-PL
 ‘the chickens which the coyote stole’ (Seiler 1977:249 (77ii))
- b. *gajūna7 [is-ta-m hem-7ejetu-7a]*
 chicken coyote-ABS-PL 3PL-steal-NMLZ
 ‘the chicken which the coyotes stole’ (Seiler 1977:250 (78ii))

In the examples in (3), the common argument is object in both clauses, with *-7a* marked for accusative. In (3c), we observe again pluralization of the construction agreeing with the number of the object.

- (3) DCA a. *Pepi-ngax ne-neken-e [[ne-ki7iw-a-j]*
 far-ABL 1SG-come-FCT 1SG-wait.for-NMLZ-ACC
pe-n-7aj-i-k].
 3SG.OBJ-1SG-pick-ABLAUT-IFUT
 ‘I came from far away to pick what I’ve been waiting for.’ (Seiler 1970:185
 1.4)
- b. *Pe aj i [a7alxe-7a-j] pe-em-7e7nan-wen.*
 FOC already PROX tell.story-NMLZ-ACC 3SG.OBJ-3PL-know-NFUT.PL
 ‘The people know this history (this that he told).’ (Seiler 1970:91 106)
- c. *Kilj me-7-7ajaw-qal [ne-nuk-a-m-i*
 NEG 3PL.OBJ-2SG-like-NFUT.SG 1SG-make.image-NMLZ-PL-ACC
ne-tav-a-m-i].
 1SG-put-NMLZ-PL-ACC
 ‘You do not like my creatures and the things that I have created (what I have
 made as an image, what I have placed).’ (Seiler 1970:43 64)

In example (4), number agreement is with the indirect object.

- (4) DCA *ñichi-lj nañishma-lje-m nea-t une-7a-m*
 woman-ABS girl(pl.)-ABS-PL basket-ABS show-NMLZ-PL
 ‘the basket that the woman shows the girls’ (Seiler 1977:250 (79ii))

Along with variability in plural marking with *-7a* subordination, there is apparent variability in accusative marking, as seen in (5). In the examples in (5), Seiler’s commas suggest that the clause with the relativization is an afterthought or a new sentence, where the relative clause is a complement in a verbless clause: “(It is) what Petrella gave me”; “(It is) what was brought by the Indian agent”.

- (5) DCA a. *Aj metewet tawpaxi-sh pe-n-jaw-qal-e-ve,*
 now many year-ABS 3SG.OBJ-1SG-hold-NFUT-ABLAUT-REAL.SUB
[chipatma-7l-i, [ne-max-7a Petréeja] Ø].
 basket-ABS-ACC 3SG > 1SG-give-NMLZ Petrella be
 ‘I had the basket that Petrella gave me for many years.’ (Seiler 1970:147 2)

- b. *I nawishma-l pe-7une-qal he-pas-i*
PROX girl-ABS 3SG > 3SG-show-NFUT.SG 3SG-OLBr-ACC
eti-j hiwen-e-t-i, [[jaw-pish-7a] Ø
PROX2-ACC lie(inan)-NMLZ-ABS-ACC take-bring-NMLZ be
kumsenáadu].
Indian.agent
‘This little girl is showing her big brother the thing lying there, that was
brought by the Indian agent (the *consignado*).’ (Seiler 1970:187 14)

While in CU the *-7a* derivation yields action nominalizations as well as the relativized modifiers on objects, in CA the suffix is apparently restricted to the latter function. Seiler (1977:89) translates several examples of action nouns, but in texts these are never in subject-headed clauses. Thus his *ne7amin7a* ‘my throwing’ will be functionally ‘what I threw’ and agree with an object head. While in CU *-7a* appears in adverbial clauses with non-local case markers, no similar constructions have been found in DCA. It should be noted that in both languages *-7a* is a possessed suffix on some nouns.

13.3.3.3. OBJECT RELATIVE CLAUSES WITH IRREALIS SUBORDINATING SUFFIX *-PI* ~ *-P*. The final subordinating suffix that appears in DCA relative clauses is the irrealis subordinator *-pi*. It appears on predicates in object relative clauses in the future tense or irrealis mood. Such clauses are vanishingly rare in the corpus (we have only found the two that appear in (1)). The suffix *-pi* is far more productive in other irrealis subordinate-clause types including complements, embedded questions, and locational and temporal adverbial clauses. The suffix induces *a* ablaut, and when the ablaut vowel is present the suffix often reduces to *-p*. The forms with *-a-p* appear following the verb roots in 10.6.1 (15) and after suffixes including the nonfuture durative *-qal/-wen*, motion suffixes, distributive *-Vm*, and the suffix *-kw* which derives verbs from adjectives.

Examples of *-pi/-p* in object relative clauses appear in (1). In both examples the common argument is object in both clauses. Note that in (1a) an accusative suffix would be very easy to hear, and should be present if it is required that the relative-clause predicate agree with its head noun, in this case *hichemivij*, the object of the main clause. But it is not present, although Sauvel and Munro (1981) give an example in MCA of an

ablauted irrealis suffix with an accusative suffix (in 13.3.4.3 (2a)). Jacobs writes his sample clause in (1b) with the accusative suffix in parentheses, so it is apparently optional. Nor does it appear in complement clauses.

- (1) DCA a. *Pen hichemivi-j pe-em-ha~al-wen pe7em,*
 and something-ACC 3SG.OBJ-3PL-IPFV~look.for-NFUT.PL 3PL.PRO
 [*ningki-che-m hem-kwa7-a-p*].
 like-ABS-PL 3PL-eat-ABLAUT-IRR
 ‘They were looking for anything that they might eat.’ (Seiler 1970:79 50)
- b. *A7wa-li pe7 hunwe-t pe-mamajaw-pi(-y).*
 dog-ABS-ACC DET bear-ABS 3SG > 3SG-help-IRR(-ACC)
 ‘The dog that the bear will help.’ (Jacobs 1975:206 12)

In the examples in (2), the relativized element is not an object in the relative clause, but an instrument. In these examples the form *pi-sh* is the 3SG pronominal with the instrumental postposition, not the complementizer (the complementizer is grammaticalized from this form). In this case there is an accusative suffix on the subordinated predicate, in agreement with *tiki7ti*. In (2b), no such suffix is present, but the headless relative is not an object in the main clause, as suggested by the determiner on the instrument clause, which is nominative. Seiler and Hioki (1979) do not write an accusative suffix in (2c), but analogy with (2a) suggests that it might be present. In summary, the DCA data leave us with many unresolved questions about case in these future object relative clauses.

- (2) DCA a. *Pen naxa-lu-ve-7l-i* *pe-e-max-wen-e*
 and age.of.man-VBLZ-REAL.SUB-ABS-ACC 3SG.OBJ-3PL-give-NFUT.PL-FCT
*tikii-7t-i*¹ *taxs-te-m* *pi-sh*
 ticket-ABS-ACC Indian-ABS-PL 3SG-INS
hem-nen-m-a-p-i, *karfil-nga.*
 3PL-go.around-DISTR-ABLAUT-IRR-ACC train-LOC
 ‘And they gave the old man a railroad pass so that the Indians could ride
 back and forth on the train.’ (Seiler 1970:149 2)

¹ Here the English loanword *ticket* has been reanalyzed such that the final *-t* is treated as the CA absolutive suffix, which then gets the etymologically mysterious intrusive glottal stop in the accusative.

- b. [[*Ku pe7 pi-sh hem-chex-wen-a-p*] \emptyset]
 EMPH 3SG.PRO 3SG-INS 3PL-be.sick(pl.)-NFUT.PL-ABLAUT-IRR.SUB be
jax-qal pe7.
 say-NFUT.SG 3SG.PRO
 ‘He said that was why they would be sick.’ (Seiler 1970:43 57)

- c. *Pa-7l-i ne-max-qa* [*pi-sh ne-welawali-pi(-j?)*].
 water-ABS-ACC 3SG > 1SG-give-FUT.SG 3SG-INS 1SG-irrigate-IRR.SUB
 ‘He gives me water (with which) to irrigate.’ (S&H 103).

13.3.3.3.1. IRREALIS SUBORDINATING SUFFIX *-PI* ~ *-P* IN OTHER TYPES OF CLAUSES. The suffix *-p(i)*, like its realis counterpart *-ve*, occurs frequently in complements, always with the complementizer *pish*. Note that there are no accusative case suffixes on these complement clauses, even where they would be clearly audible following the sequence *-a-p*, as in (1c,d).

- (1) DCA a. *I jal Tavi-sh kilj pe-7e7nan-qal* [*pish*
 PROX QUOT Woodpecker-ABS NEG 3SG.OBJ-know-NFUT.SG COMP
chengen-pi].
 dance-IRR.SUB
 ‘Woodpecker did not know how to dance.’ (Seiler 1970:45 93)

- b. *Achama* [*pish pe-em-tejan-pi* [*jewi*
good COMP 3SG.OBJ-3PL-conserve-IRR.SUB long.ago
hem-nemi-wen-i-ve]].
3PL-go.along-NFUT.PL-ABLAUT-REAL.SUB
'It would be good if they would preserve their customs of long ago.' (S&H
215)
- c. *Juki-qal* [*pish pe-e-mekn-a-p*].
be.afraid-NFUT.SG COMP 3SG.OBJ-3PL-kill(sg.)-ABLAUT-IRR.SUB
'I was afraid that they would kill him.' (Seiler 1970:79 51)
- d. *Metewe-t pi-jk mijax-we7ne pish*
many-ABS 3SG-DAT be-ST.NFUT.FCT COMP
tax_tewn-a-p.
REFL_name;tell-ABLAUT-IRR.SUB
'There are a lot of things to note.' (Seiler 1970:193 40)

Constructions with *-pi* appear in locational adverbial clauses introduced by a particle *pa* 'where', as in (2). The adverb *pepi* or *pe7pi* 'far' appears with complements with *-pi*.

- (2) DCA a. *Pe7pi* [*pa chem-ngij-pi*] *pepi* [*pa chem-hiche-pi*].
far where 1PL-go.back-IRR.SUB far where 1PL-go-IRR.SUB
'It is a long way to go to our house (to go back), it is a long way to go.'
(Seiler 1970:187 10.3)
- b. *Pe7pi pish pa hichi-pi*.
far COMP where go-IRR.SUB
'It is a long way to go.' (S&H 55)

When the nonfuture stative copula verb *mijaxwen* appears with clauses with *-ve* (as in (4) and (5) above in 13.3.3.1), it usually means 'used to'. However, when it appears with *-pi*, its sense is deontic, 'have to' (3a,b), or having to do with capacity and potentiality (3c,d). (3e) shows that, just as in CU, a *-pi* predicate can have directive force in a verbless clause as well.

- (3) CA a. [*Hem-chex-pi*] *mijax-wen*.
 3PL-be.sick.PL-IRR.SUB be-ST
 ‘They will have to have sickness.’ (Seiler 1970:43.57)
- b. *Mijax-wen* [*pish pe-n-tetijax-pi*] *chepév-kw-a-l-i*.
 be-ST COMP 3SG.OBJ-1SG-tell-IRR.SUB true-VBLZ-NMLZ-ABS-ACC
 ‘I have to tell the truth.’ (S&H 30)
- c. *Peqi pa7vu7u-l* *mijax-wen* [*pish pe-7a~7aw-lu-pi*]
 only great.doctor-ABS be-ST COMP 3SG.OBJ-PL-horn-VBLZ-IRR.SUB
suka-t *awa-j*.
 deer-ABS horn-ACC
 ‘Only the Great Doctor could put on the deer headdress.’ (S&H 146)
- d. *Kilje mijax-wen* [*pish hiwñash-pi*].
 NEG be-ST COMP stay.FUT.DUR-IRR
 ‘He couldn’t remain.’ (Seiler 1970:51 170)
- e. “*Kilj pe mijax-wen-a-p*” *jax-qal*.
 NEG FOC be-ST-ABLAUT-IRR.SUB say-NFUT.SG
 ‘He said, “It should not exist.” ’ (Seiler 1970:43 55)

Like its realis counterpart *-ve*, the irrealis *-pi* has an absolutive form, *-pi-sh*. Absolutive forms of the suffix can appear as relativized predicates whose objects correspond to the relative-clause head, as in (4).

- (4) CA a. *hunwe-t* [*pe7 pe mamajaw-pi-sh*]
 bear-ABS DET FOC help-IRR.SUB-ABS
 ‘the bear that will be helped’ (Jacobs 1975:208 18)
- b. *kilje tew-a-pi-sh*
 NEG see-ABLAUT-IRR.SUB-ABS
 ‘one which is not supposed to be found, seen’ (S&H 213)

- c. *pa amu-pi-sh*
 where hunt-IRR.SUB-ABS
 ‘place to be hunted’ (S&H 15)
- d. *kwa7-a-pi-sh*
 eat-ABLAUT-IRR.SUB-ABS
 ‘something edible, something to be eaten’ (S&H 91)
- e. *pak-pi-sh*
 tap-IRR.SUB-ABS
 ‘a flat paddle for tapping a pot’ (S&H 138)
- f. *ting7aj-pi-sh*
 cure-IRR.SUB-ABS
 ‘medicine’ (S&H 217)
- g. *pa wiwaj-pi-sh*
 where hang-IRR.SUB-ABS
 ‘coat hanger’ (S&H 243)

13.3.4. OBJECT RELATIVE CLAUSES IN MCA. For this section, we again draw on the account of MCA relativization in Sauvel and Munro (1981). The main difference between this system and the other Cupan systems is apparently that, as in DCA, plural suffixes appear with the subordinators *-ve* and *-pi*. However, as in DCA, these are poorly attested. Outside the Sauvel and Munro lessons we have found only one possible example of this type in the MCA text collections, given below in 13.3.4.1.1 (4a). The inventory of subordinating suffixes in object relative clauses appears in Table 13.3.4.

Table 13.3.4. Suffixes in object relative clauses in MCA

			singular	plural
head in main	subject	realis	<i>-ve</i>	<i>-ve-m</i>
		nonfuture	<i>-7a</i>	<i>-a-m</i>
		irrealis	<i>-pi ~ -p</i>	<i>-pi-m</i>
	object	realis	<i>-ve-j</i>	<i>-ve-m-i</i>
		nonfuture	<i>-a-j</i>	<i>-a-m-i</i>

irrealis *-pi-j* *-pi-m-i*

13.3.4.1. PAST-TENSE OBJECT RELATIVE CLAUSES WITH SUBORDINATOR *-ve*. Sauvel and Munro (1981:264) state that the subordinator *-ve*, *-ive* “means about the same as *-7a*, but it seems to be a little bit less common.” This subordinator also appears in the sequences *-qal-i-ve*, *-wen-i-ve*, in which case the construction is interpreted as durative or imperfective.

In the examples in (1), the common argument is subject in the main clause. Note that where the object of the relativized predicates is plural, a pronominal object prefix appears, as in (1c, 2b).

- (1) MCA
- a. *Wani-sh pa7 ne-nami-ve hilye7-we-t Ø.*
 river-ABS LOC 1SG-cross-REAL.SUB wide-CHAR-ABS be
 ‘The river I crossed is wide’ (S&M 264)
- b. *Ja-qal-i-ve chepe7 pe ajax-we*
 say-NFUT.SG-ABLAUT-REAL.SUB same FOC be.like-ST.PRS
hem-kutash-7a Misjóon Sangravijél-nga7
 3PL-speak-NMLZ Mission San Gabriel-LOC
 ‘What they were speaking is just the same as what they spoke at Mission San Gabriel.’ (3.113.0113)
- c. *Kilje heñew-va-che-m ajax-wen-Ø-te-m [pe7e-m-i*
 NEG fight-AGTV-ABS-PL be.like-ST-NMLZ-ABS-PL DET-PL-ACC
me-chem-tew~ew-i-ve hunnga-jka] Ø.
 3PL.OBJ-1PL-see~DISTR-ABLAUT-REAL.SUB back-DAT be
 ‘They are not as warlike as those that we have seen further back.’
 (3.113.0083)
- d. *Ningki-che-m pe7 pe ne-naqma-ve-m hem-chengen-we7.*
 woman(pl.)-ABS-PL DET FOC 1SG-hear-REAL.SUB-PL 3PL-dance-PST.PL
 ‘The women that I heard were dancing.’ (S&M 266)

In (2), the common argument is object in both main and relative clauses. Note that there is no number agreement in (2b) for the *-ve* construction, although it is present in

the other relative clause, *chexnami* ‘those who had been killed.’ The Harrington notes provide an example with *-ve-m-i* (2c); Harrington states that the accusative suffix is optional.

- (2) MCA a. *Yangva7-i vaaka7 chengen-i-ve-j pe-m-mekan-7i.*
 lizard-ACC cow kick-ABLAUT-REAL.SUB-ACC 3SG.OBJ-3PL-kill(sg.)-FCT
 ‘They killed the lizard that the cow kicked.’ (S&M 266)
- b. *Pichi-law-nik jal me-7amin-7i taxlis-te-m*
 arrive-GOPR-SS QUOT 3PL.OBJ-throw-FCT person-ABS-PL
chex-n-a-m-i me-jaw-neke-ve-j ika-nga7.
 die(sg.)-CAUS-NMLZ-PL-ACC 3PL.OBJ-hold-COMING-REAL.SUB-ACC net-LOC
 ‘When he arrived, they say he threw down the people who had been killed
 that he was bringing in his net.’ (3.112.0401)
- c. *Hem-kija7-nge-ve-m(-i) ne-max pe-m-hivin-7i.*
 3PL-leave-GOING2-REAL.SUB-PL(-ACC) 1SG-ABL 3SG.OBJ-3PL-pick.up-FCT
 ‘At my command they picked up what they had left behind.’ (3.113.0379)

13.3.4.1.1. OTHER USES OF REALIS *-ve* IN SUBORDINATE CLAUSES. Among other subordinate-clause types with *-ve* are complements of various forms of the copula *mijax*. When *mijax* is in the present tense, as in (1a), the interpretation is deontic (as it is with subordinate predicates with irrealis *-pi*). However, when the copula is in the past tense, as in (1b), the result is a past perfect predication.

- (1) MCA a. *Che7 e-te-j pish ne-pis-a-law-ve mijax-we.*
 just PROX2-ABS-ACC COMP 1SG-exit-ABLAUT-GOPR-REAL.SUB be-ST.PRS
 ‘For just that reason I had to get out.’ (3.112.0018)
- b. *Juj-i-ve pen wewn-i-ve mijax-we7*
 snow-ABLAUT-REAL.SUB and rain-ABLAUT-REAL.SUB be-ST.PST
mete-n pe7-i pe tukmija-7t-i.
 much-ADV DET-ACC FOC night-ABS-ACC
 ‘It had snowed and rained a great deal that night.’ (3.113.0127)

Complement clauses with *-ve* in MCA, shown in (2), always seem to include the complementizer *pish*, and do not add an accusative suffix to the complement-clause predicate.

- (2) MCA a. *Tewlave-l jal aj pe-7e7nan-qa7 kia-t pish*
 devil-ABS QUOT already 3SG.OBJ-know-PST.SG boy-ABS COMP
ngij-ve hé-ki-jka.
 go-REAL.SUB 3SG-house-DAT
 ‘They say the devil already knew that the boy had gone home.’
 (3.311.0127)
- b. *Jax-qa pish wani-qal-i-ve chepe7i-j*
 say-PRS.SG COMP water.run-NFUT.SG-ABLAUT-REAL.SUB same-ACC
ajx-i-7ch-i pish wani-qal-i-ve
 be.like-NMLZ-ABS-ACC COMP water.run-NFUT.SG-ABLAUT-REAL.SUB
iv7ax.
 now
 ‘He says that it had the same amount of water running as what is running
 now.’ (3.113.0099)

Constructions with *-ve* appear in adverbial clauses, including instrumental and locational types, as in (3). In such clauses (in fact, in all subordinate clauses except relative clauses) both singular and plural object prefixes appear on the subordinated constructions (as in (3b, c)).

- (3) MCA a. *Pu~vu-la-m e-t he7-mexan-7a pi-sh*
 PL-doctor-ABS-PL PROX2-ABS 3PL-property-PSD 3SG-INS
tax_hem-ting7awi-wen-i-ve.
 REFL_3PL-heal-NFUT.PL-ABLAUT-REAL.SUB
 ‘This is something which the shamans used to heal people with.’ (S&E
 1012)

- b. *Pe7i-sh pe i-pa7 u7mu pi-t qi~qpi-m-we7*
 3SG-INS FOC PROX-LOC all road-ABS DISTR~be.line-DISTR-ST.PST
pa7 hem-nem-i-ve, pa7 hichaxi pa7
 LOC 3PL-walk-ABLAUT-REAL.SUB LOC things LOC
pe-m-jaw-ichi-wen-i-ve hawawaj-7lj-i
 3SG.OBJ-3PL-hold-GOING-NFUT.PL-ABLAUT-REAL.SUB word-ABS-ACC
miv-ax p-ax qal-Ø-te-m.
 INDF-ABL 3SG-ABL be.there.ANIM-NMLZ-ABS-PL
 ‘That is why all those trails criss-crossed this area, on which they would travel, on which they would take messages to people who lived somewhere else.’ (S&E 968)
- c. *Penga7 pe7 pe hem-wajki-7a pa7*
 there DET FOC 3PL-dine-NMLZ LOC
pe-m-wen-wen-i-ve jewi
 3SG.OBJ-3PL-put(pl.)-NFUT.PL-ABLAUT-REAL.SUB long.ago
a~7ami-va-m.
 PL~throw-ADJ-PL
 ‘There is where the old timers used to store their food long ago.’ (S&E 968)

An alternative type of locational construction with *-ve* is a suffix sequence with *-ve* and a local case suffix. In cases of this type, the subordinating particle *pa7* is absent. (4c) is not locational, but instead the ablative suffix is used to create a “because” clause.

- (4) MCA a. *Pe-7e7nan-qa pish nem-i-ve i-pa7*
 3SG.OBJ-know-PRS.SG COMP wander-ABLAUT-REAL.SUB PROX-LOC
taxlos-t-m-ma7 taxlos-te-m hem-qal-ve-nga.
 person-ABS-PL-AMONG person-ABS-PL 3PL-be.there.ANIM-REAL.SUB-LOC
 ‘He knows how to wander among the people, in the places where people live.’ (3.113.0072)

- b. *Hem-vuk-méni-ngi7* *hém-ki-jka*
 3PL-straight-return-GOING 3PL-house-DAT
hem-qal-ve-ka.
 3PL-be.there.ANIM-REAL.SUB-DAT
 ‘They returned to their homes and habitations.’ (3.113.0109)
- c. *Pi-chem-tew-i-v-ax* *wel-che-m-i* *ajax-we*
 3SG.OBJ-1PL-see-ABLAUT-REAL.SUB-ABL grow-ABS-PL-ACC be.like-ST.PRS
pish kilje juj-i-t \emptyset .
 COMP NEG snow-NMLZ-ABS be
 ‘From what we have seen of the plants, it seems that it does not freeze.’
 (3.113.0090)

13.3.4.2. PRESENT-TENSE OBJECT RELATIVE CLAUSES WITH SUBORDINATOR -7A. Subordination with -7a, as in DCA, seems to be restricted to object relative clauses. In (1), the common argument is subject in the main clause, object in the relative clause. In (1a), the main-clause verb is a verb-adjunct construction where the adjunct is an onomatopoeia.

- (1) MCA a. *Wuhh jax-vanek-7e pe7 pe amin-7a.*
 whirr do-COMING-FCT DET FOC throw-NMLZ
 ‘What he had thrown up came whirring down.’ (S&E 893)
- b. *U7mu hem-kul-a-m jal tuxchanga-le-m*
 all 3PL-make-NMLZ-PL QUOT powerful.being-ABS-PL
hem-mijax-we7.
 3PL-be-PST.PL
 ‘Todos los que criaron eran poderosos. (All those they raised were powerful.)’ (3.112.0097)

In (2), the common argument is object in both clauses, requiring that the relativized predicate bear an accusative suffix.

- (2) MCA a. *Ne tax_{ne}-netang-qa7 ne-qi ne-7ajaw-a-j.*
 1SG.PRO REFL_{ne}-1SG-ask-PST.SG 1SG-only 1SG-want-NMLZ-ACC
 ‘I ordered just what I wanted.’ (S&E 903)

- b. *U7mu tame-7t-i amu-qa7 mekn-a-m-i*
 every day-ABS-ACC hunt-PST.SG kill(sg.)-NMLZ-PL-ACC
me-m-qwa-we7.
 3PL.OBJ-3PL-eat-PST.PL
 ‘Every day he hunted, comían los que mataba (they would eat what he killed)’ (3.112.0377)
- c. *Em-7ajaw-we pish me-7-jaw-ichi-pi*
 2PL-want-PRS.PL COMP 3PL.OBJ-2PL-hold-GOING-IRR.SUB
e-kul-a-m-i aníja7-m-i.
 2SG-make-NMLZ-PL-ACC ring-PL-ACC
 ‘You want to (each) take the rings that you made.’ (3.112.0201)

13.3.4.3. FUTURE-TENSE OBJECT RELATIVE CLAUSES WITH SUBORDINATOR -PI. The examples in (1) show the subordinator *-pi* where the common argument is subject in the main clause.

- (1) MCA a. *Pe7 pe mawa hem-qa7-a-p Ø, pe7 pe*
 DET FOC later 3PL-eat-ABLAUT-IRR.SUB be DET FOC
hem-ki7iw-7a Taxs-te-m Ø.
 3PL-wait.for-NMLZ Cahuilla-ABS-PL be
 ‘It was what they would eat later, it was what the Cahuilla depended upon.’
 (S&E 846)
- b. *Nawishma-l Joe kinangi-pi julu7ka tuleki-sh Ø.*
 girl-ABS marry-IRR.SUB hair black-ABS be
 ‘The girl that Joe will marry has black hair.’ (S&M 260)
- c. *A~7wa-le-m e-7ejtu-pi-m pe-m-7iva-we7.¹*
 PL~dog-ABS-PL 2SG-steal-IRR.SUB-PL 3SG.OBJ-3PL-run-PST.PL
 ‘The dogs you’ll steal were running.’ (S&E 263)
- ¹ Mysteriously, *iva* ‘run’ always has transitive pronominal inflection with a 3SG object.

In (2), the common argument is object in the main clause. In this case, the subordinate predicate has an accusative suffix. In (2a), an ablauting construction, *tew-a-p* ‘see-ABLAUT-IRR.SUB’, is followed by an accusative suffix.

- (2) MCA a. *Nichi-7lj-i tew-a-p-i pe-n-tew-7i.*
 woman-ABS-ACC see-ABLAUT-IRR.SUB-ACC 3SG.OBJ-1SG-see-FCT
 ‘I saw the woman he will see.’ (S&M 264)
- b. *Lola pe-saamsa-ne awa-7l-i e-7eytu-pi-j.*
 3SG.OBJ-buy-FUT dog-ABS-ACC 2SG-steal-IRR.SUB-ACC
 ‘Lola will buy the dog you’ll steal.’ (S&M 264)
- c. *Lola me-saamsa-ne a~7wa-l-m-i pe7 pe*
 3PL.OBJ-buy-FUT PL~dog-ABS-PL-ACC DET FOC
e-7ejtu-pi-m-i.
 2SG-steal-IRR.SUB-ACC
 ‘Lola will buy the dogs you’ll steal.’ (S&M 264)

13.3.4.3.1. OTHER USES OF IRREALIS *-PI* IN SUBORDINATE CLAUSES. Subordinate predicates with irrealis *-pi* appear in many of the same types of subordinate clauses as illustrated above for realis *-ve*, although the latter are much more richly attested.

Of special importance is the idiom ...*-pi mijaxwe*, meaning ‘be able to, be possible’, as illustrated in (1).

- (1) MCA a. *Kilj mijax-we7 haxa-m-i pish pi-jik hem-hichi-pi*
 NEG be-ST.PST someone-PL-ACC COMP 3SG-DAT 3PL-go-IRR.SUB
pi-sh me-7-mamajw-a-p.
 3SG-INS 3PL.OBJ-3PL-help-ABLAUT-IRR.SUB
 ‘They could not turn to anyone for help.’ (S&E 950)

- b. *Taxliswe-t pe7 pe7-ij e7nan-qal-e-t pen*
 person-ABS DET 3SG.PRO-ACC know-NFUT.SG-NMLZ-ABS and
pe-7e7nan-pi mijax-we qa-hicha-j pi-sh
 3SG.OBJ-know-IRR.SUB be-ST.PRS Q-what-ACC 3SG-INS
pe-taxmu-qal-i-ve.
 3SG.OBJ-sing-NFUT.SG-ABLAUT-REAL.SUB
 ‘A person who knows [Cahuilla] can understand what she was singing
 about.’ (S&E 1252)

- c. *Me-ha~al-pi mijax-we7 pi-sh*
 3PL.OBJ-IPFV~search-IRR.SUB be-ST.PST 3SG-INS
pe-m-max-a-pi wajaki-wen-Ø-t-i,
 3SG.OBJ-3PL-give-ABLAUT-IRR.SUB dine-ST.NFUT-NMLZ-ABS-ACC
wajaki-wen-e-t sawa-qal-ipa7.
 dine-ST.NFUT-NMLZ-ABS be.absent-NFUT.SG-DS
 ‘Los tenía que buscar (they had to search) in order that they might give
 him food, food being lacking’ (3.113.0074)

In (2) are illustrated irrealis complement clauses under the complementizer *pish*.

- (2) MCA a. *Ne7 pe-n-7ajaw-qa pish*
 1SG.PRO 3SG.OBJ-1SG-want-PRS.SG COMP
ne-7-ku~kul-max-pi saw-i-7ch-i.
 1SG.OBJ-2SG-IPFV-make-BEN-IRR.SUB bake.bread-NMLZ-ABS-ACC
 ‘Yo quiero para que me hagas pan. (I want you to make bread for me.)’
 (3.112.0154)
- b. *Pen aja Naxa-sh Hunwe-t pe-7e7nan-qa7 pish*
 and then Man Bear 3SG.OBJ-know-PST.SG COMP
pe-m-che-qivish-pi uwi-7ch-i.
 3SG.OBJ-3PL-CF-cut-IRR.SUB rope-ABS-ACC
 ‘Y de allí el Hombre Oso sabía que iban a trozar el chicote. (And then Bear
 Man knew that they were going to break the rope.)’ (3.112.0189)

The irrealis subordinator appears in instrumental and locational adverbial clauses. In these clause types, headed by locative *pa7* ‘where’ and by instrumental *pish* ‘with which’, the predicates have the same structure as that seen in the relative clauses, with only subject pronominals and object pronominals absent except when they are plural.

- (3) MCA a. *E-n-max-ne* *e-ki-j* *amnawe-7t-i* ***pa7***
 2SG.OBJ-1SG-give-FUT 1SG-house-ACC big-ABS-ACC LOC
em-hiwnash-pi *yenge-7an.*
 2PL-be.there.ANIM.FUT.IPFV-IRR.SUB pass.a.long.time-ADV
 ‘I will give you a big house that you can live in always.’ (3.112.0275)

- b. *Pe7* *ne-j_jikaw-max-i-sh* *u7mu*
 DET 1SG-ACC_gather-BEN-NMLZ-ABS all
pe-ku~kul-nashpu7 *hichamivi-j* *pe7* *pe* ***pi-sh***
 3SG-IPFV~make-POL.USIT.SG something-ACC DET FOC 3SG-INS
chem-7ik-a-p.
 1PL-play-ABLAUT-IRR.SUB
 ‘My mother would make those things for us to play with.’ (S&E 915)

- c. *Pe-m-walin-we7* *pe7i-j* *tema-7l-i* *pi-ka*
 3SG.OBJ-3PL-dig.ditch-PST.PL DET-ACC ground-ABS-ACC 3SG-DAT
pa-l *pa7* *pe-j_7iva-ka-7t-i* *pe7* *pe* ***pi-sh***
 water-ABS LOC 3SG-ACC_run-IFUT-ABS-ACC DET FOC 3SG-INS
hem-wes-a-p.
 3PL-plant.crop-ABLAUT-IRR.SUB
 ‘They would make ditches in the ground where the water would run for them to plant crops.’ (S&E 922)

Unlike *-ve* predicates, *-pi* predicates can appear in purpose clauses when these are headed by an object, as in (4). (4a) provides an example of a different-subject purpose clause. The contrast of immediate-future inflection in same-subject purpose clauses, and irrealis-subordinator inflection when the subject changes, seems to appear in all of the Cupan languages.

- (4) MCA a. *Tewlave-l jal kia-7t-i pe-max-7i hé-qa-j*
 devil-ABS QUOT boy-ABS-ACC 3SG.OBJ-give-FCT 3SG-FaMo-ACC
pi-jik pish pe-wel-ne-pi.
 3SG-DAT COMP 3SG.OBJ-grow-CAUS-IRR.SUB
 ‘They say the devil gave the boy to his paternal grandmother to raise.’
 (3.112.0124)
- b. *Chem-ngij-7i sup-l-i leewa7 pen qwanang pi-jik pish*
 1PL-go-FCT one-ABS-ACC league and half 3SG-DAT COMP
chem-tew-a-p penichi-va-7l-i.
 1PL-find-ABLAUT-IRR.SUB cross-PLACE-ABS-ACC
 ‘We went one and a half leagues along it to look for a crossing place.’
 (3.113.0111)

CHAPTER 14

CROSS-CATEGORY DERIVATION: NOUN, ADJECTIVE, AND ADVERB BASES, AND DENOMINAL VERBS

14.0. INTRODUCTION. Derivation in the Takic languages involves suffixation almost exclusively, with the adjectivalizing prefix *a-* and leftward copy reduplication providing the major exceptions. Cross-category derivation, of deverbal nouns and adjectives and of denominal verbs, adheres to this pattern.

The derivation of nouns and adjectives requires attention to “suffix sequences,” because these grammatical elements exhibit possessed and non-possessed or absolutive states. In the absolutive state, suffixes that derive nouns from verbs pair with specific forms of the absolutive suffix, which forms are cognate across the languages. As discussed in chapter 5, the absolutive suffixes represent the conflation of accusative **-ta* and absolutive plural **-ty*. In citing the various derivational suffixes in this chapter together with the form of their absolutive suffix they take, we ignore this complication and omit the word-final, usually apocoped vowel of the absolutive suffix.

This chapter treats first, in 14.1-10, the derivation of deverbal nouns and forms that are ambi-functional as nouns and adjectives. Several suffix sequences that derive nouns are shared across the Takic languages. These are from **-i-ch*, **-aʒ-t*, **-Vʒ-t*, **-V-l*, and **-ka-t*, where the first suffix is a nominalizing suffix and the second is an absolutive marking the non-possessed state. These widely-shared sequences are discussed in 14.1-4. Nominalizations from deverbal agentive **-wyC-t*¹⁴⁷ and characterizing **-rawyC-t* are also shared. Developments of these sequences are discussed in 14.1.5. Other suffixes and suffix sequences are found in Tongva and Serran but not in Cupan, some are restricted to Serran, some to Cupan, and some appear in only one of the languages; these are treated in 14.6-10. Several of the derivational suffixes listed above also serve as subordinating suffixes in relative clauses, as discussed in chapters 12 and 13. The constructions discussed in the present chapter are often identical to relative-clause predicates, but are

¹⁴⁷ In these schematic reconstructions we use **C* as a placeholder for whatever consonant it was that blocked the lenition of absolutive *-t*. It may have been a nasal (see 14.14.4 (20)).

fully lexicalized as noun formatives, and can be used in any syntactic context where a noun can appear.

The repertoire of shared noun- and adjective-deriving suffix sequences exhibits structural cognacy across the languages. However, structural distinctions among the suffixes, especially those that derive deverbal nouns, are not consistently paired with semantic categories. The accounts of their semantic functions offered here should be understood as tendencies only.

Then, in 14.11, we treat noun > noun derivations although they are not of a cross-category nature. The few examples of noun compounds in the languages are treated in 14.12. Derivation by sound-symbolic consonant modification occurs actively only in LU, and is briefly reviewed in 14.13, along with hints of sound symbolism in the other languages.

Derivation of adjectives and adverbs is treated in 14.14. All the languages have adverb–adjective oppositions, where the same stems can appear with absolutive suffixes (as adjectives), or with a special set of suffixes that appear only with adverbs.

Finally, the derivation of denominal verbs is taken up in 14.15. In contrast to the relatively rich repertoire of suffix sequences for deverbal derivation, denominal verbs, and verbs formed from adjectives, are derived across the languages with very few suffixes, the most productive being a reflex of **-tu7a*.

14.1. DEVERBAL NOUNS IN **-I-CH*. A nominalizing suffixal vowel **-i*, followed by a reflex of the absolutive suffix **-ch*, suffixed to a verb base, derives deverbal nouns throughout the Takic languages. The absolutive suffix **-ch* appears as TV *-j*, SE *-ch*, KI *-ts*, AC *-ch* and other Cupan *-sh* ~ *-chV-*. LU, AC, and CU also have adjectives in **-i-ch* (14.14.4, 14.14.5). The distinction between nouns and adjectives is somewhat blurred; many of the deverbal “adjectives” in **-i-ch* can stand alone as substantives, although they may not be attested in that role in the restricted corpora for the Takic languages. Equally, it is likely that some forms characterized here as “nouns” can modify other nouns.

Across the languages, the **-i-ch* suffixal combination as a nominalizer most commonly derives a theme, often a result of the action described in the verb, as in (1). In CU and CA **-i-ch* derives agent- and subject-headed relative clause predicates. In CA the derivation is largely restricted to that function, with resultatives usually derived with reflexes of **-a7-t*.

- (1) a. TV *hong-ii-j* ‘meat’ (cf. *hongaa-7a* ‘roast it!’) (3.105.0359)
 b. SE *kumu7kin-i-ch* ‘s.th turned over, dumped’ (< *kumu7kin* ‘turn over, dump out’)
 c. KI *kwam-i-ts* ‘wild tobacco drink’ (< *kwam* ‘prepare wild tobacco drink’)
 (3.98.0480)
 d. LU *ta\$ki-i-sh* ‘shadow, shade’ (< *ta\$ki* ‘be shady, cast a shadow (intr.)’)
 e. AC *waa7-ch* ‘meat, cow’ (< *waa7-a* ‘roast’) (3.116.0411)
 f. CU *\$aw-i-sh* ‘acorn bread’ (< *\$aw* ‘bake acorn bread’)
 g. CA *kwasi-sh* ‘that which is ripened, cooked’ (< *-kwas* ‘be ripe, done (cooked)’)

Not all nouns of this type are resultative; agentive, action, and eventive senses with **-i-ch* are also attested in derived nouns in the various languages. In the CA form in (2f) the underlying *-i* does not appear; this is the regular pattern with CA vowel-final verb bases.

- (2) a. TV *\$iee7-e-j* ‘medicine’ (3.103.0470) (cf. *\$iee7ero* ‘will cure’ (3.103.0470), cf. *\$ieen7ar* ‘curador (healer)’ (3.103.0473)) (< *\$ieen7a-x** ‘cure’)
 b. SE *miise-i7-ch* ‘church’ (< *miisa7* ‘attend church’)
 c. KI *kyman-i-ts* ‘making’ (3.98.0350) (< *kyman* ‘make’)
 d. LU *takwájax-i-sh* ‘sickness’ (< *takwáj-ax* ‘be sick, ill’)
 e. CU *myqn-í-sh* ‘killer’ (< *myqyn_s* ‘kill sg.obj.’)
 f. CA *kija-sh* ‘one who stays behind’ (< *kija* ‘stay behind’)

14.1.1. TONGVA RESULTATIVE NOUNS IN *-I-CH. The development of **-i-ch* in TV is *-ii-j* (stressed) ~ *-e-j* (unstressed), as in (1). Some of the verb roots end in a vowel (1a,b,e) which is replaced by the vowel of the derivational suffix. The *na* component of the causative suffix *-ina* is lost before the *-e-j* suffix (1c,f). Others underlyingly end in a glottal stop (1d), which deletes before a consonant but surfaces before the vowel-initial suffix.

- (1) TV a. *ho7eex-e-j* ‘trabajo (work) (noun)’ (cf. *ho7eexo-k* ‘work (verb)’) (3.104.0577)
 (< *ho7exo*)
 b. *hong-ii-j* ‘meat’ (3.105.0359) (cf. *hongaa-7a* ‘roast it!’ (3.105.0359)) (< *honga*)
 c. *nahoo7-e-j* ‘the law’ (3.103.0274) (cf. *nahoo7-ena-x* (3.105.0109) ~ *hoo7-ena-x* (3.103.0274) ‘command’ (3.105.0109)) (< *na-hoo7-ina*)

- d. *\$ii7-e-j* ‘meado (urinated urine)’ (3.105.0373) (cf. *\$e~\$ii-k* ‘urinate’ (3.105.0041)) (< *\$ii7*)
- e. *tav-ii-j* ‘s.th placed, peon game’ (3.103.0251) (cf. *tavoo-k* ‘put, place’ (3.103.0327)) (< *tavo*)
- f. *t\$e7ee7-e-j* ‘song’ (3.103.0421) (cf. *t\$e7ee-na-x* ‘sing’ (3.104.0093)) (< *t\$e7ee7-ina*)

There seem to be no possessed nouns that correspond to the absolutive nouns in **-i-ch*. Two possible but irregular possessed examples appear in (2). In (2b), *-ja* may be a passive suffix (see 14.6.2).

- (2) TV a. *-\$ii-n* ‘urine (possessed)’ (3.104.0110) (cf. *\$ii7-e-j* (1d) < *\$ii-k* ‘urinate’)
- b. *-taav-ja-n* ‘s.th placed (possessed)’ (3.103.0327) (cf. *tav-ii-j* (1e) < *tavoo-k* ‘place’)

The limited data include apparent irregularities, as in example (3), where *kuuj* may be from underlying *kuuj-e-j*. This underlying representation would reduce to *kuuj-j* by syncope, with word-final *jj* > *j* giving the surface form *kuuj*.

- (3) TV *kuu-j* ‘convivado (person invited to a fiesta)’ (3.103.0355), pl. *kuuj-ja-m* < *kúyyam*>, *ku~kuuj-ja-m* < *kukúyyam*> (3.103.0355)

Kuuj presents an etymological mystery. It seems unlikely to derive synchronically from TV *koo-na-x* ‘call, invite’. The root *koo* in the latter may be cognate with Hopi *kywa* ‘one who is hospitable’ (with regular loss of intervocalic *w* before *a* in TV). *Kuuj* also seems unlikely to relate to SE *kuuhan* ‘call, invite’ (with SE *h* < PTak **\$*). The most likely TV cognate for SE *kuuhan* is *kuu\$a-x* ‘está quejándose, e.g. cuando tiene un dolor (be moaning or calling out, as when one has a pain)’ (3.105.0114). Cf. also the CU root *ku\$-* ‘make characteristic sound’. Whatever the etymology of *kuuj* may be, it remains likely that at least diachronically, it represents an example of the **-i-ch* nominalization.

14.1.2. SERRANO NOUNS IN **-I-CH*. The development of **-i-ch* in SE mostly entails no change, with examples given in (1).

- (1) SE a. *ho^Rqa^{Rn}-i-ch* ‘s.th boiled’ (< *ho^Rqa^{Rn}* ‘boil’)
 b. *oo^R\$an-i-ch* ‘s.th written’ (< *oo^R\$an* ‘write, paint’)
 c. *paa^{Rv}chan-i-ch* ‘story’ (< *paa^{Rv}chan* ‘tell a story’)
 d. *tyhtyj-i-ch* ‘work, job’ (< *tyhtyj* ‘work’)
 e. *tiy^{Rh}-i-ch* ‘legend’ (R&E 133) (< *tiy^R(ha)* ‘tell’)
 f. *waan⁷kin-i-ch* ‘s.th dug’ (< *waan⁷kin* ‘dig’)

Some derived forms in *-i-ch* show regular glottal stop metathesis with attendant vowel quantity adjustments.

- (2) SE a. *kwe-i⁷-ch* ‘s.th that has been eaten’ (< *kwa⁷-i* ‘eat’)
 b. *miise-i⁷-ch* ‘church’ (< *miisa⁷* ‘attend church’)
 c. *\$e-ii⁷-ch* ‘excrement, what has been defecated’ (< *\$aa⁷* ‘defecate’)
 d. *\$\$-ii⁷-ch* ‘urine’ (< *\$\$i⁷* ‘urinate’)
 e. *tuhtu-i⁷-ch* ‘a dance’ (< *tuhtu⁷* ‘dance’)

Terms for kinds of people can be derived with this suffix.

- (3) SE a. *houngan-i-ch* ‘poor, pathetic person’ (< *ho~houngan* ‘be poor’)
 b. *jee-i-ch* ‘a prisoner, someone caught’ (< *je-j* ‘take, catch’)
 c. *tiy^{Rmq}-i-ch* ‘frightened person’ (< *tiy^{Rmq}* ‘be scared’)

The examples in (4) show derivational *-i* followed by various inflectional suffixes.

- (4) SE a. *Ho^Rqa^{Rn}-i-v* ‘Palm Springs (at the boiled water)’
 b. *ho^Rqa^{Rn}-i-nu⁷-t\$* ‘person from Palm Springs’
 c. *houngan-i-m* ‘poor, pathetic ones’, pl. of *houngan-i-ch* (3a)

As in TV, possessed forms relatable to absolutes in *-i-ch* are barely attested, if at all. If possessed forms such as those in (5) ended in a derivational short *-i*, that vowel would be lost by the regular rule of apocope, rendering such forms unmarked. We regard these forms as having no resultative suffix, in line with what we find for most possessed nouns of this kind in Cupan. (Note that the 1SG prefix *ni-* in (5b) and *ny-* in (5c) are as pronounced by Sarah Martin; cf. 4.2.10.)

- (5) SE possessed resultative absolutes
- | | | |
|----|--|--|
| a. | <i>ny-paa^Rvcchan</i> ‘my story’ | <i>paa^Rvcchan-i-ch</i> ‘story’ (1c) |
| b. | <i>ni-\$aa7</i> ‘my feces’ | <i>\$e-ii7-ch</i> ‘excrement’ (2c) |
| c. | <i>ny-\$ü7</i> ‘my urine’ | <i>\$-ii7-ch</i> ‘urine’ (2d) |
| d. | <i>ni-tyhtyj</i> ‘my work, my job’ | <i>tyhtyj-i-ch</i> ‘work, job’ (1d) |

In a rare example, the possessed accusative of a possibly resultative noun, (5d), is seen in (6). Again, there is no overt resultative suffix; the word-final *-i* is the accusative suffix.

- (6) SE *Ama-j* *pyy-tyhtyj-i = kwyny* *widhapkin*
 DIST-ACC 3PL-work-ACC = QUOT.3PL > 3SG leave
 ‘They abandoned their work.’

The possessed form *-\$aa7* ‘feces’ (5b) has a variant, *-\$eii7*, which is derivationally quite strange and occurred only once. It shows the metathesis found in the absolutive form *\$eii7ch* (2c) even though in the possessed form there is no phonological environment for metathesis: V7V > VV7 metathesis normally requires a following consonant. The possessed variant *-\$eii7* may have been analogically back-formed from the absolutive form. If so, this unusual form seems to provide the only example of a SE possessed form containing the resultative nominalizer *-i*.

The examples in (7), from the same text and both in the accusative case, show the two forms. They seem to be interchangeable, though it seems likely that the form in (7b) was a correction of the form earlier given in (7a).

- (7) SE a. *Wary7 jangk kwy7 = ch* *Waq^R-t-i* *tiy^R.* *Mia = t* *kwy7*
 yes but POT = 1PL > 3SG Frog-ABS-ACC tell DUB = IRR POT
ama7 a-\$e-ii7-i *my^Rny^R7-kj.*
 3SG.PRO 3SG-defecate-RES-ACC swallow-K.TR
 ‘Yes but we can tell Frog. Maybe he can swallow his (the god’s) excrement.’
- b. “*Uvia ni-\$aa7-i* *kwa~kwa7,*” *ky-j = kwyn.*
 already 1SG-defecation-ACC CMP~eat say-IND = QUOT.3SG
 ‘He has eaten my excrement,’ he (the god) said (knowing that he was now doomed).’

14.1.3. KITANEMUK NOUNS IN *-I-CH. The development of *-*i-ch* in Kitanemuk is -*i-ts*, with examples in (1).

- (1) KI a. *kame[a]7n-i-ts* ‘acorn bread’ (3.98.0187) (< *kamea7n* ‘roast in pit’ (3.98.0462))
 b. *kiitanamu7-i-ts* ‘the Kitanemuk language’ (< *kiitanamu7* ‘speak Kitanemuk’) (3.98.0065)
 c. *mak-i-ts* ‘gift’ (< *mak* ‘give’) (3.98.0497)
 d. *oo\$an-i-ts* ‘s.th written’ (< *oo\$an* ‘write, paint’) (3.100.0631)
 e. *\$aa7-i-ts* ‘feces’ (< *\$aa7* ‘defecate’) (3.99.0256)
 f. *tav-i-ts* ‘compuesto [arranged], tidy’ (< *tav* ‘put’) (3.98.0481)
 g. *vaankin-i-ts* ‘patio of the ceremonial house’ (literally, ‘swept thing’) (< *vaank(in-)* ‘sweep’) (3.98.0181)

A seemingly irregular form is found in (2), where the suffix vowel -*i* may have been absorbed without a trace into the stem. We would expect ‘urine’, in the sense ‘what was urinated’ at least, to be *\$ii7-i-ts**.

- (2) KI *\$ii7-ts* ‘urine’ (< *\$ii7* ‘urinate’) (3.98.0349)

The relationship between the noun and verb in (3) may be an instance of the *-*i-ch* derivation, but it is doubly problematic. The noun has no resultative -*i* and the verb has a final glottal stop, not present in the related noun.

- (3) KI *hungu-ts* ‘language’ (cf. *hungu7* ‘speak, say’) (3.100.0364)

The possessed equivalents of KI nouns in -*i-ts*, as in SE, show no suffix vowel -*i*.

- (4) KI a. *-\$aa7* ‘feces’ (3.100.0476)
 b. *-\$ii7* ‘urine’ (3.98.0349)
 c. *-hungu7-a7* ‘language’ (3.100.0364)

14.1.4. COASTAL CUPAN NOUNS IN *-I-CH. In AC, the vowel of **-i-ch* is lost, leaving only the *-ch* form of the absolutive. This is a fairly clear example of the morphologization of absolutive suffix choice. The development of word-final **-i-ch* in the other Cupan languages is *-i-sh*, with the usual lenition of *ch* to *sh* in the syllable coda.

Examples from LU appear in (1). In forms derived from verbs with the transitive suffix *-i*, the resultative suffix displaces the transitive suffix as a result of the regular rule of V-V reduction. In Pablo Tac's LU dictionary of 1841 (in Haas 2011), verbs are given consistently in an "infinitive" form with a final *<-s>*, *<-is>*, or *<-iis>*. Kroeber and Grace (1960:145) speculate that Tac's *<-s>* may be the absolutive *-sh*, and propose that his "infinitives" are abstract nominalizations in resultative *-i-sh*, "the doing" of the verb. In (1), (1a,h,i) are clearly of this type and can be understood as resultative. However, some of these LU derivations may be eventive rather than strictly resultative, such as (1e,g). The distinction is often not clear; for instance is 'song' (1f) a resultative 's.th sung', or an eventive 'event of singing'?

- (1) LU
- a. *aa7alv-i-sh* 'story' (< *aa7alv-i* 'tell story')
 - b. *chaláw-i-sh* 'a women's dance' (< *chaláw-i* 'dance such a dance')
 - c. *chiluuj-i-sh* 'the Spanish language' (< *chiluuj* 'speak Spanish')
 - d. *eskan-i-sh* 'make-up, design' (< *eskan-i* 'draw, paint')
 - e. *haal-i-sh* 'act of searching' (< *haal* 'search')
 - f. *heel-ax-i-sh* 'song' (< *heel-ax* 'sing')
 - g. *het-ax-i-sh* 'ascension' (< *het-ax* 'rise')
 - h. *juun-ax-i-sh* 'assembly, gathering' (< *juun-ax* 'assemble')
 - i. *maax-i-sh* 'acorn flour' (< *maax-i* 'grind acorn meal')
 - j. *oho7van-i-sh* 'belief, faith' (< *oho7van* 'believe')
 - k. *pel-ax-i-sh* 'generic dance' (< *pel-ax* 'dance (verb)')
 - l. *\$aa7-i-sh* 'excrement' (< *\$a7a* 'defecate')
Note the vowel length difference. The verb may also be derived.
 - m. *\$ii7-i-sh* 'urine' (< *\$ii7* 'urinate')
 - n. *wiqén-i-sh* 'girl's puberty ceremony; initiated girl' (< *wiqén-i* 'perform a girl's puberty ceremony')

With vowel-final roots the resultative *-i* is completely elided by phonological rule, as in (2). A similar phonological reduction is found in the noun *ja7ásh* 'man', the plural of

which is the less-reduced *ja7ájchum* (cf. discussion in 4.4.3). Unfortunately there are no attestations of appropriate inflected forms of the derivations like those of (2) to demonstrate the synchronic presence of the apparently elided resultative morpheme *-i*.

- (2) LU
- a. *ha\$la-sh* ‘sweathouse’ (< *ha\$la* ‘sweat oneself in a sweathouse’)
 - b. *kii-chu-vichu-sh* ‘the need for building’ (< *kii-chu-vichu* ‘want to build a house’)
 - c. *owlu-sh* ‘menstruation’ (< *owlu* ‘menstruate’)
 - d. *pacha-sh* ‘deer hunting song’ (< *pacha* ‘sing such a song’)

The apparently irregular relationship between LU *hikwsa-sh* ‘breath, life’ and the verb *hakwís* ‘breathe, be alive’ should also be noted in this context.

Most possessed forms corresponding to these derived nouns show no suffixation, as in (3). These possessed forms, mainly action nouns, are common in LU discourse; their functions are discussed in 13.2.2.

- (3) LU
- a. *-hetax* ‘ascension’ (< *het-ax* ‘rise’)
 - b. *-7oho7van* ‘belief’
 - c. *-7owlu* ‘menstrual period’
 - d. *-pelax* ‘dance’ (< *pel-ax* ‘dance’)
 - e. *-\$aa7* ‘excrement’
 - f. *-\$ii7* ‘urine’

However, some possessed forms retain nominalizing *-i*:

- (4) LU
- a. *-7aa7alv-i* ‘story’ (< *aa7alv-i* ‘tell story’)
 - b. *-7eskan-i* ‘make-up, design’ (< *eskan-i* ‘draw, paint’)
 - c. *-heel-ax-i* ‘song’ (< *heel-ax* ‘sing’)

AC nominalizations from **-i-ch* are poorly attested, and the source verbs are often nowhere to be found. In the examples below, where LU source verbs are from Elliott (1999), they are marked with a star, being unattested in AC. These AC nominalizations appear to have a semantic range similar to what is found in LU. Since AC permits complex syllabic codas, the suffix vowel is often lost, as in (5).

- (5) AC a. *cheen-a7-ch* ‘sheep-shearing’ (3.122.0205) (< *cheen-a7* ‘shear’)
 b. *heel7-x-ch* ‘song’ (3.123.0358) (< *heel-x* ‘sing’)
 c. *maax-ch* ‘acorn flour’ (3.124.0093) (< *maax-a** ‘grind’)
 d. *moor7-ch* ‘tatahuila dance’ (3.124.0224) (< *moor-a7* ‘whirl’)
 e. *waa7-ch* ‘meat, cow’ (3.116.0411) (< *waa7-a** ‘roast’)

Where the suffix vowel appears, it is *a*, the regular unstressed reflex of **i*, as in (6). But in these examples, we wonder if it is really the resultative vowel or, at least synchronically, simply the verb stem vowel (with \emptyset for the vowel of the resultative suffix as in all other examples).

- (6) AC a. *aa7val-a-ch* ‘story’ (3.123.0248) (< *aa7vala* ‘narrate history’)
 b. *aqinn-a-ch* ‘functioning as a midwife’ (3.123.0270) (< *aqinn-a* ‘assist at birth’)
 c. *teepan-a-ch* ‘peon game’ (3.122.0144) (< *teepana* ‘play peon’)

AC also has a construction with the associated motion suffix *-nga(m)* (cf. LU *-ngi(m)* ‘GO&’) that is like the action nouns in (6), where the status of the vowel is ambiguous. In LU, this construction appears as *-ng-i-sh*, e.g. *amo-ng-i-sh* ‘act of coming from hunting’ (Elliott 1999:94). The two examples found in the AC data are given in (7).

- (7) AC a. *Noo = n* *manaa* *aama-ng-a-ch* \emptyset .
 1SG.PRO = 1SG come.PRS hunt-GO&-NMLZ-ABS be
 ‘Yo vengo de cazar. (I have just come back from hunting.)’ (3.123.0288)
- b. *Manaa = p* *ngoox-ng-a-ch* \emptyset .
 come.PRS = 3SG grind-GO&-NMLZ-ABS be
 ‘Viene de moler. (She has just come back from grinding.)’ (3.123.0328)

In AC, possessed forms of these nominalizations simply delete the absolutive suffix, as in the examples in (8). With regard to (8f), absolutive *takwejxch** ‘sickness’ is not attested, but it occurs in LU as *takwájaxish*.

- (8) AC a. *na-7aa7vala* ‘my story’ (3.123.0248) (cf. (6a))

- b. *pa-7qinna* ‘her midwifery skills’ (3.123.0325) (cf. 6b)
- c. *na-heel7x* ‘my song’ (3.123.0358) (cf. (5b))
- d. *no-maax* ‘my acorn flour’ (3.124.0095) (cf. (5c))
- e. *pa-nechx* ‘its price’ (3.123.0593) (no attested absolutive)
- f. *pa-tkwejx* ‘his sickness’ (3.123.0275) (cf. LU *takwájaxish*)

14.1.5. INLAND CUPAN NOUNS IN *-I-CH. There are two *-i-sh* derivations in CU. The first, which derives subjects/agents in past-tense relative clauses, is discussed in 13.2.4.1. These do not appear in the possessed state. The second is the resultative derivation, which appears in both absolutive and possessed state. The *-i-sh* derivation in CU is less important for the resultative nouns than for adjectives. However, some important nouns are derived this way, as seen in (1). In (1i), the stressless root *kwa7_s* displaces the stress to the suffix (see 4.5.1).

- (1) CU
- a. *max-i-sh* ‘acorn meal’ (< *max* ‘grind acorns’)
 - b. *pachik-i-sh* ‘leached acorn flour’ (< *pachik* ‘leach acorn flour’)
 - c. *pukav-in-i-sh* ‘whirlwind’ (< *pukav-in* ‘spin, twirl’)
 - d. *pulin-i-sh* ‘baby’ (< *pulin* ‘be born’)
 - e. *si7áj-i-sh* ‘cracked acorns’ (< *si7áj* ‘crack acorns’)
 - f. *\$aw-i-sh* ‘acorn bread’ (< *\$aw* ‘bake bread’)
 - g. *wa7-i-sh* ‘meat’ (< *wa7* ‘roast’)
 - h. *wiw-i-sh* ‘acorn mush’ (< *wiw* ‘make acorn mush’)
 - i. *kwa7-í-sh* ‘food’ (< *kwa7_s* ‘eat’)

As in LU (14.1.4 (3)) and AC (14.1.4 (8)), possessed forms of these nouns often have no nominalizing suffix, as seen in (2). This pattern is also found with nouns in *-i-sh* which are not obviously deverbal, such as *-syj* < *syj7-i-sh* ‘*Juncus* sp.’, *-\$y7yv* < *\$y7yv-i-sh* ‘*Rhus integrifolia*’ (both are basketry plants).

- (2) CU
- a. *py-si7áj* ‘cracked acorns’
 - b. *py-\$aw* ‘acorn bread’
 - c. *py-wiw* ‘acorn mush’

Others are attested with the suffix *-7a*, as in (3), which is usually found with the *-a7-t* class discussed in 14.2, below.

- (3) CU a. *py-max-7a* ‘acorn meal’
 b. *py-pachik-7a* ‘leached acorn meal’

Finally, some retain the nominalizing suffix *-i*, as in (4).

- (4) CU a. *py-wa7-i* ‘meat’
 b. *py-kwa7-i* ‘food’

In both DCA and MCA, the derivation with *-i-sh* is used for only a few resultative deverbal nouns. In fact, many of the examples below that translate as English resultatives are, in CA, subjects of intransitives rather than objects of transitives or causatives. The **-a7-t* derivation (14.3) seems to be more common for the latter sense. The vowel of *-i-sh* appears only after consonant-final roots, as in (5). See (7) below for vowel-final roots, where the suffix vowel is lost.

- (5) CA a. *kapal-i-sh* ‘hole (in a pipe)’ (< *kapal* ‘get a hole, make a hole’)
 b. *kijalaw-i-sh* ‘one who is left alone’ (< *kijalaw* ‘be left behind’)
 c. *muk-i-sh* ‘sick person’ (< *muk* ‘get sick, weak’)
 d. *pis-i-sh* ‘that which has come out’ (< *pis* ‘come out’)
 e. *qivich-i-sh* ‘one which is cut’ (< *qivish/qivich-* ‘be cut, cut’)
 f. *saw-i-sh* ‘tortilla’ (< *saw* ‘make tortillas’)
 g. *siw-i-sh* ‘heat, fever’ (and as adj., ‘hot’) (< *siw* ‘become hot, have fever’)
 h. *tawas-i-sh* ‘one who is lost’ (< *tawas* ‘get lost, lose’)
 i. *tu7-i-sh* ‘fruit, berries’ (< *tu7* ‘bear fruit’)
 j. *wax-i-sh* ‘that which is dry’ (< *wax* ‘become dry’)

As in CU, the formation of possessed state nouns from these forms is inconsistent, as seen in (6).

- (6) CA a. *-saw* ‘tortilla’ (cf. (1f))
 b. *-tu7-i* ‘fruit, berries’ (cf. (1i))

With vowel-final roots, the suffix vowel *-i* disappears in both resultative (7a-e) and agentive (7f) derivations.

- (7) CA
- a. *kuʔa-sh* ‘wormy mesquite bean’ (< *kuʔa* ‘become wormy’)
 - b. *che-sípi-sh* ‘one which is scraped’ (< *che-sípi* ‘scrape, peel off’)
 - c. *emi-sh* ‘one who got burned’ (< *emi* ‘get burned’)
 - d. *kengi-sh* ‘what is fallen off’ (< *kengi* ‘fall off, of small, light objects’)
 - e. *qapi-sh* ‘that which is broken’ (< *qapi* ‘break (tr.)’)
 - f. *majlju-sh* ‘one who gives birth’ (< *majlju* ‘give birth’)

14.2. DEVERBAL NOUNS IN *-Aʔ-T. All the Takic languages share a second derivational sequence, **-aʔ-t*, that yields themes, usually resultatives. This sequence is relatively rare in TV and the Serran languages, but it is productive in Cupan, especially in CA, where the *-i-sh* derivation usually yields agentives and the *-a-t* suffix sequence derives most resultatives.

The nominalizer suffix **-aʔ* is reconstructed with ʔ, instead of simple *a* (as in Langacker 1977:182), because the consonant of the absolutive is always non-lenited **-t*, suggesting a historic preceding consonant.

While the **ʔ* is lost before the absolutive suffix, it does appear in possessed nouns. In SE most of the possessed forms end in *-aʔ*, while in the Cupan languages a final *-ʔa* appears. This results from a metathesis of **-aʔ* in word-final position. The glottal stop in this suffix is lost before case and local suffixes, as well as before the absolutive *-t*. This has been described (e.g. in Seiler 1977, Hill 2005) as a possessed suffix. However, historically these nouns are probably best regarded as lacking possessive suffixation, with the possessed state being indicated only by the absence of the absolutive suffix *-t*.

It is possible that the choice of thematic/resultative derivation, whether **-i-ch* or **-aʔ-t*, is a lexical property of the verb stem. The available data are insufficient to resolve this question. A point against such an analysis is that in CA, as seen in 14.2.4 (9), a number of verb stems are attested with both derivations.

14.2.1. TONGVA NOUNS IN *-Aʔ-T. The development of **-aʔ-t* in TV may be *-a-t*, with loss of the glottal stop, as seen in (1). However, equally well, considering the forms in (1),

since the *a* preceding the suffix *-t* is the same as the presumed final *a* of the stem, it could be that, as in SE below, there is no separate synchronically justifiable existence of the suffix vowel, and what remains of the suffix is the feature that selects the absolutive in *-t*. Unfortunately, for none of these examples is the nonfuture form of the source verb attested.

- (1) TV
- a. *honga-an-t* ‘asador (roasting spit)’ (3.103.0703) (< *honga-an(a-x?)* ‘roast’ [nonfuture form of this verb unattested])
 - b. *mo7-aa-t* ‘pile’ (3.103.0507) (cf. adj. *mo7aa-k* ‘piled up’ (3.103.0623))
 - c. *ngoox-a-t* ‘ground-up thing’ (3.105.0092) (< *ngoox(a-x?)* ‘grind’)
 - d. *\$eh-aa-t* ‘s.th hung up or spread out like bedding, rug, sleeping mat’ (3.103.0347) (source verb unattested, but would be cognate with KI *\$eahk* ‘part hair’ or *\$eank* ‘spread’ [Anderton 1988:498 suggests that these may be the same verb.¹])

¹ Like Anderton, we read Harrington’s handwritten forms as having *h* in the first, *n* in the second. But we find other instances of Harrington writing *n* for *h*. For example, TV *hohuundram* ‘bears’ is transcribed < *hunúndram* > at 3.104.0058. Harrington sometimes had trouble with the risers on letters and he must have recognized this. It is not unusual in the notes to find risers on *k* and *h* which appear to be written in as later clarifications.

The only possessed forms with this derivation attested for TV are *mo-\$eeh-a-n* ‘your sleeping mat’, *ne-\$eeh-a-no* ‘my sleeping mat (acc.)’, with the *-n* possessed suffix.

14.2.2. SERRAN NOUNS IN *-a7-t. In SE, **-a7-t*, the glottal stop has reduced to the abstract feature governing the selection of the “hard” form of the absolutive suffix, i.e., *-t* rather than lenited *-t\$* or *-ch*. There is no evidence even of the separate synchronic existence of the vowel **a* of the ending. SE examples that possibly show the **-a7-t* derivation appear in (1). *Paa^Rvchan-i-ch*, the word for ‘story’ derived from *paa^Rvchan* ‘tell a (traditional) story’, has the *-i-ch* derivation (cf. 14.1.2 (1c)), while the word for ‘story’ in (1a), based on the verb *aav*, has the **-a7-t* derivation. However, the AC nominalization based on the verb root **aavy* is in **-i-ch* (cf. 14.1.4 (6b)).

- (1) SE
- a. *aav-t* ‘story’ (< *aav* ‘tell a story, tell about an experience’)
 - b. *jua-t* ‘snow (noun)’ (< *ju-j* ‘snow (verb)’, cf. *jua-qa7* ‘it’s going to snow’)
 - c. *kut\$aa-t* ~ *kut\$ay-t* ‘firewood’ (< *kut\$a-j* ‘get firewood’, cf. *kut\$ay-ka7* ‘be going to get firewood’, *kut\$au-t\$u7* ‘go get firewood’)
 - d. *mo^Raa7-t* ‘smoke’ (< *moo^R7(a)* ‘emit smoke’)
 - e. *tiy^Rha-t* ‘what has been told’ (< *tiy^R(ha)* ‘tell’, cf. *tiy^Rha-qa7* ‘be going to tell’)
 - f. *tua7-t* ‘flour’ (< *tu7a-j* ‘pound into flour’, cf. *tua7-qa7* ‘be going to pound’)
 - g. *vyravk-t* ‘language’ (< *vyrav-k* ‘speak’)
 - h. *wiichua7-t* ‘string’ (< *wiichu7(a)* ‘make string’)
 - i. *woo^Rng-t* ‘rain (noun)’ (< *woo^Rng* ‘rain (verb)’)

The examples in (2) may appear to belong to this set, but it is more likely that the verbs are derived from the respective nouns by the addition of a verbalizing suffix *-7a* or a more complex derivation in the k-class verb of (2c).

- (2) SE
- a. *paavuha-t* ‘plant, s.th planted’ (cf. *paavuha-7* ‘plant (verb)’)
 - b. *huuna-t* ‘bear’ (cf. *huuna-7* ‘hug’ [cf. English “bear hug”])
 - c. *muum-t* ‘owl’ (cf. *muumu-7-k* ‘hoot’)

The noun of (2a), which is the same in KI, looks like a compound of *paa-* ‘water’ plus a hitherto unidentified component *-vuha*. TV has *pohaa-wva-x* ‘be planting’ (3.103.0476) and the related nouns *pohaa-wv-e* ‘siembra (a planting)’, *ne-puuha-v-e-n* ‘mi siembra (my planting)’. These support the identification of an TV root *puha*, clearly cognate with SE *-vuha*. (*-wva-* ~ *-wv-* ~ *-v-* remains unidentified.) The root *puha* also appears with *paa-* ‘water’ and with *p > v* lenition, as in SE, in TV *paa-voxa-ja* ‘let’s plant’. This is spelled in the single Harrington citation (3.102.0212) with *-x-* instead of expected *-h-*, but it is not unusual to find TV *h* and *x* used interchangeably or one for the other in the Harrington notes. We surmise that the distinction may have been hard to perceive.

Most, but not all, of the attested possessed forms end in *-a7*, as in (3). Again, this is probably not a possessive suffix but rather the nominalizer itself. At least one possessed form related to a noun of (1) shows an overt glottal stop suffix, as seen in (3e).

- (3) SE
- a. *ni-chaamqana-7* ‘what I think/thought’ (< *chamaqaan(a)* ‘think’)
 - b. *ny-ha-ky-7* ‘what I said’ (< *ky-j* ‘say’)

- c. *ny-maqa-7* ‘what I gave him’ (< *maqa-j* ‘give’)
- d. *ni-\$aawa-7* ‘my acorn bread’ (cf. *\$aaw-t* ‘acorn bread’, pl. *\$aawa-m*)
- e. *a-tiy^hha-7* ‘what she told [me]’ (< *tiy(ha)* ‘tell’) (cf. (1e))
- f. *a-tyy7wana-7* ‘a number’ (with 3SG prefix) (< *tyy7wan(a)* ‘join, count’)

Two other deverbal possessed forms related to nouns of (1) show no evidence of any nominalizing suffix, as seen in (4). Example (4a) is phonetically identical to the verb it is derived from and (4b) seems to be back-formed from the related absolutive form *wiichua7t* inasmuch as there is no environment in the possessed form to motivate the metathesis of the glottal stop; cf. the underlying verb *wiichu7(a)*. Alternatively, (5b) may be a reduced form of expected *-wiichu7a7**.

- (4) SE a. *-vyravk* ‘language’
 b. *-wiichua7* ‘string’

The possessed form of *kut\$aat* ~ *kut\$ayt* ‘stick, firewood’ is *-kut\$a7*, seen in (5).

- (5) SE *-kut\$a7* ‘firewood’ (cf. accusative *-kut\$a-t\$!*, absolutive *kut\$aa-t* ~ *kut\$ay-t*) (cf. (1b))

A form like *^x-kuut\$a7* or *^x-kuut\$ay7* might be expected, with regular transfer of the length feature to the initial syllable in possessed forms (cf. 4.2.11) and with a word-final glottal stop motivated by the shortened nature of the final vowel. However, the attested *-kut\$a7* shows no lengthening of the initial-syllable vowel. This resistance to lengthening relates to the origin of the *aa* of *kut\$aat* (and of the vowel cluster *ay* of the variant form *kut\$ayt*) as the result of the loss of intervocalic **w*: **kut\$awa-t* > *kut\$aa-t*. The underlying length feature in SE is autosegmental: it can be reassigned from one location to another under specifiable conditions. A vowel cluster like *a+a* < **awa* behaves differently; it has no length feature to be reassigned. Unfortunately neither our transcriptional scheme nor our hearing is up to the task of representing or of properly or consistently perceiving the

difference between long vowels and clusters of like vowels. For now at least, examples must be inferred from morphophonemic behavior and from the comparative evidence.¹⁴⁸

While the citation form in (5), *a-kut\$a7* ‘3SG’s firewood’, has a final glottal stop, the inflected forms, seen in (6), do not. The fact that the accusative suffix in (6a) is postvocalic *-t\$u7*, not postconsonantal *-ti*, is another indication that there is no remnant of the suffix **-a7* preceding the inflectional ending.

- (6) SE a. *A-kut\$a-t\$u7 = kwyn* *wiin-t\$u7*.
 3SG-firewood = QUOT.3SG > 3SG throw.down-MOT
 ‘He threw his wood down.’
- b. *Wahi7 = kwyn* *pichy-j* *a-kut\$a-mia7*, *wiin-t\$u7*.
 coyote = QUOT.3SG > 3SG arrive-IND 3SG-firewood-COM throw.down-MOT
 ‘Coyote arrived with his wood and threw it down.’

This parallel to the situation in CU, where the final *-7a* of possessed forms is also lost in the accusative (see 4.5.2).

The development of **-a7-t* in KI is *-a-t*, with loss of the glottal stop, as seen in (7). Anderton (1988:150) includes with these forms derivations in *-a-ts*, like *kav-a-ts* ‘ear’ (< *ka7vyk* ‘listen’). However, these may have a different history, with *ka7vyk* being a denominal verb (as is also *majha7*, in (7a), which is derived from the possessed noun *-majr* ‘child’).

- (7) KI a. *majh-a-t* ‘young of animal’ (< *majha-7* ‘give birth’) (3.98.0103)
 b. *nahponam-a-t* ‘store’ (< *nahponom* ‘sell’) (3.100.0427)
 c. *punit-a-t* ‘game’ (< *punita7* ‘play a game’) (3.98.0473)
 d. *\$ikw-a-t* ‘ice’ (< *\$ikwa7* ‘be cold’) (3.98.0083)
 e. *tyju-a-t* ‘frost’ (< *tyju* ‘be frost’) (3.98.0083)

¹⁴⁸ Cf. CU *kylawat*, CA *kelawat*, and LU *kulaawut*, with secondary lengthening of *a*. All these have the same meaning and all relate to *ku-t* ‘fire’, whose root is stressless, at least in in CU (Hill 2005:473). The unexpected first-syllable vowels of CU *kylawat* and CA *kelawat* also may relate to the stressless nature of *ku-t*.

There are no attestations of KI possessive forms with this suffix. The word for ‘child’, cited above, is the root form of the set, underlyingly *majHa*, where “H” represents the alternation medial *-h-* ~ final *-r*, also found in SE. The corresponding absolutive form is (underived) *majha-t\$* ‘(human) child’. (*h* < **s* or **\$* alternates with *r*; *h* < **h* does not.)

KI also shows this suffix sequence in a few agentive nouns. An unexplained allomorph *-ha-* appears in (8d). (8b-d) show diverse representations of the customary prefix *nah-* ‘do regularly’ (see 14.12.9).

- (8) KI a. *ynan-a-t* ‘wise person’ (< *ynan* ‘know’) (3.98.0069)
 b. *naa-7iham-a-t* ‘naughty child’ (< *nah-7ihama** ‘tease, joke’ [Harrington says “can’t get verb”]) (3.98.0284)
 c. *na-mak-a-t* ‘generous person’ (cf. *mak* ‘give’) (3.98.0385)
 d. *nah-mona7-ha-t* ‘fraudista (cheat, fraudster)’ (cf. *mohmona7* ‘cheat, deceive’) (3.100.0596)

It is possible that the **a* of *-*a7-t* survives in Serran in the word for ‘sun, day’. The Takic nouns for ‘sun’ are given in (9) along with the Tübatulabal (TB), Hopi (HO), and Southern Paiute (SP), representing the other branches of Northern Uto-Aztecan.

- (9) ‘sun’ a. TV *taamet* (3.104.0014)
 b. SE *taamiat*
 c. KI *taameat*
 d. LU *timét*
 e. AC *temet* (3.123.0449)
 f. CU *tamit*
 g. CA *tamit*
 h. TB *taal*
 i. HO *taawa* (cf. also *taala* ‘light, daylight’)
 j. SP *tapa* (< ta’ ϕ A > Sapir 1931:668)

For the forms in (9), no unified reconstruction is possible. For these forms Stubbs (2011) reconstructs **tawa*/**tawV* (#2230a), **tapa* (#2230d), and **tamV* (#2230e). He concludes, “Every branch has things beginning with **ta-*” (Stubbs 2011:358).

It is fairly clear what's at work here. Since the sun has sacred status, one should not refer to it by its "real" name, but only by some euphemistic descriptor. We have seen this earlier with words for 'bear' (cf. 4.2.1). A further example is Nahuatl *tōnalli* 'sun', derived from the verb *tōna* 'be warm, for the sun to shine'.

Why this situation is of interest in the present context is the possibility that Serran *taamiat/taameat* may contain a unique fossilized instance of **-a7-t* with the vowel *a* retained. The *i* of SE *taamiat* – and the *e* of KI *taameat* – most likely represents the *i* seen in the verb SE *taami7* 'be light, as with daylight'. (The corresponding KI verb is not attested.) Thus, if *taamiat* 'sun' is from *taami7a* + **-a7-t*, it can be understood as "the one having to do with daylight".

In Hopi there is an interesting diachronic split, the opposite of the euphemistic strategy attested in Takic. Hopi *taawa* 'sun' represents an unusual exception to the regular sound change **wa > la*. *Taala* 'daylight' shows the same element as having undergone the sound change. We surmise that the ritual status of ancient **taawa* in the sense 'sun' blocked the sound change, while **taawa*, in the secular sense 'light', was free to undergo the change. We offer this as an example of the conservative nature of ritual vocabulary.

All the forms in (9) show the Uto-Aztecansub-morpheme *ta-*, which associates words having to do with light and fire. The Takic languages all show medial *m*, the source of which remains unexplained (both in the nouns and in the verb *taami7*). We also have no explanation of the Coastal Cupan forms that have a mutated first vowel and are accented as though they have stressless roots.

14.2.3. CUPAN NOUNS IN **-A7-T*. Very few derivations in **-a7-t* are attested in Coastal Cupan. For LU, Kroeber and Grace (1960:82) do not include it in their list of nominalizing suffixes and we have found only two likely examples in AC.

- (1) AC a. *kwaas-t* 'rain (noun)' (< *kwaas-* 'rain (verb)') (3.123.0572)
 b. *a-loom-x-t* 'las olas (breaking waves, whitecaps)' (< *loom-x* 'break, of waves') (3.123.278)

Examples from LU appear in (2). All of these have irregularities and problems of one kind or another. However, they are interesting in that the *x* of the intransitive thematic suffix in (2a,b) is not lost before *a*, as it is before three suffixes with *-an*: the present

plural, the future, and the adjectivalizing suffix (see 4.4.7). This suggests that historically a metathesized glottal stop, as discussed below for CU, blocked the loss of *x*.

- (2) LU
- a. *lajilí7ax-a-t* ‘one whose clothes are loose at waist’ (no verb was recorded, but it must have been *lajilí7-ax**)
 - b. *\$aqax-a-t* ‘hot, heated (thing?)’ (only *\$aqi* ‘be hot’ is attested; this derived noun suggests an intransitive, *\$aq-ax**)
 - c. *teel-a-t* ‘language’ (< *teel-ax* ‘speak of’, an archaic ceremonial word; if it were the source we would expect *teelax-a-t**)
 - d. *wiichu-t* ~ *wiich-a-t* ‘rope’ (< *wiichu* ‘make rope or string’)

Possessed forms appear to lack suffixes entirely, in contrast to the *-7a* forms in Inland Cupan.

- (3) LU
- a. *-teela* ~ *-teeli* ‘language’
 - b. *-wiichu* ‘rope’

In contrast to LU, CU and especially CA make frequent use of the **-a7-t* derivation. Examples from CU appear in (4). This resultive derivation contrasts with the agent/subject forms derived with CU *-y-t*, CA *-e-t*, that appear in present-tense relative clauses (see 13.2.4–5).

- (4) CU
- a. *awlin-a-t* ‘tumpline, hairnet’ (< *awlin* ‘carry by tumpline’)
 - b. *chyqúl7-a-t* ‘a joke’ (< *chyqúl7* ‘make a joke’)
 - c. *juma7-a-t* ‘hat’ (< *juma7* ‘put on a hat, wear a hat’)
 - d. *ku\$a-t* ‘outsider girl at initiation’ (< *ku\$* ‘get, take’)
 - e. *kyláw-a-t* ‘firewood’ (< *kyláw* ‘get firewood’)
 - f. *qinx-a-t* ‘beads’ (< *qinyx* ‘wear necklace’)
 - g. *si7al-a-t* ‘braid’ (< *si7al* ‘braid’)
 - h. *tutung-a-t* ‘doll’ (< *tutung* ‘play with’)
 - i. *ty7uju7-a-t* ‘dream’ (< *ty7uju7* ‘dream’)
 - j. *wichu7-a-t* ‘string’ (< *wichu7* ‘make string’)
 - k. *wy7nú7-a-t* ‘blunder’ (< *wy7nú7* ‘aim and miss’)
 - l. *yl-a-t* ~ *yla7-a-t* ‘skirt’ (< *yl* ~ *yla7* ‘put on’)

Attested possessed forms in CU all have final *-7a*, as in (5).

- (5) CU a. *-kyláw-7a* ‘firewood’
 b. *-qinx-7a* ‘necklace’
 c. *-si7al-7a* ‘braid’
 d. *-ty7uju-7a* ‘dream’
 e. *-7yl-7a* ‘dress, skirt’

This final *-7a* was treated as a possessed suffix in Hill (2005), and, in DCA, by Seiler (1977). However, as noted above, historically these forms may be better described as ending in *-a7*, where *-7a* is an allomorph of the nominalizer *-a7* and the possessed state is marked by the absence of the absolutive suffix. Such a treatment also would be problematic, cf. discussion at 4.5.2. These forms perhaps should be regarded as examples of action nominalizations with, for instance, *ny-7yl-7a* ‘my dress’, which we can understand as ‘what I have put on’; cf. the morphologically covert relationship between English *dress* as a generalized verb of putting on clothing and *dress* as a specific kind of women’s wear.

A large number of derivations in *-a-t* are attested in CA, as in (6).

- (6) CA a. *chi7-a-t* ‘what was picked [up]’ (< *chi7* ‘gather from ground’)
 b. *i7isne-a-t* ‘painting’ (< *i7isne* ‘write, paint’)
 c. *ivilju7-a-t* ‘Cahuilla language’ (< *ivilju* ‘speak Cahuilla’)
 d. *juki-7a-t* ‘that which one is scared of’ (< *juki* ‘get scared, be afraid’)
 e. *kelaw-a-t* ‘wood, firewood’ (< *kelaw* ‘get wood’)
 f. *mi7-a-t* ‘smoke’ (< *mi7* ‘emit smoke in burning’)
 g. *nu7in-a-t* ‘law’ (< *nu7in* ‘tell to do, send’)
 h. *paw-a-t* ‘water that belongs to sbdy’ (< *paw* ‘get water’)
 i. *qenx-a-t* ‘beads’ (< *qenxa* ‘have around the neck’)
 j. *tav-a-t* ‘s.th put’ (< *tav* ‘put sg.obj.’)
 k. *wa7-a-t* ‘roast meat’ (< *wa7* ‘roast’)

Most possessed forms end in *-7a*; cf. the discussion above for CU.

- (7) CA a. *-7i7isne-a* ‘painting’
 b. *-juki-7a* ‘that which one is scared of’
 c. *-paw-7a* ‘water that belongs to sbdy’

In contrast to the situation with the *-i-sh* derivations, we find only one, slightly irregular, CA example (8) of an *-a-t* construction that might be considered an agentive.

- (8) CA *nek-a-t* ‘one who came’ (< *neken* ‘come’)

An example of its use in MCA is seen in (9).

- (9) MCA *Pe7* *me-chex-in-qa7* *pe7em-i* *pe7e*
 3SG.PRO 3PL.OBJ-die(pl.)-CAUS-PST.SG 3PL.PRO-ACC DET
hem-picha-law-wen-ipa7 *pe7em,* *penga* *pe* *miv-ax* *p-ax*
 3PL-arrive-GOPR-PST.PL-DS 3PL.PRO then FOC INDF-ABL DEF-ABL
taxs-te-m *nek-a-te-m.*
 person-ABS-PL come-NMLZ-ABS-PL
 ‘She would kill them when they would come, those people who came from
 somewhere else.’ (S&E 867)

The expected form *neknat* is found in a snippet of Pass Cahuilla that Mrs. Sauvel remembered: *Mivax et neknat?* ‘Where have you come from?’ (Sauvel and Elliott 2004: 934, with *et*, the proximal-2 demonstrative, written as a prefix).

Examples of *-i-sh* ~ *-a-t* doublets in CA suggest that the shape of the resultative derivation is not lexically determined by the verb stem. While in several of the examples below the two suffixes are used to distinguish agentives in subject-headed relative clauses from resultatives, in (10b,f,g) both forms are themes or resultatives. In (10b), two slightly different forms of the verb appear, *siv* vs. *sip* ‘scrape’. We suspect that *p* in *-sip-i-sh* (10b) involves an emphatic geminate, an analysis suggested by the presence of the contrastive-focus prefix *che-*. After a vowel, *-i-sh* and *-a-t* appear as *-sh* (10d,g) and *-na-t* (10e) or *-7a-t* (10d). The difference between *-na-t* and *-(7)a-t* remains to be understood.

- (10) CA a. *amin-i-sh* ‘one who abandons wife or children’ *amin-a-t* ‘orphan’
 b. *che-sip-i-sh* ‘that which is scraped’ *siv-a-t* ‘that which is scraped, arrowhead’
 c. *hajin-i-sh* ‘tired person’ *hajin-a-t* ‘fatigue’
 d. *majlju-sh* ‘one who gave birth’ *majlju-7a-t* ‘baby’
 e. *nuk-i-sh* ‘creator’ *nuk-a-t* ‘creature, creation, image doll’
 f. *qivich-i-sh* ‘that which is cut’ *qivich-a-t* (same meaning)
 g. *qapi-sh* ‘that which is broken’ *qapi-na-t* (same meaning)

14.3. EXCEPTIONAL AND DOUBTFUL FORMS.

14.3.1. DEVERBAL NOUNS IN *-t*. In all the languages (except CU, where the corpus is small) there are examples of apparent deverbal nouns with absolutive *-t* that are functionally similar to nouns in the **-a-t* class, but which show a different vowel, usually **y*.

The word for ‘thief’, in (1), shows final *-y-t* throughout Takic except for TV, which has the unrelated *pokiij*. (AC ‘thief’ and ‘steal’ are unattested.) In KI and Cupan, the verbs for ‘steal’ derive from the noun. It is of interest that the *t* of the derivational suffix **-tu7* in Cupan is unlenited, thus verifying that ‘thief’ is an underived *t*-class root (cf. 5.1.1.2). In SE, *yjy-t* ‘thief’ (1b) may look like it could be a nominalization of the verb *yjy-j* ‘steal’, but neither the noun nor the verb shows any overt derivational morphology, other than the unlenited nature of the final *-t* in ‘thief’ of course. We can see that **yjy* counts as a Cupan stressless root from the stress pattern and the very reduced form of the root in the derived CU verb *i-tú7* (1e).

- | | | | | |
|-----|----|---------|-----------------------------|----------------------------------|
| (1) | | ‘thief’ | | ‘steal’ |
| | a. | TV | <i>pokii-j</i> (3.103.0147) | <i>pokii-t\$a-x</i> (3.103.0147) |
| | b. | SE | <i>yjy-t</i> | <i>yjy-j</i> |
| | c. | KI | <i>yjy-t</i> (3.100.0342) | <i>-7yjy-w</i> (3.100.0342) |
| | d. | LU | <i>ujó-t</i> | <i>ujoo-tu</i> |
| | e. | CU | <i>yjy-t</i> | <i>i-tú7</i> |
| | f. | CA | <i>eje-t</i> | <i>-7eje-tu-</i> |

KI has the examples shown in (2). Anderton, correctly we believe, ascribes the vowel *y* of (2a,b) and the *a* of (2c) to the underlying verb. In (2c), the verb may also be a derived form. (The sequence *-7iha-* in (2c) may represent **iisa* ‘coyote’.)

- (2) KI a. *tym-ky-t* ‘door’ (< *tym-k* ‘close’) (3.100.0495)
 b. *wiiky-t* ‘pipe, cigarette’ (< *wiik* ‘smoke’) (3.98.0211)
 c. *naa7ihama-t* ‘brat’ (3.98.0284) (< *naa-* ‘customarily’ + *i~7ihama-7* ‘tease’
 [found only in reduplicated form] (3.98.0272))

Further CA examples of nouns in *-e-t* (< **-y-t*) are given in (3). Example (3c) contrasts with *-wen7a* ‘stored food’ (< *wen* ‘put (plural object)’), with the possessed form of the *-a7-t* derivation. Seiler and Hioki (1979:77) ascribe the vowel of (3a) to the verb root. However, for (3b,c) as well, the vowel *e* is most likely also etymologically part of the root; these verbs are from **nymy* ‘walk about’ and **wyny* ‘be there’. The latter seems to have developed a causative sense ‘put’ in CA.

- (3) CA a. *kewe-t* ‘fiesta’ (< *kewe* ‘give a fiesta’)
 b. *nem-e-t* ‘traveler’ (< *nem* ‘wander’)
 c. *wen-e-t* ‘s.th that is still there’ (< *wen* ‘put’)

14.3.2. NOUNS IN **-I-T*. The TV agentive noun stems in (1) end in *e*. This may represent the vowel of **-i-t* or it could be from the underlying causative *-ina*, with the loss of the *na* component, which also happens with derivational **-i-ch* (see 4.1.6).

- (1) TV a. *ekwee7-e-t* ‘cuidador (shepherd)’ (3.104.0107) (< *ekwee-na-x* ‘he is caring for it’ (3.103.0307))
 b. *nahoo7-e-t* ‘mandón (one who commands)’ (< *nahoo7-ena-x* ‘he is commanding’) (3.105.0109)

In (2), the vowel before the absolutive suffix has been removed by syncope in the accusative case noun (the expected nominative *naawmet** is not attested).

- (2) TV *naawm-ta* ‘aggressive person (acc.)’ (3.105.0506) (cf. *naawma-x* ‘fight’ (3.105.0053))

In TV (and in the other languages) these constructions do not permit interpretation as being related to the immediate past inflection (see chapter 11 and 12.2.5.1).

Examples in SE appear in (3). In (3b-d), the derivational suffix *-i* and the 7 of the verb root have undergone regular metathesis.

- (3) SE
- a. *wiirui7n-i-t* ‘reed flute, whistle’ (< *wiirui7n* ‘play a flute’)
 - b. *oo^Rnga-i7-t* ‘lazy one’ (< *oo^Rnga7* ‘be lazy’)
 - c. *paat\$u-i7-t* ‘s.th wet’ (< *paat\$u7* ‘be wet’)
 - d. *wii\$e-i7-t* ‘s.th wide’ (< *wii\$a7* ‘be wide’)

Examples in KI are given in (4). The vowel *i* reduces to nonsyllabic *j* after the glottal stop, as in (4a,c). The plural verb for ‘die’, which underlies (4a), is not separately attested in the KI corpus. In SE ‘die (pl.)’ is *qo^R7a-j*.

- (4) KI
- a. *koh~ko7-j-m* ‘dead people’ (pl. only, corresponding verb unattested) (3.100.0390)
 - b. *kuuhan-i-m* ‘invited guests’ (cf. SE *kuuhan* ‘call, invite’) (3.98.0050)
 - c. *kyry7-j-t* ‘toasted, parched’ (< *kyry7* ‘toast, parch’) (3.98.0208)
 - d. *muuk-i-t* ‘dead person’ (< *muuk* ‘die, be sick’; pl. *muuk-i-m* [= (3a)]) (3.98.0233)
 - e. *tsawk-i-t* ‘thin person’ (< *tsahawyk* ‘be thin’) (3.99.0597)

Only one example has been identified in LU.

- (5) LU *juuj-i-t* ‘snow (noun)’ (< *juuj* ‘snow (verb)’)

Inland Cupan seems to lack the **-i-t* nominalizer. While the root of CU *ingish* ‘lazy’ corresponds to that of SE *oo^Rngai7t* (3b), it has a different absolute suffix. Further, the CU word may not figure synchronically as deverbal since there is no attested underlying verb.

14.3.3. NOUNS WITH THE LENITED ABSOLUTE. There is no general Takic pattern involving a derivational suffix sequence with the lenited absolute **-L* (TV *-r*, SE *-t\$*, KI *-t\$*, Cupan

-l ~ -lj). Absolutives from **-L* are common in all the languages in non-derived nouns, and also appear in other suffix sequences such as the Inland Cupan event nouns in *-i-L* to be discussed in 14.9.3, and in absolutive forms of derivations with the realis subordinator **(i)vy* in the Cupan languages in 14.8.2 below. Each of the languages has a few deverbal nouns with the lenited absolutive **-L* with variable nominalizer vowels or no vowel at all. However, we find no regular semantic pattern to these derivations, and it is not clear why they are so rare in comparison to derivations in **-a7-t* and **-i-ch*. The two attested TV forms appear in (1).

- (1) TV a. *pojoojen-e-r* ‘disease of trembling’ (< *pojoojen-* ‘tremble as from cold [shiver]’) (3.105.0099)
 b. *wejoo7-e-r* ‘feces’ (< *wejoo7-a-x* ‘defecate’) (3.105.0374)

Nouns with *-t\$* (< **-L*) that relate to verbs in SE are shown in (2). Very few examples have been found of this pattern. Even in the absence of overt derivational morphology, it is clear that, at least for (2c), the derivational direction is verb > noun because forms with simplex k-class morphology are always verbs. We assume the derivational direction is the same for the non-k-class examples.

- (2) SE a. *pychaa7kw-t\$* ‘s.th butchered’ (< *pycha7kw* ‘butcher’)
 b. *raakw-t\$* ‘food’ (< *raakw* ‘eat (intr.), dine, have a meal’)
 c. *taqa^R7-k-t\$* ‘one who is facing’ (< *taqa^R7-k* ‘be facing’)

Example (2b) is interesting. The noun *raakw-t\$* and the verb *raakw* are identical, granted different inflectional markers. There is no derivational elaboration under inflection: *ni-raakw* ‘my food’, acc. *ni-raakw-i*. The KI cognate is *-raakw-yk* ‘chew’ (3.99.0527), a k-class verb. It is highly unusual for a k-class verb in one Serran language to correspond to an athematic verb in the other. Further, SE *raakw* and KI *-raakwyk* seem etymologically isolated; no cognates have been found elsewhere. These anomalies lead to the hypothesis that *raakw* is a loan word. The surprising source is Nahuatl, in particular the Nahuatl verb *tla-cua* [INDF.OBJ-eat], phonetic [t^lak^wa], the intransitivized form of the verb *-cua* ‘eat’ (cf. *ni-c-cua* [1SG-3SG.OBJ-eat] ‘I eat it’). A Nahuatl presence at Hopi prior to the revolt of 1680 is probable: There is a Hopi loan from Nahuatl, *tota7tsi*

‘malign dictator’, from the Nahuatl *to-tà-tzin* [1SG-father-HONORIFIC] ‘our honored father’, a word used to address or refer to a Catholic priest. Serran *raakw* may indicate that Hopi was not the only linguistic group affected by the language of the Mexican retainers of the Spanish priests in the Arizona–New Mexico area during the seventeenth century.

Another group of SE nouns with *-t\$* derive from non-verbs and show a similar lack of overt derivational morphology. Examples are given in (3). Examples (3a,b) show nouns derived from adjectives and (3c,d) are from local-case adverbials. The final glottal stop in *atiy^R7a7* (3b) is “inorganic” (cf. 4.2.2) and has no morphemic status.

- (3) SE a. *a7ajy-t\$* ‘good one’ (< *a7aj(y)* ‘good’)
 b. *atiy^R7a-t\$* ‘big one’ (< *atiy^R7a7* ‘big’)
 c. *aapiu7-t\$* ‘person from there’ (< *aapiu7* ‘from there’)
 d. *iipiu7-t\$* ‘person from here’ (< *iipiu7* ‘from here’)

Forms like those in (2) and (3) are quite distinct from the examples in (4). The derivational direction is the reverse. Here we have denominal verbs (discussed in 14.15), with the denominalizing suffix *-7* displacing the inflectional absolutive suffix *-t\$*.

- (4) SE a. *paa-t\$* ‘water’ > *paa-7* ‘drink’
 b. *waqaa-t\$* ‘fiesta’ > *waqaa-7* ‘have a fiesta’

The examples in (5) are the only deverbal nouns with **-L* found in the KI corpus. Except for (5d), all these show a derivational suffix complex *-i-t\$* (not the *-i-ts* from **-i-ch* of 14.1.3).

- (5) KI a. *momkin-i-t\$* ‘piled up’ (< *momkin* ‘pile s.th up’) (3.100.0421)
 b. *paropkin-i-t\$* ‘ball’ (< *paropkin* ‘make round’) (3.98.0347)
 c. *tsurupkin-i-t\$* ‘Antap ceremony initiate’ (‘one who enters’) (< *tsurupyk* ‘enter’) (3.98.0181)
 d. *tyya-t\$* ‘roasting pit’ (< *tyy7* ‘roast’) (3.98.0054)
 e. *viruvk-i-t\$* ‘s.th steep’ (< *viruhvyk* ‘rise, climb’) (3.100.0590)

Examples in *-V-l* from LU, AC, CU are seen in (6).

- (6) a. LU *pi7xw-a-l* ‘lazy person’ (< *pi7xw-ax* ‘be lazy’)
 b. AC *ma\$iqq-a-l* ‘s.th twisted’ (< *ma\$iq* ‘be twisted, wrenched’) (3.122.0220)
 c. CU *sakwítx-y-l* ‘whip’ (< *sakwít* ‘curse, whip’) (or perhaps *sakwít-a-l*)

CA has more candidates for derivation in *-V-l* than do the other languages. The examples in *-i-l* in (7a-c) may belong to the abstract noun/event noun set in *-i-lj* discussed in 14.9.3. However, they do not semantically fit among those nouns, and they are clearly transcribed by Seiler and Hioki (1979) with absolutive *-l*, not *-lj*.

- (7) CA a. *pa7-i-l* ‘the drink’ (< *pa7* ‘drink’)
 b. *se7ni-7i-l* ‘decoration’ (< *se7ni* ‘decorate’)
 c. *hu7-i-l* ‘s.th that smells’ (< *hu7** ‘fart (verb)’)
 d. *e7wa-7a-l* ‘sweat (noun)’ (< *e7wa* ‘sweat (verb)’)
 e. *iva-7a-l* ‘biceps, power’ (< *iva* ‘be strong’)
 f. *kikesew-a-l* ‘intoxicating drink’ (< *kikesew* ‘get drunk’)
 g. *tax_kwá7ilja-7a-l* ‘hate’ (< *kwa7ilje* ‘hate’)
 h. *suk-lu-7a-l* ‘deer dance of the Palm Springs Indians’ (< *suk-lu* ‘do this dance’)
 i. *chaju-l* ‘earring’ (< *chaju* ‘put on earrings’)
 j. *tepaqa-l* ‘belt’ (< *tepaqa* ‘tighten’)
 k. *xelja-l* ‘clothes’ (< *xelja* ‘wear clothes’)

Example (7c), *hu7il*, is given by Seiler and Hioki (1979:61) as irregularly derived from the verb *huv* ‘smell’, and they provide the example *tekwel hu7i* ‘sac of a skunk’. Since in Tactic skunks “fart” rather than “spray,” the derivation almost certainly is from an unattested verb *hu7**; cf. SE *huu7*, CU *huu* ‘fart’. The SE verb *huu7* may also relate to the noun *huuhu7at\$* ‘beetle, stinkbug, pinacate beetle’: perhaps *huu~hu7a-t\$* [IPFV~fart-ABS].

14.4. DEVERBAL AGENTIVE AND CHARACTERIZING NOUNS IN *-KA7-T. The Tactic languages exhibit several derivational sequences for agentives. The most widely attested is the sequence **-ka7-t*. This appears as *-qa7* in SE, *-k(a)* in KI, *-ka-t* in LU, AC, and CU, and *-k*, *-ka* or *-ka-t* in CA. There is only one example of *-ka* in the TV corpus, and as noted below, it may be a LU form.

Among the agentive suffixes, **-ka7-t* often functions to indicate expertise, ceremonial responsibility, excellence, and the like, rather than simple engagement in an activity.

This suffix sequence is not always specifically agentive, since it also derives nouns designating persons or things as possessing some distinguishing characteristic. In this sense it overlaps with derivations like characterizing *-ka7j* that appears in KI adjectives (14.11.3). As with derivations in **-i-ch*, the noun–adjective distinction with these **-ka7-t* derivations is blurred.

The initial consonant of this suffix is almost always recorded as *k* in Cupan. Thus, while agentive and characterizing derivations in **-ka7-t* overlap with immediate future inflectional sequences from **-ka7-t* that appear in subject relative clauses (see chapters 12 and 13), the latter are consistently recorded with *-qa-t* in LU and CU. (The difference between SE *-qa(7)* and *-ka(7)* is entirely determined by phonological context.) Like the immediate future suffixes in *-ka-t*, agentive *-ka7-t* induces *i*-ablaut in Inland Cupan. The two suffix sequences may be historically related, even though they are not identical in their phonological developments and syntactic functions.

14.4.1. TONGVA DEVERBALS IN **-KA7-T*. Possible attestations of this suffix are very sparse in TV. Harrington collected *waraa7pi-ka-t* ‘dance leader,’ with a verb root attested in LU and CU, and speculated that it might be a LU form (3.105.0551). He had the same concern about *t\$aa-ro-k-to-m* ‘those who are going to dance the *patada*’ (3.103.0183), although *t\$aroo* ‘dance the *patada*’ is attested only in TV. These might be immediate future forms; see 11.1. While agentive or characterizing **-ka7-t* would also be expected to show *-xa7* in TV, as does adjectivalizing *-xa7* (14.14.1 (18)), no agentive noun example in *-xa7* has been found.

14.4.2. SERRANO DEVERBALS IN **-KA7-T*. Examples of the SE characterizing suffix *-qa7* appear in (1) through (4). In (2), we see examples that are apparently derived from nouns. One of these derived forms, the word for ‘house owner’ in (1c), appears in all the Takic languages. The inflected forms of SE *-qa7* are acc. *-qa-ti*, pl. *-qa-m*. The suffix *-qa7* appears as *-ka7* in (1b,c) from absorption of the thematic suffix *-k* and in (2b,c) from assimilation to the preceding, stem-final high vowel.

- (1) SE a. *kima-qa7* ‘one who comes, came’ (< *kim(a)* ‘come’)
 b. *pich-ka7* ‘one eyed man’ (cf. *pich-k-in* ‘close, as of an eye’, *pich-y7-k* ‘be closed, as of eyes’)
 c. *ty^Rna^R7n-ka7* ‘s.th black, black one’ (cf. **ty^Rna^R7-k* ‘turn black’, *ty^Rnaa^Rna^R7n* ‘be black’)
- (2) SE a. *chaa-qa7* ‘ceremonial singer’ (< *chaa-t\$* ‘song’)
 b. *kii-ka7* ‘owner of a house’ (< *kii* ‘house’)
 c. *wychyy-ka7* ‘police officer’ (no source root attested; possibly from Southern Numic, cf. Southern Paiute *wacchy-* < *wat-ci-* > ‘catch up with’ [Sapir 1931: 714])

Sometimes the verb forms that theoretically underlie the nouns in *-qa7* are unattested or ungrammatical, with the closest relatives being morphologically different. Examples are given in (3) where, again, *-qa7* appears as *-ka7* from absorption of thematic *-k*.

(3) SE	noun in <i>-qa7</i>	underlying verb	closest attested verb(s)
a.	<i>jaraap-ka7</i> ‘whitish one’	<i>jaraap-k*</i>	<i>jaraap-y7-k</i> ‘be whiter’
b.	<i>kapo^Rch-ka7</i> ‘short one’	<i>kapo^Rch-k*</i>	<i>kapo^Rch-y^R7-k</i> ‘be short’
c.	<i>kawaw-ka7</i> ‘crooked one’	<i>kawaw-k*</i>	<i>kawalawa7n</i> ‘be crooked’
d.	<i>puah-ka7</i> ‘circle’	<i>puah-k*</i>	<i>puah-y7-k</i> ‘be in a circle’, <i>puah-k-in</i> ‘make a circle out of, put into a circle’
e.	<i>put\$up-ka7</i> ‘spherical one’	<i>put\$up-k*</i>	<i>put\$up-u7-k</i> ‘be spherical’
f.	<i>\$at\$ü7n-ka7</i> ‘yellow one’	<i>\$at\$ü7n-k*</i>	<i>\$at\$ü7-k</i> ‘turn yellow’, <i>\$at\$üt\$i7n</i> ‘be yellow’

Case-marking with the SE characterizing suffix *-qa7* is in the usual manner of \emptyset -class nouns, with *-ti*, as in (4a). (4b) shows the characterizing suffix in the plural and provides a rare example of a marked accusative plural (marked only when subject is 3PL). When relative clauses with the immediate future are objects, the relative clause predicate is never attested with an accusative suffix, so these are examples of the characterizing derivation (see 12.2.5.3.1).

- (4) SE a. *Aa-pia7 ani = m my^Rka^Rn Pyy-nyp-i, [ivi7 iviin*
 DIST-LOC and.then = 3PL > 3SG kill(sg.) 3PL-chief-ACC PROX earlier
huch-ka-ti] Jesus pyy-hak-iv.

be.born-K.CHAR-ACC Jesus 3PL-call-REAL.SUB

‘They had killed their Lord, the one that was born and known as Jesus.’

<‘Apya’ ‘anim merkan Peenepi, ‘ivi’ ‘ivin huchka’ti’ *Jesus* peehakiv.> (R&E 138)

- b. *\$umaana-n = kwyny = my muu~m tyngk aa-m*
 bow.and.arrow-INS = QUOT = 3PL > 3PL IPFV~shoot just DIST-PL
kima-qa-m-i.

come-CHAR-PL-ACC

‘They used to shoot with a bow and arrow at those that were coming.’ (Mission Creek) (Men would ride by on horseback as arrows were shot at them. The horseback riders had to dodge the arrows.)

14.4.3. KITANEMUK DEVERBALS IN *-KA7-T. In KI this suffix is usually *-k(a-)*, singular *-k* or *-ka-t*, with the absolutive suffix, plural *-ka-m*, as seen in (1). Some examples show *-ke7* or *-ky7*, as in (5b,g). Another member of this set may be characterizing *-ka7j*, discussed in 14.14.3 (10) and (11). In KI, *kiikat* means ‘house post’ or, perhaps metaphorically, ‘captain (village leader)’, not ‘householder’, which takes the form seen in (1b). As in SE, some of these forms are derived from nouns.

- (1) KI a. *kavoot\$aj kymana-k* ‘blacksmith’ (3.98.0283) (< *kavoot\$aj -kyman* ‘knife (acc.) make’)
 b. *kii-k ~ kii-ke7* (< *kii-ts* ‘house’) (3.98.0283) ‘householder, inhabitant’
 c. *kwaat\$yymuuku-k* ‘man with a guardian spirit’ (3.98.0375) (< *-kwaat\$yymuuk* ‘guardian spirit’)
 d. *maat\$-ka-m* ‘wise people, doctors’ (3.98.0039) (< *maat\$* ‘hear’)
 e. *naama-ka-t* ‘generous man’ (3.98.0385) (< *naa-mak* ‘give regularly’)
 f. *nahtaanimakana-k* ‘teacher, counselor’ (3.98.0448) (< *nahtaanimakan* ‘teach’)
 g. *-nar-ky7* ‘partner, workmate’ (3.98.0345) (< *na7ryk* ‘help’)
 h. *papahe7a-k* ‘three pronged fawn’ (3.98.0107) (< *paahi7* ‘three’)
 i. *tarapk7a-k* ‘two-pronged fawn’ (3.98.0107) (< *tarapk* ‘forked’)

14.4.4. CUPAN DEVERBALS IN *-KA7-T. For LU (1), Elliott (1999) documents an extensive list of agentives in *-ka-t*, with plural *-vuk-tu-m*, e.g. *aaw-ka-t* ‘inhabitant’, *qal-vuk-tu-m* ‘inhabitants’ (here the source verb is suppletive as well). The plural is also shown in (1a); all other examples follow this regular pattern except for (1e). This plural suffix sequence is unique to LU; the other Takic languages have only the *-m* plural suffix with *-ka* derivations. The plural sequence is probably from **-vo-ka-to-m*, where **-vo* is related to the SE inchoative *-vy* (14.15.4.2) and to poorly attested suffixes in *-vV* in CU and CA (see below).

As in the other languages, some of these derivations in LU are on a noun root, as in (1a,e,f). (1g), with the stressless verb root *qwa7* ‘eat’, shows that *-ka* is an *i*-ablauting suffix, as is immediate-future *-qa-t*. The *i* in (1b,c) is the transitive thematic suffix.

- (1) LU
- a. *ash-ka-t* ‘rancher, owner of cattle’, pl. *ash-vu-k-tu-m* (< *ash-la* ‘owned animal’)
 - b. *ayál-i-ka-t* ‘an adept, one who knows’ (< *ayál-i* ‘know’)
 - c. *hiqw-i-ka-t* ‘driver’ (< *hiqw-i* ‘make run’)
 - d. *kii-chu-ka-t* ‘house builder’ (< *kii-chu* ‘build a house’)
 - e. *kii-ka-t* ‘house owner, dweller, mourner’, pl. *kii-k-tu-m* (< *kii-cha* ‘house’)
 - f. *naa-ka-t* ‘one who has become a father’ (*-naa* ‘father’)
 - g. *qwa7-ii-ka-t* ‘eater’ (< *qwa7* ‘eat’)
 - h. *to\$ngu-ka-t* ‘policeman’ (< *to\$ngu* ‘give orders’)

AC has this derivation, but the plural, where attested, is regular, as seen in (2). The sense is agentive: Of the contrast between *aama-ka-t* ‘hunter’ and related *aama-w7-t*, Harrington observes, “When asked the difference, seems to say that ?aamakāt is cazador & ?aamaw?t is one who likes to hunt” (3.123.0285).

- (2) AC
- a. *chalu7-ka-t* ‘“castillano” (one who uses Spanish [*castilla*] well, or in excess, pretentiously)’, pl. *chalu7-k-ta-m* (3.123.0440) (< *chalu7* ‘speak Spanish’)
 - b. *teelama-ka-t* ‘liar, deceiver’, pl. *teelama-k-ta-m* (3.123.0453) (< *teelama* ‘speak’)

For CU, the only example of the *-ka-t* derivation attested is *kiikat* ‘dweller, householder’. In CU, the *-wy-t* sequence (see 14.5) seems to have replaced agentive *-ka-t*.

For instance, CU has *ash-wy-t* ‘rancher, cattle owner’; contrast this with LU *ash-ka-t* in (6a) above.

In CA, Seiler (1977:94) distinguishes the agentive *-ka-t* forms from a suffix sequence which he represents as *-(a)k(t)-*, glossed ‘excellence’, e.g. *mu-ak* ‘good shooter’ (< *mu* ‘shoot at target’) and *neh-ak* ‘good basket maker’. He observes that these are probably related to the *-ka* derivations shown in (3). Among the CA forms is (3c), with a secondary derivation from a deverbal adjective meaning ‘smart’. (3d) is another example based on an adjective.

- (3) CA
- a. *aljmu-ka(-t)* ‘Diegueño Indian’ (< *aljmu* ‘speak Diegueño’)
 - b. *ash-ka* ‘one who owns an animal’ (< *-ʔash* ‘owned animal’)
 - c. *eʔn-i-sh-ka(-t)* ‘skillful, smart, good at s.th’ (< *eʔnani-sh* ‘one who knows a lot’ < *eʔnan* ‘know’)
 - d. *enene-ka-t* ‘bitter stuff’, *pal eneneka* ‘bitter water, beer’ (< *enene* ‘bitter’)
 - e. *iva-ka-t* ‘strong person’ (< *iva* ‘be strong’)

However, *-k* also appears in the examples in (4), with a barely-attested verbalizing suffix *-vi*, which may be related to CU *-vu* in 14.5 (6a-c), which may reflect **-vy* before *w*, LU *-vu* in *-vuktum*, and the SE inchoative *-v(y)* (14.15.4.2). In CA it also appears with nouns for garments, e.g. *jumuʔ-vi* ‘put on a hat’. The plurals of all of these suffix sequences have *-te-m* in the absolutive-plural, whether the *t* absolutive occurs in the singular or not.

- (4) CA
- a. *ash-vi-k*, *ash-lju-vi-k* ‘one who owns a lot of animals’ (< *-ʔash* ‘owned animal’)
 - b. *mexan-vi-k* ‘owner of a lot of things’ (< *mexan* ‘possession’)
 - c. *tuvxáʔ-vi-k(a-t)* ‘worker’ (< *tuvxáʔ* ‘work’)

14.5. NOUN DERIVATIONS IN **-wYC-T* AND **-RAWYC-T*. A deverbal derivation present in all sub-branches of Takic, an agentive from **-wyC-t*, has merged in some of the languages with reflexes of a second suffix that derives characterizing nouns or adjectives from nouns, **-rawyC-t*. Another suffix, the reflex of which is identical in several of the languages to these nominalizers, is a augmentative **-wyC-t*. The augmentative suffix seems to represent a grammaticization of PUA **wyr~l* ‘big’, which is independent of the other two suffixes. Given the confusing merger of the three in most of Takic, we discuss

them together here, although the main discussion of the augmentative is left until section 14.11.1.

Reflexes of agentive **-wyC-t* appear mainly on verb stems and overlap in function with the suffixes with *-kaC-t* discussed in 14.4. Reflexes of **-rawyC-t* are usually suffixes on noun stems, deriving characterizing nouns/adjectives encoding notable features of a person or thing, often body parts. The morphological distinction between reflexes of **-wyC-t* with verb stems and **-rawyC-t* with noun stems is not absolute, but appears to be a strong tendency.

Remarkably, it is the sparse TV and KI data that permit us to suggest etymologies for deverbal agentive **-wyC-t* and characterizing **-rawyC-t*. These two languages retain a contrast between the two, with **-wyC-t* reflected as TV *-jo-t* and KI *-hiy-t*, and **rawyC-t* reflected as TV *-ro-t* and KI *-wy-t*. With TV nouns, the suffix is *-ro-t*, with a single exception in the small corpus. The suffix **-rawyC* is cognate with the Tepiman abstract noun-forming suffix *-dag*, and probably also with Eudeve *-ra-wa* ‘habit, facility’ and the Nahuatl abstract noun suffix *-yō* (Dakin 2007:301).

TV *r*, as in *-ro-t* < **-rawyC-t*, should correspond to *r* in Serran and to *l* in Cupan. This would predict that **-rawyC-t* should appear as Serran *-ray-t**, LU *-lawu-t**, CU *-lywy-t**, CA *-lawe-t**, but examples of such forms have not been found. Dakin (2007:301) suggests that CA *-la* in *kuna-la* ‘married’ may be from this source.

The Cupan languages have completely merged **-rawyC-t* and **-wyC-t* and, except for AC, have merged these in turn with augmentative **-wyC-t*. The reflexes of **-rawyC-t* and **-wyC-t* seem always to be **-wy-t*, with appropriate vowel, or *-wʔ-t* in AC. In AC, agentive *-wʔ-t* remains distinct from augmentative *-wt* ~ *-ot*.

An important piece of evidence for the hypothesis that many examples of Cupan **-wy-t* come from **-rawyC-t* is that TV, KI, and CA all show the same derivation for ‘sharp’, based on the word for ‘tooth’, with TV clearly attesting to the suffix-initial **l/r*.

- (1) a. TV *a-taamb-ro-t* ‘sharp’ (3.105.0119) (the *b* is a phonetic transition [see 3.2.7])
(cf. *ne-taama-n* ‘my tooth’ (3.103.0753))
- b. KI *tamaa-wy-t* ‘sharp’ (as of a sharp stone) (3.98.0469)
- c. CA *tama-we-t* ‘sharp-edged’

The *j* in the TV and (*h*)*i* in the KI reflexes of **-wyC-t* may have arisen as follows. In those languages *w* is usually lost in intervocalic position. Since agentive **-wyC-t* is an *i*-ablauting suffix (as seen in CU *ja7-i-wy-t* ‘fast runner’ in (5g)), this seems to have affected the development of the suffix. The initial *j* or *i* in the reflexes of these suffixes probably derives from reanalysis, yielding the suffix sequence *-jo-t* in TV and KI *-hiy-t* in KI. The *h* of KI *-hiy-t* seems to reflect **w*. Note that it almost certainly this *h* does not represent the **r* of **-rawyC-t*; the KI *h* that is associated with *r* is from **s*, not **r*. Exceptions in TV are found where etymological **w* is retained after a suffix *-ro*, as in (2c,d). This derivational suffix *-ro* may be identifiable with the future tense suffix. An alternative source of TV *w* in (2c,d) may involve the insertion of the homorganic glide *w* as a transition between the *o* of *-ro* and the following *o*, avoiding the conflation of *o-o* into a single long vowel. A difficulty in evaluating the TV data is that Harrington’s consultants also spoke SE, LU, and CA, and some interference among the languages is evident.

Examples of TV deverbal *-jo-t* from **-wyC-t* are shown in (2). In (2e), we see the single attested example of *-jo-t* with what appears to be a noun stem. This word co-exists with *kiingarot* ‘inhabitant’, seen below in (8d).

- (2) TV
- a. *pahii-jo-t* ‘morning star’ (3.102.0599) (< *pahii-no-k* ‘dawn (verb)’ (3.103.0159))
 - b. *\$eraaw7-jo-t* ‘person who is a speaker’ (3.103.0420) (< *\$eraaw7a-x* ‘speak, talk’ (3.104.0060))
 - c. *\$iee7e-ro-wo-t* ‘one who is going to cure’ (3.103.0470) (< *\$iee7e-ro** ‘will cure’)
 - d. *wiik-ro-wo-t* ‘one who is going to smoke’ (3.103.0717) (< *wiik-ro* ‘will smoke’ (3.103.0731), *wiiko-k* ‘be smoking’ (3.103.0214))
 - e. *kii-jo-t* ‘householder, inhabitant’ (3.103.0461) (< *kii-j* ‘house’ (3.104.0153))

In Serran, these suffixes are attested in a few forms in Harrington’s SE data, e.g. *pahi7kiyt* ‘morning star’ (3.101.0022), from the verb *pahi7k* ‘dawn’. Several other examples, in names of sacred beings, lack etymologies. However, these endings do not appear in the speech of either Sarah Martin, K. Hill’s principal consultant, or Dorothy Ramón (Ramón & Elliott 2000). These speakers had agentives in *-i7a-t\$* where KI has

-(h)iy-t. For instance, compare SE *chaat\$u7i7at\$* ‘singer’, *tuhtu7i7at\$* ‘dancer’, and *huu7t\$ pahi7ki7at\$* ‘morning star’ with KI forms in (3f,g,i) below.

Kitanemuk has *-hiy-t* and *-wy-t* as productive reflexes of **-wyC-t* and **-rawyC-t*. Examples of the former are in (3) and of the latter in (10) below. Anderton (1988:140-43) treats them in a single discussion under the label “augmentative” without distinguishing among the reflexes of **-wyC-t*, **-rawyC-t*, and augmentative **-wy-t* (see 14.11.1). After a k-class verb, the suffix *-hiy-t* loses its *h* (3h,i).

- (3) KI
- a. *kuu-hiy-t* ‘pujador (pusher, stammerer)’ (< *-kuur* ‘push, stammer’) (3.98.0133)
 - b. *nah-kyy7-hiy-t* ‘biter (dog)’ (3.98.0132) (< *-kyy7* ‘bite’ (3.98.0278)) (*nah-* ‘customarily’)
 - c. *nah-mona7-hiy-t* ‘deceiver’ (< *moh~mona7* ‘cheat, deceive’) (3.100.0419)
 - d. *nih~ni-hiy-t* ‘a person who is good at s.th’ (3.98.0231) (< *nih~nea* ‘do as a custom (3.98.0245))
 - e. *paa7-hiy-t* ‘big drinker, drunkard’ (3.98.0446) (< *-paa7* ‘drink’ (3.99.0476))
 - f. *tsaat\$u7-hiy-t* ‘singer’ (< *tsaat\$u7* ‘sing’) (3.100.0505)
 - g. *tuhtu7-hiy-t* ‘dancer’ (3.100.0501) (< *tuhtu7* ‘dance’ (3.98.0325))
 - h. *ngyt\$kin-iy-t* ‘person who cuts’ (< *ngyt\$kin* ‘cut’) (3.100.0442)
 - i. *pahik-iy-t* ‘morning star’ (3.98.0033) (cf. SE *pahi7k* ‘dawn’)

LU has many deverbal derivations with *-wu-t* from **-wyC-t*, defined by Kroeber and Grace (1960:149) as deriving nouns for “occasional agents,” as opposed to the agentives in *-ka-t* which designate a regular occupation.

- (4) LU
- a. *chung-la-wu-t* ‘kisser’ (< *chung-la* ‘kiss frequently’)
 - b. *haal-wu-t* ‘one who is looking for s.th’ (< *haal* ‘look for’)
 - c. *pi7-wu-t* ‘evil shaman’ (< *pi7* ‘throw, bewitch’)
 - d. *wol-wu-t* ‘person prone to anger’ (< *wol-tu* ‘be angry’)

Elliott (1999) notes that some examples have *-ka-t* agentives in some LU dialects, or are variable within Rincon LU. For instance, he notes *\$uwoo7wut* ‘coward’ from his consultant Villiana Hyde, but *\$uwoo7kat* recorded by Philip Sparkman at the beginning of the 20th century (< *\$uwoo7* ‘be afraid of’).

In AC, a deverbalizing suffix sequence *-w7-t* is richly attested. It is agentive, and the derivation is several times recorded by Harrington as synonymous with an agentive derivation in *-ka-t*. However, *-w7-t* agentives are often glossed in the Harrington notes as ‘muy (very)’, e.g. *wara7a-w7-t* ‘levantador, an early riser, muy levantador (very much an early riser)’ (3.123.0292) (< *wara7* ‘get up’). The glottal stop in the AC sequence is probably not the historical glottal stop, but a secondary development, because it contrasts with augmentative *-w-t* ~ *-o-t*, which historically should also have had some morpheme-final consonant before the absolutive. Additional examples of the AC suffix appear in (5).

- (5) AC
- a. *huu7na-w7-t* ‘teacher’ (3.123.0590) (< *huu7na* ‘teach’ (3.123.0591))
 - b. *hu\$\$\$a-w7-t* ‘dog who is to follow scent’ (< *hu\$\$\$-a* ‘smell (tr.)’) (3.123.0597)
 - c. *huu\$a-w7-t* ‘a great smoker’ (< *huu\$a* ‘smoke tobacco’) (3.123.0597)
 - d. *mon-nga-w7-t* ‘andariego (wanderer)’ (3.123.0254) (< *mon-nga* ‘travel, walk’ (3.123.0494))
 - e. *xaraaj-a-w7-t* ‘one who snores a lot’ (< *xaraaj-a* ‘snore’) (3.123.0530)

CU has a number of these deverbal derivations with *(-i)-wy-t* from **-wyC-t*, in (6), distinguished by Hill (2005:323) from augmentative *-wy-t*, but not from the *-wy-t* that is the reflex of **-rawyC-t*. Example (6b) shows the *i*-ablaut.

- (6) CU
- a. *ash-vu-wy-t* ‘cattle owner’ (< *ash-vu* ‘own an animal’)
 - b. *ja7-i-wy-t* ‘fast runner’ (< *ja7* ‘run’, with *i*-ablaut)
 - c. *ju-vu-wy-t* ‘person with plenty of hair’ (< *ju-vu* ‘have hair’)
 - d. *kung-vu-wy-t* ‘bride, married woman’ (< *kung-vu* ‘have a husband’)
 - e. *mixan-va-w-ta-m* ‘the owners’ (probably < unattested *mixan-vu** ‘have a possession’)
 - f. *mulu7-wy-t* ‘first person, ancestor’ (< *mulu* ‘be first’)
 - g. *pulin-xa-wy-t* ‘newborn baby, newly delivered mother’ (< *pulin-xa* ‘be born for’)

Deverbal agentive derivations with *-we-t* from **-wyC-t* are extensively documented for CA. Many of these alternate with derivations in *-i-sh* or *-va-sh/-va7a-sh*, the latter an agentive suffix found only in Inland Cupan. For instance, both *nukish* and *nukwet* mean

‘creator’ (< *nuk* ‘create’), both *ngangi-va-sh* and *ngangi-we-t* mean ‘crier’ (< *ngang* ‘cry’). Seiler (1977) states that *-we-t* nominalizations encode disposition or quality beyond mere custom or habit. Additional examples of *-we-t* constructions appear in (7). The role of these in CA subject relative clauses is discussed in 13.2.3.

- (7) CA
- a. *a7avu7-we-t* ‘old person’ (< *a7avuk* ‘get old’)
 - b. *amu-we-t* ‘hunter’ (< *amu* ‘hunt’)
 - c. *hingi-we-t* ‘airplane’ (< *hing* ‘fly’)
 - d. *kup-we-t* ‘sleepy person’ (< *kup* ‘sleep’)
 - e. *nu7in-we-t* ‘leader, spokesman’ (< *nu7in* ‘tell to do, send’)
 - f. *-pij-we-t* ‘one who bewitches someone’ (< *pij* ‘bewitch’)
 - g. *taxmu-we-t* ‘singer’ (< *taxmu* ‘sing’)

Reflexes of **-rawyC-t* usually appear with nouns. Commonly, the head noun is a body part noun, and such forms have sometimes been interpreted as augmentative. However it seems likely that these are characterizing suffixes, not augmentatives. In TV the suffix appears with other types of noun roots as well, as in (8d,e).

- (8) TV
- a. *a-maa\$a-ro-t* ‘uno q[ue] tiene alas (winged creature)’ (3.103.0761)
(*a-maa\$a-n* ‘his alas [his wings]’)
 - b. *a-maax-ro-t* ‘canusco (person with gray hair)’ (3.104.0475) (*ne-maaxa7* ‘mis canas [my gray hair]’)
 - c. *a-muu\$a-ro-t* ‘barbón (bearded man)’ (3.104.0120) (*ne-muu\$a* ‘mi barba [my beard]’)
 - d. *ke~kii-nga-ro-to-m* *\$ovoova-nga*
PL~house-LOC-CHAR-ABS-PL Soboba-LOC
‘inhabitants of Soboba’ (3.105.0297) (*kii-nga* ‘in the house’ (3.105.0330))
 - e. *naveemxa-ro-t* *eraaxpo7*
poison-CHAR-ABS old.man
‘venenoso hombre (poisonous [old] man [a wizard])’ (3.104.0569)
(*naveemxa-r* ‘poison’)
 - f. *-paa-j-ro-7* ‘liquor (possessed)’ (3.104.0475) (*paa-* ‘water’)

There are a few TV examples of *-ro-t* with verb roots, where we expect *-jo-t*. These appear in (9).

- (9) TV a. *taaxa-t* *a-heoo-ro-t* (< *heoo-na-x* ‘know’)
 person-ABS ADJZ-know-CHAR-ABS
 ‘wise person’ (3.105.0371)
- b. *Menee* *worooj-t* *na7uu-ro-t*. (< *naa7u-* ‘marry, of a man’)
 PROX man-ABS marry-CHAR-ABS
 ‘This man is married.’ (3.103.0557)

KI, CU, and CA preserve attestations of this body-part characterizing construction with reflexes of **-rawyC-t*, and none of them have the suffix attested with other nouns. This distribution, in TV and one Serran and one Cupan language, locates the suffix as of Proto-Takic age.

KI examples of *-wy-t* from **-rawyC-t* appear in (10). There are two examples of *-wy-t* on a verb root, in (10e,f).

- (10) KI a. *kanga-wy-t* ‘bearded man’ (< *kanga-ts* ‘beard’) (3.98.0356)
 b. *kwa7-wy-t* ‘person who eats a lot’ (3.98.0255) (< *kwa7* ‘eat’ (3.98.0093))
 c. *poho-wy-t* ‘hairy person’ (< *ni-poho* ‘my body hair’) (3.98.0349)
 d. *tamaa-wy-t* ‘sharp-edged’ (3.98.0469) (< *tamaa-ts* ‘tooth’(3.98.0356))
 e. *wiini-wy-t* ‘a supernatural that calls’ (3.98.0335) (*ni-wii7* ‘estoy gritando [I’m shouting]’ (3.98.0079); cf. SE *wii7n* ‘shout’)
 f. *yt\$-wy-t* ‘bloody’ (< *a-7yt\$* ‘its blood’) (3.98.0348)

The Coastal Cupan languages have no examples of noun > noun derivation with **-wyC-t*. Instead, the suffix sequence LU *-mawi-sh*, AC *-ma7-ch* appears in this function, e.g. LU *muu\$i-mawi-sh* ‘bearded’ (compare the CU form in (11)).

The restricted CU data provide few attestations.

- (11) CU *mu\$ú-wy-t* ‘bearded man’ (< *-mu\$-* ‘beard’)

CA has only the word for ‘sharp’, seen also in (1) above.

(12) CA *tama-we-t* ‘sharp-edged’ (< *-tama* ‘tooth’)

14.6. DERIVATIONS SHARED IN TONGVA AND SERRAN. We turn now to derivational sequences that do not appear in all the Takic subgroups, but are restricted to TV and Serran (this section), to Serran exclusively (14.7), or to Cupan (14.8).

14.6.1. AGENTIVES IN *-(I)7A-L. A productive suffixal sequence found in both TV and Serran is *-e7a-r* ~ *-j7a-r* ~ *ii7a-r* ~ *-a7-r* in TV, *-i7a-t\$* in SE and *-i7aa-t\$* in KI. It derives agentive nouns from verbs.

Examples in TV appear in (1). These constructions have plurals with *-m*, and the form of the absolutive before the plural is *-ro*, thus *t\$e7een-7a-r* ‘singer’, pl. *t\$e7een-7a-ro-m*. Plural reduplication is also attested, e.g. *\$e~\$ieen-7a-ro-m* ‘curers’ (see (1p)).

Since the conditions for the appearance of the various allomorphs of the suffix are not entirely clear, we give a number of examples. The variants *-e7a-r* (1a-e), *-j7a-r* (1f,g), and *-ii7a-r* (1h-k) are clearly allomorphs, with *-e7a-r* after consonants, *-j7a-r* after vowels, and *-ii7a-r* after a root consisting of a monomoraic, unstressed syllable. However, the variant *-7a-r* (1l-w) does not have any obvious phonological condition determining its appearance. It is interesting that where these are derived from verbs with *-ina* and *-no* (1l,m,n,p,r,t), the *-n* of the suffix remains in the nominalization. It is possible that it is a different morpheme, but *maajno7ar* (1m), *nongiin7ar* (1n), *t\$aajnar* (1r) – and perhaps other examples, like *weoo7ar* (1v), share with the *-i7ar* derivations a heightened sense of agentivity. The final example, *xariive7ar* ‘stopping place, station’ (1x), is probably derived from a locative with the suffix *-vea*. We are not sure how to parse it. It may be related to another locative derivation, appearing as *-va-l*, *-va7a-l* in CA (14.8.1 (10)).

- (1) TV a. *avaak-m-e7a-r* ‘flier’ (< *avaak-mo-k* ‘be flying’) (3.105.0024)
 b. *ho7eex-e7a-r* ‘worker’ (< *ho7eexo-k* ‘work’) (3.104.0577)
 c. *a7-oi\$men ma~maanv-e7a-r* ‘person who likes to ask questions’ (cf. *maa-7a* ‘ask him!’, *maa-ro* ‘will ask him’) (3.105.0123)
 d. *naawm-e7a-r* ‘fighter’ (3.105.0055) (< *naawma-x* ‘fight’ (3.105.0053))
 e. *xamaax-m-e7a-r* ‘heavy drinker’ (3.105.0056) (< *xamaak-mo-k* ‘get drunk’ (3.104.0554))

- f. *mohuu-j7a-r* ‘player (dice thrower?)’ (3.104.0566) (< *mohuu-k* ‘shoot [throw dice?]’ (3.105.0332))
- g. *okoo-j7a-r* ‘big sleeper’ (3.103.0424) (< *okoo-k* ‘sleep, lie down to sleep’ (3.104.0120))
- h. *kwa7-ii7a-r* ‘big eater’ (3.104.0529) (< *kwa7aa-x* ‘eat’ (3.103.0773))
- i. *\$e~\$-ii7a-r* ‘muy meón (person who pisses a lot)’ (< *\$ii~\$i-k* ‘urinate’ (3.105.0041)) (3.105.0373)
- j. *t\$ong-ii7a-r* ‘laundrer’ (< *t\$ongaa-x* ‘wash’) (3.105.0077)
- k. *xar-ii7a-r* ‘person in a place’ (3.104.0117) (< *xaa ~ xaroo* ‘be’)
- l. *jakee-n-7a-r* ‘dancer’ (< *jakee-na-x*) (3.105.0360)
- m. *maajno-7a-r* ‘magician (“maker”)’ (3.103.0319) (< *maajno-k* ‘make, prepare (food)’ (3.103.0164))
- n. *nongii-n-7a-r* ‘andariego (one who walks around a lot)’ (< *nongii-no-k* ‘walk around’) (3.103.0632)
- o. *\$eraaw-7a-r* ‘speaker’ (< *\$eraaw7a-x* ‘speak’) (3.104.0109)
- p. *\$ieen-7a-r* ‘curer’ (3.103.0472) (cf. *\$iee-7a* ‘cure him!’ (3.105.0374))
- q. *toovto-7a-r* ‘tatahuila dancer’ (< *toovto7a-x* ‘dance the tatahuila’) (3.103.0184)
- r. *t\$aaj-n-(7)a-r* ‘person who is sick all the time’ (< *t\$aaj-no-k* ‘be sick’) (3.104.0095)
- s. *t\$aaro-7a-r* ‘patada dancer’ (< *t\$aaro-k* ‘dance the patada’) (3.103.0183)
- t. *t\$e7ee-n-7a-r* ‘singer’ (3.104.0413) (< *t\$e7ee-na-x* ‘sing’ (3.104.0412))
- u. *t\$orii-7a-r* ‘pinacate beetle’ (3.104.0483) (< *t\$orii7a-x* ‘have hiccups’ (?) (3.105.0093))
- v. *weoo-7a-r* ‘shitter’ (3.105.0374) (< *weoo-7a* ‘defecate!’ (3.104.0111))
- w. *wiiro-7a-r* ‘flute’ (< *wiiro7a-x*) (3.103.0560)
- x. *xar-ii-ve-7a-r* ‘stopping place, station’ (3.103.0511) (< *xaa, xaroo* ‘be’)

The TV and Serran derivations include an initial *i* in this suffix complex, probably the same prothetic *i* as that seen in the desiderative verb suffix **-ihuun* (see 10.3.4) and in the instrumental noun suffix *-ihwa7* (below in 14.7). It has been suggested that this *i* might be a noun-base deriving vowel, but since it also occurs in verb suffixes, and is also seen in many derived Hopi verb suffixes (cf. Hopi circumgressive *-inyma* ‘go around doing

s.th’, based on **nymy* ‘walk’, and progressive *-ima* ‘go along doing s.th’, probably based on **miaa* ‘go’), prothetic *i* is probably best regarded as part of a template for deriving a canonical form for suffixes rather than a category-changing element.

- (2) SE a. *hyiĩn-i7a-t\$* ‘hunter’ (< *hyiĩn* ‘hunt’)
 b. *juu7-i7a-t\$* ‘crybaby’ (< *juu7* ‘cry’)
 c. *kwa7-ia7-t\$* ‘glutton’ (< *kwa7* ‘eat’)
 d. *nahky^{Rhk}-i7a-t\$* ‘person who says nasty things’ (< *nahky^{Rhk}* ‘customarily say nasty things’)
 e. *qa^Rma^R7k-i7a-t\$* ‘drunkard’ (< *qa^Rma^R7k* ‘get drunk’)

In KI, Harrington heard the suffix as *-i7aa-t\$*. The long vowel appears quite consistently in his transcriptions.

- (3) KI a. *hi7hi-i7aa-t\$* ‘mirón (rubber-necker), onlooker’ (< *hiu* ‘see’) (3.98.0480)
 b. *majhan-i7aa-t\$* ‘midwife’ (< *majha7-n* ‘cause to give birth’) (3.98.0256)
 c. *nanaak\$a7-i7aa-t\$* ‘professional wrestler’ (< *nanaak\$a7* ‘wrestle’) (3.99.0590)
 d. *tuhtutu7-i7aa-t\$* ‘playful person’ (< *tuhtutu7* ‘play’) (3.99.0596)

One SE example was heard with a long vowel, *kwa7-i7aa-t\$* ‘food’, an isolated, non-agentive form. This may relate in some way to the fact that the KI suffix has a long vowel.

14.6.2. PASSIVE SUFFIXES TONGVA *-JA7*, KITANEMUK *-(H)EA*. A deverbalizing suffix in TV appears as *-ja7* in the non-possessed form, with no absolute suffix. The possessed state form is *-ja-n*. The data are so sparse that a definitive account of its function is impossible; it may be in origin a passive suffix cognate with KI *-(h)ea*, perhaps from the Uto-Aztecan passive/impersonal suffix **iwa*. The relation between the TV suffix and that of KI is suggested by the comparison between (1f), TV *ne-toaan-ja-n* ‘my name’, and (2d), KI *my-tywan-ea* ‘your name’ < *tyw-an-ea* ‘be named s.th’ (with no change of stem form). However, if these constructions are derived from passive verbs, these forms have no separate deverbalizing derivational suffix.

- (1) TV
- a. *komook-ja7* ‘upside down’ (3.105.0156) (< *komook-** ‘turn upside down’ (unattested verb))
 - b. *menaapke-ja7* ‘rightside up’ (3.105.0156) (< *menaapke-** ‘turn rightside up’ (unattested as verb))
 - c. *nat\$aak-ja7* ‘lantern (s.th lit)’ (3.105.0048) (cf. *nat\$aake-7a* ‘light the fire!’ (3.105.0064))
 - d. *a-paak-ja-n xaaja* ‘mountain pass’ (3.102.0308) (< *pakoo-k* ‘enter’ (3.103.0125))
 - e. *ne-taav-ja-n* ‘mi puesto (what I have put)’ (3.103.0327) (< *tavoo-k* ‘put’ (3.103.0426))
 - f. *ne-toaan-ja-n* ‘what I am called, my name’ (3.104.0356) (< *toaan-** ‘name’ (unattested verb))

The KI attestations of this suffix in deverbal nouns appear in (2).

- (2) KI
- a. *my7-aah-ea* ‘your bathing place’ (3.98.0449) (< *ni7-aar* ‘I take a bath’ (3.98.0250))
 - b. *a-jaa-hea* ‘its handle’ (3.98.0249) (< *jaw* ‘grasp, grab, catch’ (3.100.0372))
 - c. *ni-kwat\$ea7n-ea* ‘my fireplace, where I always light my fire’ (< *kwat\$ea7* ‘start a fire’) (3.98.0465)
 - d. *my-tyw-an-ea* ‘your name (??)’ (seems to be a passive verb: ‘you are named’) (< *tyw-an-ea* ‘be named s.th’ < *tyw* ‘name someone’) (3.98.0498)

14.7. DERIVATIONS SHARED IN SERRAN.

14.7.1. INSTRUMENTAL NOMINALIZATIONS. SE and KI share a suffix sequence *-ihwa7-t* that derives instrument nouns from verbs. This suffix is quite consistently associated with this function. The suffix *-ihwa7* provides another example of the prothetic *i* seen in agentive *-i7a* (14.6.1). Examples appear in (1) and (2).

- (1) SE
- a. *chynynk-ihwa7-t* ‘wheel’ (< *chynynk* ‘roll’)
 - b. *ichu7kin-ihwa7-t* ‘maker, device for making s.th’ (< *ichu7kin* ‘make’)
 - c. *joo^Rr-ihwa7-t* ‘horse-drawn plow’ (< *joo^Rr* ‘plow (verb)’)
 - d. *mu-ihwa7-t* ‘pistol’ (< *mu-j* ‘shoot’)
 - e. *nyypk-ihwa7-t* ‘chair’ (< *nyypk* ‘sit’)

- f. *oo^R\$an-ihwa7-t* ‘pencil’ (< *oo^R\$an* ‘write, paint’)
- g. *waan7kin-ihwa7-t* ‘digging tool’ (< *waan7kin* ‘dig’)
- (2) KI a. *ja-jhwa7-t* ‘cloth to grasp things with’ (3.98.0270) (< *-jaw* ‘grasp, grab, catch’ (3.100.0372))
- b. *kwat\$e7n-ihwa(7)-t* ‘atizadero, fireplace’ (3.99.0425) (cf. *-kwat\$ea7* ‘start a fire’ (3.98.0465)) (second 7 not present in source)
- c. *ookwan-ihwa7-t* ‘fishhook’ (3.98.0212) (< *ookwa7n* ‘jerk fishline (to set hook), fish’ (3.100.0444))
- d. *\$yym-ihwa7-t* ‘scratching stick with shell’ (3.98.0485) (< *\$yym* ‘scratch’ (3.98.0379))
- e. *tav-ihwa7-t kiwy\$taj* ‘pot rest stone’ (3.98.0062) (< *ta* ‘put on’ (3.100.0484))
- f. *wiin-ihwa7-t* ‘purgative’ (3.98.0478) (< *wiin* ‘have diarrhea’ (3.98.0280))

The SE possessed forms of *-ihwa7-t* nouns are peculiar, as can be seen in (3), where all of the few attestations are included. In (3a), what seems to be a regular form for ‘my chair’ was elicited from Sarah Martin. It follows the regular rule of possessed nouns in dropping the absolutive. However, this form may have been given in error. Subsequent occurrences of *nyypkihwa7t* always had final *-t* or a local case suffix. This derivation occurs within a text in Ramón and Elliott (2000) but with the suffix *-t* included in the possessed form: *pyynyppkihwa7t* ‘their seating area’ (3a). An attempt at eliciting a possessed form, ‘my pistol’ (3b), failed; Mrs. Martin provided *ni-ñu muihwa7t* ‘my possession the pistol’, the formula for making a possessed form of a grammatically unpossessable noun. Next, in (3c), we find the grammatically challenging phrase for ‘my coffee pot’. *Kjafee7* ‘coffee’ seems to be the object of the underlying verb *ichu7kin*, but it is in the nominative case, not the expected accusative *kjafee7ti*. Perhaps the phrase for ‘my coffee pot’ is understandable as “coffee, the device (there) that I make it in.” The prefix *ny-* here might be not the possessor ‘my’ but the subject ‘I’. The strange retention of the final *-t* ‘absolutive(?)’ is also found with the possessed form of ‘plow’ in (3d), again from a Ramón and Elliott text. Perhaps it is ‘what he plows with’ rather than ‘his plow’.

- (3) SE a. *nyypk-ihwa7-t* ‘chair’
a-nyypk-ihwa7 ‘my chair’
tuhtu7i7am pyy-nyypk-ihwa7-t ‘the dancers’ seating area’

- <tuhtu'i'am peenepkihwat > (R&E 802)
- b. *mu-ihwa7-t* 'pistol'
ni-ñu mu-ihwa7-t 'my pistol' (*ni-ñu* 'my possession')
- c. *ichu7kin-ihwa7-t* 'maker'
kjafee7 aap ny7-ichu7kin-ihwa7-t 'my coffee pot'
- d. *joo^Rr-ihwa7-t* 'plow'
a-joo^Rr-ihwa7-t 'his horse-drawn plough'
 <'ayeer-rrihwat > (R&E 820)

The KI possessed forms of these constructions usually replace *-ihwa7* with a different suffix, *-ivana7*, shown in (4). However, one item with *-ihwa7* is attested with a regular possessed form: absolutive *watsav-ihwa7-t* 'seed beater', possessed *-watsav-ihwa7*.

- (4) KI a. *-heer-k-in-ivana7* 'forefinger (what one points with)' (3.98.0361) (cf. *heer-k* 'be pointing' (3.98.0469))
- b. *-ja-jvana7* 'cloth to grasp things with' (3.98.0270)
-ookwan-ivana7 'fishhook' (3.98.0212)
- c. *-\$yym-ivana7* 'scratching shell' (3.98.0485)
- d. *-tav-ivana7* 'place to put things, keep things' (3.98.0054)
- e. *-wiin-ivana7* 'purgative' (3.98.0478)

These KI possessed forms may be *-7* derivations from verb bases with the instrumental causative *-ivana* of SE, below in 14.7.2. Such verbs are not otherwise attested in KI.

14.7.2. INSTRUMENTAL CAUSATIVE. In SE, there is an "instrumental causative," a verb derivational suffix *-ivana*, e.g. *hiikyn-ivan(a)* 'cure using s.th'. Other examples are given in (1), repeated from 10.2.3.6 (1).

- | | | |
|-----|--|---|
| (1) | SE | instrumental causative |
| | a. <i>nyy7</i> 'make a basket' | <i>ny-ii7van</i> 'make a basket using s.th'
<ney'van > (R&E 586) |
| | b. <i>tuhtu7</i> 'dance' | <i>tuhtu-i7van</i> 'dance with s.th (feathers)'
<tuhtwivan > (R&E 133) |
| | c. <i>vyraa~vyra-7n</i> 'talk, be speaking',
cf. <i>vyrav-k</i> 'talk, speak' | <i>wyra-7n-ivan</i> 'speak of s.th, talk about s.th'
<werra'nivan > (R&E 115) (Dorothy Ramón's <i>wyra-</i>
corresponds to Sarah Martin's <i>vyra-</i> .) |

14.8. DERIVATIONS SHARED IN CUPAN.

14.8.1. INSTRUMENTAL NOMINALIZATIONS. The instrumental nominalizer in most of Cupan is **(-a)-la7a-ch*. This appears as LU *-la-sh*, AC *-la-ch*, and CU *-la7a-sh* ~ *-lja7a-sh*. Instead of **(-a)-la7a-ch*, CA has *(-i)-va7a-l*; see below in (9).

LU *-la-sh*, AC *-la-ch*, and CU *-l(j)a7a-sh* derivations often appear in words for modern tools and household equipment, as in several of the examples in (1, 2, 3). The CU examples (3a,c) show that *-l(j)a7a-sh* is an *a*-ablauting suffix.

- (1) LU a. *cheen-i-la-sh* ~ *chen-ki-la-sh* ‘scissors’ (< *chen-i* ~ *chen-kixi* ‘cut’)
 b. *kup-la-sh* ‘bed’ (< *kup* ‘sleep’)
 c. *mokna-la-sh* ‘weapon’ (< *mokna* ‘kill (sg.obj.)’)
 d. *puuj-i-la-sh* ‘bellows’ (< *puuj-i* ‘blow on fire’)
 e. *waak-i-la-sh* ‘broom’ (< *waak-i* ‘sweep’)
- (2) AC a. *chaaja7-la-ch* ‘colander, strainer’ (3.123.0433) (< *chaaj-a7* ‘strain liquid, seeds’ (3.123.0431))
 b. *havu\$\$-a-la-ch* ‘baking powder’ (< *havu\$\$-a* ‘make swell up’) (3.123.0534)
 c. *ngaw7-la-ch* ‘rug, bed, mat’ (3.123.0337) (< *ngaw-a7* ‘spread s.th out’ (3.123.0567))
- (3) CU a. *chawa-jax-a-la7a-sh* ‘ladder’ (< *chawa-jax* ‘climb’)
 b. *chyl-i-lja7a-sh* ‘scissors’ (< *chyl-in* ‘cut’)
 c. *kwa7-a-la7a-sh* ‘s.th for eating’ (< *kwa7* ‘eat’)
 d. *naqtyma-la7a-sh* ‘jimsonweed’ (< *naqtyma* ‘be drunk’)
 e. *wak-i-lja7a-sh* ‘broom’ (< *wak-in* ‘sweep, comb’)

These suffixes also can refer to the place where an activity characteristically takes place, as in (4, 5, 6). Example (4e) illustrates the range of meanings that can be assumed by these constructions.

- (4) LU
- a. *aa7alv-i-la-sh* ‘story telling place or time’ (< *aa7alv-i* ‘tell a true story’)
 - b. *aaw-la-sh* ‘place of residence (of one subject)’ (< *aaw* ‘be located (sg.anim. subj.)’)
 - c. *heel-i-la-sh* ‘singing place’ (< *heela* ‘sing’)
 - d. *ngool-ax-la-sh* ‘bar, saloon, booze’ (< *ngool-ax* ‘get drunk’)
 - e. *pachxam-la-sh* ‘laundromat, washing machine, detergent, laundry’ (< *pachxam* ‘wash repeatedly, do laundry’)
- (5) AC
- a. *aama-la-ch* ‘hunting ground’ (3.123.0288) (< *aama* ‘hunt’ (3.123.0285))
 - b. *-chuur-x-la* ‘sliding-down place’ (< *chuur-x* ‘slide down’) (3.123.0471)
 - c. *maqa7-x-la-ch* ‘place to lie down’ (3.123.0578) (< *maqa7-x* ‘lie down’ (3.123.0458))
 - d. *mon-nga-la-ch* ‘path for walking’ (3.124.0211) (< *mon-nga* ‘travel, walk’ (3.116.0195))
 - e. *-moora-la* ‘killing place’ (3.123.0371) (< *moora7* ‘kill’ (3.124.0196))
- (6) CU
- a. *a\$-la7a-sh* ‘bathing place’ (< *a\$* ‘bathe’)
 - b. *chamish tykvy7-la7a-sh* ‘where they burn islay (chokecherry)’ (< *tykvy7* ‘stir a bonfire’)
 - c. *Juma7at Wichaxa-lja7a-sh* ‘Where They Throw Hats’ (place name) (< *wichaxa* ‘throw’)
 - d. *namxa-la7a-sh* ‘store’ (perhaps related to *nymyxa* ‘sell’ but more likely from unattested *namxa**, cf. SE *naamqa* ‘distribute, give out’)
 - e. *wakat ngij-lja7a-sh* ‘where they make rabbit sticks’ (< *ngij* ‘go and return’)

In CU, when possessed forms with *(-a)-l(j)a7a* are derived from thematic verbs, as in (7), the pronominal element that marks possessor is grammatically a subject marker and appears prefixed to the thematic suffix rather before the verb root in accord with the pattern of past-tense verb inflectional morphology. Since the possessive prefixes (5.2.1 (6)) and the subject prefixes (11.5.1 (1)) are of the same phonetic form, treating the pronominals here as subject markers rather than possessive prefixes is a distinction without a difference. Example (7a) again shows that *-la7a* is an *a*-ablauting suffix.

- (7) CU
- a. *chawa=chym-jax-a-la7a* ‘our ladder (what we climb up on)’
 - b. *chyl=ny-Ø-lja7a* (< *chyl=ny-in-lja7a*) ‘my scissors (what I snip with)’

In the Coastal Cupan derivations on thematic *-i/-ax* verbs, however, the pronominal prefixes are in initial position, as in (8).

- (8) LU a. *pom-7aa7alv-i-la* ‘their story-telling time’
 b. *pom-ngool-ax-la* ‘their saloon’
 AC c. *na-mqa7-x-la* ‘my lying-down place’ (3.123.0578)
 d. *na-hvu\$\$a-la* ‘my baking powder’ (3.123.0534)

While we treat most of the derivational suffixes that appear in only one language in section 14.8, we include CA *(-i)-va7a-l* here for convenience of comparison. Derivations with this suffix sequence have the same functional range as LU *-la-sh*, AC *-la-ch*, and CU *(-a)-l(j)a7a-sh*. Some examples are given in (9).

- (9) CA a. *kikesaw-va7a-l* ‘jimsonweed’ (< *kikesaw* ‘get drunk’)
 b. *kul-va7a-l* ‘kitchen’ (< *kul* ‘cook, prepare food’)
 c. *miisi-va7a-l* ‘church’ (< *miisi* ‘attend mass, pray’)
 d. *piki-n-va7a-l* ‘dump’ (< *piki-n* ‘dump, turn upside down, spill’)

When used in the instrumental sense, as in (10), they appear with instrumental *pish* (cf. 5.4.5.1). Example (10b) shows that *-va7a* is an *i*-ablauting suffix.

- (10) CA a. *pish hati-n-va7a-l* ‘s.th to light with, flashlight’ (< *hati-n* ‘cause to shine’)
 b. *pish kwa7-i-va7a-l* ‘s.th to eat with, spoon’ (< *kwa7* ‘eat’)
 c. *pish pashxam-va7a-l* ‘s.th to wash with, soap’ (< *pashxam* ‘wash clothes, hair’)
 d. *pish wipis-va7a-l* ‘s.th to pull with, tractor’ (< *wipis* ‘pull, drag’)

When these derivations refer to a place, as in (11), they appear with locative *pa* (11a,b) or dative *pax* (11c).

- (11) CA a. *pa amu-va7a-l* ‘place to hunt’ (< *amu* ‘hunt’)
 b. *pa chengen-va7a-l* ‘dancing place’ (< *chengen* ‘dance, kick’)
 c. *pax waj-va7a-l* ‘where one hollers from, inside of throat’ (< *waj* ‘holler, make noise’)

14.8.2. DEVERBAL NOUNS IN *-VY-L AND *-PI-SH. All of the Cupan languages share the subordinating suffixes *-vy ‘realis’¹⁴⁹ and *-pi ‘irrealis’, which appear in object-headed relative clauses as discussed in 13.3. These suffixes also occur in sequence with absolutive suffixes to derive deverbal nouns. Both derivations yield themes or resultative nouns, with the realis vs. irrealis aspect retained.

Nouns with LU *-vu-l* (< *-vo-l), CU *(-i)-vy-l* and CA *(-i)-ve-l* are shown in (1, 2, 3). Examples (1c, 2d, 3b) show that this suffix induces *i*-ablaut, like the homophonous subordinating suffix.

- (1) LU
- a. *aamu-vu-l* ‘place which has been hunted’ (< *aamu* ‘hunt’)
 - b. *pi7muk-vu-l* ‘death’ (< *pi7muk* ‘die (bewitched)’)
 - c. *qwa7-ii-vu-l* ‘s.th already eaten or picked clean’ (< *qwa7* ‘eat’)
 - d. *tuk-vu-l* ‘former campsite, where one has already camped’ (< *tuk* ‘spend the night’)
- (2) CU
- a. *pi7muk-vy-l* ‘ghost’ (< *pi7muk* ‘kill by witchcraft’)
 - b. *piq-in-vy-l* ‘s.th that was touched’ (< *piq-in* ‘touch’)
 - c. *Atáxmi Syx-in-vy-l* ‘Where They Burned People’ (place name) (< *syx-in* ‘burn, cremate’)
 - d. *tav-í-vy-l* ‘established’ (< *tav* ‘put’)
- (3) CA
- a. *pa amu-ve-l* ‘place which has been hunted’ (< *amu* ‘hunt’)
 - b. *kwa7-i-ve-l* ‘food left over’ (< *kwa7* ‘eat’)
 - c. *muk-ve-l* ‘one who has died’ (< *muk* ‘die’)

There are some semantic inconsistencies among the languages. For instance LU (1b) means ‘death’, not ‘one already dead’ or ‘ghost’, as in CU (2a).

Examples with *-pi-sh appear in (4, 5, 6). This derivation is sparsely attested in CU. The CA forms all show the *a*-ablaut vowel, which is also induced by the subordinating suffix *-pi*.

¹⁴⁹ *-vy ‘realis’ is not attested in the AC corpus, but must surely have existed in the language. Several nouns end in *-va-l*, e.g. *\$i7va-l* ‘clam sp.’, but none are clearly deverbal derivations.

- (4) LU a. *aamu-pi-sh* ‘where hunting will take place’ (< *aamu* ‘hunt’)
 b. *churii-pi-sh* ‘wood to be cut’ (< *churii* ‘chop’ [*<chorii>* in Elliott 1999:273])
 c. *kii-chu-pi-sh* ‘construction materials’ (< *kii-chu* ‘build a house’)
 d. *nech-i-pi-sh* ‘bill to be paid’ (< *nech-i* ‘pay’)
 AC e. *wak-p-ch* ‘broom, centipede’ (< *wak-* ‘sweep’) (3.116.0173)
 f. *ngoox-a-la-p-ch* ‘metate’ (3.122.0092) (< *ngoox-a* ‘grind’ (3.124.0104))
- (5) CU a. *chi7ín-pi-sh* ‘s.th too heavy to lift’ (< *chi7ín* ‘carry in arms’)
 b. *ñim-in-pi-sh* ‘s.th soft’ (*ñim-in* ‘bend, fold’)
- (6) CA a. *kilje tew-a-pi-sh* ‘one which is not to be found, seen’ (< *tew* ‘see’)
 b. *aj-a-pi-sh* ‘fruit to be picked’ (< *aj* ‘pick from tree’)
 c. *kwa7-a-pi-sh* ‘s.th edible’ (< *kwa7* ‘eat’)

A number of **-pi-sh* derivations do not have an obvious irrealis sense. LU in examples of this type include those in (7).

- (7) LU a. *em-lax-pi-sh* ‘porch’ (< *em-la-ax* ‘lean frequently’)
 b. *\$uj-pi-sh* ‘sting, bite as of insect’ (< *\$uj-i* ‘itch’; cf. *\$uj-la* ‘scorpion’)
 c. *wi7éq-lax-pi-sh* ‘act of denying, disputing’ (< *wi7éqlax* ‘argue, dispute’)

CA has many examples which are apparently everyday instrumental derivations, such as those in (8).

- (8) CA a. *jawna-pi-sh* ‘arrow straightener’ (< *jawan* ‘make smooth’)
 b. *kaja-pi-sh* ‘swing’ (< *kajaw* ‘swing’)
 c. *pak-pi-sh* ‘paddle for making pots’ (< *pakin* ‘tap pot’)

14.9. DERIVATIONS SHARED IN INLAND CUPAN.

14.9.1. NOMINALIZATIONS IN **-QAL-Y-T*, **-WYN-Y-T*. The nominalizing suffix sequences **-qal-y-t* and **-wyn-y-t* (< **-qalY -iC -ta*, **-wyny -iC -ta*) appear in CU and CA, where their reflexes are CU *-qal-y-t*, *-wyn-y-t* and CA *-qal-e-t*, *-wen-e-t*. These sequences have a syntactic function, marking the present-tense predicates of subject relative clauses, as discussed in 13.2.4.2 and 13.2.5.1.2. Many of the nouns with these suffixes may have

originated in this function but they appear in the modern languages as fixed forms that can be used anywhere a noun is appropriate. These constructions also can function as modifiers, offering another instance of a blurred noun-adjective distinction. Recall that CU plurals from *-wynyt* exhibit irregular *-wyntim* instead of expected *-wyntam* (see 5.1.1.1).

The elements in the sequence are, first, the nonfuture (and often durative) suppletive pair *-qal* ‘nonfuture singular subject’ and *-wyn/-wen* ‘nonfuture plural subject’ and also ‘nonfuture stative’. The following vowel, *-y-* in CU and *-e-* in CA, is a nominalizer. The immediate ancestor of this vowel is **y* (or maybe **yʔ*, although there is no synchronic evidence for the glottal stop beyond the fact of the unlenited *t* absolute), so it is apparently unrelated to the **-aʔ-t* derivations discussed in 14.2.

LU *-wunu-t*, which is an inflectional sequence found in same-subject adverbial clauses (see 13.1.1), is probably cognate with **-wyn-y-t*. But LU *-wunu-t* is exclusively inflectional and does not appear as a derivational suffix sequence on nouns or adjectives. LU does not have a cognate of **-qal-y-t*.

Examples of these suffixes in CU appear in (1) and (2). In the CU corpus, there are only two examples of forms in *-qal-y-t* that appear to be lexicalized; both are in modifying or adjectival function. The first appears in Harrington’s notes on CU from 1919-21.

- (1) CU a. *pal xaljywjax-qal-y-t* ‘waterfall’ (< *xalew-jax* ‘fall’) (3.130.0073)
 b. *avaxat chama~lma-qal-y-t* ‘shimmering cottonwood tree’ (< *chama~lma* ‘shimmer’)

In contrast to its limited treatment of *-qa-ly-t*, CU has important nouns and a number of adjectives in *-wyn-y-t*, where *-wyn* is the stative suffix. The Salton Sea (2b), the current manifestation of Lake Cahuilla, was dry and then filled in 1911, within the lifetime of the CU consultants.

- (2) CU a. *pal hiw-jax-wyn-y-t* ‘luke-warm water’ (< *hiw-jax* ‘be heated’)
 b. *Pal Jut-ax-wyn-y-t* ‘Salton Sea’ (< *jut-ax* ‘be full, be standing’)
 c. *ljaw-jax-wyn-y-t* ‘cave’ (< *ljaw-jax* ‘be dug out’)
 d. *wyw-jax-wyn-y-t* ‘arroyo, barranca’ (< *wyw-jax* ‘run off, of rain’)

The *-qal-e-t*, *-wen-e-t* derivations are well attested in CA, as shown in (3) and (4). In CA there are *-wen-e-t* derivations that clearly come from the nonfuture plural, shown in (3), as well as from the stative, shown in (4).

- (3) CA
- a. *heveve-qal-e-t* ‘butterfly’ (< *heveve* ‘be soft’)
 - b. *nu7in-qal-e-t* ‘boss’ (< *nu7in* ‘send, give order’)
 - c. *nu7in-wen-e-te-m* ‘bosses’ (also *nu7in-qal-te-m*)
 - d. *qa7i-qal-e-t* ‘Luiseño person’ (< *qa7i* ‘speak Luiseño’)
 - e. *qa7i-wen-te-m* ‘Luiseño people’
 - f. *pal wane-qal-e-t* ‘running water’ (< *wane* ‘flow, run of water’)
- (4) CA
- a. *haji-wen-e-t* ‘end’ (< *haj* ‘end, come to an end’)
 - b. *kavi-wen-e-t* ‘hole’ (< *kavi* ‘have a hole, be open’)
 - c. *pit meyi-wen-e-t* ‘curved road’ (< *meje* ‘turn, curve’)
 - d. *nanajax-wen-e-t* ‘quarrel’ (< *najax* ‘quarrel, argue’)
 - e. *wajiki-wen-e-t* ‘food’ (< *wajiki* ‘take a meal’)

14.9.2. AGENTIVE NOUNS IN *-va(7A)-sh*. CU and CA have a productive agentive suffix sequence, *-va7a-sh* in CU and *-va-sh* in CA. These derivations are much more common in CU and CA than the agentive derivations in **-ka-t* (which are not attested in CU at all) or **-wyC-t*. We have found only one example of *-va-sh* in LU, *chiluu7-va-sh* ‘one who likes to speak Spanish’ (< *chiluu7* ‘speak Spanish’). In the AC data the same root appears with *-ka-t*: *chaluuj-ka-t*, ‘one who is very Spanish (speaks Spanish well)’ (3.123.0440). Examples of CU *-va7a-sh* appear in (1).

- (1) CU
- a. *hamán-va7a-sh* ‘bashful person’ (< *hamán* ‘be ashamed’)
 - b. *havych-in-va7a-sh* ‘morning star’ (< *havych-in* ‘dawn’)
 - c. *kwaavichu-va7a-sh* ‘warden’ (< *kwaavichu* ‘take care of’)
 - d. *tyyching-va7a-sh* ‘boss’ (< *tyyching-* ‘give orders’)

Many CA verb roots appear with *-va-sh* and also with *-we-t*. Seiler (1977:97, 98) glosses them respectively as ‘performing in special situations’ and ‘habitual or competent performer’, but there are so many exceptions that it is clear that any difference in meaning is very subtle. For instance, both *nu7in-va-sh* and *nu7in-we-t* are glossed as

'leader, spokesman' (and see also 14.8 (3d) above, *nu7in-qale-t* 'boss'). Examples of *-va-sh* forms appear in (2).

- (2) CA a. *jengiljew-va-sh* 'person who stays too long' (< *jengiljew* 'pass, of time')
 b. *puli-va-sh* 'one who always falls (e.g. a horse)' (< *puli* 'fall')
 c. *qaqawpi-va-sh* 'football player' (< *qawpi* 'play shiny, ball game')
 d. *ting7aj-va-sh* 'doctor' (< *ting7aj* 'cure')

14.9.3. EVENT AND ABSTRACT NOUNS IN *-I-LJ*. A suffix sequence *-i-lj* (< **-i-l*) occurs frequently in event nouns and also in other functions, especially in the formation of abstract nouns, as illustrated in (1) and (2).

- (1) CU a. *hamán-i-lj* 'shame' (< *hamán* 'be ashamed')
 b. *lumu7-i-lj* 'measles' (no source verb attested)
 c. *nang7aw-i-lj* 'image ceremony' (< *nang7aw* 'make images of dead')
 d. *qawpi7-i-lj* 'shinny game' (< *qawpi7* 'play shinny')
 e. *puj-i-lj* 'a meal' (< *puj* 'dine')
 f. *yjálmu7-i-lj* 'Diegueño language' (< *yjálmu* 'speak Diegueño')
- (2) CA a. *ejetu-i-lj* 'stealing' (< *ejetu7* 'steal')
 b. *kuj-i-lj* 'funeral' (< *kuj* 'bury')
 c. *nuk-i-lj* 'image feast' (< *nuk* 'create, make images')
 d. *sunhaman-i-lj* 'shame' (< *sunhaman* 'be ashamed')
 e. *tuvxa7-i-lj* 'job' (< *tuvxa7* 'work')

There are also *-i-lj* derivations which do not fit the event/abstract noun description, as in (3).

- (3) a. CU *jykykn-i-lj* 'coward' (< *jykwín* 'be afraid')
 b. CA *jujukn-i-lj* 'coward' (< *juki* 'be afraid')
 c. CU *kukup-i-lj* 'sandman' (< *kup* 'sleep')
 d. CA *kukup-i-lj* 'sleepyhead' (< *kup* 'sleep')

CA especially has a number of other items with this derivation that do not fit in the event/abstract noun frame, such as those in (4).

- (4) CA a. *ñuch-i-lj* ‘dough’ (< *ñush* ‘smash’)
 b. *pavas-i-lj* ‘dew’ (< *pavas* ‘get wet from rain or dew’)
 c. *tajul7-i-lj* ‘s.th smooth, slippery’ (< *tajul* ‘be smooth, slippery’)

14.10. NOMINALIZING SUFFIXES FOUND IN ONLY A SINGLE LANGUAGE.

14.10.1. TONGVA NOUNS IN -t\$(o). TV has a series of derivations in -t\$(o). (The full form -t\$o- is found non-finally, as in (2e,f).) In examples like that of (1), this looks like it could be understood as an absolutive suffix (cf. the rare TV absolutive suffix -t\$, discussed in 5.1.2).

- (1) TV *toov-e-t\$* ‘those who are dancing, a dance’, pl. *to-roov-e-m* (< *toovto7a-x* ‘dance’) (3.104.0558)

But -t\$(o) is found in the possessed state, as in (2), showing that it is distinct from the absolutive suffix -t\$. In these examples the semantic range is instrumental, including the sense of “a place for doing something.” (2f) shows the full form of the suffix, with the vowel *o* retained but the plural gloss is strange: *a-* is the 3SG prefix. The form is given as an isolated citation with no context to help our understanding.

- (2) TV a. *-ooko-t\$* ‘bed’, *-ooke-n* ‘where one sleeps, not necessarily a bed’ (< *okoo-k* ‘lie’) (3.103.0230)
 b. *-ho7oke-t\$* ‘towel’ (< *hooke-no-k* ‘dry’) (3.103.0119)
 c. *-miao-t\$* ‘footprints, departure’ (< *miao* ‘go’) (3.105.0135)
 d. *-moone-t\$* ‘throat’ (< *monee-na-x* ‘swallow’) (3.103.0088)
 e. *-waako-t\$* ‘hairbrush’ (< *waako-k* ‘comb, brush hair, sweep’) (3.102.0707)
 f. *a-xaa-t\$o-nga* ‘onde vevían [sic, for vivían] (where they used to live)’ (< *xaa* ‘be, dwell’) (3.102.0068)

Example (3) shows -t\$o with a following absolutive in -t.

- (3) TV *a-xaaro-t\$* ‘where he was’, *xaroo-t\$o-t* ‘place where they were, e.g. a park’ (< *xaroo* ‘be, dwell’) (3.103.0079)

If we look at other examples of word-final or intervocalic *tʃ* in TV, we find that it usually reflects PUA **Ct* (sometimes **nt* or **tt*), followed by a non-low vowel. Examples illustrating this point are seen in (4). PUA reconstructions are from Stubbs (2011) with two modifications: For **yṭṭy7y* ‘cold’, Stubbs reconstructs only a single **t*. However, none of Stubbs’s cited daughter forms reflect full lenition of the consonant, so we prefer **tt*. For **jansi* ‘sit’, Stubbs omits the nasal, though other scholars (cited by Stubbs 2011:328 #2005a) include it. We feel the TV evidence supports its inclusion.

(4)	TV	PUA		Stubbs 2011
a.	<i>-aatʃe-</i> (3.102.0892)	PTak <i>*-7ajti</i>	‘owned animal’	
b.	<i>jatʃoo-</i> (3.103.0459)	<i>*jansi</i>	‘sit’	#2005a
c.	<i>otʃoo-</i> (3.103.0125)	<i>*yṭṭy7y</i>	‘cold’	#510
d.	<i>watʃaa7</i> (3.102.0658)	<i>*wattiwi</i>	‘four’	#2627
e.	<i>-xoo-xotʃ</i> (3.102.0630)	<i>*koCti</i>	‘bark, shell’	#2016

The TV suffix then derives from a sequence **-CCi* – most likely *-Cti*, perhaps originally *-CV-Ci*. No obvious cognate has been identified within Takic, but a search farther afield might permit reconstruction of a source.

14.10.2. TONGVA NOUNS IN **-vi-t*. A suffix sequence *-ve-t* is attested with several TV nouns (1) and adjectives (2). The etymology of this suffix is uncertain. It might relate to the **-wyC-t* complex treated in 14.5.5. A homophonous suffix appears in place names and gentilics (see 15.5.2.2).

- (1) TV
- a. *kwa7-ii-ve-t* ‘food’ (3.103.0164)
 - b. *paaha7-ve-t* ‘morning star’ (3.104.0421)
 - c. *paa-j-ve-t* ‘whiskey’ (3.103.0255)
 - d. *tamaa-ve-t* ‘sorcery, witchcraft’ (3.105.0494)
- (2) TV
- a. *havaa-ve-t* ‘fast (at running)’ (3.103.0564)
 - b. *pavaa-ve-t* ‘wet, soaked’ (3.103.0461)
 - c. *tehoo-ve-t* ‘good’ (3.103.0722)

14.10.3. CAHUILLA -NAX, -NAX-TE-M. Alongside *-ka-t* and *-we-t*, CA has a third agentive with suffix *-nax*, pl. *-nax-te-m*. This suffix also appears in future-tense subject relative clauses (see 13.2.5). Seiler (1977:95) says that nouns derived with *-nax* refer to agents who are “supposed to fulfill a specialized function,” especially ceremonial. He gives only the examples in (1), along with *taxmu7-we-t*, which he states is synonymous with *taxmu7-nax*. The entries in Seiler and Hioki (1979) are inconsistent in including these. *Taxmu-nax* does not appear with *taxmu* ‘sing’, but *-pij7-nax* is included under *pi7* ~ *pj7* ‘bewitch’ (it appears as *pj7-nax* in Seiler 1977:95). It is unclear whether this suffix is strictly inflectional and syntactic in nature, or whether its function is to derive stable lexical nouns.

- (1) CA
- a. *pe-j_pj7-nax* ‘the one supposed to bewitch him’ (< *pi7* ‘bewitch’)
 - b. *taxmu7-nax* ‘one who is supposed to sing’ (< *taxmu* ‘sing’)
 - c. *taxmu7-nax-te-m* ‘the ones that are supposed to sing’

14.11. DERIVATIONAL SUFFIXES ON NOUN ROOTS. We have treated derivations on noun roots with reflexes of characterizing **-rawyC-t* in 14.5 above, since this suffix is involved in an intricate overlap with deverbal derivations with agentive **-wyC-t*. In this section we discuss augmentative **-wyC-t*, the Cupan diminutive *-ma-l*, and “absentative” **-pi-ch*.

14.11.1. AUGMENTATIVE *-WYC-T. An augmentative suffix sequence from **-wyC-t* is shared across all Takic subgroups, although it does not seem to be very productive in any of the languages. As mentioned in 14.5, the first element of this sequence probably reflects PUA **wyr~l* ‘big’, grammaticized as part of a suffix sequence with absolutive **-t*. The form of the absolutive consonant presumably reflects the historic presence of the now-lost final consonant of ‘big’. Reflexes of augmentative **-wyC-t* are distinct from reflexes of characterizing **-rawyC-t* and agentive **-wyC-t* (14.5).

In TV and in the Serran languages, the augmentative suffix has lost its initial *w* and consequently can be very difficult to identify. In these languages the contrast with agentive **-wyC-t* is preserved since the agentive is usually reflected with initial *j* or **(h)i* (cf. 14.5 (2, 3)), which we suspect may relate to the fact that this suffix induces *i*-ablaut, which augmentative **-wyC-t* does not do. On the other hand, in present-day Cupan, apart from the differences in ablaut, the augmentative and the agentive are homophonous.

The TV examples in (1) show the attested doublets, with and without the augmentative suffix. The *-w-* appearing in the first column is misleading. It is not a retention of the **w* of **-wyC-t* but is instead the devocalized form of *o*, from the **y* of **-wyC-t*, original **w* having been lost by regular rule. The suffix seems rather unproductive and is attested mainly in the names of certain animals. The word for ‘coyote’, *iitar* in the non-augmentative column of (1a), is a sound-symbolic modification of expected **ii\$ar* (see 14.13.2).

- | | | | | |
|-----|----|--|--|--|
| (1) | TV | augmentative | | non-augmentative |
| | a. | <i>ii\$a-w-t</i> ‘wolf’ (3.103.0020) | | <i>iita-r</i> ‘coyote’ (3.104.0056) |
| | b. | <i>kakaa-w-t</i> ‘mountain quail’
(3.103.0419) | | <i>kakaa-r</i> ‘valley quail’ (3.102.0618) |
| | c. | <i>tokuura-w-t</i> ~ <i>tokuurot</i> ‘mountain lion’
(3.102.0616) | | <i>tokuu-t</i> ‘wildcat’ (3.102.0608) |
| | d. | <i>wanaa-w-t</i> ‘big rabbit net’ (3.102.0589) | | <i>wanaa-r</i> ‘rabbit net’ (3.103.0706) |

In SE, augmentative **-wyC-t* has all but disappeared. It remains only as a trace that helps explain a few irregularities. This element has been identified in only three examples, seen in (2). These show *-y-t*, the overt reflex of **-wyC-t* with loss of initial **w*.

- | | | | |
|-----|----|----|---|
| (2) | SE | a. | <i>hikaa-y-t</i> (pl. <i>hikaa-y-m</i>) ‘California gray squirrel’ |
| | | b. | <i>huuna-y-t</i> (pl. <i>huuna-y-m</i>) ‘bear’ (3.101.0032) |
| | | c. | <i>qaqaa-y-t</i> ‘grouse’ (Harrington reference number unavailable) |
| | | d. | <i>\$yt\$y-y-t</i> (pl. <i>\$yt\$y-y-m</i>) ‘mockingbird’ |

Example (2c), which appears as Tongva-accented <kakaawt> in the Harrington notes, is not morphologically the augmentative of SE *kakaata7* ‘quail’. *Kakaata7* seems to be a more recently coined sound-imitative name rather than an example of the normally developing cognate of, for example, LU *qaxaa-l*, which would be *qaqaa-t\$** in SE. In turn, the augmentative of *qaqaa-t\$** would be attested *qaqaa-y-t*. Both forms occur in KI, as *kakaa-t\$*, *kakaa-y-t*; see (7b) below.

The word for ‘bear’, found in Harrington’s notes with the augmentative (2b), was *huuna-t*, pl. *huuna-m* for K. Hill’s consultant Sarah Martin. This word, as discussed earlier in section 4.2.1, shows monophthongization of earlier *ay*, but the resulting vowel remains

resistant to syncope; i.e., the monophthongization does not result in **huunt*. In the Cupan languages the word for ‘bear’ is the augmentative of the word for ‘badger’, as seen in (3).

(3)		bear	badger	badgers
	a.	LU <i>hun-wu-t</i>	<i>huuna-l</i>	–
	b.	CU <i>hun-wy-t</i>	<i>huna-l</i>	–
	c.	CA <i>hun-we-t</i>	<i>huna-l</i>	<i>hun-la-m</i>

This relationship no longer holds in Serran, where the word for ‘badger’, SE *huuna-v-t*, KI *huuna-vi-t*, is a secondary development, with the suffix *-vi* appended to the synchronically unanalyzable stem for ‘bear’. In TV, the word for ‘bear’, *huuna-r* (3.104.0516), is cognate with the Cupan words for ‘badger’, while the word for ‘badger’, *honaa-r* (3.104.0456), seems to be the result of a sound-symbolic process (cf. 14.13 below). The TV words are paralleled in Hopi, where underived *hoona-w* ‘bear’ corresponds to Cupan ‘badger’, and *hona-ni* ‘badger’ shows secondary developments.¹⁵⁰

The use of the augmentative of ‘badger’ for ‘bear’ probably relates to the special status of the bear, whose “real” name is too sacred (or dangerous) to use. But then things come full circle and the euphemism becomes the new “real” word for ‘bear’. See also the discussion of ‘bear’ and ‘badger’ in 4.2.1, and 14.2.3 (9) for similar comments regarding words for ‘sun’.

Example (2b), *hikaayt* ‘squirrel’, repeated in (4a), may show the full SE form of **-wy-t*, i.e. *-y*. It is cognate with forms in other Takic languages where **w* remains, as seen in (4).

(4)	a.	SE <i>hikaa-y-t</i> ‘California gray squirrel’
	b.	LU <i>\$ukaa-wu-t</i> ‘tree squirrel’
	c.	CA <i>sika-we-t</i> ‘tree squirrel’

¹⁵⁰ Hopi *-w* (*~ -ngw*) is a noun suffix akin in function to the absolutive suffix of Takic. Underlyingly it is *-wy* (*~ -ngwy*), but there is no evidence other than a coincidence of form to link it with the augmentative suffix. The latter element is well represented in Hopi by adjectives in the meanings of ‘big’ and ‘old’. The suffix *-ni* in *hona-ni* remains unidentified.

However, in none of the languages with this etymon is there a corresponding non-augmentative form. This means that if these words indeed contain the augmentative **-wy-t*, it is only a diachronic fact, not a language-internal derivation.¹⁵¹

Example (2c), *\$yt\$yyt* ‘mockingbird’, is related to the word for ‘mouth’, as can be seen in (5).

- (5) SE a. *\$yt\$y-y-t* ‘mockingbird’
 b. *ni-\$yt\$* ‘my mouth’
 c. *a-\$yt\$a-v* ‘in her mouth’

In (5a), the root-final *a* of SE *-\$yt\$(y)* ‘mouth’ (5b) has assimilated in vowel quality to the following remnant *y* of the augmentative suffix, making it fairly clear that ‘mockingbird’ does not represent a synchronic derivation from ‘mouth’, though the relationship between the two remains obvious. This is opposite of the monophthongization seen above in ‘bear’: **ay* > **aa*, and then shortening to *a* (*huunayt* > **huunaat* > *huunat*). Our conclusion must be that synchronically SE no longer has a separable augmentative suffix.

The same metaphor, “big mouth”, is used for ‘mockingbird’ in the Cupan languages, as shown in (6). This is further reason to posit that the SE word for ‘mockingbird’ was similarly derived.

- | | | | |
|-----|----|----------------------|----------------------------|
| (6) | | mockingbird | mouth |
| | a. | LU <i>tamaa-wu-t</i> | <i>tamá-t</i> |
| | b. | CU <i>tamá-wy-t</i> | <i>ny-tamʔa</i> ‘my mouth’ |
| | c. | CA <i>tama-we-t</i> | <i>tama-l</i> |

The augmentative **-wy-t* is still separable in KI, though in reduced form with loss of **w* as illustrated in (7).

¹⁵¹ But see Hill (2008:177) for an alternative analysis according to which the *-wy-t* sequence as in CU *sykáwyt* is not from the historical augmentative.

- (7) KI a. *Juhaha-y-t* ‘older brother of *Juhaha-t*, a mythical personage’¹⁵² (Anderton 1998: 142)
 b. *kakaa-y-t* ‘partridge’ (< *kakaa-t* ‘quail’) (3.98.0036)
 c. *paahina-y-t* ‘big chia’ (< *paahina-t* ‘chia’) (3.98.0149)
 d. *-paa-vuhij-y7* ‘bird sp., ceremonial, feather headband’ (< *puhij-t* ‘roadrunner’ (3.98.0025)

In the Cupan languages augmentative **-wy-t* appears as LU *-wu-t*, AC *-w-t* ~ *-o-t*, CU *-wy-t*, and CA *-we-t*. Kroeber and Grace (1960:80) suspected what we have argued here, that with LU (to which we add CU and CA), this is not the same suffix as that which appears on verb roots designating “occasional agents.”

- (8) LU a. *aana-wu-t* ‘large species of ant’ (< *aana-t* ‘red ant’)
 b. *anoo-vaj-wu-t* ‘great coyote’ (< *ano7* ‘coyote’) (Elliott 1999:120)
 c. *hun-wu-t* ‘bear’ (< *huuna-l* ‘badger’)
 d. *jungáva-wu-t* ‘condor’ (< *jungávi-sh* ‘vulture’)
 e. *nex-wu-t* ‘gourd sp., gourd bottle’ (< *neexi-sh*, a different ‘gourd sp.’)
 f. *waana-wu-t* ‘net connecting heaven and earth’ (also *waana-l*, cf. *woona-l* ‘rabbit net’)
- (9) AC a. *iss-a-t* ‘wolf’ (cf. Inland Cupan *isi-lj* ‘coyote’) (3.121.0685)
 b. *kajoo-w-t* ‘whale’ (< *kajuu-l* ‘fish’) (3.121.0668)
 c. *maan7~mana-w-t* ‘tuna cactus sp.’ (cf. CU *mana-l* ‘beavertail cactus’) (3.121.0060)
 d. *\$aka-w-t* ‘elk’ (< *\$uuk-t* ‘deer’) (3.116.0411)
- (10) CU a. *hun-wy-t* ‘bear’ (< *huna-l* ‘badger’)
 b. *is-wy-t* ‘wolf’ (< *isi-lj* ‘coyote’)
 c. *kaxaa-wy-t* ‘mountain quail’ (< *kaxaa-l* ‘valley quail’)
 d. *kyjú-wy-t* ‘whale’ (< *kyjú-l* ‘fish’)

¹⁵² We have been unable to locate this form in Harrington’s KI field notes. Indeed, in the entries we found, it is stated that *Juhahat* was “the oldest of the five viejos (old ones)” (3.100.0275) among the “first people.” The augmentative *Juhahayt* may appear on a slip that is unreadable in the on-line microfilm archive; Anderton worked from hard copy.

- (11) CA a. *hun-we-t* ‘bear’ (< *huna-l* ‘badger’)
 b. *is-we-t* ‘wolf’ (< *isi-lj* ‘coyote’)
 c. *pal~pala-we-t* ‘s.th flat, like palm leaf’ (< *pala-t* ‘leaf’)
 d. *tuk-we-t* ‘mountain lion’ (< *tuku-t* ‘wildcat’)

14.11.2. CUPAN DIMINUTIVE -MA-L. We have not been able to securely identify any diminutive derivations in TV or the Serran languages. However, the Cupan languages have a diminutive suffix *-ma-l*, grammaticized from **majV*,¹⁵³ probably ‘baby’, which, with added **-sa*, gives **majV-sa* ‘offspring, child’, cf. Serran *-maj-r* ~ *-maj-ha-* ‘son, child’.¹⁵⁴ The ample LU corpus shows the productivity of this suffix with nouns and adjectives. (1d) exemplifies the consonantal sound symbolism that is common in LU diminutives. In this example \$ appears in the diminutive form as s. LU sound symbolism is discussed in 14.13.

- (1) LU a. *a\$-ni-ma-l* ‘initiated boy’ (< *a\$-ni-sh* ‘initiated boy’)
 b. *jo-ma-l* ‘largish’ (< *jo-t* ‘big’)
 c. *kihat-ma-l* ‘very small’ (< *kihaa-t* ‘little (of animates)’)
 d. *kii-xala-ma-l* ‘old house’ (< *kii-cha* ‘house’, *-xala* ‘old’)
 e. *sam-mawi-ma-l* ‘somewhat grassy’ (< *\$am-mawi-sh* ‘full of grass’)
 f. *\$e7-la~la-ma-l* ‘small spear’ (< *\$e7-la7a-sh* ‘arrow, spear’)
 g. *ujó-ma-l* ‘one who robs a little’ (< *ujó-t* ‘thief’ [*<oyó-t>* in Elliott 1999])

In AC, alongside the noun diminutives (2a-c), the suffix can appear in adjectives, as in (2d-g). The color pair in (2g) is a diminutive formation that is not attested in LU.

- (2) AC a. *ajh-ma-l* ‘crazy’ (3.123.0254)
 b. *anoo-ma-l* ‘little coyote’ (cf. *ano7* ‘coyote’)
 c. *kajuu-ma-l* ‘little fish’ (cf. *kajuu-l* ‘fish’) (3.116.0277)
 d. *malo~mlu-ma-l* ‘blue’ (3.124.0117) (cf. *malo~mla-ch* ‘green’ (3.122.0209))

¹⁵³ The reconstructed **j* of **majV* is retained in the LU allomorph *-maj*, which occurs in all environments except immediately before the absolutive suffix (cf. 4.4.2). **majV* also occurs in Cupan words for bearing a child, e.g., CA *majlju* ‘give birth’.

¹⁵⁴ The kin-term formative **-sa* appears as *-r* ~ *-ha-* in various other Serran kin terms as well, as in SE *-paa-r* ‘older brother’, *-qoo^R-r* ‘older sister’, *-taa-r* ‘maternal uncle’; plurals are *-paa-ha-m*, *-qoo^R-ha-m*, *-taa-ha-m*.

- e. *sosk-ma-l* ‘small sp. of nettle’ (cf. *\$okojh-l* ‘large nettle’) (3.122.0047)
- f. *\$aa~\$ax-ma-l* ‘stingy’ (3.121.0467)
- g. *tooqa-ma-l* ‘very slow, lazy’ (3.124.0084)

Diminutive *-ma-l* is not productive in CU, neither for Paul-Louis Faye’s consultants in 1919-1921, 1927 nor for Roscinda Nolasquez who worked with J. Hill in the 1960s. There are examples of words ending in *-ma-l*, but not all of these sequences reflect diminutives. Examples in the “container” vocabulary appear in (3).

- (3) CU
- a. *chay-ma-l* ‘medium-size round basket’ (also ‘mistletoe’)

The non-diminutive form, *chaya-l*, is also used for ‘mistletoe’, and it occurs as well in *pa-l* *chaya-l* ‘algae’.
 - b. *kavá7-ma-l* ‘pot’
 - c. *ljyvát7i-ma-l* ‘large flat basket, winnowing basket’
 - d. *tivi7-ma-l* ‘small basket’ (< *tivi-lj* ‘mushroom sp.’)

A few small bird names end in *-ma-l*, as in (4).

- (4) CU
- a. *chiit-ma-l* ‘bush tit’ ¹⁵⁵
 - b. *kyjýjyk-ma-l* ‘nighthawk’
 - c. *mukík-ma-l* ~ *wukík-ma-l* ‘small bird (any kind)’

A “large” CU bird also appears with the *-ma-l* suffix: *kwava7-ma-l*. This is described as “a big spotted bird that cries in the night and brings bad news.”

There are a few paired items in CU, shown in (5), but with irregularities (5b,c).

- (5) CU
- a. *muu-ma-l* ‘spotted owl’ ¹⁵⁶ (< *muu-t* ‘great horned owl’)
 - b. *nawísh-ma-l* ‘girl’ (< *nawi-lj* ‘young lady’)
 - c. *qichi7-ma-l* ‘abalone shell’ (< *qichi-lj* ‘money’)

¹⁵⁵ Chit’-mal ‘bush tit, *Psaltriparus*’, C. H. Merriam’s Indian Vocabularies 60:263, from “Koopah”, Warner Valley, CA

¹⁵⁶ moo’-mahl ‘spotted owl, *Syrnium*’, C. H. Merriam’s Indian Vocabularies 60:257, from “Koopah”, Warner Valley, CA

CA has no large/small pairs. Seiler (1977:102) notes an example in the container vocabulary where the suffix is used for the larger member of a pair: (6b) *kaputmal* ‘big basket’. This word was later reported to mean ‘round basket’ (Seiler & Hioki 1979:71).

- (6) CA a. *chipat-ma-l* ‘little basket’ (cf. SE *chipat* ‘basket’ [$< *chipata-t$])
 b. *kaput-ma-l* ‘big basket/round basket’ (*kaputi-lj* ‘small round basket’)

The sequence *-ma-l* appears in a few CA animal names, as in (7), but no paired items are attested. It is unlikely that that two roots cited in (7b) are the same.

- (7) CA a. *aja-ma-l* ‘raccoon’
 b. *awa-ma-l* ‘crow-like small black bird’ (cf. *alwe-t* ‘crow’)¹⁵⁷
 c. *wikik-ma-l* ‘bird’

LU and CU have paired reciprocal junior and senior kin terms, where the junior relative term has the diminutive suffix. Examples appear in (8) and (9). In LU, the possessed form of *-ma-l* is *-maj* (cf. 4.4.2).

- | | | | |
|-----|----|---|---|
| (8) | LU | junior | senior |
| | a. | <i>-ka7-maj</i> ‘woman’s daughter’s child’ | <i>-ka7</i> ‘paternal grandmother’ |
| | b. | <i>-kamú-maj</i> ‘man’s younger brother’s child’ | <i>-kmu</i> ‘father’s older brother’ |
| | c. | <i>-kwa7-maj</i> ‘man’s daughter’s child’ | <i>-kwa7</i> ‘maternal grandfather’ |
| | d. | <i>-mas-maj</i> ‘younger brother’s child’ | <i>-ma\$</i> ‘father’s younger brother’ |
| | e. | <i>-no\$-maj</i> ‘woman’s younger sister’s child’ | <i>-no\$</i> ‘mother’s older sister’ |
-
- | | | | | |
|-----|----|----|---|--------------------------------------|
| (9) | CU | a. | <i>-kumú-ma</i> ‘man’s younger brother’s child’ | <i>-kum</i> ‘father’s older brother’ |
| | | b. | <i>-kwa-ma</i> ‘man’s daughter’s child’ | <i>-kwa</i> ‘mother’s father’ |
| | | c. | <i>-qa-ma</i> ‘son’s child’ | <i>-qa</i> ‘father’s father’ |
| | | d. | <i>-\$u-ma</i> ‘woman’s daughter’s child’ | <i>-\$u</i> ‘mother’s mother’ |

CA does not have this system. Only one kin term, *-sunga-ma* ‘man’s child’, has the diminutive suffix (cf. LU *\$ungaa-l* ‘wife’). The CA grandchild terms share roots with the

¹⁵⁷ Merriam gives $<al'-wum-mal>$ ‘crow, *Corvus brachyrhynchos*’, and $<al'-wut, ahl'-wut>$ ‘raven’, C. H. Merriam’s Indian Vocabularies 60:227, from $<pow'-w-wam>$, Cahuilla Valley (a Mountain Cahuilla community).

grandparent terms, but have a suffix *-la* instead of *-ma*, as seen in (10). The source of *-la* has not been determined.

- | | | | | |
|------|----|----|--|-------------------------------|
| (10) | CA | a. | <i>-kwa-la</i> ‘man’s daughter’s child’ | <i>-kwa</i> ‘mother’s father’ |
| | | b. | <i>-qa-la</i> ‘son’s child’ | <i>-qa7</i> ‘father’s parent’ |
| | | c. | <i>-su-la</i> ‘woman’s daughter’s child’ | <i>-su7</i> ‘mother’s mother’ |

In LU, AC, and CU, *-ma-l* appears on names of months or seasons. Each of the names is paired, with a ‘big’ and ‘little’ month or season, as in (11) and (12). The month names are discussed in more detail below at 14.12.1.

LU forms (11c,d) show diminutive sound symbolism in the appearance of *s* in diminutive vs. *ʃ* in the base form. Example (11d) also shows vowel shortening in the first element. This pattern of vowel shortening in roots in the presence of diminutive suffixes is well represented in Nahuatl and Hopi, but rare in Takiic. The reduction of *-moji-* to *-u-* in (11b) attests to the developing opacity of these compound forms. For more on Takiic compounding, see section 14.12, and 14.12.1 in particular for month names.

- | | | | | |
|------|----|----|---|---|
| (11) | LU | a. | <i>Tas-moj-ma-l</i> ‘Little First Month’ | <i>Tas-moji-l</i> ‘Big First Month’ |
| | | b. | <i>Tawn-u-ma-l</i> ‘Little Second Month’ | <i>Tawn-uji-l</i> ‘Big Second Month’ |
| | | c. | <i>Tawsan-ma-l</i> ‘Little Third Month’ | <i>Tawʃana-l</i> ‘Big Third Month’ |
| | | d. | <i>Som-moj-ma-l</i> ‘Little Eighth Month’ | <i>ʃoom-moji-l</i> ‘Big Eighth Month’ |
| | AC | e. | <i>Aawi-cha-ma-l</i> ‘October’ (Boscana 1933:66, 189) | <i>Aawi-t</i> ‘November’ (Boscana 1933:66, 189) |

The CU month names in (12) also divide as little and big. The first element of (12c) is the CU verb *tawʃan* ‘thunder’. The CU suffix *-xi-* in (12) is not otherwise attested. For a complete list of the CU months, see 14.12.1 (5, 6).

- | | | | | |
|------|----|----|---------------------------------------|-------------------------------------|
| (12) | CU | a. | <i>Taʃpa7-ma-l-pa</i> ‘Little Spring’ | <i>Taʃpa7-xi-sh-pa</i> ‘Big Spring’ |
| | | b. | <i>Tawpa7-ma-l-pa</i> ‘Little Summer’ | <i>Tawpa7-xi-sh-pa</i> ‘Big Summer’ |
| | | c. | <i>Tawʃanva7-ma-l</i> ‘Little Autumn’ | <i>Tawʃanva7-xi-sh</i> ‘Big Autumn’ |

CA does not have this morphologically-marked system of little and big months or seasons.

14.11.3. ABSENTATIVE SUFFIX SEQUENCE *-PI-T ‘LACKING, WITHOUT’. An absentative suffix sequence **-pi-t*, usually realized as *-vi-t*, but as Cupan *-vi-sh*, appears in all the Tactic languages, following noun roots to indicate a lack of the property encoded in the noun.¹⁵⁸

TV has a more general suffix *-pe7* ~ *-ve-t* (with underlying vowel *i*) that derives deverbal adjectives, e.g. *teroor-pe7* ‘broken’ (< *teroor-k-ena-x* ‘break (tr.)’). It is difficult to be sure of these examples since the source verb is nearly always unattested. However, the meanings of the examples in (1) suggest that they belong to the noun + *-pi7* set, especially in examples like (1c,d) where the source noun is known. Regarding (1a,b), Harrington notes that his consultant Jesús Jauro stated that the word in (1b) is more polite than the word in (1a), which is “para reir no más” (just for joking). In (1f), *reoo* is not the TV word for ‘hair’, which is *-poaa-n*, unique to TV. However, a suggested possible source, *-juu* ‘head, hair’, is a widespread Uto-Aztecan etymon which also appears in the Cupan languages.

- (1) TV a. *het\$uux-pe7* ‘tuerto (one-eyed, blind in one eye)’ (said of one’s eye, *-t\$oot\$on*, cf. *het\$uuxpe7 at\$oot\$on* ‘es tuerto’) (3.104.0334)
 b. *a-huu-pe7* ‘tuerto’ (3.103.0073)
 c. *moaa7-pe7* ‘crazy, loco’ (3.105.0147) (< *moaa-r* ‘moon’ (3.102.0503))
 d. *a-puu\$-pe-ro-t* ‘without strength, weak’ (3.103.0767) (< *(ne-)puu\$-te-n* ‘(my) strength’ (3.105.0070))
 e. *a-piivt\$-ve-t* ‘female that does not have much milk’ (cf. *(ne-)piivt\$-o7* ‘(my) breast [milk]’) (3.103.0608)
 f. *reoo-pe7* ‘bald’ (3.105.0158) (< **juu* ‘hair?’; cf. also *-jy-* in SE *-ajy7* ‘head, hair’; cf. also *reoo7enax* ‘cut hair, shear’ (3.105.0084), KI *rioo7in* ‘shear’ (3.98.0283), and LU *riwi7* ‘be bald’)

Serran examples appear in (2) and (3).

- (2) SE a. *huwawy-vi-t* ‘blind’ (< *huvaa-ch* ‘eye’)
 b. *qava^Rvo^R-vi-t* ‘deaf one’ (< *qavaa^R-ch* ~ *qa^Rvaa-ch* ‘ear’)

¹⁵⁸ This suffix also appears in Tübatulabal (Voegelin 1935:163-4).

- (3) KI a. *huvawa-vi-t* ‘blind’ (< *-uva* ‘eye’) (3.98.0102)
 b. *kavaawa-vi-t* ‘deaf’ (< *-kavaa* ‘ear’) (3.98.0102)
 c. *Ty7u-vi-t* ‘personal name means “never had child” ’ (3.98.0602) (source word unknown, but cf. PUA **tu7aC* ‘bear son, child’)

In KI the suffix also appears as *-wi(7)*, as in (4). In (4b) it is involved in the derivation of a denominal verb.

- (4) KI a. *\$ii-wi-n* ‘gut a carcass’ (3.100.0481) (< *(ni-)\$i* ‘(my) guts’ (3.98.0349))
 b. *toxox a-hung-wi7* ‘he is a stutterer’ (lit. ‘fool without language’) (3.98.0451) (< *hungu-ts* ‘language, word’ (3.100.0364))

LU has several attestations of constructions with *-vi-sh*, as in (5). Most of them show reduplication. Example (5f) appears to have a verb as the root.

- (5) LU a. *ataax-vi-sh* ‘empty, without people’ (< *ataax* ‘person’)
 b. *ja~ja-vi-sh* ‘poor runner’ (< *ja7* ‘run’)
 c. *kaa~ka-vi-sh* ‘not having a paternal grandparent’ (< *-ka7* ‘paternal grandparent’)
 d. *kuu~kung-vi-sh* ‘unwed woman’ (< *-kung* ‘husband’)
 e. *mi~mlu-vi-sh* ‘weak’ (< *milú-t* ‘strength’)
 f. *naa~naq-vi-sh* ‘deaf, ill-behaved’ (< *-naq* ‘ear’)

- (6) AC a. *ataax-va-ch* ‘empty (lit. without people)’ (3.123.0375) (< *ataax* ‘person’ (3.121.0783))
 b. *naa-nq-va-ch* ‘sordo (deaf)’ ¹ (3.124.0282) (< *naaqam* ‘ear’ (3.124.0268))
¹ This word was recorded by Arthur E. Harrington as <naan’kwitʃ> ‘sordo, also i.e. travieso (mischievous)’. We have reconstructed the form. Arthur Harrington over-heard glottalization. There is variation between *w* and *v* in J. P. Harrington’s notes as well.

CU has few attestations, but the suffix is clearly present. (7d) shows a form without the usual lenition to *-vi*.

- (7) CU a. *a\$7a-vi-sh* ‘deserted’ (< *a\$7a* ‘wear, put on’, cf. *a\$7ava* ‘naked’)
 b. *ii-vi ~ pi7ii-vi* ‘without’ (< *ii* ‘this’)
 c. *palju-vi-sh* ‘colicky’ (< *pa-lju* ‘get water?’)

- d. *pushqy-pi-sh* ‘blind’ (< *-push* ‘eye’)
- e. *a\$a-v-7a* ‘naked, empty-handed, bare’ (< *a\$a* ‘wear clothes, get dressed’)

CA does not use the absolutive *-vi-sh* sequence for this sense, using instead *i7i-ve* ‘without, lacking this’, the equivalent of the CU *ii-vi* seen in (7b).

- (8) CA
- a. *hé-push i7i-ve* ‘blind’ (his-eyes without)
3SG-eye this-LACKING
 - b. *naq i7i-ve* ‘deaf’ (ear without)
3SG.ear this-LACKING

14.12. COMPOUNDING. Noun compounds are uncommon in the Takic languages, with many of the examples being “frozen forms which are the residue of some obsolete rule” (Anderton 1988:145). The not-so-frozen examples are concentrated in certain semantic domains. These will be studied across the Takic languages before taking up compounding as found in the individual languages.

14.12.1. TAKIC MONTH VOCABULARY. All the languages all have compound names for months. The system had fallen into disuse before twentieth-century vocabulary collection such that for most of the languages only a few of the month names were recovered. The system itself, though probably of post-Proto-Takic age, must be quite old in that it retains a number of archaisms. But at the same time, there are signs of recent borrowing.

The three attested TV names for months containing the root ‘moon’ are given in (1). Only one of these names, (1a), has the expected *-r* form of the absolutive, as in TV *moaa-r* ‘moon’. Two of the names, (1b,c), have the *-t\$* absolutive as in Serran. These look very much like borrowed forms, cf. Serran *myaa-t\$* ‘moon’ and the examples in (2) and (3). If indeed they are borrowed, the substitution of TV *o* for SE *y* simply reflects the difference between the vowel systems of the two languages.

- (1) TV
- a. *\$ekwaa-moaa-r* [cold-month-ABS] ‘said to mean ‘harvest time, when seeds and fruits are ripe’ (Harrington wrote <-moor> for the second element.)
(3.105.0408)

- b. *Jaama-moaa-t\$* [sprout-month-ABS] ‘March. Means it is tiempo de brotar (time of sprouting), from S. yámay [SE *jaama-j*], brotar (sprout).’ (3.103.0738)
- c. *\$oo-moaa-t\$* [flower-month-ABS] ‘from word for flower, mg. mes florido (meaning flowery month)’ (3.103.0738)

Only a few Serran month names have been identified, given in (3) and (4). Apart from the vowel adjustment mentioned above, the SE forms in (2) are the same as the TV forms in (1b,c).

- (2) SE a. *Jaama-myaa-t\$* [sprout-month-ABS] ‘March’
- b. *\$yy-myaa-t\$* [flower-month-ABS] ‘April’

- (3) KI a. *\$ikwa-myaa-t\$* [cold-month-ABS] ‘the month that Christmas is in’ (3.98.0086)
- b. *Jaa(m)-myaa-t\$* [sprout-month-ABS] ‘March’ (3.98.0086)
- c. *\$yy-myaa-t\$* [flower-month-ABS] ‘March’ (3.98.0303)

LU month names come in doublets, contrasting *-muji-l*, for the “big” month, and *-moj-ma-l*, the “little” month, cf. 14.11.2 (11) above. Only “big” month forms are shown in (4). The etymologies of many of the month names are obscure, as indicated by question marks. (4g) is probably a contraction of (4h).

- (4) LU a. *Tas-muji-l* [?-month-ABS] ‘big first month, ca January’
- b. *Tawn-uji-l* [?-month-ABS] ‘big second month’
- c. *Taw\$ana-l* [thunder-ABS] ‘big third month’ (cf. CU *taw\$an* ‘thunder’)
- d. *Nuvaan-uji-l* [get.fat-month-ABS] ‘big fifth month’ (<noova> ‘get fat, of animals’) (<nováanoy-il> in Elliott 1999)
- e. *Neem-muji-l* [return-month-ABS] ‘big seventh month, ca October, November’ (<neemax/i> ‘return’)
- f. *\$oom-muji-l* [?-month-ABS] ‘big eighth month, ca December, January’ (cf. *-\$oomawish* ‘abloom, flower-covered’, <-\$oo> ‘flower’ and maybe *-ma* ‘diminutive’)
- g. *Paax-uji-l* [?-month-ABS] ‘a month’ (<páaxoy-il> in Elliott 1999)

- h. *Paaxu-muji-l* [young.jackrabbit(?)*-month-ABS*] ‘springtime’ (cf. *paaxu-l* ‘young jackrabbit’ [Elliott (1999:676) comments: “refers to young jackrabbits which were apparently all born in the spring.” Whether the young jackrabbits were named after the month or vice versa is unknown.]])

In LU, the word for ‘month, moon’ is the long absolutive form *moj-la*, acc. *mooji-l*. However, many LU month names are compounds with *-muji-l*, which is sometimes clipped to *-uji-l*. One name, (4c), seems to have lost the *mooji-l* component entirely. The form *-muji-l* might be understood as manifesting an instance of the suffix **-i-l* (cf. 14.9.3). If so, since LU does not otherwise have the **-i-l* suffix, the explanation could be that those month names are borrowed from CA or CU.

The explanation, though, almost certainly has to do with the survival of archaic forms in names, rather than with derivational suffixation. The “long absolutives” are a LU innovation, though the diachronic explanation for their development remains to be understood. The corresponding accusatives, with short absolutives, are of the form of the nominative in cognate languages and probably represent what was once the nominative form of these nouns, in pre-Luiseño. The archaic nominative, *moojil*, which is accusative in present-day LU, appears as the combining form *-mujil* in the month names.

A complete set of the AC month names was collected by Boscana in the early 19th century. Harrington, working in the 1920s and 1930s and pushing his consultant “Acú” to the point of exasperation, was unable to confirm Boscana’s very obscure transcriptions, but some of these include the element *-ma-l* (Harrington 1978[1933]:188-189).

In CU the ordinary word for ‘moon’ is *myni-lj*, but the second element in some of the month names is *-muj-* (5e, 6b,c), *-muji-lj* (5f), and *-myji-lj* (6a). The expected CU form *-meni-lj* appears in (6d). The yearly cycle of CU months is given in (5). The ceremonial months given in (6) were apparently used as needed, but whether they were simultaneous with selected months of (5) or run contemporaneously with them is unclear from the information available (summarized in Hill & Nolasquez 1973:111[2005:197]). Much of the complex morphology of the month names is rather opaque. As mentioned above, diminutive *-ma-l* is clear in the names of the “little” months, but we have not been able to identify *-xi-* in the “big” month names.

- (5) CU a. *Pivi7mukmal* ‘Little Ghost Month (the beginning of the year; it follows Big Autumn (5m))’
 b. *Pivi7mukxish* ‘Big Ghost Month’
 c. *Tami7va7malpa* ‘Little Winter’
 d. *Tami7va7xishpa* ‘Big Winter’
 e. *Ni-múj-malpa* ‘Little “April” ’
 f. *Ni-múji-lj-pa* ‘big “April” ’
 g. *Ta\$pa7malpa* ‘Little Spring’
 i. *Ta\$pa7xishpa* ‘Big Spring’
 j. *Tawpa7malpa* ‘Little Summer’
 k. *Tawpa7xishpa* ‘Big Summer’
 l. *Taw\$anva7mal* ‘Little Autumn’
 m. *Taw\$anva7xish* ‘Big Autumn’
- (6) CU a. *syxy7-myji-lj* ‘burning month’ (cf. *syx* ‘burn’)
 b. *Syxy7-muj-ma-l* ‘Little Burning Month’
 c. *Syxy7-muj-xish* ‘Big Burning Month’
 d. *\$y\$xá-myni-lj* ‘[month of the] burning of goods’

While we have no explanation for the vowel *u* in *-muj-* and *-muji-lj*, the form *-myji-lj* in (6a) might be understandable as a result of LU influence in CU. However, we feel this hypothesis is unnecessary. Again the explanation seems to lie in the survival of an archaic form. The Proto-Cupan root for ‘moon’ is **myyji*; cf. LU *moj-la*, acc. *mooji-l*. The *n* found in CU *myni-lj*, CA *meni-lj*, which replaces **j*, is an Inland Cupan innovation. The final *i* in Proto-Cupan **myyji* is also innovative; other Uto-Aztecan languages attest to PUA **a*. Proto-Northern Uto-Aztecan **myyja-L* appears, with loss of the medial glide, as TV *moaa-r*, Serran *myaa-t\$*. The full NUA proto-root remains unchanged in (non-Takic) Tübatulabal *myyja-l* and Hopi *myyja-w*.¹⁵⁹

The CA words in (7) are from Hooper (1920:362), who wrote them as separate elements, as given here (in normalized spelling). However, the first elements are clearly not complete CA words, so these month names should also be written as compounds.

¹⁵⁹ The Numic languages also suffer glide loss in ‘moon’; Ianucci (1973:108) reconstructs Proto-Numic **my7a(h) ~ *myha(h)*.

- (7) CA a. *seja menilj*
 b. *tawe menilj*
 c. *to menilj*
 d. *sa menilj*

14.12.2. THE TWO ELEMENTS PAA-, ‘GREAT’ AND ‘WATER’. A second kind of compound-like formation shared across the languages involves an augmentative first element *paa-* ‘great’, usually having reference to a big member of some category. This element seems to be more productive than the augmentative suffix noted in 14.11.1. *Paa-* is nowhere found in any adjective for ‘big’ and appears only as a first element in nouns. It may be related to **-paa7* ‘older brother’, though the derivational direction, if they are related, cannot be determined. Examples are given in (1)-(6) and are discussed below.

- (1) TV a. *paa-7a\$aaw-t* [great-eagle-ABS] ‘a bird sp.’ (3.105.0151)
 b. *paa-huuna-r* [great-bear-ABS] ‘the great bear’ (a song word) (3.105.0473)
 c. *paa-kijuu-r* [great-fish-ABS] ‘whale’ (3.103.0720)
 d. *paa-makaaho7* [great-mourning.dove] ‘[the kind of] wild dove that is bigger’ (3.104.0344)
 e. *paa-\$okaa-t* [great-deer-ABS] ‘elk’ or ‘horse’ (3.103.0129)
 f. *paa-wii\$o7* [great-vulture] ‘California condor’ (3.103.0714)
- (2) SE a. *paa7-a^Rt\$aw-t* [great-crow-ABS] ‘raven’
 b. *paa-hukah-t* [great-deer-ABS] ‘elk’
 c. *paa-juhaa-t\$* [great-ponderosa.pine-ABS] ‘Douglas fir’
 d. *paa-kihUU-t\$* [great-fish-ABS] ‘whale’
 e. *paa-nahu-t\$* [great-snake(?)-ABS] ‘California king snake’ (cf. *taahu-t\$* ‘red racer’)
 f. *paa-wiruk-t* [great-vulture-ABS] ‘condor’
- (3) KI a. *paa-hanga-7a-t\$* [great-bee(?)-ABS] ‘bee sp. bigger than *hanga-t\$*’ (3.98.0135)
 b. *paa-hukah-t* [great-deer-ABS] ‘great-deer’ ‘elk’ (3.98.0105)
 c. *paa-hu-t\$* [great-wood;arrow-ABS] ‘a large pine species, pino colorado’ (3.99.0160)

- d. *paa-nahu-t\$* [great-snake(?) -ABS] ‘water snake, great snake that circles the globe’ (3.98.0069) (cf. *taahu-t\$* ‘gopher snake’ (3.99.0309))
- e. *paa-vuhiy-t* [great-roadrunner -ABS] ‘bird sp.’ (3.98.0150) (cf. *puuhiy-t* ‘roadrunner’ (3.98.0114))
- f. *paa-wirukuh-t* [great-vulture -ABS] ‘condor’ (3.98.0111)
- (4) LU a. *paa-7aja-t* [great-(rattle) -ABS] ‘turtle shell rattle’
- b. *paa-kuka-t* [great-spider -ABS] ‘trap-door spider’ (cf. *kuka-t* ‘black widow’)
- c. *paa-naqwu-t* [great-sumac -ABS] ‘type of sumac that grows 6-8 feet high’ (cf. *naqwu-t* ‘sumac [the “normal”-size kind]’)
- d. *paa-navu-t* [great-prickly-pear -ABS] ‘*Mesembryanthemum* spp., sea fig’ (cf. *naavu-t* ‘prickly pear’)
- e. *paa-\$uka-t* [great-deer -ABS] ‘elk’ (cf. *\$uuka-t* ‘deer’)
- f. *paa-vichuk-ma-l* [great-(?) -DIM -ABS] ‘a type of large butterfly’
- g. *paa-viva-t* [great-tobacco -ABS] ‘wild tobacco’ (cf. *piiva-t* ‘tobacco’)
- (5) CU a. *pa-\$ywy-t* [great-snake -ABS] ‘water snake’ (cf. *sywy-t* ‘rattlesnake’)
- b. *pa-\$uka-t* [great-deer -ABS] ‘horse’
- (6) CA a. *pa-siva-t* [great-flint -ABS] ‘knife, sword’
- b. *pa-sna-t* [great-gum -ABS] ‘tar, pitch’ (cf. *saana-t* ‘gum’, with secondary vowel lengthening)
- c. *pa-suka-t* [great-deer -ABS] ‘elk’

In one CU example, (5b), one is aided in identifying the preposed *pa-* as ‘great’ by sound symbolism, the substitution of augmentative \$ for the non-augmentative *s* of underlying *sywy-t* ‘rattlesnake’, even though *pa\$ywy-t* is identified as some kind of water snake (but presumably a large kind).

Example (4f), LU *paa-vichuk-ma-l* ‘a type of large butterfly’ has both the augmentative prefix and the diminutive suffix *-ma-l*. Unfortunately the corresponding form without augmentative *paa-* is unattested. However, *paavichukmal* can itself be elaborated with an augmentative suffix (*paa-vichuk-may-wu-t*) or by a second diminutive suffix (*paa-vichuk-may-ma-l*).

A problematic example for the interpretation of *paa-* as ‘big’ is a word for a kind of hawk, in (7). The uncompounded root, from **kiisa*, though with a changed root-final

vowel, appears in CU/CA *kisi-lj*, described for CA as “bigger than *kwa7al*,” another raptor. However, the CA evidence is not particularly useful since elsewhere the root in CA *kwa7al* designates a large raptor. The SE cognate of *kwa7al* is *kwa7tʃ*, which designates the largest kind of hawk, and beyond Takic we find the cognates Nahuatl *cuāuhtli* [kwa:wɬli] ‘eagle’ and Hopi *kwaajo* ‘large hawk’. The unprefixd, unmodified root of the forms found in (7) is found in Hopi *küsa* ‘chicken hawk, falcon’ (larger than *kjeele* ‘sparrow hawk, kestrel’, smaller than *kwaajo*). The forms in (7) may contain what was once **paa-* ‘great’, but it no longer seems to be analyzable in this combination. In TV it is no longer even a stressable part of the word. If the LU form is correct (it is found with *-sh-*, not *-\$-*, in both Bright 1968 and Elliott 1999), the root has become restructured with *ch-/sh* replacing etymological **s*.

- (7) a. TV *pakii\$ar* ‘chicken hawk’ (3.102.0458)
 b. SE *paakihat\$* ‘chicken hawk, a small kind of hawk’
 c. KI *paakihat\$* ‘hawk sp.’ (3.98.0080)
 d. LU *paakishla* ‘chicken hawk, prairie falcon’ [accusative unknown]
 e. AC *paaksl* ‘bullet hawk’ (3.116.0361) ¹

¹ The final *l* in this form is represented by Harrington with <ł>, a devoiced variant attested in several other nouns with a final sequence sibilant-*l*, e.g. *waqchl* ‘meloncilla, wild mullein’ (3.121.0489), *a\$l* ‘pamita, a seed plant’ (3.121.0462), *esl* ‘vidrillo, a plant’ (3.121.0492), *qexl* ‘yellow abalone’ (3.116.0057).

Many instances of *paa-* have been mistakenly glossed as ‘water’. On careful inspection, it appears that there are few examples to support a ‘water’ sense. The LU (and AC) word for tortoise shell rattle, *paa-7aja-t* (4a), is misleadingly glossed as a ‘turtle shell rattle’. Since turtles are associated with water in English, *paa-* here looks like a clear instance of *paa-* ‘water’. However, ethnographic knowledge informs one that ceremonial rattles are of (desert) tortoise shell and tortoises are most definitely not associated with water. Unfortunately, LU words for ‘gourd rattle’ or ‘baby rattle’ are unattested. One or both of them may have provided the missing uncompounded form *aaaja-t** or *aj-ta**. Stubbs (2011, #2141) reconstructs PUA **ajaw* ‘squash, gourd’, from which rattles were made in some UA groups, with a SE reflex, *aaaj* ‘rattle’. Alternatively, the compound *paa-7ajat* might be literally ‘tortoise-rattle’ since the LU word for ‘tortoise, turtle’ is *paa7i-la*, and in the instance of *paa7ajat*, perhaps *paa-* represents a reduction of expected *paa7i-*. *Paa7ila* itself

looks like it might be a compound, but even if *paa-* can be identified as ‘great’ or ‘water’ here, the component *-7i-* remains unidentified. Note that pond turtles are culturally insignificant in the Takic area. The SE word given for ‘water turtle’ is the lexically unrelated *ju7aat\$*. However, the LU word *paa7ila* (AC *paa7al*) ‘tortoise, turtle’ is not restricted to land tortoises, as can be seen in the usage *paa7ila momngawish* ‘sea turtle’.

Examples where *paa-* probably really is ‘water’ appear in (8). In (8a,b) the Serran languages do not have the free-standing root **kwini-*, e.g. TV *kwenaar* ‘mud’. The rhotic feature in the SE example (8a) may serve to differentiate the combining form of *paa-t\$* ‘water’ from *paa-* ‘big’. Rhotic *paa^R-* ‘water’ is also found in SE *paa^R-v-k(y)* [water-become-K] ‘get wet, become watery’. Example (8c) is not conclusive of either analysis, whether ‘great’ or ‘water’. It seems doubtful though that the *paa-* of (8c) should be regarded as a derivational example of reduplication. Example (8d) seems like a possible instance of the association of *paa-* with the sense ‘water’, but the derivation is quite unclear. As for example (8e), raccoons are associated with water habitats. This seems more like to have been the salient feature than any size (or greatness) comparison with the coyote, assuming our identification of the *-7iha-t\$* component of the compound is correct. Serran ‘coyote’ is *wahi7*.

- (8) a. SE *paa^R-kwini-t* ‘mud’
 b. KI *paa-kwini-t* ‘mud’ (3.98.0014)
 c. KI *paa-vahata-t* ‘bladder’ (3.99.0256) (cf. *pahatat* ‘canteen, basketry water jug’ (3.98.0021))
 d. KI *paa-vovo7a-t\$* ‘tadpole’ (? *povo* ‘kidney’) (3.98.0118)
 e. KI *paa-7iha-t\$* ‘raccoon’ (perhaps from **iisa-L* ‘coyote’, not independently attested in Serran) (3.99.0363)

14.12.3. COMPOUNDS WITH **QAWII* ‘ROCK/MOUNTAIN’. A metaphor for ‘molar’ as “rock tooth” appears to have arisen more than once, as in (1). The CA form (1c), however, is not a compound noun. The Serran forms show lenition of the initial *t* of the second component, **tama* ‘tooth’, attesting to the antiquity of the compound. The sense ‘rock’ for the independent word *qaii-ch* is obsolete in SE and Harrington’s consultant said that example (1a) meant literally “mountain tooth”.

- (1) a. SE *-qaii-t\$am* [rock-tooth] ‘molar’
 b. KI *-kay-t\$ama* [rock-tooth] ‘molar’ (3.98.0356)
 c. CA *-tama7 qawi-sh* [tooth rock-ABS] ‘molar’

The root *qawii-*, ‘rock, mountain’ appears as the initial component in a few compounds, as in (2).

- (2) a. LU *qawii-7alwu-t* ‘raven’ (cf. *alwu-t* ‘crow’)
 b. AC *qawii-7ala-t* ‘raven’ (3.116.0360)
 c. LU *qawii-tok-la* ‘mountain tokla’ (cf. *tok-la* ‘a plant’)
 d. CU *qawi-7alwy-t* ‘raven’ (cf. *alwy-t* ‘crow’)

To the examples in (2) might be added SE *qaii-yky-jam* [mountain-lie-PL] ‘Mountain Cahuilla’, a noun + verb compound.

In SE, *qaii-ch* as a final member of a compound occurs in the names of a few mountain peaks, given in (3).

- (3) SE a. *Aja-qaii-ch* ‘Mount San Gorgonio’
 b. *A^{Rt}\$aw-qaii-ch* ‘Slover Mountain, the cement hill at Colton’
 c. *Kwiri-qaii-ch* ‘Mount San Jacinto’

In (3a), *a^{Rt}\$aw-* is from *a^{Rt}\$aw-t* ‘crow’, but the first elements of (3b,c) are not recognizable in SE. *Aja-* in (3b) seems to be from unattested CA *aja-l**,¹⁶⁰ the non-diminutive of DCA *aja-ma-lj* ‘raccoon’. No source has been identified for *kwiri-*, the first element in (4c).

14.12.4. KIN TERM COMPOUNDS. A final domain where compounds (and pseudo-compounds) are fairly common is in the terms for affinal kin, where, after a married couple has children, their affinal relatives call them by so-called “teknonymous” kin terms, labeling them in reference to the link between the speaker and those children, or as parents, etc., of the children. These have been heard as compounds by collectors,

¹⁶⁰ The CA absolutive is posited as *-l* because TV has the corresponding absolutive in *-r*; cf. “says G. [= TV] raccoon, mapache may be something like *paa-?ejar*” (3.103.0131).

except in LU, where Elliott gives the examples in (4) as separate words. However, the LU 3SG prefix *pa-* is peculiar; the expected form – if they were indeed separate words – would be *po-*. Furthermore, the complement kin terms for the daughter’s children have been clipped of their diminutive suffix. Thus it could be argued that these are compounds as well. J. Hill has heard some of the terms in CU and confirms their phonetic compound nature: stress falls on the head, the final element of the compound (specifically, on its possessive prefix in these examples), and in the complement there is often some phonological simplification. While not all Takic affinal terms have this structure, there are many examples that do, though for completeness we begin with TV and SE which do not.

There are no compounds among affinal kin terms in TV, only syntactic constructions, as in (1).

- (1) TV a. *ne7-iikokwa a7-aa\$o-n* [1SG-son.GEN 3SG-spouse-POSS] ‘my daughter-in-law (my son’s wife)’ (3.104.0332)
 b. *aa-wk ne7-aa\$o-n* [3SG-mother 1SG-spouse-POSS] ‘my mother-in-law (my spouse’s mother)’ (3.105.0117)

The Serran and Cupan forms cited in (2)-(6) apply only after the birth of a child.

The SE constructions in (2) were collected by Edward Winslow Gifford (1922) as unanalyzed single-word expressions. However, they are clearly two-word sequences, with full inflections, including both prefixes and case marking. We omit from the descriptions of the meanings in (2) the complications entailed by the fact that SE parallel cousins are terminological siblings, e.g. *ny-ka7* refers not only to my paternal grandparent but also to any of my paternal grandparent’s siblings or parallel cousins.¹⁶¹

- (2) SE a. *ny-kak a-jy7* [1SG-SoCh.GEN 3SG-Mo] (i) ‘my daughter-in-law (the mother of my son’s child)’; (ii) the reciprocal, ‘my (woman’s) parent-in-law’ (cf. *ny-ka7* ‘my paternal grandrelative, i.e., my son’s child or the reciprocal, my paternal grandparent’)
 kakaiye DI after she bears a ch. The term means “s ch m.”

¹⁶¹ Serrano society was organized in two exogamous moieties, the “Coyotes” and the “Wildcats” (Gifford 1918:178). If I am a “Wildcat”, then presumably any “Wildcat” of my grandparents’ generation is *ny-ka7*.

kakaiyek Wm pl after speaker bears a ch. The term is illogically applied since it means “s ch m.” (Gifford 1922:55) [Gifford gives two spellings for the same SE form. The second spelling is the genitive-case form.]

- b. *ny7-aahir-y7 a-na7* [1SG-MaSSCh-GEN 3SG-Fa] ‘my (man’s) brother-in-law, my (man’s) sister’s child’s father’ (cf. *ny7-aahir* ‘my cross nibbling, my (man’s) sister’s child or my wife’s brother’s child’)

ahidana Mn ss h after ss bears a ch. The term means “mn ss ch f.” (Gifford 1922:56). [The reciprocal is unrelated *ni-taar* ‘my maternal uncle’:] tad M b, m ♂ c (p. 54), F ss h. (Gifford 1922:55).

- c. *ni-chuuri7-t a-na7* [1SG-WoDaCh-GEN 3SG-Fa] ‘my (woman’s) son-in-law, the father of my daughter’s child’ (cf. *ni-chuur* or *ni-chuuri7* ‘my female cross grandrelative, my (woman’s) daughter’s child or the reciprocal, my maternal grandmother’)

tcuritanak Wm sl after speaker’s d bears a ch. The term means “wm d ch f.” (Gifford 1922:55) [No comment in Gifford regarding reciprocal usage of *ni-chuur7-t a-na7* but it may also apply to man’s mother-in-law after his wife has borne a child.]

KI has at least one compound affinal kin term, in (3).

- (3) KI *ni-majha-jy7* ‘mother of my children, my wife by whom I have children’
(3.98.0367)

LU (4) and CU (5a,b) show “almost-compounding,” with the peculiar *pa-* form of the 3SG possessive prefix. Example (5c) seems to show the *-may* allomorph of the diminutive suffix (or ‘child’), common in LU (cf. 4.4.2), but otherwise unattested in CU.

- (4) LU a. *-kwa-pa-na* [MaDaCh-3SG-Fa] ‘man’s son-in-law (man’s daughter’s child’s father)’ (cf. *-kwa7maj* ‘man’s daughter’s child’)
b. *-tu7-pa-na* [WoDaCh-3SG-Fa] ‘woman’s son-in-law (woman’s daughter’s child’s father)’ (cf. *-tu7maj* ‘woman’s daughter’s child’)
- (5) CU a. *-matísma-pa-na* [WoOlSSCh-3SG-Fa] ‘woman’s older brother-in-law, woman’s older sister’s husband after issue of marriage’ (cf. *-matísma* ‘woman’s older sister’s child’)
b. *-ny\$íma-pa-na* [WoYoSSCh-3SG-Fa] ‘woman’s younger brother-in-law, woman’s younger sister’s husband after issue of marriage’

- c. *-taqmaj pý-jy* [MaOlBrCh-3SG-Mo] ‘man’s sister-in-law, man’s brother’s wife after issue of marriage’ (cf. *-taqma* ‘man’s older brother’s child’)

The CA examples involve the reduction a different 3SG prefix, *-hi-* in (6a) but unreduced *-he-* in (6b). Again, the otherwise-unattested *-may* allomorph of the diminutive appears in (6a).

- (6) CA a. *-taqmay-hi-je* [MaOlBrCh-3SG-Mo] ‘man’s older sister-in-law, man’s older brother’s wife’
 b. *-kwala-he-na* [MaDaCh-3SG-Fa] ‘man’s son-in-law, man’s daughter’s husband’

In all the languages, there are a few other scattered compounds. Most of these are only partially analyzable. We review some of these for TV, SE, KI, and LU in the sections below. Neither CU nor CA appears to have any analyzable compound forms beyond those of the type already discussed in this section, although a number of nouns that are longer than expected canonically might eventually yield to etymological investigation.

14.12.5. TONGVA COMPOUNDS. J. Hill (2012) suggested that TV *\$ongaaxej* ‘tortilla’ (3.104.0428) originates as a compound meaning ‘maize-s.th.to.eat’, with the second element being a nominalization of a verb *aax* ‘eat pinole (a seed gruel)’. Hill and Merrill (2017) review the controversy around the historical origins of *\$ongaaxej*, which Hill (2012) suggested might include a reflex of PUA **suhunu* ‘maize’. Now, with further study of TV, this might be better understood as a nominalization of an incorporated-noun construction *\$ong-aax* [maize(?) -pound] ‘pound into meal’. Most attestations of the verb *aax* show the sense ‘eat pinole’ but in (1) *aax* refers to the preparation.

- (1) TV *Heaa7 = ne aax-ro mohii.*
 now = 1SG > 3SG pound-FUT pinole
 ‘Voy a machucar el pinole. (I’m going to pound the pinole.)’ (3.103.0596)

In general, compounds are rare in TV. Several words that are longer than the canonical CVVCV, CVCVVCV stems are probably frozen compounds, but they are unanalyzable or one element has no known meaning.

Hanaxoot\$e ‘tick’ (3.104.0421) appears to be unanalyzable. While *-xoot\$e* might be relatable to *a-xoxoot\$* ‘su cáscara (its bark, shell)’ (3.104.0567), *hana-* is completely unknown.

In *Heteek-rongaj* ‘God’ (3.104.0090), the first element is clearly *heteek* ‘above’; *rongaj* is probably a lenited version of some formative in *tong-*. Speculatively we might suggest *tong-* in *tongko* (3.103.0199) or *tongooko* (3.104.0063) ‘abajo, downward’, suggestive of omnipresence: “high and low.”

In *pee\$-peva-t* ‘tobacco with lime’ (3.102.0640), *piiva-t* is a well-attested UA word for ‘tobacco’ but *pee\$-* is of unknown meaning.¹⁶²

In *Tuukme7o-\$otom* ‘Lyra (the constellation)’ (3.103.0100), the first element or elements are obscure (*tuuk* is probably ‘sky’), but the second element must be *-\$o-to-m* [star-ABS-PL]. This plural form in *-m*, though, does not correspond to the reduplicated plurals *\$e~\$eoo-t* (3.103.002) or *\$o~\$eoo-t* (3.104.0333) of the normal TV word for ‘star’, *\$eoo-t* (3.102.0588). However, monophthongal *\$o-* as the unstressed equivalent of stressed diphthongal *\$eoo-* seems to be regular. Diphthongs regularly monophthongize in unstressed position in TV.

Other examples include *tovoor-\$oxat* ‘string of shell money’ (3.102.0495) and *toova-xopetat\$* ‘clay olla’ (3.105.0530) (note SE *tyyvich* ‘white clay’ and KI *hokopi7tat* ‘kind of small basket’ (3.99.0400)).

14.12.6. SERRANO COMPOUNDS. Noun–noun compounds are rare in SE. The names of some mountain peaks with *qaii-ch* ‘mountain’ as second member are mentioned above in 14.12.3.

Another compound is the word for ‘deer song’, *hukah-cha-t\$* (< *hukah-t* ‘deer’, *cha-t\$* ‘song’) and its corresponding verb *hukah-cha-t\$u7* ‘sing a deer song’ (cf. *cha-t\$u7* ‘sing’). This isolated item suggests that within the now-gone ceremonial vocabulary there may have been other examples of compounding.

Another compound, *taamiahuu7t\$*, has been found in the Ramón and Elliott texts (2000:90), seen in (1). Mrs. Ramón speculates that it may refer to uranium. In the

¹⁶² In his glossing of KI vocabulary having to do with the tobacco and lime mixture, Harrington uses “pespibata,” a hispanicized version of TV *pee\$pevat* (3.102.0640), as in 14.12.7 (1e, 2i).

example the word *pyyjym* ‘their mothers’ occurs in place of expected *pyyjykym*; if transcribed correctly, this is probably symptomatic of language loss.

- (1) SE *Aam ani pyy-jy[ky]-m = kwyny = my tuunin pyy-majha-m*
 3PL.PRO then 3PL-mother-PL = QUOT = 3PL > 3PL warn;chase 3PL-child-PL
qaj7 pa-na7 piivia7-qa-m tymy-t-i, maqajayp ama7
 PROH PROX2-way throw-IFUT-PL rock-ABS-ACC because DIST
hii-t = kwyn aa-p qat\$ ama7 taamia-huu7-t\$
 INDF-ABS = QUOT.3SG DIST-LOC be DIST sun-star-ABS
py^Rna^Rv-t\$.
 one.like.that-ABS

‘Their mothers would warn their children not to throw rocks like that because it’s that they say there’s something like *taamiahuu7t\$* there [in them].’

< ‘Aam ‘ani’ peeyem kwenemu’ tuunin peemayham, “Qay’ pana’ piivya’qam teme’ti’, maqayeewp ‘ama’ xhiit kwan ‘ap qac ‘ama’ tamyahuu’ch pernafc.” > ‘Their mothers would warn their children “Don’t throw rocks, because there is a tamyahuu’ch in them.” ’ (R&E 90)

The names of the creator gods, *Kukii-ta-ch* and *Pa-q^Ryk-ta-ch* can be analyzed only part way. *Ny-kuuki7* is ‘my great-grandrelative’ (Sarah Martin) and *ny-kuuki7-nuch* is ‘my deceased ancestor’ (Dorothy Ramón) (Ramón & Elliott 2000:120). *Ny-q^Ryk* is ‘my great-grandrelative’ according to Gifford (1922): “krüg. Ggp, ggch” (p. 54), “Sp gf, mn gch sp” (p. 56). We can surmise that the element *Pa-* in *Paq^Ryktach* represents the element *paa-* ‘great’ discussed above. This analysis is supported by the fact that instead of Mrs. Martin’s *Kukiitach*, Mrs. Ramón uses the form *Q^Ryktach* for *Paq^Ryktach*’s younger brother. Stem-final *-ta-* remains unidentified. Also, the absolutive *-ch* after stem-final *a* is peculiar; one would expect *-t\$*.

Some personal names may represent compounds, e.g. *\$yyrywyny-t*, ‘Jim Pine’, a man often referenced in SE texts and in the Harrington notes. The CA version of Jim Pine’s name is said to be *Selewene-t* (according to Sarah Martin). CA *sele-t* means ‘sumac’, but the SE cognate is *hyy-t\$*, with initial *h*, not *\$*. No SE word in *\$yyry-* is attested though KI has a word *\$yrykvy-t* for a kind of hawk (3.99.0341). One would need inaccessible cultural knowledge about naming practices before trying to relate either of these nouns to the name. In any case, the element *-wyny/-wene* is probably the verb ‘be in a location’,

so the name, whatever the origin of *\$yyry-/Sele-*, is likely to be a nominalized incorporating verb, and thus is not, strictly speaking a compound noun.

The names of the twin sons of the Sun, *Saatuxutani*⁷, the older, and *Paaraxani*⁷, the younger, and that of their son/nephew *Kwixumari*⁷, look very much like compounds, but it cannot be determined even what language these names are from. The late Margaret Langdon told K. Hill that the twins were known in the Diegueño (Yuman) languages and that their names were similarly strange and foreign sounding, but that those names were not the same as the ones in SE. (Supernaturally powerful twins are also found in Hopi folklore: the older is *Pöqangwhoja* ‘Little Weaver’ and the younger is *Palöngawhoja* ‘Little Echo’. “Little Weaver” is an allusion to their grandmother, *Kòokjangwso7wỳyti* ‘Old Spider Woman’. Their names are unrelated to those of SE.)

14.12.7. KITANEMUK COMPOUNDS. KI has an unusually large number of compounds compared to the other Takic languages but Anderton (1988:145) suggested that it was unlikely that these represent a currently productive process. Two of the examples listed in her review (1a,b), plus those in (1c,d,e) are probably not true compounds; instead, they are nominalizations of verbs with noun incorporation. These appear in (1).

- (1) KI
- a. *hyng-kyman-i-ts* [rattlesnake-make-NMLZ-ABS] ‘rattlesnake figure on basket’ (3.98.0285)
 - b. *taaka-kyman-i-ts* [person-make-NMLZ-ABS] ‘people figures on basket’ (3.98.0285)
 - c. *tyyj-kyman-i-ts* [spirit-make-NMLZ-ABS] ‘devil dance’ (3.99.0648)
 - d. *a-kwaka-7u7-a7* [3SG-soldier-take-NMLZ] ‘enemy scalp, cut off’ (3.98.0099)
 - e. *tsivu-mu-jhwa7-t* [bitter.thing-grind-INSTR-ABS] ‘small mortar for *pespibata* (tobacco with lime)’ (3.98.0026)

Clearer examples of noun–noun compounds in KI appear in (2). We list only analyzable examples; there are numerous other examples that are unanalyzable, or only partially analyzable, but are obviously compounds. Example (2a) seems to have an internal possessive pronoun. Harrington’s original spelling, cited by Anderton (1988: 317), shows two stresses, one on the first member of the compound and the other on the possessive prefix of the second: < hú?átaŋat >. And *-tangat*, the final component of the

compound is the possessed form of *tangata-t* ‘sack’. It is striking that *huu-* in this compound is best understood in terms of the sense ‘stick’, a sense that seems quite archaic for Takic, where this root is otherwise documented only in its diachronically more recent sense ‘arrow’.

- (2) KI
- a. *huu-7a-tangat* [stick;arrow-3SG-sack] ‘acorn granary’ (These were built of basketry, secured in the crotch of trees.) (cf. *tangata-t* ‘sack’) (3.98.0022)
 - b. *jyyha-huu7-t\$* [evening-star-ABS] (3.98.0033)
 - c. *kawii-7ihaj-t\$* [mountain-wild.cucumber-ABS] ‘a plant, white seeds, grows in sierra’ (3.99.0186)
 - d. *kut\$a-vaha-t\$* [wood-container-ABS] ‘wooden *jícara* (cup)’ (3.98.0026)
 - e. *kyyt\$a-viiha-t\$* [manzanita-sugar-ABS] ‘manzanita sp.’ (3.99.0218)
 - f. *ni-mukpi-pija-t* [1SG-nose-piece.of.regalia-(?)] ‘my nose stick’ (3.98.0019) (cf. *pija-t\$* ‘a kind of dance regalia’ (3.100.0304))
 - g. *navo-kaha-ts* [foot-shoe-ABS] ‘shoe’ (3.98.0024)
 - h. *Tsivu7-paa-t\$* [bitter-water-ABS] (3.98.0302), a place name, contrast *Tsivu-t Paa-ve* ‘pespibata (tobacco with lime) water’, another place name (3.98.0023)
 - i. *tyh-paha-t\$* [rock-mortar-ABS] ‘bedrock mortar’ (3.98.0160)
 - j. *ty-jua-t* [rock-snow-ABS] ‘frost’, *a-ty-ju* ‘freeze (re weather)’ (3.98.0083)

14.12.8. CUPAN COMPOUNDS. Kroeber and Grace (1960:41) give a list of compounds, both analyzable and not, for LU. Some are listed in (1).

- (1) LU
- a. *jarii-sawu-t* [brush-snake-ABS] ‘watersnake’ (cf. *jarii-cha* ‘brush’)
 - b. *u7uu-\$ana-t* [shrub.sp-gum-ABS] (*u7uut* ‘*Adenostomoa fasciculatum*’)
 - c. *wii-kun-la* [fiber-sack-ABS] ‘sack’ (cf. *wii-cha* ‘Indian hemp’)
 - d. *-wii-wana* [-fiber-net] ‘spider web’

Both Inland Cupan languages have the same compound for ‘bag, sack’: CU *qaw-kuni-lj* and CA *kaw-kuni-lj*. LU has *kaawi-sh* ‘large net sack for acorns’, which probably corresponds to the first element in the CU and CA forms. SE also has a compound with this element, *kaaw-tynga-t\$* ‘pocket’. The second component, *-tynga-t\$*, seems to be a

distorted form of SE *tanga-t* ‘sack’. It’s as though there’s some sort of tendency to increase the opacity of compounds.

CU may have a compound in *pish-wýl-i-sh* ‘grown up, of a young man’, pl. *pish-wý-wyl-i-sh*, based on the verb *wyl* ‘grow’. *Pish-* is also found as an emphatic element in the compound adverb *pish-7amáj* ‘just then, right there’, from *amáj* ‘now, today; just, only’ (cf. SE *amaj7*, KI *ama7j* (3.100.0569), both meaning ‘now, today’). The element *pish-* does not relate well to any attested CU lexical form but one is reminded of the SE verb *pichy-j* ‘arrive, reach’: perhaps *pish-wýl-i-sh* is one who has arrived at a grown-up state.

CA has a compound verb *-sun-háman-* ‘feel ashamed, embarrassed’, from *-sun* ‘heart’ and *-haman-* ‘be shy’. Seiler and Hioki (1979:190) provide a list of verbs that characteristically cooccur with *-sun* ‘heart’ to form expressions of emotion or attitude or the like, as is done throughout Takic, but *-sun-háman-* may be unique in their list for behaving as a compound verb stem.

Neither CU nor CA seems to have any identifiable compounds beyond the above and those discussed in 14.12.1-4.

14.12.9. THE SERRAN CUSTOMARY PREFIX *NAH-. Combinations involving the “customary” prefix *nah-* are found with both verbs and deverbal nouns in Serran. SE examples of verbs are given in (1) and (2).

- (1) SE a. *nah-nami7n* ‘hold races’ (< *naami7n* ‘race’)
 b. *nah-ky^Rh-k* ‘sing “swear” songs’ (< *ky^Rh-k* ‘say nasty things’)
 c. *naa-mq* ‘give things out’ (< *maqa-j* ‘give’)

- (2) SE *Aa-pia aam = kwyny qat\$ ani = kwyny = my*
 DIST-LOC 3PL.PRO = QUOT.3PL be; dwell and.then = QUOT = 3PL > 3PL
nah-na7uu7 na~naacha-m ii-piu7; aamy7 Myha7njam
 CUST-marry PL~girl-PL PROX-ABL 3PL.PRO (lineage.name)
na~naacha-m = my uh~u7.
 PL~girl-PL = 3PL > 3PL IPFV~marry;take.a.wife
 ‘They (the Morongos) lived there (Twentynine Palms) and they would marry girls from here (Malki); they married *Myha7njam* girls.’

Example (2) has to do with the customary exogamic practice of the SE moieties. The *Maarynga7jam* ‘Morongos’ belong to the Coyote moiety and the *Myha7njam* are a Wildcat moiety lineage. There are two verbs ‘marry’ in SE: *uu7* means ‘take’ or ‘take a wife’; *na7uu7* means ‘take a spouse’, i.e., either a husband or wife. The “customary” verb *nahna7uu7* in (2) is based on *na7uu7* and the repetitive verb *uhu7* is based on *uu7*. We suspect that the *na-* of *na7uu7* is an echo of the Uto-Aztecan reflexive **na-*.

The majority of the attestations of the customary prefix are in deverbal nominalizations, all too often with the underlying verb unattested in KI. (3d-f) are repeated from 14.2.2 88). The sequence *-7iha-* in (3d) is possibly a reflex of **iisa* ‘coyote’.

- (3) a. SE *nah-ky^{rh}-k-i7a-t\$* ‘person who says nasty things’ (cf. *ky^{rh}-k* ‘say nasty things’)
 b. SE *nah-tyhtyjy-ka7* ‘boss’ (cf. *tyhtyj* ‘work’)
 c. SE *nah-jej-je-i-jam* ‘police’ (cf. *je-j* ‘catch’)
 d. KI *naa-7ihama-a-t* ‘naughty child’ (< *nah-7ihama** ‘tease, joke’) (3.98.0284)
 e. KI *na-mak-a-t* ‘generous person’ (cf. *mak* ‘give regularly’) (3.98.0385)
 f. KI *nah-mona7-ha-t* ‘cheat, fraudster’ (cf. *mohmona7* ‘cheat, deceive’) (3.100.0596)

A example showing a KI customary nominalization in context is provided in (4).

- (4) KI *A-kyy7 = vyn.* *Ivi7 kutsi7 nah-kyy7-hiy-t.*
 3SG-bite = 3 > 1SG PROX dog CUST-bite-NMLZ-ABS
 ‘Me mordió. (It bit me.) This dog bites (is a biter).’ (3.98.0278)

14.13. SOUND SYMBOLIC MUTATIONS.

14.13.1. DIMINUTIVE DERIVATION AND SOUND SYMBOLIC CONSONANT MUTATIONS IN LU.

Kroeber and Grace (1960:23) point out two sound symbolic consonant mutations in LU. These are $\$ > s$, $r > dh$. In these pairs, the second consonant is associated with the diminutive.

The first mutation, $\$ > s$, is productive in the environment with the diminutive suffix. There are many examples in Elliott’s (1999) dictionary of Rincon LU of nouns and

adjectives with *s* before the diminutive suffix, but with *\$* elsewhere. A sample appears in (1). An AC example appears in 14.11.2 (2a).

(1)	LU	non-diminutive	diminutive
	a.	<i>a\$wu-t</i> ‘eagle’	<i>aswu-ma-l</i>
	b.	<i>kwa\$a~kw\$i-sh</i> ‘shriveled, withered’	<i>kwasá~kws-i-ma-l</i>
	c.	<i>moo\$i-sh</i> ‘pond scum’	<i>moosi-ma-l</i>
	d.	<i>paa\$a-l</i> ‘chia’	<i>paasa-ma-l</i>
	e.	<i>qa\$a~l\$i-sh</i> ‘noisy, loudmouthed’	<i>qasá~lsi-ma-l</i>
	f.	<i>qa\$i~qsi-sh</i> ‘squinting with one eye smaller than the other’	<i>qasí-qsi-ma-l</i>
	g.	<i>\$uuka-t</i> ‘deer’	<i>suk-ma-l</i> ‘fawn’
	h.	<i>Taa\$aata-l</i> ‘Big January’	<i>Tas-moj-ma-l</i> ‘Little January’
	i.	<i>to7\$il-i-sh</i> ‘arid’	<i>to7sil-i-ma-l</i>
	j.	<i>too\$axi-t</i> ‘cottontail’	<i>toosax-ma-l</i>

The simple presence of *-ma-l* does not necessarily predict the mutation. There are examples like (2a) where apparently the *-ma-l* in the left-hand column is not understood as a diminutive. Without further information, we have to regard (2b) as simply exceptional. There are also variable examples like (2c); Kroeber and Grace (1960) recorded an alternation but Elliott’s consultant Mrs. Villiana Hyde did not have it.

(2)	LU	a.	<i>axá\$a-ma-l</i> ‘sweet pea’	<i>axás-maj-ma-l</i>
		b.	<i>too\$a-ma-l</i> ‘plant sp.’	<i>too\$a-maj-ma-l</i>
		c.	<i>-noo\$a</i> ‘mother’s older sister’	<i>-nos-maj</i> ‘woman’s younger sister’s child’ (K&G 23), <i>-no\$a-maj</i> (Elliott 1999)

Only *\$* participates in the alternation: *sh* from *ch* is not affected, as seen in (3).

(3)	LU	a.	<i>qesh-la</i> ‘seashell’	<i>qesh-la-ma-l</i>
		b.	<i>tish-ma-l</i> ‘hummingbird’	<i>tish-may-ma-l</i>

There are fewer examples of the mutation *r* > *dh* [ð] (<th> in Elliott 1999); all occurrences that we have found appear in (4). Two forms in the left column have

consonant mutations: $r > dh$ in (4e) and $\$ > r$ in (4f). (4e) shows consonantal metathesis in the repeated root.

- | | | | | |
|-----|----|----|--------------------------------------|--|
| (4) | LU | a. | <i>ará7~ra-sh</i> ‘lidless bowl’ | <i>adhá7~dha-ma-l</i> |
| | | b. | <i>awvira-t</i> ‘shell money’ | <i>awvidha-ma-l</i> |
| | | c. | <i>kaara-wu-t</i> ‘earthworm’ | <i>kadhuu-ma-l</i> ‘little worm’ |
| | | d. | <i>ngarú~ngru-sh</i> ‘wide-mouthed’ | <i>ngadhú~ngdhu-ma-l</i> ‘small-mouthed, narrow-mouthed’ |
| | | e. | <i>riwí~wdh-i-sh</i> ‘bald’ | <i>dhiwí~wdh-i-ma-l</i> |
| | | f. | <i>\$avá~rvash</i> ‘rough, scratchy’ | <i>savá~dhva-ma-l</i> |

With one root with both $\$$ and r , in (5), only $\$$ undergoes the diminutive consonant mutation; r remains unchanged.

- | | | | | |
|-----|----|----|--|-------------------------|
| (5) | LU | a. | <i>uruu\$a-t</i> ‘grinding stone’ | <i>uruusa-ma-l</i> |
| | | b. | <i>uruu\$a-mawi-sh</i> ‘full of grinding stones’ | <i>uruusa-mawi-ma-l</i> |

There are at least two examples of the $r \sim dh$ consonant alternation where the suffix *-ma-l* is not involved. In (6a,b) the change seems to reflect a lesser action or condition. (6c) is obviously related to this system, but does not involve diminution. It also shows an interchange of $\$$ and t , which may be unique. Example (6d) shows an unusual $t \sim dh$ alternation.

- | | | | | |
|-----|----|----|-----------------------------------|--|
| (6) | LU | a. | <i>xaarax</i> ‘growl’ | <i>xaadhax</i> ‘snarl’ |
| | | b. | <i>\$orórax</i> ‘tremble’ | <i>\$odhódhax</i> ‘tremble slightly’ |
| | | c. | <i>\$iirax</i> ‘flow out of’ | <i>tiidhax</i> ‘flow profusely’ |
| | | d. | <i>chitax</i> ‘chirp of squirrel’ | <i>chidhax</i> ‘rattle of snake momentarily’ |

There are rare examples suggesting that vowel alternations may also play a derivational role, as in (7), which also shows $\$$ in alternation with s . However, for none of these do we find a consistent paradigmatic association with a meaning change, as happens with diminutive s from normal $\$$. The vowel difference, short i in (7a-c), long oo in (7d), is striking, but we have nothing to offer by way of explanation.

- (7) LU a. *i\$í~7si-sh* ‘cockeyed’
 b. *isí~7si-sh* ‘cross-eyed’
 c. *isá~7sa-sh* ‘darting of eyes, shifty-eyed’
 d. *oo\$i* ‘have narrow squinting eyes’

The Tactic languages all have occasional examples suggesting a sound-symbolic function for some consonant and also vowel alternations (cf. the CU example at 14.12.2 (5a)). However, only LU has evidence for a productive paradigm suggesting that consonant alternations should be added to the inventory of derivational processes.

14.13.2. TRACES OF SOUND SYMBOLISM IN TV AND SERRAN. There is no evidence for diminutive sound symbolism as an active process in TV and Serran, but there are a few examples that suggest this may have an active process in the past and it seems useful to include a few examples that have come to our attention.

The TV words for ‘coyote’ and ‘fox’, in (1), seem to relate to each other as if sound symbolism was part of the mix.

- (1) TV a. *iita-r* ‘coyote’ (3.102.0878)
 b. *iiso-t* ‘fox’ (3.104.0035)

(1a) and (1b) appear to be cognate with the words for ‘coyote’ and ‘wolf’ (and TV ‘fox’) shown in (2). ‘Wolf’ is morphologically the augmentative (-*wy*) of ‘coyote’. Not included in (2) are Serran *wahi7* ‘coyote’ and *wana-t\$* ‘wolf’ (or ‘mountain lion’), which are unrelated.¹⁶³

- (2)
- | | | |
|----|----------------------|--|
| | coyote | wolf |
| a. | PTak <i>*iisa-La</i> | <i>*iisa-wy-ta</i> |
| b. | TV <i>iita-r</i> | <i>ii\$a-w-t</i> (3.103.0020), <i>e\$a-a-w-t</i> (3.103.0295) ~ <i>e\$a-a(-w)-t</i> (3.103.0130) ‘wolf’; <i>iis-o-t</i> ‘fox’ (3.104.0035) |
| c. | LU (<i>anó7</i>) | <i>is-wu-t</i> |

¹⁶³ In 14.3.3 we suggested that Serran *raakw* ‘eat (intr.)’ may reflect ancient Serran contact with the Hopi community. Similarly the Hopi word *iHy*, a folkloric word for ‘coyote’ (*iisa-w* is the everyday word), may represent the reverse, a Hopi loan from Serran. PTak **iisa-La* should, with regular **s > h*, result in Serran *iHa-t\$**. As a loan word, its transmogrification into Hopi *iHy* seems not implausible.

- | | | | |
|----|----|---------------|----------------|
| d. | CU | <i>isi-lj</i> | <i>is-wy-t</i> |
| e. | CA | <i>isi-lj</i> | <i>is-we-t</i> |

We suggest TV *iita-r* ‘coyote’ may be from **iisa-La* (2a) with a sound-symbolic modification of **s* to *t*. No other identification of *iita-r* seems available among known cognate sets. TV *iiso-t* ‘fox’ may also be from **iisa-wy-ta*, with syncope of **a*, loss of **w*, and the regular sound change **y > o*, maintaining original length on the first syllable, unlike ‘wolf’. Thus ‘coyote’, ‘wolf’, and ‘fox’ are all marked in TV, at least etymologically: ‘coyote’ is a sound-symbolic diminutive and ‘wolf’ and ‘fox’ are marked for augmentative. (Our **iisa* corresponds to Stubbs’s #567 **isa7a(N)pa*.) We have no explanation for the change **a > i*, presumably by way of **o*, of the second vowel in Inland Cupan *isilj*.

The Serran languages show some forms for young males that might be best understood as involving sound symbolism. The words for ‘boy’ are given in (3). The KI words seem to show a modification of *ch* to *t* probably as part of diminutive sound symbolism.

- | | | | |
|-----|----|------|---|
| (3) | | SE | KI |
| | a. | boy | <i>chichin-t</i> <i>titini-t</i> |
| | b. | boys | <i>chichina-m</i> <i>titini-m</i> (3.98.0087) |

The directionality of the change, *ch > t* rather than *t > ch* is supported by the change *a > i* seen in the final syllable of KI ‘boys’ (3b). A change of a vowel to *i* is commonplace in diminutives but not a modification of *i* to *a*. The consonantal change here, *ch > t*, is very much like the change of *s > t* seen in (1a) above. In both, *t* replaces a sibilant, whether the fricative *s* in TV *iita-r* or the affricate *ch* in KI *titini-t*. Overall, the direction of sound symbolic diminution seems, in Jakobsonian terms, to be to reduce the stridency of consonants (Jakobson et al. 1963:23).

The Serran examples in (4) relate to a verb *tut\$* ‘grow up’, attested only in KI. (Unfortunately the derivational suffix(es) in *-in* remain unidentified.) The SE forms show sound symbolic effects.

- | | | | |
|-----|----|-----------|--|
| (4) | | SE | KI |
| | a. | older one | <i>a-tuchini7</i> <i>a-tut\$ini7</i> (3.98.0369) |

- | | | |
|---------------|------------------------------|---------------------------------|
| b. older ones | <i>a-tuh~chini-m</i> | <i>a-tut\$ini-m</i> (3.98.0369) |
| c. young man | <i>ty^Rchin-t</i> | <i>tut\$ini-t</i> (3.98.03670) |
| d. young men | <i>ty^Rchiña-m</i> | <i>tut\$ini-m</i> (3.98.03670) |

SE shows *ch* where KI has *t\$*. Since the verb has *t\$*, we should understand *t\$* as basic and the *ch* of the SE forms as the result of a modification. The SE words for ‘young man’ (2c,d) show *y^R*, similarly a departure from the basic *u*. In addition, SE ‘young men’ shows *ñ*, though with plain *n* in the singular. Maybe the singular wasn’t heard correctly or maybe there is a rule *ñt* > *nt*, though this would provide the only example. In any event, since a change *n* > *ñ* would almost certainly be a diminutive modification, the other SE modifications, *t\$* > *ch*, *u* > *y^R*, may also be diminutive markers. Unfortunately this leaves unexplained the *a* that appears in the SE plural in (4d). This is parallel to the plural in *chichinam* (3b). The similarity of *-chin-* in both SE *chichint* (3a) and *ty^Rchint* (4c) is striking, but one has its plural in *-chinam* and the other in *-chiñam*, and the *-chin-* partial has no known identity independently of these two words.

14.14. ADJECTIVES AND ADVERBS. All of the languages have a few “primary” adjectives for which no derivation can be identified, and which do not formally resemble nouns. However, the morphological distinction between nouns and adjectives is often rather unclear. Many constructions that can appear as modifiers exhibit the same derivational suffix sequences as nouns. The available data do not permit a systematic review of the syntactic behavior of such constructions, as for instance, whether they can be modified by adverbs or quantifiers. At least some forms that function as nouns also appear with adverbs, e.g. TV *awee7* ‘sweet, sugar’, cf. *waraak awee7* ‘it is very sweet’ (3.105.0033). However, some adjectives are derived from verb and noun stems with distinctively adjectival morphology. This section deals primarily with adjectives of that type, with some inevitable overlap into the more noun-like derivations that are discussed above in 14.1-13. Here we also treat adverbs and derivational morphology that appears in adverbial forms, restricting the discussion to adverbs of manner where there is often a derivational relationship between adjectives and adverbs, along with a few notes on intensifiers like “very”, “just”.

14.14.1. TONGVA ADJECTIVES AND ADVERBS. The TV corpus contains several different derivational patterns in words that seem to be adjectives. Unfortunately, most attestations are in isolation without syntactic context.

Some syntactic contexts in which adjectives are attested appear in (1). In (1a) there is an attributive construction with the adjective initial (the N–A order is also well attested). (1b) shows the adjective (a verbless complement) modified with an adverb (for the morphology of the other adjective, *\$ahoovkewe*, see (15) below). In (1c) we see a predicate complement, and in (1d) a verbless complement. (1e) has an adjective-forming prefix *a-* that is found throughout Takic. The copula verb *xaa* is represented as optional in many examples.

- (1) TV a. *we-taa-7* *worooj-t*
fat-ABS-ADJZ man-ABS
'fat man' (3.102.0738)
- b. *Menee7* *eraaxpo7* *\$ahoov-ke-we,* *weraaw* *we-taa-7.*
PROX old.man respected-ADJ(?)-(?) very fat-ABS-ADJZ
'Este viejo es muy respetoso, muy gordo. (This old man is distinguished, very fat.)' (3.104.0551)
- c. *Puujn-e* *xaa.*
full-ADJZ be
'Está lleno. (It is full.)' (3.105.0334)
- d. *Xay* *pe-maa7* *haawm7-e7* \emptyset .
NEG PROX2-AUG soft-ADJZ be
'No es blandito. (It isn't soft.)' (3.105.0156)
- e. *A-mooja = 7e* *xaa.*
ADJZ-dead = IND be.NFUT
'Está muerto. (He is dead.)' (3.104.0110)
- f. *eraaxpo7* *jajaar-e7*
old.man liar-ADJZ
'viejo embustero (lying old man)' (3.105.0404)

A sample of adjectives in TV are listed in (2). Where plurals are attested, they mostly include reduplication (2f). This is typical of adjectives across Takic, but not all adjectives in TV have this plural structure.

- (2) TV
- a. *haawm7-e7* ‘soft’ (3.105.0156)
 - b. *emuu-t* ‘new’ (3.103.0137)
 - c. *t\$ekwaa-7* ‘strong, bitter, salty’ (3.103.0519)
 - d. *jaawjo-7* ‘pure, nothing but’ (3.103.0187)
 - e. *jaraar-e7* ‘liar’, pl. *jaraar-e7-a-m* (3.105.0073)
 - f. *jo7ooj-t* ‘big’, pl. *jo~joo7oj-t* (3.103.0626) (cf. LU *jo-t* ‘big’)
 - g. *mohaa-j* ‘bad’ (3.103.0637), pl. *mo~mooha-m* (3.105.0111) or *mo~moohe-m* (3.103.0637) (cf. *amoohe* ‘witchcraft’)
 - h. *t\$enuuho-7* or *t\$enuu-j* ‘little’, pl. *t\$e~t\$iinoho-7a-m* (3.103.0679)
 - i. *we-taa-7* ‘fat’ (cf. *we-taa* ‘fat one’, pl. *we~wii-ta-m* (3.103.0171))

Most of the examples in (2) exhibit derivational elements of some sort, but in many instances the derivational details are obscure, especially so because of limitations in the attested TV vocabulary. For example, (2a) *haawm7-e7* ‘soft’ seems quite isolated. It shows the adjectivalizing suffix *-e7*, but we have found no other vocabulary with the same root.

The word *emuu* ‘new’ (2b) may be derived with what looks like an absolutive suffix, given SE *amajt* ‘new’ and the adverb *amaj7* ‘now’ (cf. KI *ama7j* (3.100.0353)), mentioned above in 14.12.8. (2g) also ends in *-t*, but there is no obvious derivational source, although it is possible that the root also appears in *a-joo7en* ‘many, much’.

The final glottal stop in (2c-e) seems to be an adjective marker. Though often the derivational details are unclear, we can see that example (2e), *wetaa7* ‘fat’, is related to the corresponding noun *we-taa* [fat-ABS] ‘fat one’ (presumably also ‘fat, grease, oil’ as in related languages). The noun plural may also serve as the plural of the adjective.

The forms in (3) are derived with the adjectival suffix *-e7*, cognate with *-i7* in Serran. (3d) has an adjective-deriving prefix *a-*, which also appears in Serran. It appears with plural constructions, e.g. *amooja7 ajoo7en* ‘muchos difuntos (many dead people)’ (3.105.0094), showing that it cannot be construed as a 3SG prefix. Examples (3a,f) show reduplication in the plural, poorly attested in TV but not unusual for adjectives in the other Takic languages. It should be noted that the suffix *-e7* is not the homophonous

indicative clitic, since it appears when the adjective is not in a clitic-bearing position, as in (1d,f). Finally, adjectival *-e(7)* appears before the plural suffix, as in (3a,f,g).

- (3) TV
- a. *t\$eeveev-e7* ‘pinto (spotted), pl. *t\$e~t\$eeveev-e7-am* (3.105.0104)
 - b. *puujn-e7* ‘lleno (full)’ (cf. *puujno-k* ‘se llenó [it filled up]’) (3.105.0334)
 - c. *rawaat-e7* ‘medio blanco (whitish, light complexioned)’ (3.102.0648) (cf. *rawro7* ‘blanco, white’ (3.103.0675))
 - d. *a-mooj-e7* (3.103.0770) or *a-mooja-7* (3.103.0686) ‘dead’ (cf. *mojoo-k-mo-k* ‘se murió (he died)’ (3.103.0770))
 - e. *ejaa-xan-e7* ‘hinchado (swollen)’ (cf. *ejaa-no-k* ‘se está hinchando [it’s getting swollen]’) (3.105.0098) (or *eaaxan-e7*, *eaaxan-no-k*)
 - f. *maav-e7* ‘desnudo (naked)’, pl. *ma~maav-e-m* (3.104.0509)
 - g. *jaroor-e7* ‘flaco (thin)’, pl. *jaroor-e7-am* (3.104.0422)
 - h. *aw-ee7* ‘dulce (sweet)’ (3.103.0157) (cf. *awee7en* ‘azúcar (sugar)’ (3.105.0410))
 - i. *oaa-e7* ‘resbaloso (slippery)’ (cf. *noo = n = 7e oaa-ko-mo-k* ‘ya me voy resbalando [now I’m going sliding along]’) (3.105.0112)
 - j. *kaawr-e7* ‘atascoso (boggy, sticky)’ (cf. *kaawr-ko-mo-k* ‘se atascó (he bogged down)’) (3.105.0294)
 - k. *nanaawr-e7* ‘tonto (foolish)’ (3.105.0493)
 - l. *toraar-e7* ‘un peso, lit. un redondo (a peso [coin], lit. a round one)’ (3.103.0184) (cf. *toraar-ke-we7* ‘round, as of sun, moon’ (3.104.0167) in (16d)) (maybe < Spanish *dólar*)
 - m. *jajaar-e7* ‘embustero (liar)’ (3.103.0165) (cf. *jajaaro-n-mo-k = e7* ‘está engañando, está echando mentiras (3SG is deceiving, lying)’ (3.105.0073))
 - n. *aviee-j* ‘open’ (3.103.0378) (cf. *aav-ena-x* ‘open (tr.)’) (root *avi*)

At least two adjectives in *-7(a)* appear to be primary (4a,b), since the related verbs appear to be derived from the adjective bases rather than vice versa. In at least in one instance (4h), both adjective and verb appear to be derived from a common abstract root. The short forms *kamuuj* (4f) and *t\$enuuj* (4g) appear to be diminutive or affectionate. There is an unidentified formative *-ho* in (4f,g) which is displaced by the suffix *-j*.

- (4) TV a. *oroo-7* ‘caliente (hot, of weather)’ (3.103.0687) (cf. *oroo-7a-x* ‘está haciendo calor (it’s hot)’ (3.103.0125))
- b. *ot\$oo-7* ‘frío (cold, of weather)’ (3.103.0125) (cf. *ot\$oo-7a-x* ‘está haciendo frío (it’s cold)’ (3.103.0546))
- c. *potoo-7* ‘duro (hard)’ (3.104.0400) (cf. *potoo-\$-ko-mo-k* ‘se cuajó el agua, the water froze to ice (it got hard)’ (3.103.0250))
- d. *tepo-7* ‘amargo (bitter)’ (3.105.0046), ‘muy salado (very salty)’ (3.105.0151) (i.e., ‘having a strong, unpleasant taste’)
- e. *kahoo-7* ‘largo (3.104.0553), alto (3.103.0386) (long, tall)’, pl. *ka~kaaho-7a-m* (3.103.0386, 3.104.0553)
- f. *kamuu-ho-7* ‘chapo (short)’, pl. *ka~kaamo-ho-7a-m* (3.103.0385) (also *kamuu-j* ‘cortito (quite short)’, pl. *ka~kaamo-j* (3.105.0081))
- g. *t\$enuu-ho-7* ‘small’ (3.103.0148), pl. *t\$e~t\$iino-ho-7a-m* (3.103.0397) (also *t\$enuu-j* (3.103.0679), pl.inan. *t\$e~t\$iino-j* (3.102.0601))
- h. *raawro-7* ‘white’, pl. *raawro-7a-m* (3.103.0747) (cf. *raawro-k* ‘be white’ (3.103.0649))
- i. *jaawjo-7* ‘puro (all, entirely, nothing but)’ (3.103.0187)

Some adjectives have final *-t*, as in (51); cf. *emuut* ‘new’ in (2b) above. Some of these may be “immediate past” constructions (see 11.1), but the source verbs are not attested. Animate plurals take *-m* (5a,e) while the inanimate plural (5b) does not. (The inanimate plural of ‘big’ (5b) was given in the context of talking about thumbs, the “big fingers”; the animate plural is unattested.)

- (5) TV a. *jaaj-t* ‘vivo (alive), awake, not asleep’, pl. *ja~jaaj-to-m* (3.103.0769) (cf. SE *jein-t*, KI *jajna-t*)
- b. *jo7ooj-t* ‘grande (big)’, pl. *jo~joo7oj-t* (3.103.0626) (cf. LU *jo-t*)
- c. *juupe-t* ‘overcast, of sky’ (3.105.0470) (cf. *jopiixa7* ‘black’ (3.103.0220), perhaps also *ejuumkomok* ‘be clouded’ (3.103.0335))
- d. *saaw-t* ‘crudo, raw’ (3.105.0154) (cf. SE *\$ay-t*, LU *\$awó-t*)
- e. *t\$oiit-t* ‘flojo (lazy)’, pl. *t\$o~t\$oiit-m* (3.104.0459)

Some adjectives in *-ko* are shown in (6). The only plural attested for this set is the reduplicated plural of (6b) based on that of the underlying noun ‘coyotes’.

- (6) TV a. *awee\$-ko* ‘contento (happy)’ (3.103.0558)
 b. *iita-ko* ‘maldito (unruly, wild, coyote-like)’, pl. *et~iita-ko-7am* (3.105.0071)
 (cf. *iita-r* ‘coyote’, pl. *et~iita-ro-m* (3.105.0381))
 c. *mo7aa-t-ko* ‘piled up’ (3.103.0507) (cf. *mo7aa-t* ‘pile’ (3.103.0507))
 d. *moaax-ko* ‘gray or white, of hair’ (3.103.0580)
 (cf. *-maaxa7* ‘canas, gray hair’ (3.104.0422))
 e. *moriiv-ko* ‘triste, pobre (sad, poor, destitute)’ (3.103.0769)
 (cf. *moriiv-ko-mo-k* ‘[estar] triste (be sad)’ (3.105.0491))
 f. *tehoov-ko* ‘bueno (well, good, all right)’ (3.103.0132)
 g. *weoox-ko* ‘colgado (hanging, hung up)’ (3.103.0506)
 h. *xahuut-ko* ‘derecho (straight)’ (3.104.0517)
 i. *xaviuv-ko* ‘chino (curly, of hair)’ (3.105.0157)

Adjectives in *-ko* are used as predicate complements with the verb *xaa*, as in (7), but not as noun modifiers. Example (7) also illustrates the fact that predicate complement adjectives show no agreement; here we note the absence of plural marking.

- (7) TV *Xay = me tehoov-ko xaa, metee-ma7, metee = me xaa moriiv-ko,*
 NEG = 3PL well-ADVZ be now-AUG now = 3PL be poor-ADVZ
moriiv-ko = me xaa.
 poor-ADVZ = 3PL be
 ‘No están buenos ahora, ahora están tristes, tristes están. (They are not all right now, now they are poor, they are destitute.’ (3.103.0769)

Some adjectives and adverbs in *-ko* share roots with nouns, as in (8), though it would be unrealistic to say either was derived from the other. The noun in (8c) provides an example of an apparent absolutive *-t\$*, which is rare in TV (see 14.10.1 for discussion of this consonant as a final element in other forms).

- (8) TV adjective noun
 a. *aawm-ko* ‘oscuro (dark)’ (3.103.0151) *aawm-e-t* ‘noche (night)’ (3.103.0019)
 b. *awee-\$-ko* ‘contento (happy)’ (3.103.0558) *awee-7e-t* ‘azúcar (sugar)’ (3.104.0357)
 c. *moriiv-ko* ‘triste (sad, poor, destitute)’ (3.103.0097) *moriive-t\$* ‘poor, destitute person’, pl. *mo~mooreve-m* (3.104.0169)

A number of important adverbs, such as those illustrated in (9), are also derived with *-ko*, sometimes recorded with a final glottal stop.

- (9) TV a. *hamiin(g)-koʔ* ‘por qué, cómo (why, how)’ (3.104.0410)
 b. *honuu-koʔ* ‘antes, of long ago’ (3.102.0159)
 c. *hetee-ko* ‘arriba (high, above)’ (3.104.0395)
 d. *mahii-ko* ‘pronto (right away, soon)’ (3.103.0173)
 e. *\$evoor-ko* ‘de otro modo (differently)’ (3.102.0018) ~ *\$owoor-ko* ‘diferente (differently)’ (3.103.0362)

Verbs can be derived from adjectives and adverbs in *-ko* with the suffix sequence *-mo-k*, as in (10).¹⁶⁴

- | (10) TV | adjective | verb |
|---------|---|---|
| a. | <i>aawm-ko</i> ‘oscuro (dark)’
(3.103.0151) | <i>aawm-ko-mo-k</i> ‘oscurecer (get dark)’
(3.103.0151) |
| b. | <i>hetee-ko</i> ‘arriba (up, high, above)’
(3.102.0601) | <i>heet-ko-mo-k</i> ‘subió (climbed up)’
(3.103.0252) |
| c. | <i>morii-v-ko</i> ‘triste (sad, poor)’
(3.103.0097) | <i>morii-v-ko-mo-k</i> ‘[estar] triste (be sad)’
(3.105.0491) (cf. transitive <i>morii-no-k</i>
‘tener lástima (take pity on)’
(3.105.0148)) |
| d. | <i>tongoo-ko</i> ‘abajo (below, under)’
(3.102.0866) ~ <i>toong-ko</i> ‘abajo,
debajo (under)’ (3.103.0255) | <i>toong-ko-mo-k</i> ‘está bajo (be low, under)’
(3.102.0579) |

A number of verbs are attested with *-ko-mo-k* where no corresponding adjective or adverb is attested. Examples are given in (11). (11a) is cited with future *-ro*; it is not attested with nonfuture *-k*. The attestations of (11g) lack the nonfuture *-k*.

¹⁶⁴ TV *-ko* is probably cognate with the Hopi suffix *-ko* which marks accusative case for the class of “morphological adjectives” (Hopi Dictionary 1998:875). The nominative case is in *-jo*. This is another instance, along with the absolutive suffix, where we find Takic non-accusative elements corresponding to Hopi accusative markers.

- (11) TV
- a. *haaj-ko-mo-ro* ‘a quedar (to stay, remain)’ (3.105.0104)
 - b. *hoov-ko-mo-k* ‘está calentándose (la estufa) (heat up, of stove)’ (3.103.0687)
 - c. *hojuuj-ko-mo-k* ‘come out ahead in an argument’ (3.103.0222)
 - d. *jaraar-ko-mo-k* ‘remember’ (3.105.0122)
 - e. *joviiv-ko-mo-k* ‘be late in the day’ (3.103.0647)
 - f. *kojaax-ko-mo-k* ‘[se levanta] mucho polvo (much dust is raised, become dusty, powdery)’ (3.105.0013)
 - g. *kwaraar-ko-mo-k* ‘se está reditiendo [= derretiendo] (it is melting)’ (3.103.0422)
 - h. *neem-ko-mo-k* ‘se arrendó (returned)’ (3.103.0282)
 - i. *paaw-ko-mo[-k]* ‘está hinchando (be swollen)’ (3.103.0330)
 - j. *potoo\$-ko-mo-k* ‘se cuajó el agua (the water froze, got hard)’ (3.102.0576)
 - k. *povee-ko-mo-k* ‘se chinquecha pa arriba (raise abdomen with head down, as of pinacate beetle)’ (3.104.0507)
 - l. *taan-ko-mo-k* ‘está andando (go along)’ (3.105.0070)
 - m. *teroor-ko-mo-k* ‘se rompió (it broke)’ (3.105.0091)
 - n. *t\$aam-ko-mo-k* ‘está desparamado (be scattered)’ (3.105.0155)
 - o. *toaaj-ko-mo-k* ‘se quebró (it broke)’ (3.105.0084)
 - p. *vaaw\$-ko-mo-k* ‘subside, of swelling’ (3.103.0331)
 - q. *weraar-ko-mo-k* ‘the sun is on its downward course’ (3.105.0489)
 - r. *wiit-ko-mo-k* ‘se acaba (come to an end)’ (3.103.0234)

There is a small class of derived adjectives that end in *-k*. This *-k* is not the nonfuture verb suffix, since these constructions are recorded as copula complements with *xaa* (see 9.1.2 (2)). Again, additional members of this class can be predicted from verbs that are like *karuu-k-mo-k*. For example, from *t\$omuu-k-mo-k* ‘bend over’, one can predict the adject for ‘bent over’ should be *t\$omuu-k*. No plural forms are attested for these. The important adverb *waraak* ‘very’ (3.103.0318), ‘just’ (3.104.0396) may have this ending; a variant *weraaw* appears once (see (1b) above).

- (12) TV
- | | adjective | related verb |
|----|--|--|
| a. | <i>araa-k</i> ‘rajado (split)’
(3.105.0106) | <i>araa-k-mo-k</i> ‘solo se raja (la tabla) (it [the plank] splits on its own)’ (3.105.0106) |
| b. | <i>karuu-k</i> ‘parado (standing up)’ (3.103.0671) | <i>karuu-k-mo-k</i> ‘se paró (stood up)’ (3.103.0109)
3.104.0358 |

- c. *nataa-k* ‘pegado (stuck, as with glue)’ (3.103.0268) *nataa-k-mo-k* ‘está pegado, se atascó (be stuck, got stuck, as in a mire)’ (3.105.0146)

There are two forms of the adjective ‘white’, *raawro-k* and *raawro-7(a)*. *Raawro-k* is the predicate complement form, as are most of the adjectives surveyed in this section, while *raawro7(a)* is the modifier form. This difference can be seen in (13).

In (13) there are two different speakers. The one Harrington interviewed first, Jesús Jauro (Jes.) uses the overt copula *xaa* with the predication ‘be white’ (13a). The later speaker, José de los Santos Juncos (Kw., for his nickname “Kewen” [kju:n]), produces his own version of the predication, with a zero copula (13b), and with a different version of the indicative modal. Then he offers a sentence using ‘white’ as a noun modifier (13c).

- (13) TV a. Jes. *Raawro-k = 7e xaa.*
 white-ADJZ = IND be
 ‘Está blanco. (It’s white.)’ (3.105.0105)
- b. Kw. *Raawro-k = e7 Ø.*
 white-ADJZ = IND be
 ‘Está blanco. (It’s white.)’ (3.105.0105)
- c. Kw. *Huu-to = 7aa kavaajo7-a raawro-7a.*
 see-TR = 2.IMP horse-ACC white-ADJZ.ACC
 ‘¡Mira el caballo blanco! (Look at the white horse!)’ (3.105.0105)

The use of adjectives as modifiers is not well represented in the TV data (nor in most of Tactic). Most of the modifier adjectives are morphologically indistinguishable from nouns and consequently have not stood out for separate study. One feature they have in common with nouns and not with complement adjectives is that they agree with their head noun with respect to case and number. The accusative form of *raawro7* is seen in (13c). The plural is *raawro-7a-m* [white-ADJZ-PL] (3.103.0747). The plural reveals the full form of the adjectivalizing suffix *-7(a)*, as does the accusative of (13c), where accusative is marked by the retention of a final vowel that is otherwise subject to apocope.

We continue with mainly predicate complement adjectives.

Many derived adjectives have a suffix *-pe7*. Some of these are derived from verb stems. Since many of these refer to states of absence or inadequacy, it seems likely that the suffix is related to the noun-forming absentative suffix sequence **-pi-sh* ‘lacking, without’, discussed in 14.11.3, where several of the items in (14) are also noted.

- (14) TV a. *a-hoojaw-pe7* ‘being aloft through air’ (3.105.0529)
 b. *a-huu-pe7* ‘tuerto (blind in one eye, one-eyed)’ (3.103.0073)
 c. *het\$uuk-pe7* ‘tuerto (blind in one eye) (more polite)’ (3.105.0343)
 d. *horoop-pe7* ‘agujerado (perforated, having a hole)’ (3.105.0156)
 (*horoop-ke-nax* ‘está agujereando (make a hole)’ (3.103.0497))
 e. *jomaax-pe7* ‘medio prieto, color oscuro (blackish, dark color, dark complexioned)’ (3.102.0648)
 (also modifier adj. *jomaaxa-7*, pl. *jomaaxa-7o-m* (3.103.0765))
 f. *kareoot-pe7* ‘cojo (lame)’ (3.104.0517)
 (*kareoota-x* ‘anda mancando (walk with a limp)’ (3.104.0549))
 g. *moaa7-pe7* ‘loco (crazy)’ (3.105.0147) (*moaa-r* ‘moon’)
 h. *reoo-pe7* ‘bald’ (3.105.0158)
 i. *sakaa-pe7* ‘más claro (than *takaape7* ‘azul [blue]’) (light blue)’ (3.104.0327)
 (perhaps cognate with Hopi *sakwa* ‘light greenish blue’)
 j. *taa\$-pe7* ‘pobre (poor)’ (3.104.0334)
 k. *takaa-pe7* ‘verde, azul (green, blue)’ (3.103.0027)
 l. *teroor-pe7* ‘rompido (broken)’ (3.105.0107)
 (*teroor-k-ena-x* ‘está rompiéndolo (be breaking it)’ (3.105.0106))
 m. *toaar-pe7* ‘mucho malo’ (very bad)’ (said of lame boy peddler) (3.102.0556)
 n. *waawt\$-pe7* ‘arrugado (wrinkled)’ (3.105.0157)
 o. *xamaa-pe7* ‘borracho, loco, tonto (drunk, crazy, stupid)’ (3.103.0479)

While these constructions are attested with nouns as attributives, unlike adjectives in *-ko*, they are not attested as predicate complements of the verb *xaa*. Instead, their preferred role is as a verbless complement, also an option for *-ko* constructions. In (15) *moaa7pe7* appears with a genitive plural and is syntactically a noun.

- (15) TV *po-moo-ke-n* *moaa-7-pe7-mo*
 3-PL-house-PSD moon-(?)-absent-PL.GEN
 ‘casa de los locos (crazy people’s house, house of the lunatics)’ (3.105.0147)

A small set of derivations with *-ke-we7* and *-we7*, in (16), are attested exclusively as verbless complements. Example (16f) may exhibit haplology: **ke-ke > ke*.

- (16) TV
- a. *noom-ke-we7* ‘doblado, chueco (bent, crooked)’ (3.105.0341)
 - b. *poon-ke-we7* ‘un real (a *real*, a dime)’ (3.103.0464) (var. *poonko* (3.104.0095), but elsewhere *poonko* “is a mistake” (3.104.0402)) (cf. SE *pyynk* ‘dime’)
 - c. *\$ahoov-ke-we7* ‘muy respetoso (ritually powerful, respected)’ (3.104.0551) (cf. *\$ahoovet* ‘ritual power, powerful being’ (3.103.0320))
 - d. *toraar-ke-we7* ‘round, as of sun, moon’ (3.104.0167) (cf. *toraar-e7* ‘round, peso coin’ in (31))
 - e. *xahuut-ke-we7* ‘derechito (quite straight, not bent)’ (3.104.0553)
 - f. *araake-we7* ‘rajado (split)’ (3.105.0106) (cf. *heaa=na=y araa-ena-x* ‘ya lo rajé [I split it]’ [also at 3.105.0106])
TV *araak* looks like it may be a loan from Spanish *rajar*.
 - g. *pajuuho-we7* ‘amarillo (yellow)’ (3.103.0450) (also *pajuu-we-t* (3.104.0463))
 - h. *worix-we7* ‘está grande (grown, of a child)’ (3.103.0681)

At least two forms that can be used attributively end in *-r* (17).

- (17) TV
- a. *mopii-7a-r* ‘primero (first, ahead)’ (3.102.0868) (cf. *ne-moope-n* ‘my nose’ (3.103.0610)) (root *mopī*)
 - b. *pavaa-r* ‘mojado (wet)’ (3.103.0461) (cf. *pavaa-ro-k* ‘get wet’: *heaa7=ne pavaarok* ‘ya me mojé (I got wet)’ (3.105.0345))

Mopii7ar ‘first’ (17a) can be used attributively, both animately (18a) and inanimately (18b), and adverbially (18c). *Mopii7ar* is not attested as a predicate complement.

- (18) TV
- a. *mopii7ar wo\$ii7* ‘el primer perro (the first dog)’ (3.102.0868)
 - b. *mopii7ar kijj* ‘la primera casa (the first house)’ (3.102.0868)
 - c. *Noo = ne = 7 = m* *mii mopii7ar*.
1SG.PRO-1SG = IND = AUG go first
‘Yo fui primero. (I went first.)’ (3.102.0868)

Finally, there are adjectives in *-ka7* (19) and *-xa7* (20). These are likely cognate with the *-qa7* adjectivalizing suffix in SE. The variant *-ko7* in (19c) may be from some other source.

- (19) TV a. *hopeej-ka7* ‘sharp-pointed, as of a needle’ (3.105.0349)
 b. *monii-ka7* ‘pointed, as of a hill’ (3.103.0225)
 c. *\$amuu-ka7* ~ *-ko7* ‘peludo, barbón (hairy, bearded)’ (3.103.0304)
 d. *xo7oo-ka7* ‘strong, as of a man’ (3.103.0767)

The plural of *-xa7* is with *-am* in (20g) and *-om* in (20a). This difference means, within the framework of our analysis, that different speakers have different underlying forms for *-xa7*, either *-xa7a* or *-xa7o*. We have no idea which is diachronically prior.

- (20) TV a. *jomaa-xa7* ‘dark complexioned’, pl. *jomaa-xa7o-m* (3.103.0765)
 b. *jopii-xa7* ‘black, the black of carbon or of a black dog’ (3.102.0648)
 c. *ko\$ii-xa7* ‘ash-colored’ (cf. *ko\$ii-j* ‘ceniza (ash)’) (3.103.0763)
 d. *kwahoo-xa7* ‘colorado (red)’, pl. *kwahoo-no-m* (sic, with *-no-*, i.e. a different derivation) (3.103.0749)
 e. *rekwaa-xa7* ‘straight, as of a road’ (3.105.0341)
 f. *taraajn-xa7* ‘está horqueteado (it is forked, as of branches of a tree)’ (3.103.0122)
 g. *tomoon-xa7* ‘sordo (deaf)’, pl. *tomoom-xa7a-m* (3.105.0090)

Related to *kwahooxa7* ‘red’ (20b) is the noun *kwahooxa7a* ‘big red snake’ (3.102.0624). This seems to be a nominalization that is marked by retention of the final vowel. The plural given (once only) for *kwahooxa7* is *kwahoonom*, with *-no-* replacing *-xa7*. This represents a different derivation: *kwahoonom* is the plural of unattested *kwahoonot**. This should be compared with *rawaanot* ‘light-complexioned person’, pl. *rawaanom*, related to the adjective *rawaate7* ‘medio blanco (light complexioned)’ (3.103.0748).¹⁶⁵

¹⁶⁵ There is some confusion about these forms in the Harrington notes (3.103.0748). Initially José de los Santos Juncos, “Kewen,” provided *rawaanot* as the plural of *rawaate7* ‘medio blanco’, saying that it meant ‘gentes medio blancos (light-complexioned people)’, and then, seemingly as a correction, he provided the “real” plural *rawaanom* and

Another example of the nominalization seen above, that of the retention of the final vowel, is *jupiixa7a* ‘black ant’ (3.103.0054). It is striking that *kwahooxa7a* is not just a “red one” but specifically a “big red snake” and *jopiixa7a* is not a “black one” but a “black ant”.

Yet another example of this nominalization is *joixa7a* ‘valley, valle, llano’ (3.102.0582). This is derived from unattested *joi-xa7**, which would presumably mean ‘flat, of land’. In the locative (with *-nga*), the final syllable *-7a* disappears: *muuro joixanga* ‘allá en el llano (there on the flat, in the valley)’ (3.103.0260).

The root in *taraajna7* ‘forked’ appears without *-xa7* in (21); compare to (20d). The example is somewhat mysterious (how does Harrington’s imperative translation match the apparently 3SG indicative nature of the sentence?), but the example in (21) does seem to demonstrate that *-xa7* figures as a suffix and is not the copula *xaa*.

- (21) TV *Taraajn = 7e xaa*.
 forked = IND be
 ‘Abre las piernas, spread your legs.’ (3.103.0122)

An important adverbial suffix is that for ‘time’ or ‘times’, *-e\$* (see 15.5.1 for further discussion). In TV this suffix has only been found attached to numerals and the quantifier *ajoo7* ‘much, many’ but, if it functioned as it does in SE, it may have been able to appear with other vocabulary as well.

- (22) TV a. *weh-ee\$* ‘twice’ (3.102.0657) *wehee7* ‘two’
 b. *paahe7-e\$* ‘three times’ (3.103.0448) *paahe7* ‘three’
 c. *mahaar-e\$* ‘five times’ (3.102.0659) *mahaar* ‘five’
 d. *ajoo7-e\$* ‘many times’ (3.104.0416) *ajoo7, ajoo7en* ‘many, much’

14.14.2. SERRANO ADJECTIVES AND ADVERBS. SE has a small set of (apparently) non-derived adjectives, seen in (1), though for one example, (1m), the form with no derivational suffixation occurs only reduplicated. A recent loan (1g) finds itself in this short list. In

elaborated, “de Pechanga la gente no son muy blancos, son *rawaanom* (at Pechanga the people are not very white, they are *rawaanom*).”

spite of looking like a *k*-class verb, *navi7y7k* ‘fast’ (1h) participates in no verbal derivation or inflection.

- (1) SE
- a. *chikt\$* ‘nothing but, only, just’
 - b. *chivu7* ‘bitter’ (cf. *chivu7-t* ‘bitter thing’)
 - c. *chuka7* ‘salty, sour’ (cf. *chuka7-t* ‘salt’)
 - d. *hou7pa7* ‘slow’
 - e. *ky^R\$a7* ‘bad’ (cf. *ky^R\$a7-ni-ch* ‘bad one’)
 - f. *kwiicha7* ‘tough’ (cf. *kwiicha-v-k* ‘get tough’)
 - g. *luumish* ‘lame’ (cf. *luumish-tu7* ‘become lame’) (< CA *luumish* ‘paralyzed, crippled person or animal’ S&H 98)
 - h. *navi7y7k* ‘fast, right away’
 - i. *puchu7* ‘hard’ (cf. *puchu-v-k* ‘get hard’)
 - j. *pyy^Rn* ‘naked’
 - k. *py^Rt\$y^R7* ‘heavy’ (cf. *py^Rt\$y^R7-v-k* ‘get heavy’)
 - l. *rou7n* ‘green’
 - m. *va\$i~va\$i* ‘thin, of cloth’ (cf. *va\$i-pka-t* ‘cloth’ [-*pka*- unidentified])
 - n. *ychy* ‘cold’ (cf. *ychy-v-k* ‘for the weather to get cold’)
 - o. *y^Rt\$y^R* ‘hot’ (cf. *y^Rt\$y^R-t* ‘hot thing’, *y^Rt\$y^R-7n* ‘be hot, of weather, for a person to feel hot’)

Many adjectives derived from verbs have a prefix *a-* and most of these also have the adjectivalizing suffix *-i7*, as seen in (2). That the adjectivalizing prefix *a-* is not a 3SG possessive prefix is made clear, for instance, by the adjective *a-qo^R7i-m* ‘dead (of plural subject)’ (< *qo^R7a-j* ‘die (pl.)’), in (2e). This form also shows that adjectives appear with inflectional suffixes for nouns, including plural, accusative/genitive, and local case suffixes and further, that the suffix *-i7* ends in a glottal stop that is pronounced only in word-final position, a recurrent pattern in SE.

- (2) SE
- a. *a-hiik-i7* ‘alive’ (< *hiik* ‘breathe’)
 - b. *a-kwah-i7* ‘cooked,ripe’ (< *kwahy-j* ‘get cooked, ripen’)
 - c. *a-nuumin-i7* ‘broken, of long object’ (< *numiin* ‘break (intr.)’)
 - d. *a-pi\$qa7-i7* rotten (< *pi\$qa7* ‘rot’)
 - e. *a-qo^R7-i-m* ‘dead (pl.)’ (< *qo^R7a-j* ‘die (pl.)’)
 - f. *a-waak-i7* ‘dry, dried up’ (< *waak* ‘dry up’)

Adjectives of this type derived from k-class verbs are shown in (3).

- (3) SE a. *a-mym7-k-i7* ‘dead (sg.)’ (< *mym7-k* ‘die (sg.)’)
 b. *a-julal-k-i7* ‘worn out, ragged’ (< *julal-k* ‘wear out, get old’)
 c. *a-noo^Rm7-k-i7* ‘bent’ (< *noo^Rm7-k* ‘bend (intr.)’)
 d. *a-qapit-k-i7* ‘broken from bending’ (< *qapit-k* ‘break by bending (intr.)’)
 e. *a-qa^Rm7-k-i7* ‘foolish, silly, drunk’ (< *qa^Rma^R-k* ‘be drunk’)
 f. *a-qo^Rp-k-i7* ‘broken, of hard surface, e.g. glass, egg’ (< *qo^Rp-k* ‘break (of hard surface) (intr.)’)
 g. *a-\$arar-k-i7* ‘split’ (< *\$arar-k* ‘crack, split (intr.)’)
 h. *a-tyykw-k-i7* ‘shaded’ (also *tyykw-k-i7*) (cf. *tyykw-k-in* ~ *tyykw-kw-in* ‘shade s.th.’)

The examples in (4) are derived from k-class verbs that contain the resultative suffix *-y7-* ~ *-u7-* which appears before thematic *-k*. These lack the *-i7* suffix. They resemble KI adjectives of the type seen in (14.11.3 (2)) but the KI adjectives derive from verbs that correspond to the SE simple k-class verbs above in (5) and are not resultative forms. (The k-class resultative *-y7* is not found in KI.)

- (4) SE a. *a-pit-y7-k* ‘full’ (< *pit-y7-k* ‘be full’)
 b. *a-puut-u7-k* ‘full of’ (< *puut-u7-k* ‘be full of’)

Two common adjectives take the adjectivalizing *a-* prefix but no adjectivalizing suffix.

- (5) SE a. *a7-aj* ‘good’ (cf. *-ajy* ‘right hand’) (root *ajy*)
 b. *a-tiy^R7a7* ~ *a-ty^R7a7* ‘big’ (root *tiy^R7à* ~ *ty^R7à*)

The examples in (5) are in their complement forms. Their inflected forms, i.e., those used when these adjectives are used as modifiers or adjectival nouns, reveal some interesting structural details, as seen in (6), particularly in the example *aa7ajym* ‘good (pl.)’ in (6a).

- (6) SE singular plural
 a. *a7-ajy-t\$* ‘good (one)’ *a-a7~ajy-m* (< *a- a~ ajy -my*)

	[ADJZ-good-ABS]	[ADJZ-PL~good-PL]
b. 1.	<i>a-tiy^R7a-t\$</i> ‘big (one)’	<i>a-tih~tiy^R7a-m</i>
2.	<i>a-ty^R7a-t\$</i>	<i>a-ty^Rh~ty^R7a-m</i> (cf. KI <i>tyh~ty7a</i> ‘be big’)
		[ADJZ-PL~big-PL]

The pattern seen in the plural forms of (6b) shows that in *a- a~ a_{ij} -my*, the underlying form of (6a) *aa7ajym*, the first *a-* is the adjectivalizer and the second the reduplicative plural prefix. The fact that a glottal stop is heard only after the second *a-* suggests that maybe the SE rule of glottal stop insertion after a prefix applies only to the position immediately before a vowel-initial root.

Many other SE adjectives have just the suffix *-i7* (~ *-7i7* following a vowel). The examples given in (7) show adjectives of this sort and the most closely related vocabulary that has been identified. There are a number of morphological details that remain to be understood. One important phonological detail yet to be understood is why some vowels, as in (7f,g,i,k), are not displaced by the ostensibly vowel-initial adjectivalizing suffix, abstract *-i*, and remain in the derivation to provide the context for the selection of the *-7i* allomorph. Many of the grammatical details of the forms in (7) remain confusing. The hyphens in (7) separate morphemes, but many of these elements are unique within the corpus and cannot yet be identified, e.g. what is final *-chi7* in (7a), what is medial *-ii7-* in (7b), what is *-t\$-* in (7e)? The adjective of (7e) looks like a derivative from a k-class verb, but the verb was not known. In (7j) the derivation in *-i7* displaces the thematic *-k* suffix of the verb, a different pattern from that seen for k-class verbs in (3) above.

(7)	SE	adjective	related word
	a.	<i>añii7-i7</i> ‘small’	<i>añii7-i-chi7</i> ~ <i>añii7-chi7</i> ‘small one’
	b.	<i>cha7-i7</i> ‘crowded’	<i>che-i7-t</i> ‘thicket, brush’
	c.	<i>chaak-ii7-i7</i> ‘tiresome, boring’	<i>chaak</i> ‘get tired of’
	d.	<i>hachaa-7i7</i> ‘sharp’	<i>haach-k-in</i> ‘sharpen’
	e.	<i>hy^Rnchkaa^Rh-k-i7</i> ‘nasty, disgusting’	<i>hy^Rnchkaa^Rh-t\$-i-ch</i> ‘nasty stuff’
	f.	<i>huwa-7i7</i> ‘different’	<i>huwa-t\$</i> ‘other, another’
	g.	<i>mita-7i7</i> ‘long, tall’	<i>mita-t</i> ‘long one, tall one’
	h.	<i>naanyng-i7</i> ‘alike’	<i>nyy-n</i> ‘like me’, <i>py^R-na^R</i> ‘like him’, and cf. reciprocals in <i>*na-</i> , CU suffix <i>-ngki-sh</i> ‘like’

- | | | |
|----|---------------------------------------|--------------------------------------|
| i. | <i>pi\$a-7i7</i> ‘sweet’ | <i>pi\$e-i-t</i> ‘s.th sweet’ |
| j. | <i>tajul-i7</i> ‘slippery’ | <i>tajul-k</i> ‘slide’ |
| k. | <i>tiy^Rmqa-7i7</i> ‘scary’ | <i>tiy^Rmq</i> ‘be afraid’ |

Sometimes the nearest related vocabulary to an adjective in *-i7* is a verb derived from the adjective, as in (8). In the derived verb of (8b), the adjectivalizing suffix has absorbed the stem-final glottal stop of the root *nama7*.

- | | | | |
|-----|----|-----------------------------------|---|
| (8) | SE | adjective | derived verb |
| | a. | <i>mychan-i7</i> ‘strong tasting’ | <i>mychan-i-v-k</i> ‘have a strong taste’ |
| | b. | <i>nama7-i7</i> ‘soft’ | <i>nama-i7-v-k</i> ‘get soft’ |

There are a few adjectives with final *-7n*. This looks like the stative suffix on verbs. However, these are not verbs. They do not have the indicative suffix when followed by auxiliary elements, as shown in (9a). In the future tense, they require support from the copula (9b).

- | | | | | | |
|-----|----|----|---------------------|------------------|------------------------|
| (9) | SE | a. | <i>Rou-7ny = n.</i> | not | <i>*Rou-7ny-j = n.</i> |
| | | | green-ADJ = 1SG | | green-(?)-IND = 1SG |
| | | | ‘I’m green.’ | | |
| | | b. | <i>Ta = n</i> | <i>hawawa-7n</i> | <i>ñi-iv.</i> |
| | | | IRR = 1SG | light.weight-ADJ | do-FUT |
| | | | ‘I’ll lose weight.’ | | |

It should be noted that there is no obvious syntactic test for adjective status beyond those noted in (9). Intensifiers such as *hakup* ‘very’ occur with verbs (10a), nouns and, adjectives in verbless clauses (10b,c), and other adverbs (10d). Furthermore, nominal forms can appear as modifiers, as in (11).

- | | | | |
|------|----|----|-----------------------|
| (10) | SE | a. | <i>Hakup viis-k.</i> |
| | | | very thin.of.liquid-K |
| | | | ‘It was very thin.’ |

- b. *Hakup* $wy^R t \$ i 7 v y^R - t \$$ \emptyset .
 very old.man-ABS be
 ‘I am a very old man.’
- c. *Hakup* = *kwyn* $y^R t \$ y^R$ \emptyset .
 very = QUOT.3SG hot be
 ‘It is very hot.’
- d. *Hakup* *pyjaana-nu7* = *kwyny* = *my-7* *kim*.
 very far.away-ABL = QUOT = 3PL-PST come
 ‘They came from very far away.’

- (11) SE a. *wama-t* *mita-t*
 tree-ABS tall;long-ABS
 ‘tall tree’
- b. *A-7ajy7* *mita-7i7* \emptyset .
 3SG-hair tall;long-ADJZ be
 ‘Her hair is long.’

SE adverbs are diverse in form, even within categories such as manner, and where there is apparent derivation of adverbs from other categories, there are few widely productive derivational elements. An example of this complexity appears in (12) and (13). In (12), the seemingly more minimal form *amaj7* is an adverb and the adjective has an absolutive suffix like the derived nouns in (1b,c) and (7f). These are also found in KI (12b). (Note that KI allows syllable-final *7j* while SE does not. KI *7j* usually corresponds to SE *j7*.) However, the adverb is not always the more basic form; the opposite is true in the examples in (13). Furthermore, there are a number of adverbs with final *-t*, as in (14).

- (12) adverb adjective
- a. SE *amaj7* ‘now’ *amaj-t* ‘new’
- b. KI *ama7j* (3.100.0571) *amaj-t* (3.98.0304)

- (13) SE adverb adjective

- a. *puchuk* ‘hard, fast, intensely, very’ *puchu7* ‘hard’
 b. *ky^R\$a7ik* ~ *ky^R\$aajt* ‘badly’ *ky^R\$a7* ‘bad’

- (14) SE adverb
 a. *hawei7t* ‘always’
 b. *hoowkpajt* ‘easily’ (*hoowkp* ‘one’)
 c. *ky^R\$aajt* ‘badly’ (*ky^R\$a7* ‘bad’)
 b. *oo^Rvai7t* ‘right away’ (*oo^Rva7* ‘be strong’)

An adverb-deriving suffix *-ik*, seen in (15) is homophonous with the SE irrealis subordinator (see 12.2.5.2). However, its senses are not irrealis, so it is unlikely that it is the same item.

- (15) SE a. *hou7pa7-ik* ‘slowly’ (< *hou7pa7* ‘slow’
 b. *houngan-ik* ‘miserably, in a pitiful manner’ (< *houngan-i-ch* ‘poor one’, cf. *ho~houngan* ‘be pathetic’)
 c. *huwa7-ik* ‘differently’ (< *huwa-7i7* ‘different’, cf. *huwa-t\$* ‘other’)
 d. *iviina-i7k* ‘recently’ (< *iviin(a)* ‘yesterday’)
 d. *ky^R\$a7-ik* ‘badly’ (< *ky^R\$a7* ‘bad’)
 e. *po^Rqa^Rtk-i7k* ‘suddenly’ (cf. KI *pokatki7-ik*)
 f. *puchu-k* ‘hard, fast, intensely, very’ (cf. *puchu7* ‘hard’)

The final adverbial suffixes to be considered here are two suffixes for ‘time’ or ‘times’. The first is *-ia* ~ *-i*. This is from **isa*, with the loss of **s* (via **h*) characteristic of Serran; the non-Serran languages all retain the sibilant. This suffix can be applied to any numeral and it appears with certain other vocabulary as well. We note that *hiñiki7* ‘how many times’ (15n) is heard with a final glottal stop, the same as *hiñiki7* in the sense ‘how much, how many’; it seems that *hiñiki7* with the ‘times’ ending has merged with *hiñiki7* with the adjectivalizing ending.

- (16) SE a. *ivi-ia* ‘this time’ *ivi7* ‘this’
 b. *ama-ia* ‘that time’ *ama7* ‘that’
 c. *huwa-t\$i* ‘the next time’ *huwat\$* ‘other’
 d. *hoowkp-ia* ‘once in a while’ *hoowkp* ‘one’
 e. *wo^Rh-ia* ‘twice, two times’ *wo^Rh* ‘two’

f.	<i>paah-ia</i> ~ <i>paah-i</i> ‘three times’	<i>paahi7</i> ‘three’
g.	<i>wahach-ia</i> ‘four times’	<i>wahach</i> ‘four’
h.	<i>maha^{Rt}\$-ia</i> ~ <i>maha^{Rt}\$-i</i> ‘five times’	<i>maha^{Rt}\$</i> ‘five’
i.	<i>paa^Rvah-ia</i> ‘six times’	<i>paa^Rvahi7</i> ‘six’
j.	<i>wachkuvik-ia</i> ‘seven times’	<i>wachkuvik</i> ‘seven’
k.	<i>wahwch-ia</i> ~ <i>wahwch-i</i> ‘eight times’	<i>wahwch</i> ‘eight’
l.	<i>ma7kuvik-ia</i> ‘nine times’	<i>ma7kuvik</i> ‘nine’
m.	<i>wahma^{Rt}\$-ia</i> ‘ten times’	<i>wahma^{Rt}\$</i> ‘ten’
n.	<i>hiñik-i7</i> ‘how many times’	<i>hiñiki7</i> ‘how much, how many’

Examples of the non-numeral use of *-i(a)* are given in (17).

- (17) SE a. *Pakii-tu7* *ivi-ia* *taamia-t.*
 fog-VBLZ PROX-TIME sun;day-ABS
 ‘Today is foggy.’
- b. *Ama-ia* *qaj = ny-7* *mi-j;* *ny-7* *mana7-k-t\$u7.*
 DIST-TIME NEG = 1SG-PST go-IND 1SG-PST go.home-K-MOT
 ‘That time I didn’t go [to school]; I went home.’ (At School)
- c. *Ajay7 = ny-7* *mo^Rch* *mi-j* *huwat\$-i* *atamo^Ra7.*
 then = 1SG-PST again go-IND other-TIME year
 ‘Then I went [to school] again the next year.’ (At School)
- d. *Mia-t* *ama7 – hiñiki7 –* *simaana7 –* *chymy-7* *chawe-j.*
 DUB-IRR.3SG DIST INDF.MANY week 1PL-PST pick;harvest-IND
 ‘I don’t know how many weeks it was that we harvested.’ (At School)

In place of (15f) *paahia* ‘three times’, Dorothy Ramón (in Ramón & Elliott 2000) uses *paahiv*, a form of *paahi7* ‘three’ with a suffix *-v*. Her word for ‘three times’ occurs in several examples, but usages of other words suffixed with *-v* in the same sense have not yet been found. Another example of this suffix *-v* apparently meaning ‘times’ (along with an unidentified element *-t\$u-*) appears in a single example, (18), elicited in brief work by K. Hill with Louie Marcus. The possibility that this might be a switch-reference suffix is advanced in 12.2.4.2 (2).

- (18) SE *Hoowkp sieentu7-t\$u-v = kwyn jaa7.*
 one hundred-(?)-times = QUOT.3SG carry;do
 ‘He did it a hundred times.’ (cf. Spanish *ciento*)

14.14.3. KITANEMUK ADJECTIVES AND ADVERBS. The list of apparently underived adjectives in KI, as can be expected, overlaps with that of SE. Examples appear in (1).

- (1) KI
- a. *haonga, haongan* ‘poor, pathetic’ (3.100.0348)
 - b. *ju7u7* ‘lame’ (3.99.0258)
 - c. *kwitsa7* ‘flexible’ (cf. *kwitsk* ‘wring out?’) (3.98.0087)
 - d. *kyky7* ‘complete’ (3.98.0235)
 - e. *ky\$a7* ‘bad’, pl. *kyh-ky\$a7* ~ *kyh-ky\$a7-nim* (3.98.0538, 0457)
 - f. *meta7y7* ~ *metat* ‘long, tall’, pl. *memeta7y7* (3.100.0411)
 - g. *namumuk* ‘first’ (cf. *-mukpi* ‘nose’) (3.100.0578)
 - h. *putu7* ‘hard, tough’ (3.98.0252)
 - i. *pyt\$y7* ‘heavy’ (3.98.0055)
 - j. *\$yvy7* ‘cold’ (cf. noun *\$yvyt*) (3.98.0278)
 - k. *toho* ‘foolish’ (3.98.0100)
 - l. *tsivu7* ‘bitter’ (3.98.0166)
 - m. *tsukwa7* ‘bitter, sour, salty’ (3.98.0184)
 - n. *tynga7* ‘deep of water, canyon’ (cf. *tyngyk* ‘get deep’) (3.98.0469)
 - o. *ymyha* ‘mute’ (3.98.0452)

Some forms that behave like adjectives end in *-t\$* and *-t*, making them formally more like nouns. Anderton (1988:129) points out that in KI it would be possible to consider adjectives of the kind seen in (1) as simply members of the \emptyset -class of absolutes. She states that only adjectives can be used with quantifiers like *tsipk* ‘a little’, *waravk* ‘really’, *wyyr* ‘very’, but there are few examples of this type, and this generalization is not true of SE where such forms appear with verbs, nouns, and other adverbs.

- (2) KI
- a. *numuat\$* ‘good, tasty’ (3.98.0169)
 - b. *pamukpit* ‘first, ahead’ (cf. *-mukpi7* ‘nose’) (also cf. (1g)) (3.98.0082)
 - c. *pitat\$* ‘youngest, junior’ (3.98.0012)
 - d. *tsikit\$* ‘nothing but’ (3.98.0381)

- e. *turuu7ki-t* ‘lazy’, pl. *tuh-turuu7ki-m* (3.98.0450)
- f. *wakit* ‘thick, of liquid’ (3.98.0204)
- g. *wip-t* ‘fat’ (also noun ‘fat, lard’), pl. *wipi-m* (3.99.0596)

Adjectives from verbs often have a suffix *-k*, as in (3). In example (3b), in line with the analysis of SE, the *y* in *winikayk* may be the underlyingly final vowel of the verb *winikaw(y)*. In the derived adjective, the intervocalic *w* is lost by regular rule. This construction is quite productive in KI, yielding a large number of adjectives. For many of these KI adjectives, the source verb is not attested.

- (3) KI a. *muuku-k* ‘sick’ (< *muuk* ‘be sick’) (3.98.0234)
 b. *winikay-k* ‘smart’ (< *winikaw* ‘remember’) (3.98.0392)

There are two patterns with *-k* derivation with k-class verbs. In the first, shown in (4), a copy of the vowel of the stressed syllable appears with a glottal stop before the suffix *-k* and any glottalization at the end of the verb root is lost. This pattern resembles the SE resultative but is found only when the source k-class verb is monosyllabic. Not all monosyllabic k-class verbs behave this way, as can be seen below in (5).

- | | | | |
|-----|----|---|---|
| (4) | KI | adjective | transitive k-class verb |
| | a. | <i>an-a7-k</i> ‘open’ (3.100.0335) | <i>an-k</i> ‘open’ (3.100.0336) |
| | b. | <i>ean-a7-k</i> ‘bent’ (3.98.0216) | <i>ea7n-k</i> ‘bend’ (3.98.0216) |
| | c. | <i>kum-u7-k</i> ‘face down’ (3.98.0329) | <i>kum-k</i> ‘put s.th. face down’ (3.98.0408) |
| | d. | <i>mon-o7-k</i> ‘mixed up’ (3.98.0235) | <i>mo7n-k</i> ‘mix up different kinds of things’
(3.98.0235) |
| | e. | <i>yj-y7-k</i> ‘leaning’ (3.98.0282) | <i>yj7-k</i> ‘lean’ (3.98.0282) |

In the second type of *-k* suffixed adjectives from k-class verbs, the derived adjective is identical to the source verb (5).

- | | | | |
|-----|----|------------------------------------|-----------------------------------|
| (5) | KI | adjective | transitive verb |
| | a. | <i>juahk</i> ‘hanging’ (3.98.0360) | <i>juahk</i> ‘hang’ (3.100.0375) |
| | b. | <i>kwiotsk</i> ‘bent’ (3.98.0216) | <i>kwiotsk</i> ‘bend’ (3.98.0216) |
| | c. | <i>momk</i> ‘piled up’ (3.98.0213) | <i>momk</i> ‘pile up’ (3.98.0213) |

- | | | |
|----|---|---|
| d. | <i>murahk</i> ‘loose, untied’ (3.98.0448) | <i>murahk</i> ‘loosen, untie’ (3.98.0448) |
| e. | <i>puutk</i> ‘full’ (3.98.0210) | <i>puutk</i> ‘fill’ (3.100.0470) |
| f. | <i>rupk</i> ‘straight’ (3.98.0215) | <i>rupk</i> ‘straighten’ (3.98.0010) |
| g. | <i>\$eahk</i> ‘astride’ (3.100.0478) | <i>\$eahk</i> ‘part hair’ (3.98.0355) |
| h. | <i>wirahrk</i> ‘turned’ (3.98.0469) | <i>wirahrk</i> ‘turn’ (3.100.0530) |
| i. | <i>wivavk</i> ‘sharp’ (3.98.0252) | <i>wivavk</i> ‘sharpen’ (3.99.0615) |

The adjectives take no subject prefixes (6b,e), while the source verbs do (6a,c,d). Perhaps because the verb and adjective have the same form, these adjectives frequently have an overt copula verb *kat\$* in attributive clauses, impossible for verbs, as in (6b), while attributive clauses with adjectives of other types are always verbless (see 9.3.2 (1)).

- (6) KI
- a. *Ni-mom-k.*
1SG-pile.up-K
‘Lo amontoné. (I piled it up.)’ (3.98.0213)
- b. *Uvea a-kat\$ mom-k.*
already 3SG-be pile.up-K.ADJZ
‘Ya está amontonado. (Now it’s piled up.)’ (3.98.0213)
- c. *Ni-kwiots-k.*
1SG-bend-K
‘I bent [a] stick (into a curve shape, drawing).’ (3.98.0216)
- d. *Ymy7=ne my-kwiots-k.*
2SG.PRO = NEHE 2SG-bend-K
‘Tú lo chuecatis. (You bent it.)’ (3.100.0403)
- e. *Kwiots-k a-uuva7.*
bend-K.ADJZ 3SG-eye
‘She is cross-eyed.’ (3.98.0216)

A second large class of adjectives is derived with a suffix *-i7 ~ -7j*, the first following consonants (7a-f), the second following vowels (7g-k).

- (7) KI
- a. *ano7s-i7* ‘small’ (3.100.0337)
 - b. *iviv-i7* ‘thin’ (cf. *ivivk* ‘make thin’) (3.98.0213)
 - c. *mytsan-i7* ‘strong tasting (like chiles)’ (3.98.0252)
 - d. *nama7-i7* ‘soft’
 - e. *oo\$-i7* ‘hot’ (3.98.0081)
 - f. *pi\$a7-i7* ‘sweet’ (3.98.0166)
 - g. *haru7-haru-7j* ‘sliding down (like pants)’ (3.98.0382) (cf. *haruhryk* ‘descend’ (3.100.0348))
 - h. *huvava-7j* ‘tasty, good-tasting’ (3.100.0366)
 - i. *kwanana-7j* ‘shiny’ (3.98.0087)
 - j. *tsutata-7j* ‘strong tasting (but not as strong as *mytsani7*)’ (3.98.0455)
 - k. *ma7aja-7j* ‘easy’ (3.98.0468)

A large class of adjectives that Anderton (1988: e.g. 342 sub *ka7m-yk*) calls “participles” are derived from verbs with a prefix *a-* and suffix *-i7*, like the SE adjectives in 14.11.2(2) above. As in SE, these have plurals in *-m*, which shows that the *a-* prefix is not the third person singular but rather is part of the derivation of the adjectives.

- | | | | |
|-----|----|--|---|
| (8) | KI | adjective | verb |
| | a. | <i>a-ka7mk-i7</i> ‘drunk’ (3.100.0381) | <i>ka7mk</i> ‘make drunk’ (3.100.0381) |
| | b. | <i>a-kopk-i7</i> ‘broken’ (3.98.0058) | <i>kopk</i> ‘break (tr.)’ (3.100.0612) |
| | c. | <i>a-nipk-i7</i> ‘dead’ (3.98.0087) | <i>nipyk</i> ‘die’ (3.98.0091) |
| | d. | <i>a-ngywhk-i7</i> , pl. <i>a-ngywk-i7-m</i> ‘worn out’ (3.100.0443) | <i>ngyhwk</i> ‘wear out (tr.)’ (3.100.0443) |

Other forms with *a-* but without the *-i7* ~ *-7j* suffix may also be adjectives. Example (9b) looks like it has the suffix *-i7* except that no final glottal stop is reported while (9f) is reported both with and without the suffix.

- (9) KI
- a. *a-hyva* ‘fine, of meat’ (3.98.0399)
 - b. *a-jak* ‘white’ (3.100.0671)
 - c. *a-jawytu7(-i7)* ‘accustomed’ (3.100.0765)
 - d. *a-kwah-i* ‘ripe, fully cooked’) (< *kwar* ‘be cooked’) (3.98.0253)
 - e. *a-mutsi* ‘coarse’ (cf. *-mutsi* ‘chaff’) (3.98.0399)
 - f. *a-ty7a* ‘big’ (< *tyhty7a* ‘be big’) (3.98.0468)

Finally, KI has a series of adjectives/nouns derived from nouns with *-ka7j*, which Anderton calls the “characterizing” suffix. These should be compared to the *-k(a-) ~ -k ~ -ka-t* suffixes discussed in 14.4, and may be members of that set. Examples appear in (10). The final *-7j* disappears in the plural.

- (10) KI
- a. *havy-ka7j*, pl. *havy-ka-m* ‘baptized Indian’ (< *havy-t* ‘clothing, blanket’) (3.98.0157)
 - b. *kiitanamu7-ka7j* ‘a Kitanemuk’, pl. *kiitanamu7-ka-m* (< *kiitanamu7* ‘speak Kitanemuk’) (3.98.0152)
 - c. *maat\$y-ka7j* ‘wise man’ pl. *machy-ka-m* (< *maat\$* ‘hear, understand’)
 - d. *majha-ka7j* ‘woman newly delivered’ (3.98.0484) (< *majha-ts* ‘son or daughter’, cf. *majha7* ‘give birth’)
 - e. *moa-ka7j* ‘turpentine wood’ (< *moa7-t* ‘smoke’) (3.99.0215)
 - f. *niw-ka7j*, pl. *niw-ka-m* ‘rich person’ (< *-niw* possession) (3.98.0211)
 - g. *poho-ka7j* ‘furry caterpillar, furry’ (< *-poho* ‘fur’) (3.98.0134)
 - h. *tara-ka7j* ‘cloven’ (3.98.0252) (< *-tara* ‘fork’)
 - i. *to7-ka7j*, pl. *to-too7-ka-m* ‘pregnant woman’ (< *to7-t\$* ‘belly’) (3.98.0441)
 - j. *uu7-ka7j*, pl. *uu7-ka-m* ‘girlfriend’ (< *uu7* ‘take’, cf. *uu7huun* ‘love’) (3.98.0210)

The productive patterns for deriving adverbs in KI seem to be few and remain to be investigated. Most KI adverbs are particles of unpredictable shape, although several end in *-k*. Some examples appear in (11). In (11b,c) are two adverbs that Anderton (1988: 162) suspects may have been derived with a suffix *-ik*.

- (11) KI
- a. *hawpa7* ‘slowly’ (3.98.0271)
 - b. *namaik* ‘quickly’ (3.98.0383)
 - c. *numua7ik* ‘well’ (3.98.0288) (cf. *numuat\$* ‘good’)
 - d. *putsuk* ‘extremely, very, firmly’ (3.98.0230)
 - e. *waravk* ‘really, a lot’ (3.98.0379)
 - f. *tsipk* ‘a little’ (3.98.0075)
 - g. *mutu7* ‘always’ (3.98.0132)

14.14.4. COASTAL CUPAN ADJECTIVES AND ADVERBS. Most adjectives in LU have absolutive suffixes; many of these can appear alone as well as in modifying position. Examples are

seen in (1). Several of these illustrate a tendency for plural adjectives to have reduplication. However, (1m) is singular. Unless otherwise noted, plurals simply add *-m* following the absolutive *-tu*, *-lu*, *-chu*. It may be noteworthy (or accidental?) that none of these adjectives show the long absolutive, i.e., the nominative case forms *-la*, *-cha*, *-ta*.

- (1) LU
- a. *alaxwi-sh* ‘bad’
 - b. *chiivu-t* ‘bitter’
 - c. *iipi-t* ‘new, fresh, future’
 - d. *jawá~jwi-sh* ‘beautiful’
 - e. *jixélva-l* ‘active, intelligent’
 - f. *jo-t* ‘big, swollen’ (no plural)
 - g. *kihuu-t* ‘small, narrow, short’ (pl. *kiika-ta-m*, *kiika-t*)
 - h. *maami-sh* ‘naked, destitute’
 - i. *michá-t* ‘some, some kind, any one of’ (pl. *michaa-tu-m*)
 - j. *muká-t* ‘big, large, great’ (pl. *mo~mka-tu-m*)
 - k. *paj7wi-sh* ‘the same’
 - l. *\$awó-t* ‘raw’ (pl. *\$awoo-tu-m*)
 - m. *tavúlvu-sh* ‘tall, long’ (cf. *-tavúlvu* ‘height, altitude’) (pl. *taa~talvi-sh*, *taa~talvi-chu-m*)
 - n. *tooqi-sh* ‘lazy’ (pl. *too~toqi-chu-m*)
 - o. *tuu7u-t* ‘clumsy’

Adjectives of this type are attested in AC as well, as seen in (2). The word for ‘red’ in (2d) is singular; color terms are often reduplicated in Cupan.

- (2) AC
- a. *alu7ma-l* ‘small’ (3.116.0067)
 - b. *awa7wa-ch* ‘difficult’ (3.122.0169)
 - c. *iiv-t* ‘new’ (3.122.0223)
 - d. *kwaja~kkwaja-ch* ‘red’ (3.123.0590)
 - e. *maka-t* ‘big’ (3.121.0074), *ma~mta-ra-m* ‘big ones’ (3.116.0222)
 - f. *pej7we-ch* ‘the same’ (3.123.0305)
 - g. *\$awo-t* ‘raw’ (3.123.0629)
 - h. *tavulva-ch* ‘tall, long’ (3.122.0133)
 - i. *tooqama-l* ‘lazy, slow’ (3.124.0084)

Many Coastal Cupan adjectives and adjectival nouns have the adjectivalizing prefix *a-*, which is found throughout Takic except for CA. The first group of LU adjectives with *a-*, shown in (3), simply prefix *a-* to the verb base. In (3g,h) and in the plural of (3i), the stress falls on the prefix and the vowel of the following syllable is lost by syncope; this stress placement is unexplained. (We indicate stress for all examples in (3).) Also of note is the loss of final *-a* in (3i), *awól* (< **a-wola*), where root-final **la* has been reanalyzed as an absolutive suffix, as is demonstrated by the plural form.

(3)	LU	adjective	verb
	a.	<i>a-náala</i> ‘afraid, scared’	<i>náala</i> ‘be afraid of’
	b.	<i>a-pí7muk</i> ‘sick person’	<i>pí7muk</i> ‘be sick, die’
	c.	<i>a-píisa</i> ‘rotten’	<i>píisa</i> ‘rot’
	d.	<i>a-šúwoo7</i> ‘fearfully, fearful (anim.)’	<i>šúwoo7</i> ‘be afraid of’
	e.	<i>a-tówja</i> ‘thin (animate)’	<i>tówja</i> ‘get thin’
	f.	<i>a-túu7</i> ‘fruitful’	<i>tuu7</i> ‘grow, of plants’
	g.	<i>á-nxa</i> ‘old (including as of a tree)’	<i>naxáa-chu</i> ‘grow old, of man’
	h.	<i>á-qw\$a</i> ‘cooked, ripe’	<i>qwa\$</i> ‘ripen’
	i.	<i>a-wól</i> ‘young man’ (pl. <i>á~7wo-lu-m</i>)	<i>wóla</i> ‘grow’

The AC corpus has one example of this type, *a7ahiivasa* ‘rotten, of wood’ (3.123.0525), with the corresponding verb given as *ahiivasaq*¹⁶⁶ ‘it is rotting’ (also at 3.123.0525). Instead, the AC adjectives usually have some suffix, as in (4), which can be compared with their LU equivalents in (3c,h,i). AC *apiisav* ‘rotten’ (4a) exists alongside *apsá7x* ‘rotten’ (8e). The *-v* suffix in (4a,c) may be the reflex of the realis subordinator PTak **-vy*, which is not attested elsewhere in AC; the CU form of (4c) is *a-wyl-vy*.

(4)	AC	a.	<i>a-piisa-v</i> ‘rotten’ (3.123.0377)	<i>pasa7-x</i> ‘be rotten, rot’ (3.123.0526)
		b.	<i>a-kw\$t</i> ‘ripe’ (3.123.0629)	<i>kwa\$oon</i> ‘be ripe’ (3.123.0629)
		c.	<i>a-wolla-v</i> ‘adult, grown up’ (3.123.0261)	<i>wolla*</i> ‘grow’ (unattested in AC)

For several examples that may be of this type, the source verb is not attested. Sometimes related roots are seen in nouns, as with (5h), *a-wí7* ‘fat, greasy’ from *-wi7* ‘fat’.

¹⁶⁶ Explicitly not **ahiivasx* (also at 3.123.0525).

- (5) LU a. *a-hiiichu* ‘orphan, abandoned child, lonely person’
 b. *a-hiikja* ‘alive person or animal, smart’ (cf. *hiksa-sh* ‘breath’)
 c. *a-kuumisa* ‘having a bad taste (of meat) because smokey or burned’ (cf. *kuumi-t* ‘smoke’)
 d. *a-táv\$í* ‘dry of weather, meat, leaves’
 e. *a-teena* ‘rotten, of eggs’
 f. *a-wa7wo* ‘different’ (cf. *a-woo* ‘other’)
 g. *a-wáki* ~ *a-wíki* ‘yearling’
 h. *a-wí7* ‘fat, greasy’ (cf. *wiitu* ‘grow fat’)
 i. *a-woo* ‘other’ (pl. *a-wó-m*)
- (6) AC a. *a-hikka* ‘alive’ (3.123.0267)
 b. *a-jo7* ‘big’ (cf. LU *jo-t* ‘big’ (1f)) (3.123.0405)
 c. *a-muula* ‘first’ (3.123.0295)
 d. *a-wí7* ‘fat, greasy’ (3.123.0288)
 e. *a-woo* ‘other’ (3.123.0391)

The largest group of adjectives with the *a-* prefix in Coastal Cupan are derived from thematic verbs. Most of these are from intransitives with the thematic suffix *-ax* retained. Several dozen of these are recorded by Elliott (1999). Example (7e) is the only example we have identified with thematic *-i*, but presumably other such derivations yielding adjectives ascribing active qualities could be produced.

- (7) LU a. *a-chíw-ax* ‘lost, spoiled’ (< *chiw-ax* ‘be defeated’)
 b. *a-huun-ax* ‘raised, inflated (price)’ (< *huun-ax* ‘be raised’)
 c. *a-jóng-ax* ‘true, real’ (< *jong-ax* ‘be true’)
 d. *a-kwoot-ax* ‘healed, cured’ (< *kwoot-ax* ‘be cured’)
 e. *a-jeex~jex-i* ‘boastful’ (< *jeex~jex-i* ‘be boastful now and then’)

All AC adjectives attested of this type are from intransitive verbs with thematic *-x*, as in (8):

- (8) AC a. *a-chiw-x* ‘lost, spoiled’ (< *chiw-x* ‘be defeated’) (3.123.0256)
 b. *a-hlúq-x* ‘fallen’ (< *haluq-x* ‘fall’) (3.123.0271)

- c. *a-miich-x* ‘strangled’ (< *miich-x* ‘strangle’) (3.123.0283)
- d. *a-moj7-x* ‘tired’ (< *moj7-x* ‘be tired’) (3.123.0181)
- e. *a-psá7-x* ‘rotten’ (< *pasa7-x* ‘be rotten, rot’) (3.123.0526)
- f. *a-wan7-x* ‘frightened’ (< *wan7-x* ‘be frightened’) (3.123.0300)

A few *a-* adjectives in LU derived from verbs do not have the thematic suffix. Instead, the suffix is realis *-vu* (from **-vy*). This suffix appears in AC as *-v*; LU *a-wólvu* ‘grown up’ (9d) corresponds to AC *a-wollav* ‘adult’ (4c).

- (9) LU
- a. *a-ju7-vu* ‘wet, moisture’ (< *ju7a* ‘be wet, get wet’)
 - b. *a-púj-vu* ‘full from eating’ (< *púja* ‘be full from eating’)
 - c. *a-wáx-vu* ‘dry’ (< *waxa* ‘dry up’)
 - d. *a-wól-vu* ‘grown up’ (< *wola* ‘grow’)

A couple of LU adjectives derived from verbs have a different prefix, *po-* ~ *pu-*, seen in (10). This is not the third singular possessive prefix, because it co-occurs with plurals. It may be a cognate of the CA contrastive-focus prefix *pe-*. As for *puloov* (10b), a full range of inflectional elements appears with it. Elliott (1999) states that the plural with animates is reduplicated with a plural suffix (*po~pluvu-m* < *póplovum* >), while with inanimates only the reduplication appears (*po~pluv* < *póplov* >).

- (10) LU
- a. *pu-néchax* ‘costly, expensive’ (< *nechax* ‘be paid’)
 - b. *pu-loov* ‘good’ (cf. *loov-i* ‘be good’)
- AC
- c. *pa-loov* ‘good’ (cf. *loov-a* ‘be good’) (3.121.0700)

Not all examples of unstressed initial *a* in Coastal Cupan adjectives are the adjectivalizing prefix *a-*. LU examples where unstressed initial *a* seems to be part of the root appear in (11). (For clarity, stress is marked on all examples.) Examples like (11j,k) correspond to roots with initial *a* that are attested outside the adjective class.

- (11) LU
- a. *achú~7chu-sh* ‘conceited, ill-mannered, proud’
 - b. *aláxwi-sh* ‘bad, evil, ugly’, *aláxwilaka* ‘very ugly’
 - c. *alú7-ma-l* ‘small, skinny’
 - d. *aní-sh* ‘coarsely ground’

- e. *apá~7p-i-sh* ‘hour-glass shaped’
- f. *arí~7r-i-sh* ‘cross-eyed’
- g. *asósa7-ma-l* ‘narrow-eyed, squinting’
- h. *a\$ó~7\$u-sh* ‘yellow, orange’
- i. *avá~7va-sh* ‘pink’ (cf. *ávaa-t* ‘red, brown’)
- j. *ajá~7j-i-sh* ‘funny’ (< *ajá~7ja* ‘be funny, sound funny’)
- k. *awá~7w-i-sh* ‘difficult’ (cf. *áw-ax* ‘not to be known’)

AC examples of this type appear in (12).

- (12) AC
- a. *alu7-ma-l* ‘small’ (3.116.0067)
 - b. *atax-va-ch* ‘empty’ (3.123.0375)
 - c. *awa~7w-a-ch* ‘difficult’ (3.122.0169)

The last large class of Coastal Cupan deverbal adjectives has a suffix **-ch, -sh* in LU, *-ch* in AC. Examples of this suffix sequence have been seen in several examples above in (11) and (12). With athematic verbs, the verb stem is the base for the adjective.

- (13) LU
- a. *chapa7na-sh* ‘patched’ (< *chapa7na* ‘mend, patch (pl.obj.)’)
 - b. *ool-i-sh* ‘confidential, secret’ (< *ool-i* ‘not to mention’)
- (14) AC
- a. *jexeex-a-ch* ‘rich’ (cf. LU *jixe~jx-i* ‘be rich’) (3.121.0754)
 - b. *nuuk-a-ch* ‘kneaded’ (< *nuuk-a* ‘knead’) (3.123.0343)

Many of these derivations have reduplicated bases, as seen in (15) and (16). (The only unreduplicated examples in the AC data are those in (14).) This reduplication pattern is found only with adjectives. With thematic verbs, the *-x* of the intransitive thematic suffix *-ax* is lost, as in (15c). Intransitive *-x* is lost in AC as well (see (16c,d)), even though AC permits a syllable coda *xch*.

- (15) LU
- a. *chará~chr-i-sh* ‘torn up, tattered’ (cf. *char-i* ‘tear once’)
 - b. *hakuu~hku-sh* ‘hollow’ (cf. *hakuuj* ‘be hollow’)
 - c. *isá~7s-a-sh* ‘shifty-eyed’ (< *isá~7s-ax* ‘shift eyes’)
 - d. *jawá~jw-i-sh* ‘pretty’ (cf. *jawá~jw-i* ‘beautify, decorate’)
 - e. *kité~kti-sh* ‘short’ (cf. *kiteej* ‘be short’)

- f. *taná~tna-sh* ‘clumsy’ (cf. *taná~tan-ax* ‘stumble along’)
- g. *ximú~xmu-sh* ‘half-smiling’ (< *ximú~xmu* ‘smile all the time’; cf. *xiim-ax* ‘smile’)

The loss of stem-final *j* before *-sh* in examples (15b,e) is regular, cf. the earlier treatment in 4.4.3 (11, 12) of the derivation involving *ja7a-sh* ‘man’, pl. *jaa~ji-ch-u-m*. The AC derivation in (16b) may also reflect this regularity. Many AC examples have *l*-reduplication, as in (16c).

- (16) AC
- a. *hamo~hma-ch* ‘shameless’ (< *hamooja* ‘be ashamed’) (3.123.0517)
 - b. *kwaja7~kwaja-ch* ‘red’ (< *kwajáj* ‘blush’) (3.123.0590)
 - c. *have~lva-ch* ‘wide’ (< *havél-x* ‘be wide’) (3.123.0567)
 - d. *lepee~lpa-ch* ‘supple’ (< *leep-x* ‘be soft’) (3.124.0029)
 - e. *xava~lva-ch* ‘bald-headed’ (< *xavá~lva* ‘be bald’) (3.122.0012)

In the LU materials there are many pairs of adjectives with reduplication and *-sh* where the meanings are subtly different depending on whether the final vowel of the verb root remains or is replaced by *i* (perhaps the **-i-ch* resultative construction discussed in 14.1), as in (17). Often, no underlying verb is attested. The difference in these adjectives, where one member shows the root-final vowel of the underlying verb and the other shows *-i*, may have some phonaesthetic effect. Examples (17a,d) show root modification: *isa ~ isi* in (17a) and *puru ~ pura* in (17d); we are not in a position to recognize which root form is basic and which is secondary.

- (17) LU
- a. *isa~7sa-sh* ‘shifty-eyed, darting of eyes’ (cf. *isa-7s-ax/i* ‘be shifty-eyed/look with shifted eyes’)
isi~7s-i-sh ‘cross-eyed, cockeyed’ (cf. *isíj* ‘be cockeyed’)
 - b. *kamú~kmu-sh* ‘swelling, lump’ (cf. *kamuuna* ‘have a lump’)
kamú~km-i-sh ‘having one lump’
 - c. *makú~mku-sh* ‘ball-like (as of yarn)’
makú~mk-i-sh ‘rounded’ (cf. *makú~mk-ax/i* ‘be rounded/make rounded’)
 - d. *purú~pru-sh* ‘round and hard’
purá~pr-i-sh ‘round and hard’ (“more common” [Elliott 1999:762])

- e. *tupú~tpu-sh* ‘thick, of tortilla, blanket’ (Bright 1968) (< *tupú~tpu* ‘be thick’)
tupú~tp-i-sh ‘thick, of tortilla, blanket’ (Elliott 1999) (< *tupú~tp-i* ‘thicken’)

Several other suffixes also derive adjectives. The propensitive suffix sequence *-ka-wu-t* derives adjectives from verbs. In these derivations the adjective base is the verb stem, not the theme. AC has a few apparent examples of this construction. The LU example in (18d) and the AC form in (18g) hint that the *-ka* morpheme may be a verb–verb derivational suffix, with *-wu-t* being from agentive **-wyn-t*, discussed above in 14.5. Elliott (1999:1137) suggests that (18b) is derived from a verb root with only a single attestation, *jongka* ‘always be honest’ (cf. LU *jong-ax/i* ‘be true, tell the truth’, CU *jyngín* ‘tell the truth’). For (18g), the AC data have only *tooj7ka* ‘laugh’, but the LU verb is *tooja*, apparently an athematic transitive.

- (18) LU a. *chaqw-ka-wu-t* ‘easily seized, seizer (with forepaws)’ (< *chaqwax/i* ‘be seized, seize’)
 b. *jong-ka-wu-t* ‘truthful, candid’ (< *jongax/i* ‘be honest, tell truth’ or *jongka* ‘always be honest’)
 c. *mit-ka-wu-t* ‘easily covered with dust’ (< *mit-ax/i* ‘rise, of dust, raise dust’)
 d. *pisa7-ka-wu-t* ‘easily rotted’ (< *pisa7a* ‘be rotten’)
- AC e. *ajal7-ka-w7-t* ‘expert, knowledgeable’ (< *ajalla7* ‘know’) (3.123.0395)
 f. *pal7-ka-w7-t* ‘a great kicker’ (< *pella7* ‘kick, dance’) (3.123.0355)
 g. *tooj7-ka-w7-t* ‘risueño (smiling)’ (3.123.0561) (< *tooj7ka* ‘laugh’ [3.123.0560], cf. LU *tooja* ‘laugh’)

The suffix sequence *-wu-t*, which appears in the sequence *-ka-wu-t*, was discussed in section 14.5 as deriving deverbal nouns with the sense “occasional agent.” This suffix also derives deverbal adjectives in LU.

The majority of adjectival examples of *-wu-t* have inflections with invariant *-wu*, as seen in (19). They do not show an allomorph *-wun* in the environment *_CV*. Thus these have *-wu* from a different source, very likely the augmentative suffix being used as a deverbal adjectivalizer (cf. the diminutive at (26) below).

- (19) LU a. nominative *hakaana-wu-t* ‘greedy’ (< *hakaana* ‘keep for one’s self’)
 b. accusative *hakaana-wu-t-i*
 c. plural *hakaana-wu-tu-m*

While in AC the few examples of plurals with *-w7-t* are *-w7-ta-m*, in a number of LU examples, including several with *-ka-wu-t*, the suffix *-wu* has the allomorph *-wun* in certain inflected forms. Thus the underlying form of *-wu* here is *-won* and that of *-ka-wu-t* is presumably *-ka-won-ta*. The *n* of underlying *-won* is retained in accord with the pattern seen in inflected forms of adjectives like *ávaat* ‘red’, with plural *ávaantum*, accusative *ávaanti*, etc. (cf. discussion in 4.4.7, where *n* in underlying form is lost in the nominative singular, as seen in example (22a) below).

A partial paradigm for *oopu-wu-t* ‘lying face upward, sloping’ appears in (20). The *n* that appears in the environment *_CV* is lost in the complementary environment, i.e. word-finally (20a) or when the following element begins in a consonant (20e). The retention of the final *-t* in the possessed form (20e) raises the question of whether this *-t* is properly to be identified with the absolutive suffix. Unlike the long *aa*, from underlying *axa*, seen in *ávaantum* ‘red things’, there is no way a long *uu* can develop in the context of the *-wu-t* ~ *-wun-t* suffix sequence. Note that this is not the same suffix as the same-subject suffix sequence *-wunu-t*, discussed in 13.1.1; that suffix always retains its final *u*.

- (20) LU a. nominative *oopu-wu-t* ‘lying face up’ (< *oopu* ‘lie face up (animate)’)
 b. accusative *oopu-wun-t-i*
 c. plural *oopu-wun-tu-m*
 d. dative *oopu-wun-ik*
 e. possessed *-7oopu-wu-t-ki* ‘s.th lying face up’

Other examples of this type, with the retention of disappearing *n* in the environment *_CV*, are given in (21).

- (21) LU a. *chara~chaar-ka-wun-tu-m* ‘easily torn, pl.’ (< *chara~chaarax/i* ‘be continually torn, tear to shreds’)
 b. *chungni-wun-tu-m* ‘wet nurses’ (< *chungni* ‘nurse (tr.)’)
 c. *huu7i-wun-tu-m* ‘able, willing, capable (animate)’ (< *huu7unax/i* ‘be taught, learned; (tr.) teach’)

- d. *juu-ka-wun-tu-m* ‘having lots of hair’ (cf. *juu-la* ‘hair’)
- e. *peepuxan-ka-wun-tu-m* ‘good at giving advice to’ (< *peepuxani* ‘give advice’)
- f. *\$aqi-wun-t-i* ‘hot (acc.)’ (< *\$aqi* ‘be hot’)

A similar process is found in the small set of adjectives discussed in 4.4.7, with an adjectivalizing suffix with several allomorphs. We represent this as having the underlying form *-(7)axan*. A few examples with nominative singular final *-aat* appear in (22).

- (22) LU
- a. *chóoraat* ‘round, ball-like or circular’, pl. *chóoraantum*, acc. *chóoraanti*, dat. *chóoraanik*, loc. *chóoraananga*, instr. *chóoraanaman*
 - b. *churó7aat* ‘complete’, cf. *churó7-ax/i* ‘be complete, settled’
 - c. *ávaat* ‘red’, *ávaanamal* ‘little red thing’, poss. *no7ávaatki* ‘my red thing’
 - d. *ítaat* ‘cold (of weather, body parts, food, water, etc.)’, acc. *ítaanti*, cf. *íta* ‘be cold (of such things)’

The productive suffix sequence LU *-mawi-sh*, AC *-ma7-ch* ‘having many, much’ derives adjectives from nouns. Examples appear in (23). Several AC examples, like (23g), are formed from possessed nouns. There is also variation in whether the absolutive suffix is retained or not. Compare (23e,f) and (23h,i). Of (23i), Harrington comments specifically that the absolutive *-l* is “not omitted in Ajj.”

- (23) LU
- a. *hij-mawi-sh* ‘full of s.th’ (< *hij-cha* ‘s.th’)
 - b. *juj-mawi-sh* ‘snowy’ (cf. *juuj* ‘snow (verb)’, *juuji-t* ‘snow (noun)’)
 - c. *paawi-mawi-sh* ‘full of scrub oak’ (< *paawi-sh* ‘scrub oak’)
 - d. *ulaa-mawi-sh* ‘lousy, full of lice’ (< *ulaa-t* ‘louse’)
- AC
- e. *alaa-ma7-ch* ‘lousy’ (< *alá-t* ‘louse’) (3.122.0059)
 - f. *makwa7-ch-ma7-ch* ‘flea-ridden’ (< *makwa7-ch* ‘flea’) (3.121.0771)
 - g. *pa-sinva-ka-ma7-ch* ‘having lots of money’ (< *sinva-l* ‘money’) (3.123.0277)
 - h. *ex-ma7-ch* ‘dirty’ (< *exxa-l* ‘dirt, earth’) (3.123.0487)
 - i. *exva-l-ma7-ch* ‘having sand’ (< *exva-l* ‘sand’) (3.123.0488)

A few derivations in *-mawi-sh*, *-ma7-ch* have as their base lexical elements that are not nouns, as in (24).

- (24) LU a. *haq-mawi-sh* ‘hungry’ (cf. *haqla* ‘be hungry’, *haqvi-sh* ‘small eater’)
 b. *mujuk-mawi-sh* ‘populous’ (< *mujuk* ‘many’)
 c. *a-pala-x-mawi-sh* ‘sprouted’, *pala-x-mawi-sh* ‘full of sprouts’, *po-pa~vla-mawi-sh* ‘leafy’ (< *pala-x* ‘sprout’; also adj. *a-pala-x* ‘sprouty’) (K&G 107)
- AC d. *pa-pit-x-ma7-ch* ‘having sprouts, buds’ (< *pit-x* ‘bud, sprout’) (3.123.0312)
 e. *axi7-ma7-ch* ‘having a bad cold’ (< *axi7* ‘have a bad cold’) (3.123.0434)

The suffix sequence LU *-wi-sh*, AC *-w(a)7-ch* (sometimes *-v(a)7-ch*) ‘originating in’ also appears in other sequences, e.g. in *-nga-wi-sh*, seen in the gentilic forms discussed in section 15.1.4.2, but which is also used more generally to characterize origin.

- (25) LU a. *iváj-wi-sh* ‘from around here’
 b. *jumáj-ka-wi-sh* ‘ancient, archaic’ (< *jumájk* ‘long ago’)
 c. *kihuut-maj-nga-wi-sh* ‘when sbdy was a small child’
 d. *kii-nga-wi-sh* ‘domestic, originating in a home’
 e. *micháj-wi-sh* ‘originating somewhere unspecified’
 f. *pitoo-ka-wi-sh* ‘current’ (< *pitoo* ‘now’)
 g. *puloovi-nga-wi-sh* ‘originating in s.th good’
 Or *pu-loovi-nga-wi-sh*? Cf. (10) above.
 h. *waam-ka-wi-sh* ‘from far away’ (< *waam* ‘far’)
- AC i. *amuula-w7-ch* ‘first’ (< *amuula* ‘first’) (3.123.0379)
 j. *pa-hajlla-w7-ch* ‘last’ (cf. LU *hajluwish* ‘edge’, CU *haj-ax/-in* ‘finish’) (3.123.0296)
 k. *jamaax-wa7-ch* ‘from long ago’ (< *jamaax* ‘long ago’) (3.123.0260)

The diminutive suffix sequence *-ma-l* can appear with adjectives, as in (26) (cf. the augmentative at (19)). The diminutivizing sound-symbolic consonant change $\$ > s$ occurs with *-ma-l* in these examples. In most of the examples of (26) there is no translational difference between the diminutivized form in *-ma-l* and the form without it. The stem-final vowel difference in (26b) seems to be unique to that pair.

- (26) LU a. *a7sa-ka-wi-ma-l* ‘ancient’ (< *a7\$a-ka-wi-sh* ‘(same)’)
 b. *apa~7pa-ma-l* ‘hourglass shaped’ (< *apa-7pi-sh* ‘(same)’)
 c. *aso~7su-ma-l* ‘yellow, orange’ (< *a\$o-7\$u-sh* ‘(same)’)

- d. *asaa-wi-ma-l* ‘overly thickened’ (< *a\$aa-wi-sh* ‘(same)’)
 - e. *jo-ma-l* ‘largish’ (< *jo-t* ‘big’)
 - f. *kapá~kpa-ma-l* ‘short, low, brief’ (< *kapá~kpa-sh* (“less common”))
 - g. *piwí~pwi-ma-l* ‘grayish and small’ (< *piwí~pwi-sh* ‘gray’)
 - h. *sam-ma-wi-ma-l* ‘full of grass’ (< *\$am-ma-wi-sh* ‘(same)’)
- AC
- i. *\$aa~\$ax-ma-l* ‘stingy’ (3.121.0467)
 - j. *ajh-ma-l* ‘crazy, silly’ (3.123.0354)

Another adjectival formation in LU involves a derivation from intransitive verbs that yields a suffix sequence *-aa(n)-t*, where the long vowel is not stressed, and where *n* appears when the plural or accusative suffix is present. Again, the phonology of this construction is discussed in 4.4.7. The AC equivalent is *-an7-t*, always preceded by the intransitive thematic suffix *-x*. The AC derivation is especially productive; most of the adjectives in the AC corpus are of this type.

- (27) LU
- a. *chéen-a-a-t* ‘chopped off’ (< *cheen-ax* ‘mow, shear’)
 - b. *híw-a-a-t* ‘warm’ (< *hiw-ax* ‘be warm’)
 - c. *úit-a-a-t* ‘cold’ (< *üit-ax* ‘be cold’)
 - d. *réeq-a-a-t* ‘smelly, aromatic’ (< *reeq-ax* ‘stink, have a smell’)
 - e. *wáak-a-a-t* ‘swept’ (< *waak-ax* ‘sweep’)
- AC
- f. *chamaalim-x-an7-t* ‘wrinkled’ (< *chamaalim-x* ‘be wrinkled’) (3.122.0054)
 - g. *hakut-x-an7-t* ‘hollow’ (< *hakut-x* ‘be hollow’) (3.123.0274)
 - h. *karii7-x-an7-t* ‘high, steep’ (< *karii7-x* ‘be high, steep’) (3.123.0492)
 - i. *luk-x-an7-t* ‘crushed’ (< *luk-x* ‘crush, make one dent’) (3.123.0053)
 - j. *\$oow7-x-an7-t* ‘very pointed’ (cf. LU *\$ow-ax* ‘be sharp’) (3.122.0164)

Many common adverbial expressions in LU and AC are morphologically single-word same-subject clauses, verb bases inflected with the same-subject suffix LU *-nik* ~ *-nuk*, AC *-nak*, as with the examples in (28).

- (28) LU
- a. *ajaali-nik* ‘correctly, well’ (< *ajaali* ‘fix, repair’)
 - b. *axáni-nik* ‘like’ (< *axáni* ‘be like’)
 - c. *hivél-i-nuk* ‘flat-wise’ (< *hivél-i* ‘make flat’)

- d. *mahí-nik* ‘slowly’ (cf. *maahila* ‘slow down (tr.)’)
 - e. *pom-i-nik* ‘abundantly’ (< *pom-i* ‘make firm’)
- AC
- f. *ajaala-nak* ‘well (done)’ (3.123.0301)
 - g. *maaxa-nak* ‘slowly’ (3.124.0109) (cf. LU *maha~mh-ax* ‘be slow’)
 - h. *pomma-nak* ‘very’ (3.122.0212) (< *pomm-a* ‘squeeze s.th in’ (3.123.0461))

A number of LU adverbs end in *-k* or *-jk*. The temporal examples (29b,g) might instead be datives.

- (29) LU
- a. *huuvichu-k* ‘visibly’ (< *huuvich-i* ‘see clearly’)
 - b. *jumájk* ‘long ago’
 - c. *pilék* ‘absolutely, very, right away’
 - d. *-ptujk* ‘unbeknownst to’
 - e. *\$o7o\$ojk* ‘quietly, still, idle’
 - f. *ujook* ‘on the sly’ (< ‘oyóok > in Elliott 1999)
 - g. *waxaamkijk* ‘in the afternoon’

A small group of LU adverbs are derived by adding *-i* to adjective bases, as in (30). These may look like accusative forms, but there is not, in LU, any larger pattern of accusative morphology being used to derive adverbs, as there is in Hopi for example.

- (30) LU
- a. *a-hújax-i* ‘really, very, a lot’ (< *a-hújax* ‘sufficient’)
 - b. *aláxwich-i* ‘badly’ (cf. *aláxwish* ‘bad’)
 - c. *eech-i* ‘high’ (cf. *eshkawish* ‘upper’)
 - d. *humá~hmach-i* ‘any old way, carelessly’ (cf. *humá~hmash* ‘worthless’)
 - e. *wehmal-i* ‘slightly’ (cf. *wehmal* ‘few’)

A few LU adverbs of manner are derived with local case suffixes (rather like English ‘in vain’, ‘in haste’, ‘with malice’, etc.). Attested are *-nga* ‘locative’, *-man* ‘along with (inanimate)’, and *-ngaj* ‘ablative’.

- (31) LU
- a. *aláxwi-nga* ‘badly, with difficulty’ (cf. *aláxwi-sh* ‘bad’)
 - b. *awoo-nga* ‘differently’ (cf. *awo7* ‘other’)
 - c. *hamó~hmo-nga* ‘shamefully’ (*hamó~hmu-sh* ‘shameful’)

- d. *jixé~jxi-nga* ‘eloquently’ (cf. *jixé~jxi-sh* ‘eloquent, rich’)
- e. *majā~mja-nga* ‘easily’
- f. *ojóngvo-nga* ‘secretly’
- g. *ojoo-nga* ‘quietly’ (cf. *ojoo-k* ‘silent’)
- h. *ojoo-k-man* ‘silently’
- i. *atoo-man* ‘certainly’
- j. *jixee-ngaj* ‘futilely’

14.14.5. CUPEÑO ADJECTIVES AND ADVERBS. Apparently primary (underived) adjectives in CU include the examples in (1) (cf. Hill 2005:206). Many of these appear to be derived with suffix sequences like *-i-sh* and *-a-t*, but lack attested source roots in CU. A distinguishing feature of CU adjectives is that most of their plural forms are reduplicated, and many can appear without the plural suffix *-m*. The element *-niki* in *tulnikish* (1s) is very productive in CA, appearing in most color terms (cf. 14.14.6 (1-4)), but in CU, it is attested only in this word.

- (1) CU
- a. *achi7a* ‘good’, pl. *a~7chi7a(-m)*
 - b. *aj7ani-sh* ‘big, tall’, pl. *a~7ajani-sh* or *a~7ajan-cha-m*
 - c. *ajxa-t* ‘old, worn out’, pl. *a-7ajxa-t*
 - d. *chiv* or *chiva-t* ‘bitter’
 - e. *e7ni-sh* ‘smart’ (cf. CA *enan* ‘know’, KI *yn* ‘know’)
 - f. *hel7i-sh* ‘wide’, pl. *he~hel7i-sh*
 - g. *ichaa7i* ‘good, nice’
 - h. *ingi-sh* ‘lazy’, pl. *i~7ing-cha-m*
 - i. *ingki-sh* ‘like s.th’, pl. *i~7ingki-sh*
 - j. *ju7i-sh* ‘wet’
 - k. *juj* ‘cold’
 - l. *mingi-sh* ‘thin’, pl. *ming-cha-m*
 - m. *pangi-sh* ‘new’
 - n. *piska7ni-sh* ‘sweet’
 - o. *qiljíq* ‘spicy, hot’
 - p. *qyn ~ qyñi-sh* ‘good tasting, good smelling’
 - q. *sawy-t* ‘sour, genuine’, pl. *saw-ta-m*
 - r. *si7táx* ‘sour’
 - s. *tul-niki-sh* ‘black’, pl. *tu~tul-niki-sh* or *tu~tul-nik-cha-m*

- t. *wavá\$-i-sh* ‘long’, pl. *wa~wv\$-i-sh*
- u. *wiwa-t* ‘fat’
- v. *yl7i-sh* ‘bad, ugly’, pl. *y~7yl7i-sh*
- w. *yshp7y* ‘the aforementioned’

There is a small group of CU adjectives derived with the prefix *a-*, seen in (2). This prefix does not appear to be as productive in CU as it is in LU. In (2g) the prefix participates in the plural reduplication.

- (2) CU a. *a-hújaxaj* ‘exceeding, best’ (< *huj-ax* ‘be left over’)
- b. *a-kúli* ‘small’, pl. *a-kú~kulji* (no underlying verb attested)
- c. *a-tíng-vy* ‘hot’ (< *ting* ‘be hot, heat’; *-vy* is the realis subordinator)
- d. *a-túij7i* ‘cold, frost’ (< *tujuj* ‘be cold’)
- e. *a-wáx-vy* ‘dry’ (< *wax* ‘dry, get dry’)
- f. *a-wís-ma* ‘a few, a little’ (< *wis* ‘two times’, cf. 15.2.2)
- g. *a-wyl-vy* ‘old, grown up’, pl. *a~7-wyl-vy-m* (< *wyl* ‘grow’)

With few exceptions, CU derived adjectives which have an absolutive suffix, have the *-sh* form of the absolutive. Some adjectives in *-sh* relate to nouns in *-t*, as in (3).

- (3) CU a. *ala7a-sh* ‘lousy’ (cf. *ala7a-t* ‘louse’)
- b. *ik7l-i-sh* ‘tangled’ (cf. *ika-t* ‘net’)

Many adjectives with *-i-sh*, as seen in (4), are derived from verbs; this is the **-i-ch* resultative nominalizing suffix sequence discussed in 14.1. It is also the relativizing suffix of past-tense subject relative clauses, but such forms are often used simply as modifiers.

- (4) CU a. *chuqym-jax-i-sh* ‘selfish, independent, alone’ (cf. *chuqym-jax* ‘remain, be left behind’)
- b. *chyx-jax-i-sh* ‘natural, untainted’ (< *chyx-jax* ‘be clean, shining, light’)
- c. *jut-ax-i-sh* ‘full’ (< *jut-ax* ‘fill’)
- d. *king7-i-sh* ‘withered’ (< *king7i* ‘burn (intr.)’)
- e. *kwyl-ax-i-sh* ‘cured’ (< *kwyl-ax* ‘be cured, get up’)
- f. *mi7aw-i-sh* ‘newly arrived’ (< *mi7aw* ‘come, arrive’)
- g. *myn-ax-i-sh* ‘changed’ (< *myn-ax* ‘change, turn into’)

- h. *naxchin-ax-i-sh* ‘past’ (< *naxchin-ax* ‘pass’)
- i. *ngij-i-sh* ‘gone away’ (< *ngij* ‘go away, leave’)
- j. *puj-i-sh* ‘full’ (< *puj* ‘dine’)
- k. *tu7-i-sh* ‘fruitful’ (< *tu7* ‘bear fruit’)

A large number of CU adjectives are attested almost exclusively in reduplicated form in the singular. The stress falls on the second of the repeated roots and the ending is *-7i-sh* or *-7a-sh*. Most color terms, seen in (5), fall in this class.

- (5) CU
- a. *hushvi~húshvi-7i-sh* ‘brown’
 - b. *kyny~kýny-7a-sh* ‘yellow’
 - c. *kwati~kwáti-7i-sh* ‘red’
 - d. *pavy~pávy-7i-sh* ‘gray’
 - e. *ty7ylvy~tý7ylvy-7a-sh* ‘pink’
 - f. *tyxy~týxy-7i-sh* ‘pale blue’
 - g. *uvy~7úvy-7a-sh* ‘gray’
 - h. *xwavi~xwávi-7i-sh* ‘green’

Also in this class are a large number of characterizing adjectives, often insulting or disparaging, as in (6).

- (6) CU
- a. *apcha~7ápcha-7a-sh* ‘snub-nosed’
 - b. *chalka~chálka-7a-sh* ‘messy-haired’
 - c. *hyti~hýti-7i-sh* ‘knock-kneed’
 - d. *jula~júla-7a-sh* ‘ragged’
 - e. *kawla~káwla-7a-sh* ‘crooked, cross-eyed’
 - f. *tupu~túpu-7i-sh* ‘thick’
 - g. *umu~7úmu-7i-sh* ‘stupid’
 - h. *wata~wáta-7a-sh* ‘hooked, of nose’

As in LU and AC (14.14.4 (26)), the suffix *-ma-l* can appear with adjectives, as in (7)

- (7) CU
- a. *a7chi-ma-l* ‘pretty, nice’ (cf. *a7chi7a* ‘good’)
 - b. *qaaw~aw-ma-l* ‘invalid’ (cf. *qaawish* ‘sick, dead’)
 - c. *ylýly-qy-ma-l* ‘bad, ugly’ (cf. *ylýl7ish* ‘bad, ugly, evil’)

Some CU adjectives are attested only with *-ma-l*.

- (8) CU a. *hyvyl7i-ma-l* ‘soft’ (and n. *hyvyl7i-ma-l* ‘the softest’)
 b. *kaválj7i-ma-l* ‘quick’, pl. *kwa~kwalji-ma-li-m* (plural also occurs without *-ma-*: *kwa~kwy7va-lji-m ~ kwakvy7y-lji-m*) (< *kaválj-ax* ‘beat fast, pound, of the heart’)
 The strange plurals in *kw* are as recorded in H&N 157(243)
 c. *kichimikúlji-ma-l* ‘cumbersome’

While most adverbs in CU are derived, many of the derivations are irregular or unproductive. There is a good-sized set derived with an adverbializing *-n*, as in the examples in (9), reminiscent of the SE stative-like adjectives in *-7n*.

- (9) CU a. *a\$7ava-n* ‘empty-handed’ (cf. *a\$7ava* ‘naked’)
 b. *awís-ma-n* ‘a little at a time’ (cf. *awís-ma* ‘few’)
 c. *huma~húma-7a-n* ‘aimlessly, like a commoner’
 d. *humy~húmy-7y-n* ‘up and down’ (cf. *humly~húmy-7y-sh* ‘hilly’)
 e. *ichaakwi-n* ‘well, nicely’ (cf. *icha7i* ‘good’)
 f. *qaj jywy-n* ‘not even’
 g. *kwaana-n* ‘half-way’
 h. *mangi-n* ‘slowly’
 i. *myly-n* ‘a lot’ (cf. *myt7i-sh* ‘many’)
 j. *nyngy-n* ‘on the sly’ (cf. *nyng* ‘hide (verb)’)
 k. *pytá7ama-n* ‘completely’ (*pytá7ama* ‘all’)
 l. *pi7í7ivi-n* ‘weakly’ (cf. *iva* ‘be strong’)
 m. *umu~7úmu-7y-n* ‘randomly’ (cf. *umu~7úmu-7i-sh* ‘stupid’)
 n. *ylýlikwi-n* ‘badly’ (cf. *ylýl7i-sh* ‘bad’)

Like LU, CU has some common adverbial expressions that are same-subject verb constructions, like *ixa-nuk* ‘thus’ (literally ‘so doing (ss)’).

14.14.6. CAHUILLA ADJECTIVES AND ADVERBS. CA adjectives are rather different from those of other Tadic languages. First, along with TV, CA lacks adjectives derived with the prefix *a-*, which is weakly attested in TV and in AC, present in CU, and productive in Serran

and in LU. Second, CA has several suffixes that derive adjective bases that are not found in the other languages. Finally, CA adjectives are more clearly distinguished from nouns than in the other languages; Seiler (1977:125) concludes that a class of adjectives must be recognized for CA, although nouns, verbs, and adjectives often share roots, as shown for the examples below. There are few significant differences between DCA and MCA in this class of items, so the two varieties are discussed here together. Most of the data in this section are from DCA.

Many CA adjectives are formed with a suffix sequence *-(n)eki-sh* (*-neki-sh* in (1a-h), *-eki-sh* in (1i,j)). All of the color terms, plus several other adjectives, exhibit this derivation, as seen in (1). Seiler (1977:311) labels the reduplicated plurals like those in (1) “distributive” and distinguishes them from a non-reduplicated set, but Sauvel and Munro (1981:117) list only the reduplicated plurals for MCA. Sauvel and Munro’s plurals also lack the vowel deletion in *-k-che-m* and are given as, for instance, *tetvish-neki-che-m* instead of the syncope plural in (1a). This may be a difference between their MCA data and Seiler’s DCA materials. The associated words of other classes given for (1b,c,e,f,h) are from Seiler (1977:311). Though Seiler and Hioki (1979:220) give *tukvashnekish* for ‘blue/green’ (1g), the form we give in (1g), *tukushnekish*, appears in both Seiler (1977) and Sauvel and Munro (1981).

- (1) CA
- a. *nanva-neki-sh* ‘ready, alike, fitting correctly’, pl. *na-nanva-nek-che-m* (cf. *nanva-jax* ‘be ready’)
 - b. *samat-neki-sh* ‘slim’, pl. *sa-smat-nek-che-m* (cf. *samat* ‘grass’)
 - c. *sel-neki-sh* ‘red’, pl. *se-sel-nek-che-m* (cf. *sele-t* ‘red-colored grass’)
 - d. *tavish-neki-sh* ‘straight’, pl. *tatvish-nek-che-m* (cf. *tavish* ‘projectile point’)
 - e. *tes-neki-sh* ‘yellow’, pl. *te-tes-nek-che-m* (cf. *tese-l* ‘yellow clay’)
 - f. *tevish-neki-sh* ‘white’, pl. *te-tvish-nek-che-m* (cf. *tevelve* ‘sparkling clear’)
 - g. *tukush-neki-sh* ‘green/blue’, pl. *tu-tkush-nek-che-m* (cf. *tukvash* ‘sky’)
 - h. *tul-neki-sh* ‘black’, pl. *tu-tul-nek-che-m* (cf. *tul* ‘coal’)
 - i. *pal-eki-sh* ‘wet’, pl. *pa-pal-ek-che-m* (cf. *pal* ‘water’)
 - j. *pisilj-eki-sh* ‘sweet’, pl. *pi-pisilj-ek-che-m* (cf. *pisilj* ‘sugar’)

The full forms of these *-(n)eki-sh* adjectives appear in adjective phrases with nouns. However, when these adjectives appear as verbless complements, a short form without *-i-sh* is used, as in (2). In the absence of the absolutive, *-sh*, final *i* is lost by apocope. The

plural (reduplicated) form of the adjective root is apparently optional with plural subjects, as seen in (2b,c).

- (2) CA a. *Sel-ek* \emptyset .
 red-ADJZ be
 ‘It is red.’ (S&M 118)
- b. *Hem-sel-ek* \emptyset .
 3PL-red-ADJZ be
 ‘They are red.’ (S&M 118)
- c. *Chem-sa~smat-nek* \emptyset .
 1PL-PL~slim-ADJZ be
 ‘We are slim.’ (Seiler 1979:121)

Seiler (1977:121) points out that long-form verbless-clause complements can appear with both sets of CA subject markers, as seen in his examples in (3), where (3a) has *hen_*, from the set of proclitics used with nominal predications, and (3b) has *ne-*, from the set of prefixes that are normally restricted to full verbs. However, the short forms can appear only with the verb prefixes, as in (3c), and do not appear with the plural suffix *-m*. This pattern is also noted for MCA by Sauvel and Munro (1981:118). Other CA adjectives also appear only with the subject prefixes. The exception is *iñishilj* ‘small’, for which some speakers prefer the proclitic subject markers (Seiler 1977:124).

- (3) CA a. *Ne7* *hen_tulj-eki-sh* \emptyset .
 1SG.PRO 1SG_black-ADJZ-ABS be
 ‘I’m black.’ (Seiler 1977:121)
- b. *Ne7* *ne-tulj-eki-sh* \emptyset .
 1SG.PRO 1SG-black-ADJZ-ABS be
 ‘I’m black.’ (Seiler 1977:121)
- c. *Ne7* *ne-samat-nek* \emptyset .
 1SG.PRO 1SG-slim-ADJZ be

‘I’m slim.’ (Seiler 1977:121)

Both forms of *-(n)ekish* adjectives can appear with the past-tense suffix *-7a*, a form which also appears with nouns, but not with verbs.

- (4) CA a. *Ne7 ne-samat-**nek-7a** Ø.*
 1SG.PRO 1SG-slim-ADJZ-PST be
 ‘I used to be slim.’ (Seiler 1977:122)
- b. *Ne7 ne-samat-**neki-sh-7a** Ø.*
 1SG.PRO 1SG-slim-ADJZ-ABS-PST be
 ‘I used to be slim.’ (Seiler 1977:122)

A second set of CA adjectives has the suffix sequence *-we-t*. Although this sequence appears with a number of adjectives having to do with size that suggest that it is simply the augmentative, as in (5), the forms in (6) do not all invite an augmentative reading. It also resembles agentive **-wyC-t* discussed in 14.5; the relationship between this suffix and that agentive is unclear. The suffix in (6j), in *tama-we-t* ‘sharp’, is from **-rawyC-t* (cf. 14.5 (1)). Adjective-deriving *-we-t* is restricted to singular forms; in many cases, the associated plurals have *-che-m*, as seen in (5a,f,h) (Sauvel & Munro 1981:120).

- (5) CA a. *amna7-**we-t*** ‘big’, pl. *a~7amna-che-m*
 b. *chiki-**we-t*** ‘thick’
 c. *hilje-**we-t*** ‘wide’
 d. *huj~húja-**we-t*** ‘long’ (*hujaa* ‘be longish, oval, as head, egg’)
 e. *hula-**we-t*** ‘rugged (as of a mountain)’ (cf. *hul~húla* ‘be pointed’)
 f. *mete7-**we-t*** ‘many’, pl. *mete7-che-m*
 g. *pele-**we-t*** ‘heavy’, pl. *pele-we-te-m*
 h. *wavu7-**we-t*** ‘tall’, pl. *waavu7-che-m*
 i. *wel-**we-t*** ‘growing really high (as of palm tree)’
- (6) CA a. *isi-**we-t*** ‘stingy’, pl. *i~7si-**we-te-m*** (cf. *isi-lj* ‘coyote’)
 b. *lap~lápe-**we-t*** ‘flat (as of nose)’
 c. *lek~léke-**we-t**, leke-**we-t*** ‘constricted (like ant’s waist)’
 d. *lik~líke-**we-t*** ‘bowed (of legs)’

- e. *luch-we-t* ‘rough (surface, as of skin)’ (with syllable-final *ch* in *luch-*; cf. 4.6.3)
- f. *mal~mále-we-t* ‘flat’ (cf. *mala-l* ‘flat stone for grinding, metate’)
- g. *pumli~púmli7-we-t* ‘round’
- h. *sivalu-we-t* ‘pointed’ (cf. *siv* ‘sharpen, scrape’)
- i. *taki-we-t* ‘patched up’ (cf. *taki* ‘be pasted’)
- j. *tama-we-t* ‘sharp’ (cf. *-tama* ‘tooth’)

This set, more than the other adjectives, overlaps both formally and functionally with the CA “characterizing” nouns in *-we-t* discussed in section 14.5. Seiler and Hioki (1979) list a number of them as nouns, but provide as examples only adjective usages, as in (7).

- (7) CA a. *Qawi-sh* *Hula-we-t*
 mountain-ABS pointed-ADJZ-ABS
 ‘“Rugged Mountain”, a place near La Quinta’ (= MCA *Qawish Julawet*)
 (S&H 59)
- b. *He-mu* *lap~lápa-we-t* \emptyset .
 3SG-nose DUR~flat-ADJZ-ABS be
 ‘He is flat-nosed.’ (S&H 95)
- c. *I* *mawu-l* *wel-we-t* \emptyset .
 PROX palm-ABS grow;rise.up.high-ADJZ-ABS be
 ‘This palm grows really high.’ (S&H 235)

A number of CA adjectives appear with a suffix *-ma*.

- (8) CA a. *acha-ma* ‘good, right’
 b. *amna-ma* ‘big, roomy’
 c. *chiki7-ma* ~ *chiki-ma* ‘thick, heavy’
 d. *eléle-ma* ‘wrong, bad’
 e. *haka-ma* ‘wide, roomy’ (cf. *haka* ‘be roomy’)
 f. *hespe-ma* ‘hard’
 g. *juj-ma* ‘cold’
 h. *ken-ma* ‘delicious, tasty’

- i. *kwawa-ma* ‘light, agile’
- j. *mete7-ma* ‘enough’
- k. *pele-ma* ‘heavy’
- l. *seljaxa-ma* ‘dirty’
- m. *siw-ma* ‘hot (cf. *siw* ‘become hot’)
- n. *sulsími-ma* ‘nice, cute, funny’
- o. *sune7-ma* ~ *sunwe7-ma* ‘poor’ (cf. *sumwe* ‘feel sorry for’)
- p. *ting-ma* ~ *tiw-ma* ‘warm’
- q. *wavu-ma* ‘long, tall’

Sauvel and Munro (1980:167) call these “describing verbs.” We label the *-ma* suffix “DSPRS” for “describing present”; the past tense is *-ma7a* “DSPST”. There are several arguments for assigning these to the verb category. One is that they often precede the noun that they modify, as in (9), while N-Adj order in CA is otherwise quite rigid.

- (9) DCA *Eléle-ma* *e-kula-m,* \emptyset *kilje* *ache-ma* \emptyset .
 bad-ADJ 2SG-make-PL be NEG good-DSPRS be
 ‘Your creatures are bad, not at all good.’ (Seiler 1970:43 49)

A second and stronger argument is that these constructions appear with the pronominal set that appears with other main-clause verbs, not the set that appears with other adjectives. This can be seen when we compare *-ma* and *-we-t* constructions in (10). Finally, the adjectives agree in number with the modified element, while descriptive verbs do not exhibit agreement.

- (10) CA verb adjective
- a. *ne-amna-ma* *hen-amna7-we-t* ‘I am big’
 1SG-big-DSPRS 1SG-big-CHAR-ABS
 - b. *e-chiki-ma* *et-chiki-we-t* ‘you are thick’
 2SG-thick-DSPRS 2SG-thick-CHAR-ABS
 - c. *hem-pele-ma* *pele-we-te-m* ‘they are heavy’
 3PL-heavy-DSPRS heavy-CHAR-ABS-PL
 - d. *em-wavu-ma* *eme-wavu7-che-m* ‘you pl. are long, tall’
 2PL-long-DSPRS 2PL-long-ABS-PL

A few examples suggest slippage in the fully verbal status of the “describing verbs.” In (11), one appears with a copula, which should not be necessary if the form enjoyed full verbiness.

- (11) MCA *Penga aj hespen eléle-ma mijax-we7.*
 then now very bad-ADJ be-ST.PST
 ‘It got really bad.’ (S&E 727)

The adjectives of (12) look like they may represent derivations with characterizing *-ka*, discussed in 14.4.4.

- (12) CA a. *iva-k* ‘strong’, pl. *i~7iva-k-te-m ~ i~7vak-te-m* (cf. *iva* ‘be strong’)
 b. *mulu-k* ‘first’ (cf. *mulu* ‘go ahead’)
 c. *wi-k* ‘fat’, pl. *wi-k-te-m* (cf. *wi-lj* ‘grease, fat’) (cf. Serran *wip-t* ‘fat, grease’)

There are a few primary adjectives, as in (13). These appear without any of the derivational endings discussed above. Sauvel and Munro (1981:120) include *sawe-t* (13e) with adjectives in *-we-t*, but in fact its root is *sawe*, with cognates in TV, SE, KI, and LU (see 3.5.4 (1c)). It appears in the MCA lineage name *Sawvel* (= *Sauvel*).

- (13) CA a. *acha7e* ‘good’, pl. *a~7acha ~ a~7chaa-m*
 b. *chepév* ‘true’
 c. *enene* ‘bitter’
 d. *iñishi-lj* ‘small’
 e. *sawe-t* ‘raw, green’, pl. *sawe-te-m*
 f. *setax* ‘salty, sour’
 g. *wangam* ‘deep’
 h. *wele-t ~ welne-t* ‘mean’, pl. *we~wele-te-m ~ we~welne-te-m*

Sauvel and Munro (1981) list the forms in (14) as adjectives. Like the adjectives in *-we-t*, these overlap with deverbal nouns in *-i-sh*, and Seiler and Hioki (1979) treat these as nouns. Seiler (1977:312) considers these deverbal derivations in *-i-sh* to indicate a completed development. Many such derivations appear in attributive contexts. For

pangish (14a), no source verb is attested in either CU or CA and we have not identified any cognates elsewhere in Takic.

- (14) CA a. *pang-i-sh* ‘new’, pl. *pang-i-che-m*
 b. *wax-i-sh* ‘dry’, pl. *wax-i-che-m*

CA, like CU, has some adverbs derived with a suffix *-n* (15a-f) or a suffix sequence *-kwe-n* (15g-j) (Seiler 1977:313). The suffix *-kwe* also functions to derive verb bases from adjectives (see 14.15.4.2).

- (15) CA a. *haka-n* ‘far away’
 b. *havu-n* ‘quickly’
 c. *hilje-n* ‘widely’
 d. *mete-n* ‘much’
 e. *pelje-n* ‘softly, slowly’
 f. *wavu-n* ‘long’
 g. *acha-kwe-n* ‘well’
 h. *mete-kwe-n* ‘enough’
 i. *pele-kwe-n* ‘heavily’
 j. *wavu-kwe-n* ‘long’

CA uses the same-subject verb form *exa-nuk* ‘that way, thus’ (literally, ‘so doing’) as an adverb.

14.15. VERB STEMS DERIVED FROM NOUNS, ADJECTIVES, AND ADVERBS. The many examples of verb stems with complex syllable structures beyond the canonical CV, CVV, and the disyllabic stems suggest that a good deal of derivation with now-obsolete suffixes, and perhaps incorporation and compounding, is reflected in the repertoires of verb stems in the Takic languages. Some of this must have been denominal and deadjectival. However, only a few suffixes with this function can be retrieved from the corpora for the languages. These include two suffixes that are found in all of the languages. The first is a pair of suffixes in **-tu*, found throughout the Uto-Aztecan family to derive denominal verbs meaning ‘do, become, make’. In the Takic languages, reflexes of **-tu* have these same functions. The second is a denominalizing suffix **-ki* that can probably be reconstructed

for Proto-Takic, or at least for Proto-Tongva/Cupan; it is not attested in Serran. **-ki* has the sense ‘harvest, gather, search for’, as in **nav-ki* ‘gather prickly pear fruit’.

In addition to these two, a few other suffixes that derive verb stems from adjectives and nouns appear in the individual sub-families and the individual languages. In some instances, there is no specialized morphology for such derivations: verb class markers, or general causative suffixes, can be suffixed to the noun to derive a verb.

14.15.1. THE SUFFIXES **-TU7A* AND **-TU7I*. Both **-tu7a* ‘make, provide with’ and **-tu7i* ‘be, become’ are of Uto-Aztecan age. They seem to be combinations of **-tu* plus a second element; the antiquity of the combinations does not allow further analysis. Before we discuss these suffixes in Takic, it may be useful to review briefly their cognates in Nahuatl, a Southern Uto-Aztecan language, and in Hopi, a non-Takic Northern Uto-Aztecan language.

In Nahuatl, **-tu7a* ‘make’ appears as *-tia*, the result of two well explored sound changes, the change of **u* to Nahuatl *i* and the loss the glottal stop phoneme (**-tu7a* > **-ti7a* > *-tia*). In Hopi, it appears as *-ta*, pl. *-to~ta*, the result of the sound change **u* > *o*, the regular loss of intervocalic **7* and the reduction **oa* > *a* (Hopi has no vowel clusters). Thus: **-tu7a* > **-to7a* > **-toa* > *-ta*; pl. **-tu~tu7a* > **-to~to7a* > **-to~toa* > *-to~ta*. Examples of **-tu7a* in Nahuatl and Hopi are given in (1).

- (1) a. Nahuatl *ni-no-nāmic-tia* (< *nāmic-tli* ‘spouse’)
 1SG-REFL-spouse-MAKE;PROVIDE
 ‘I get married (I provide myself with a spouse)’ (Launey 2011:301)
- b. Hopi *kong-ta* (pl. *kong-to~ta*) (< *koongja-7at* ‘3SG’s husband’)
 husband-MAKE;PROVIDE husband-PL~MAKE;PROVIDE
 ‘get married, take a husband’ (Hopi Dictionary)

The suffix **-tu7i* ‘be, become, do, accomplish’ is found as *-ti* in both Nahuatl and Hopi. Both of these languages lose the glottal stop. In Nahuatl the sound change **u* > *i* has had the consequence that the suffix has simplified to just *-ti* (**-tu7i* > **-ti7i* > **-tii* > *-ti*). In Hopi, the simplification to *-ti* is superficial; the underlying form remains *-toi*, as

indicated by the reduplicative plural in *-to~*. Examples of Nahuatl and Hopi *-ti* < **-tu7i* are given in (2).

- (2) a. Nahuatl *ni-tequi-ti* (< *tequi-tl* ‘work’)
 1SG-work-DO;ACCOMPLISH
 ‘I work (I do, accomplish *tequitl*).’ (Launey 1992:268 [2011:298])
- b. Hopi *kii-ti* (pl. *kii-to~ti*) (< *kii-hy* ‘house, building’)
 house-BECOME house-PL~BECOME
 ‘become constructed as a house, village, city’ (Hopi Dictionary)

In Takic, **-tu7a* ‘make, provide with’ and **-tu7i* ‘be, become, accomplish’ merge in phonological form though the meanings they mark remain. In most Takic languages the second vowel of both **-tu7a* ‘make, provide with’ and **-tu7i* ‘be, become’ has been lost. SE retains an underlying final vowel in the two suffixes, but, in line with a morpheme-structure constraint that any vowel subject to apocope after the glottal stop is *a*, **-tu7i* has merged with **-tu7a*. The phonetic merger of these suffixes throughout Takic creates what amounts to a single, multifunctional suffix; in the examples of this section the reflexes of both **-tu7a* and **-tu7i* are glossed VBLZ ‘verbalizer’. It seems to us that the greater number of examples reflect the suffix **-tu7i* ‘be, become, accomplish’. However, a few, such as example (3), quite clearly relate to **-tu7a* ‘make, provide with’.

- (3) SE *Kii-chu7a-j = ny-7*. < *kii-ch* ‘house’
 house-VBLZ-IND = 1SG-PST
 ‘I built a house.’

In all the languages, the initial consonant is subject to lenition. Usually, but not always, this lenition yields the same initial consonant (abstract *T*) as that found in the absolutive suffix of the corresponding noun, as seen in (4).

- (4) a. SE *Paa-t\$u7a-j = m*. < *paa-t\$* ‘water’
 water-VBLZ-IND = 3PL
 ‘They’re wet/They got wet.’

- b. SE *Luumish-tu7a-j=ny-7*. < *luumish* ‘lame’
lame-VBLZ-IND = 1SG-PST
‘I got lame.’
- c. KI *A-myymy-tu7*. < *myymy-t* ‘laguna (lake)’ (3.98.0358)
3SG-lake-VBLZ
‘Se encharcó el agua. (The water formed puddles.)’ (3.100.0813)
- d. KI *Ni-wip-tsu7*. < *wip-t* ‘gordo (fat)’ (3.99.0596)
1SG-fat-VBLZ
‘I got fat.’ (3.99.0596)

In most environments the suffix-final glottal stop is lost in CU, but it remains when the suffix is followed by a causative, as in *wi-tu7-nin* ‘make fat’ (cf. *wi-tu* ‘become fat’, *wi-lj* ‘fat’). The final glottal stop seems to be lost completely in LU, AC, and CA.

14.15.1.1. THE SUFFIX *-TU7A/I IN TV. The suffix is sparsely attested in TV, but it is definitely present. It is underlyingly *-tu*, with allomorphs *-tu* ~ *-ju* ~ *-ru*, with the vowel, which is usually unstressed, expressed as *o*. All examples are intransitives of the ‘be, become’ type; no example of the **-tu7a* ‘make’ type is attested in TV. All examples take the *-k* nonfuture suffix. The allomorphy of the suffix does not perfectly match that of the absolutive suffixes. For instance, in (1f) the initial consonant of the suffix is *t*, not *t\$*.

- | | | | | |
|-----|----|----|--|--|
| (1) | TV | a. | <i>hikaa-jo-k</i> ‘be windy’ (3.102.0584) | <i>-hiika-j-n</i> ‘breath’ (3.104.0110)
(absolutive <i>hikaa-j*</i> unattested) |
| | | b. | <i>jaaj-to-k</i> ‘shake, tremble, quake of earth’ (3.105.0091) | <i>jaaj-t</i> ‘alive’ (3.103.0769) |
| | | c. | <i>pa-vaa-ro-k</i> ‘get wet’ (3.105.0345) | <i>pavaa-r</i> ‘wet’ (3.105.0345) |
| | | d. | <i>t\$eaa-ro-k</i> ‘smoke, be smokey’ (3.104.0526) | <i>t\$eaa-r</i> ‘smoke’ (3.103.0145) |
| | | e. | <i>xoxaa-ro-k</i> ‘get foamy’ (3.104.0575) | <i>a-xooxa-n</i> ‘its foam’ (3.104.0575)
(presumably <i>xooxa-r</i>) |
| | | f. | <i>xaaj-to-k</i> ‘bleed’ (3.103.0187) | <i>xaaj-t\$</i> ‘blood’ (3.103.0187) ~ <i>xaaj-t</i>
(3.103.0607) ‘blood’ |

The *-tu* suffix is not attested in transitive derivations. In TV these are derived by suffixing *-ina* (= *-ena* ~ *-jna* ~ *-na*), as seen in (2). (2a,b) can be compared with (1b,c). A derived verb *mat\$ee-jo-k** ‘be tied up’, parallel to the causative in (2c), is not attested. The verbs in (2) show *-jna* ~ *-na* from underlying *-ina*.

- (2) TV a. *pa~vaa-jna-x* ‘be providing water’ *paa-r* ‘water’
 (3.104.0498)
 b. *mat\$ee-na-x* ‘está fajeando (be belting up)’ *maat\$e-j* ‘belt’ (3.103.0424)
 (3.105.0055)

While the verbs in (2) are not transitive, *pavaajna-x* (2a) can appear with a dative object, as in (3). (3b) is particularly interesting. In imperatives, the causative morpheme *-ina* is normally truncated by loss of *na*, yet *na* is retained in (3b). This may show a difference between *-ina* used as a causative on a verb, where it truncates in the imperative, and *-ina* used as a derivational suffix on a noun, where it does not.

- (3) TV a. *Ne7-aat\$e-no* *pa~vaa-jna-x*.
 1SG-horse-PSD.ACC CONT~water-CAUS-NFUT
 ‘Estoy dando que tomar mi caballo, ich tränke mein Pferd. (I am giving water to my horse.)’ (3.104.0498)
 b. *Pa~vaa-jna = 7aa* *ne7-aat\$e-no*.
 CONT~water-CAUS = 2SG.IMP 1SG-horse-PSD.ACC
 ‘Water my horse!’ (3.104.0498)

While **-tu* is not attested as a transitive or causative in TV, it can occur with other suffixes following it, as in the continuative sequence derived from (1e) in *ja~jaaj-to-n-mo-k* ‘be shaking self, be beating of heart’ (3.105.0096).

An interesting derivation is *kehaa-w-k* ‘give a fiesta’, with a mystery *w* (which phonologically must be a devocalization of an unidentified element **-o*). The corresponding noun, *kehaa-j* ‘fiesta’, is apparently an **-i-ch* derivation (see 14.1) from the same base as the verb. A differently derived denominal verb, *kehaa-j-mo-k*, which also means ‘give a fiesta’, shows the effects of the **-i-ch* derivation by the selection of the

-jo allomorph of *-tu; *kehaa-j-mo-k* is from **kehaa-jo-n-mo-k*, parallel to *ja~jaaj-to-m* ‘alive ones’ (3.103.0769), cited above at 14.14.1 (5b), but with -j reduced from -jo by syncope.

14.15.1.2. THE SUFFIX *-TU7A/I IN SERRAN. Reflexes of *-tu7a/i are attested in the Serran languages, although there is no example of the final vowel surfacing in KI. In SE, the allomorphs are -tu7(a) ~ -t\$u7(a) ~ -chu7(a). In KI, they are -tu7 ~ -t\$u7 ~ -tsu7.

In Serran, the suffix can have either an intransitive ‘be’ or ‘become’ sense, as in (1) and (2), or a causative ‘make’ reading, as in (3) and (4). Except for (3c), the verbs with causative senses are not attested as formally transitive; that is, they do not appear with additional objects. A causative can be formed with the suffix -nina, as in *luumish-tu7-nin(a)* ‘make lame’, from *luumish-tu7* ‘become lame’ (cf. 14.15.1 (1b) above); the stem is a loan from CA *luumi-sh* ‘paralyzed or crippled person or animal’.

As previously mentioned, the initial consonant of the suffix from *-tu7a is usually the same as that found in the absolutive form of the corresponding noun; example (1c) and the KI examples in (4) provide exceptions.

- | | | | | |
|-----|----|----|---|--|
| (1) | SE | a. | <i>paa-t\$u7</i> ‘be wet’ | <i>paa-t\$</i> ‘water’ |
| | | b. | <i>taoo^R7-t\$u7</i> ‘be thundering with lightning’ | <i>taoo^R7-t\$</i> ‘thunder’ |
| | | c. | <i>noo^Rq-t\$u7</i> ‘get pregnant’ | <i>noo^Rq-t</i> ‘pregnant woman’ |
| | | d. | <i>huwawy-vi-tu7</i> ‘be getting blind’ | <i>huwawy-vi-t</i> ‘blind, blind one’ |
| | | e. | <i>pakii-tu7</i> ‘be foggy’ | <i>pakii-t</i> ‘fog’ |
| (2) | KI | a. | <i>havy-tu7</i> ‘be dressed, be covered with blanket’ (3.99.0437) | (cf. SE <i>havy-t</i> ‘blanket’) |
| | | b. | <i>hawkup-i-t\$u7</i> ‘assemble, meet together’ (3.98.0381) | <i>hawkup</i> ‘one’ |
| | | c. | <i>huunay-tu7</i> ‘play tag’ (3.98.0473) | <i>huunay-t</i> ‘bear’ |
| | | d. | <i>ju7uu-tu7</i> ‘be lame’ (3.98.0466) | <i>ju7uu7</i> ‘lame’ (3.99.0258) |
| | | e. | <i>jyha-tu7</i> ‘shade self’ (3.100.0373) | <i>jyha</i> ‘evening’ |
| | | f. | <i>myymy-tu7</i> ‘form a pond, of water’ (3.100.0414) | <i>myymy-t</i> ‘pond, lake, ocean’ |
| | | g. | <i>naw-tu7</i> ‘disappear, be invisible’ (3.98.0251) | <i>naw</i> ‘no’ |
| | | h. | <i>\$ikwa-tu7</i> ‘freeze, of water’ (3.98.0083) | <i>\$ika-t</i> ‘ice’ |
| | | i. | <i>wana-tu7</i> ‘trickle, drip, flow’ (3.98.0216) | <i>wany-t</i> ‘river’ |

- (3) SE a. *chaa-t\$u7* ‘sing (make a song)’ *chaa-t\$* ‘song’
 b. *huu-t\$u7* ‘make arrows’ *huu-t\$* ‘arrow’
 c. *kii-chu7* ‘build a house’ *kii-ch* ‘house’ (repeated from 14.15.1 (3))
- (4) KI a. *kwii-wii-tu7* ‘grind acorns’ *wii-ts* ‘acorn mush’ (cf. SE *kwiij-t\$* ‘black oak
 (3.98.0348) acorn, tree’)
 b. *paavuha-t\$u7* ‘plant a crop’ (cf. SE *paavuha-t* ‘a plant’, *paavuha-7* ‘plant a
 (3.98.0229) crop’)

In (5), both Serran languages have *wii-*, the usual UA etymon for ‘string’, but it is not attested as a noun. It appears in both nouns in (5) but with complications. The SE noun *wiichua7t* ‘string’ is a nominalization of a verb in **-Tu7a*, but that verb is unattested.¹⁶⁷ KI attests the verb missing in the SE data, but the related noun in KI is elaborated with a derivational suffix *-vy*. Presumably the KI noun *wiivyt\$* is “string stuff”.

- (5) a. SE *wii-chu7** ‘make string’ *wii-chua7-t* ‘string’
 b. KI *wii-tsu7* ‘make string’ (3.98.0054) *wii-vy-t\$* ‘red milkweed, string’
 (3.99.0146)

One KI example, in (6), apparently derives a verb in *-tu7* from a verb.

- (6) KI *paa-mea-tu7* ‘be thirsty’ (3.98.0381) *paa-t\$* ‘water’ + *-mea*, probably a fossil
 reflex of **myk* ‘die’

14.15.1.3. THE SUFFIX **-TU7A/I* IN CUPAN. In the Cupan languages derivations in *-Tu(7)* derive from **-tu7i* and **-tu7a*. The derivation yields athematic verbs in all the languages. In Inland Cupan, the suffixes are clearly productive in the contemporary languages, since they appear with Spanish loans as in CU *liimpju-tu(7)* ‘be clean’ (< Spanish *limpio*) and CA *looku-lu* ‘become crazy’ (< Spanish *loco*). In AC, as in (1f), the unstressed **u* becomes

¹⁶⁷ The verb that K. Hill projected as underlying SE *wiichua7-* was not adequately marked in various materials that have been circulated. This has created the false impression that this verb is attested in SE. It is not.

a. Examples of the intransitive ‘be, become’ forms appear for Coastal Cupan in (1), CU in (2), and CA in (3).

- | | | | | |
|-----|----|----|---|---|
| (1) | LU | a. | <i>mom-tu</i> ‘come in of tide, be seasick’ | <i>mooma-t</i> ‘ocean’ |
| | | b. | <i>noo-tu</i> ‘be a male chief’ | <i>noo-t</i> ‘male chief’ |
| | | c. | <i>nee-chu</i> ‘become an old woman’ | <i>nesh-mal</i> ‘old woman’ |
| | | d. | <i>timee-chu</i> ‘bask in sun’ | <i>timé-t</i> ‘sun’ |
| | | e. | <i>ka7a-lu</i> ‘become paternal grandparent to someone’ | <i>-ka7</i> ‘paternal grandparent’ |
| | AC | f. | <i>hitchaka-ta</i> ‘spoil, become bad’
(3.123.0320) | <i>hitchaka-t</i> ‘bad person, spoiled thing’
(3.123.0259) |
| (2) | CU | a. | <i>naq7a-tu</i> ‘snore’ | <i>-naq7a</i> ‘ear’ |
| | | b. | <i>wi-tu</i> ‘get fat’ | <i>wiwa-t</i> ‘fat’ |
| | | c. | <i>pi7muk-chu</i> ‘turn into a ghost’ | <i>pi7muk-i-sh</i> ‘ghost’ |
| | | d. | <i>naxán-chu</i> ‘become an old man’ | <i>naxáni-sh</i> ‘man’ |
| | | e. | <i>pa-lu</i> ‘be watery’ | <i>pa-l</i> ‘water’ |
| | | f. | <i>i~7is-lju</i> ‘tell lies’ | <i>isi-lj</i> ‘coyote’ |
| (3) | CA | a. | <i>muh-lu</i> ‘turn into an owl’ | <i>muu-t</i> ‘owl’ (< * <i>muhu-t</i>) |
| | | b. | <i>puh-lu</i> ‘become a healer, sorcerer’ | <i>puu-l</i> ‘healer, sorcerer’ (< * <i>puhu-l</i>) |
| | | c. | <i>qawi-lju</i> ‘turn into a rock’ | <i>qawi-sh</i> ‘rock’ |
| | | d. | <i>wi-lju</i> ‘get fat’ | <i>wi-lj</i> ‘fat’ |

Verbs in *-Tu(7)* with the ‘make, provide’ sense are illustrated for LU in (4), for CU in (5), and for CA in (6).

- | | | | | |
|-----|----|----|---|--|
| (4) | LU | a. | <i>an-tu</i> ‘sting with ants’ (a healing ceremony) | <i>aana-t</i> ‘ant’ |
| | | b. | <i>ash-lu</i> ‘make up a herd, raise cattle’ | <i>ash-la</i> ‘owned animal, pet’ |
| | | c. | <i>hichika-tu</i> ‘do nasty, evil deeds’ | <i>hichika-t</i> ‘wicked, nasty, evil’ |
| | | d. | <i>huu-lu</i> ‘make arrows’ | <i>huu-la</i> ‘arrow’ |
| | | e. | <i>kii-chu</i> ‘build a house’ | <i>kii-cha</i> ‘house’ |
| | | f. | <i>ow-lu</i> ‘menstruate’ | <i>ow-la</i> ‘blood’ |

- (5) CU
- | | | |
|----|---|---|
| a. | <i>aj-lju</i> ‘shake a rattle’ | <i>aji-lj</i> ‘tortoise, tortoise shell rattle’ |
| b. | <i>ash-lju</i> ‘have a dog, a pet’ | <i>achi-lj</i> ‘owned animal, pet’ |
| c. | <i>kii-chu</i> ‘build a house’ | <i>kii-sh</i> ‘house’ |
| d. | <i>yjy-tu</i> ‘steal’ | <i>yjy-t</i> ‘thief’ |
| e. | <i>yw-lu</i> ‘do girl’s puberty ceremony’ | <i>ywy-l</i> ‘blood’ |
- (6) CA
- | | | |
|----|--|--|
| a. | <i>ash-lu</i> ‘keep as a pet’ | <i>-7ash</i> ‘owned animal, pet’ |
| b. | <i>eje-tu</i> ‘steal’ | <i>eje-t</i> ‘thief’ |
| c. | <i>ew-lu</i> ‘bleed’ | <i>ewi-lj</i> ‘blood’ |
| d. | <i>hichika-tu</i> ‘do nasty, evil deeds’ | <i>hichika-t</i> ‘wicked, nasty, evil’ |
| e. | <i>push-lu</i> ‘put eyes in doll’ | <i>-push</i> ‘eye’ |

In CU, the *-chu* allomorph of the suffix is found in the derivation of verbs from adjectives in *-i-sh*, as in (7), and with other adjectives as well (7d). These all seem to have the sense ‘become’, contrasting with ‘be’ derivations with a different suffix, *-chi*, in (8).

- (7) CU
- | | | |
|----|-------------------------------------|-------------------------------|
| a. | <i>piskan-chu</i> ‘become sweet’ | <i>piska7ni-sh</i> ‘sweet’ |
| b. | <i>wavá\$-chu</i> ‘become long’ | <i>wavá\$-sh</i> ‘long’ |
| c. | <i>yl7i-chu</i> ‘spoil, become bad’ | <i>yl7i-sh</i> ‘bad’ |
| d. | <i>icháa-chu</i> ‘get better’ | <i>icháa ~ icháa7i</i> ‘good’ |

The suffix *-chi* derives intransitives from many adjectives in the sense ‘be’. The contrast of *-chi* ‘be’ with *-chu(7)* ‘become’ (< *-Tu(7)*) is shown in (8). The suffix *-chi* does not have allomorphs in *t*, *l*, or *lj*.

- (8) CU
- | | | | |
|----|-----------------------------|---------------------------------|-------------------------|
| a. | <i>wavá\$-chi</i> ‘be long’ | <i>wavá\$-chu</i> ‘become long’ | <i>wavá\$-sh</i> ‘long’ |
| b. | <i>yl7i-chi</i> ‘be bad’ | <i>yl7i-chu</i> ‘become bad’ | <i>yl7i-sh</i> ‘bad’ |

The causative or transitive of CU verbs with *-Tu(7)* is formed with the causative suffix *-nin*, yielding athematic verbs, as in (9).

- (9) CU
- | | | |
|----|---|-------------------------------|
| a. | <i>icháa-chu7-nin</i> ‘make someone get better’ | <i>icháa ~ icháa7i</i> ‘good’ |
| b. | <i>piskan-chu7-nin</i> ‘make sweet’ | <i>piska7ni-sh</i> ‘sweet’ |
| c. | <i>tyw-lu7-nin</i> ‘name, provide with a name’ | <i>-tyw7a</i> ‘name’ |

In contrast, derivations with *-chi* have the peculiar property that, although they are mainly formally intransitive, they are thematic verbs with the transitive thematic suffix *-in*. Most of these have a ‘make’ sense, sometimes homonymous with the ‘be’ derivation, e.g. *jyli-chi-n* ‘be clean’ or ‘clean s.th’. The color term derivations in (10) illustrate this pattern. Their “make” sense is a thematic transitive, as seen in (11), where the subject marker appears before the thematic suffix. Their ‘be, become’ sense is simply the athematic intransitive, without any special derivational suffix. The second causative of the *-in* ‘make’ form is not attested, but it would presumably be thematic *kwati-chi-in-nin** ‘have one make it red.’ Since final *u* is not usually replaced in these derivations, it seems likely that *-chi* is distinct from *-Tu(7)*. The structure is underlyingly *-chi-in*, with replacement of the stem-final vowel, not *^x-chu7-in*. With *-Tu7*, the attested causative, as mentioned above, is *-chu7nin*, as in *wavá\$í-chu7-nin* ‘make long’.

- (10) CU a. *kwati-ch-in* ‘make red’ *kwati-jax* ‘be red’, *kwati~kwati7i-sh* ‘red’
 b. *kyny-ch-in* ‘make yellow’ *kyny-jax* ‘be yellow’, *kyny~kyny7y-sh* ‘yellow’
 c. *piwi-ch-in* ‘make gray’ *piw-chu-jax* ‘turn gray’; *-piw* ‘great-grand relative’
 d. *xwavi-ch-in* ‘make green’ *xwavi-jax* ‘be green’, *xwavi~xwavi7ish* ‘green’

- (11) CU *Tuku = 7yp* *kavá7ma-l* *kwati-sh = ny-n*.
 yesterday = REAL pot-ABS red-VBZR = 1SG-TR
 ‘Yesterday I painted the pot red.’

14.15.2. THE SUFFIX *-ki* ‘HARVEST, GATHER, SEARCH FOR’. Another derivational suffix that is attested widely in the Takic languages is *-ki*, which usually appears suffixed to the stem for plant names, although other types of stems also occur with it, as in (2) below. This suffix is not attested in the Serran languages.

In TV, the verb class of *-ki* verbs cannot be confidently assigned, since these are attested only in the future and in the imperative. The only attestations are shown in (1).

- (1) TV a. *naav-ke* ‘gather fruit of tuna cactus’ *naavo-t* ‘prickly pear, tuna cactus’
 (3.103.0331) (3.102.0398)
 b. *waa7-ke* ‘harvest guata (juniper)’ *waa7a-t* ‘juniper’ (3.103.0010)
 (3.103.0640)

The suffix is well attested in LU, and there are examples in AC. In LU, *-ki* verbs are in the thematic class, with intransitives in *-ax*, transitives in *-i*. Examples appear in (2). Expected *k* appears as *x* in AC in (2f).

(2)	LU	a.	<i>nav-k-ax</i> ‘be gathered, of tuna cactus fruit’; <i>nav-k-i</i> ‘gather tuna cactus fruit’	<i>naavo-t</i> ‘tuna cactus’
		b.	<i>\$axaa-k-ax</i> ‘for arroyo willow to be searched for’; <i>\$akaa-k-i</i> ‘search for arroyo willow’	<i>\$axá-t</i> ‘arroyo willow’
		c.	<i>uruu\$k-ax</i> ‘for grinding stones to be searched for’; <i>uruu\$k-i</i> ‘search for grinding stones’	<i>uruu\$a-t</i> ‘grinding stone, soapstone pot’
		d.	<i>muu\$k-ax</i> ‘for whiskers to be pulled out’; <i>muu\$k-i</i> ‘pull out whiskers’	<i>-muu\$</i> ‘whiskers, beard, moustache’
	AC	e.	<i>aaj-k-a</i> ‘collect abalones’ (3.121.0749)	<i>aaj-l</i> ‘black abalone’ (3.116.0058)
		f.	<i>naav-x-a</i> ‘collect tunas’ (3.124.0289)	<i>naav-ch</i> ‘tuna, prickly pear fruit’ (3.124.0289)

CU has only one such verb attested, *syj-ki* ‘gather *syjilj* (*Juncus acutus*, a basketry plant)’.¹⁶⁸

However, a number of CU nouns have possessive *-ki7a*, as in (3). This suffix is probably from *-ki-a7* (for *-a7*, see 14.2.4). Example (3d), where the verb is attested, is almost certainly an attestation of this suffix. The word for ‘money’ (3a) is related to the word for ‘shell’, from which strings of money were made.

(3)	CU		possessed	absolute
		a.	money	<i>-qish-ki7a</i> <i>qichi-lj</i>
		b.	tule	<i>-si7i-ki7a</i> <i>si7i-sh</i>
		c.	<i>Juncus acutus</i>	<i>-syj-ki7a</i> <i>syji-lj</i>
		d.	mushrooms	<i>-syqypi-ki7a</i> <i>syqypi-sh</i>

CA also has only one attestation, in the verb *nav-ki* ‘pick *Opuntia* fruit’ < *nave-t* ‘*Opuntia megacantha*’ (Bean & Saubel 1972:96). The *-ki7a* possessive is not reported for

¹⁶⁸ In Hill (2005:282) this suffix is grouped with a different suffix, *-qi*. It is unlikely that this is correct.

CA. The preferred construction for possessing gathered plants in CA uses one of the possessive classifiers, e.g. *ne7aj7a kwiñilj* ‘my black oak acorns that I picked from the tree’ (-7aj-7a from *aj* ‘pick from tree’). It is likely that a larger CA corpus would include a repertoire of -*ki* derivations comparable to the LU inventory and to that suggested by the CU possessives in -*ki7a*.

14.15.3. THE VERB-FORMING SUFFIX *-7A .

14.15.3.1. TONGVA DERIVATIONS IN *-7A. Verbs can derive from adjectives in TV with *-7a. With the loss of the morpheme-initial glottal stop in postconsonantal position, the suffix in TV appears to have been reduced to just -a.

- | | | | | |
|-----|----|----|--|------------------------------------|
| (1) | TV | a. | <i>ot\$oo7-a-x</i> ‘be cold, of weather’ (3.103.0546) | <i>ot\$oo7</i> ‘cold’ (3.103.0125) |
| | | b. | <i>oroo7-a-x</i> ‘be hot, of weather’ (3.103.0125) | <i>oroo7</i> ‘hot’ (3.102.0559) |
| | | c. | <i>karjoot-a-x</i> ‘be lame, walk with limp’
(3.104.0549) | <i>karjoot</i> ‘lame’ (3.104.0549) |

14.15.3.2. SERRAN AND CUPAN DERIVATIONS IN *-7A. The Serran materials document denominal derivations where the noun root and verb root are identical except for a final glottal stop added to form the verb. No vowel follows this glottal stop, although the SE suffix may underlyingly be -7a, with the vowel lost by the regular processes of glottal stop metathesis (see 10.2.1) and contraction (4.2.12 (2)). In the Cupan languages examples appear of identical noun and verb stems. Where the root is CV or CVV, or where the final syllable is stressed, the glottal stop suffix does appear, e.g. CU and CA *pa-7* ‘drink’, *pa-l* ‘water’. On disyllabic verb stems with initial stress final glottal stop on verbs does not appear, since Cupan languages (except for AC) do not permit word-final glottal stop in an unstressed syllable. Thus we can probably reconstruct a denominalizing suffix *-7 for Proto-Takic. Oddly, the AC example in (3e) has a glottal stop finally on the source noun, but not on the derived verb.

- | | | | | |
|-----|----|----|--|---|
| (1) | SE | a. | <i>majha-7</i> ‘give birth’ (<i>r ~ h</i>) | <i>-majr</i> ‘(one’s) child’ |
| | | b. | <i>huuna-7</i> ‘hug’ | <i>huuna-t</i> ‘bear’ (?), <i>-huun</i> ‘heart’ (?) |
| | | c. | <i>paa-7</i> ‘drink’ | <i>paa-t\$</i> ‘water’ |

- d. *paavuha-7* ‘plant a crop’ *paavuha-t* ‘plant’
 e. *piiva-7* ‘smoke, use tobacco’ *piiv-t* ‘tobacco’
 f. *oo^hva-7* ‘be strong’ cf. KI *-oova* ‘strength’ (3.98.0256)
 g. *waqaa-7* ‘have a fiesta’ *waqaa-t\$* ‘fiesta’
- (2) KI a. *majha-7* ‘bear child’ (3.98.0087) (*r ~ h*) *-majr* ‘son or daughter’ (3.98.0088)
 b. *huuna-7* ‘hug’ (3.98.0251) *huuna-ts* ‘heart’ (?) (3.98.0031)
 c. *ova-7* ‘be strong’ (3.98.0256) *-oova* ‘strength’ (3.98.0256)
 d. *pookuja-7* ‘eat lunch or dinner’
 (3.98.0060) *pookuja-ts* ‘lunch’ (3.98.0482)
 e. *\$ikwa-7* ‘feel cold, of a person’ *\$ikwa-t* ‘ice’
- (3) LU a. *mee-7* ‘have crust around eyes’ *mee-mawi-sh* ‘having crust around
 eyes’ (*-meela* ‘eye crust’)
 b. *tuvii-7* ‘become cloudy’ *tuvii-cha* ‘cloud’
 c. *ijaa-7* ‘be poisoned by poison oak’ *ijaa-la* ‘poison oak’
 d. *noota* ‘be a female chief’ *noo-ta* ‘female chief’
 AC e. *kaajta* ‘be an opponent’ (3.122.0155) *-kaajta7* ‘opponent’
- (4) CU a. *pa-7* ‘drink’ *pa-l* ‘water’
 b. *hukapi* ‘scalp (verb)’ *-hukapi* ‘scalp (noun)’
 c. *miisi* ‘say mass’ *miisi* ‘mass’

In CU, derivations with *-7* apparently form causatives in *-ni*, as attested in *iva-7-ni* ‘make strong’ < *-iva* ‘strength’.

- (5) CA a. *pa-7* ‘drink’ *pa-l* ‘water’
 b. *ela* ‘put on dress, to wear’ *ela-t* ‘dress’
 c. *piva* ‘smoke tobacco’ *piva-t* ‘tobacco’
 d. *qenxa* ‘have around neck’ *qenxa-t* ‘beads, necklace’
 e. *tepaqa* ‘tighten as belt’ *tepaqa-l* ‘belt’

The CA derivational relationship in (6) is not the same as that in (4), where the nouns are derived with the *-a7-t* nominalizer.

- (6) CA a. *tupa* ‘settle (of substance in water)’ *-tup-7a* ‘what has settled (e.g. coffee grounds)’
 b. *wala* ‘send out roots’ *-wal-7a* ‘stump, trunk, beginning’

There are also a number of irregularities and inconsistencies. For instance, in CU *qinxat* ‘beads, necklace’, which looks like the source for *qinexa* ‘put on necklace’, has a possessed form *-qinex-7a*, suggesting that it is the noun that is derived. Contrast this with the CA form in (5d) (although since Seiler and Hioki (1979) give no possessed form of this stem, we cannot be sure about its status).

CU also has examples where both the verb and the noun have *-7a*, in (7). Compare (7c) and (5b) in CA.

Example (7a) can be used to illustrate the many inconsistencies and conundrums involved with this derivation. A verb *pii7* ‘bewitch’ appears in LU, along with *pi7* in CA. In LU, the glottal stop in this root disappears in the compound *piimuk* ‘be very sick’, but it appears in CU in *pi7muk* ‘die (of witchcraft)’.

- (7) CA a. *pi7a* ‘kill by witchcraft’ *-pi7a* ‘victim’
 b. *ti7a* ‘roost, of birds’ *-ti7a* ‘nest’
 c. *ela7a* ‘put on, wear skirt’ *ela7a-t* ~ *ela-t* ‘dress’

SE also has examples of this type.

- (8) SE verb (-7 [-VBLZ]) possessed noun (-7 [-PSD])
 a. *hoo^Rna-7* ‘make one’s bed’ *-hoo^Rna-7* ‘bed, bedding’
 b. *jy\$ka-7* ‘sweat’ *-jy\$ka-7* ‘sweat’
 c. *paa-7* ‘drink’ *-paa-7* ‘water’ (cf. abs. *paa-t\$*)

In LU, there are many examples of the *-i-sh* resultative derivation considered in 14.1 where the verb stem and the noun stem appear to be identical, but where the noun, not the verb, is derived. But where the last syllable of the verb stem is unstressed, these constructions are often identical to those considered in this section. The difference is that the nouns always end in *-sh*, as in the examples in (9).

- (9) LU a. *kajtu* ‘be an enemy to someone’ *kajtu-sh* ‘enemy’

- b. *kula7xa* ‘be disgusted by s.th’ *kula7xa-sh* ‘nausea’
 c. *naw7\$ʔi* ‘participate in arrow-shooting contest’ *naw7\$ʔi-sh* ‘arrow-shooting contest’

There has apparently been some instability in whether a derivation is deverbal or denominal. For instance, Serran verbs and nouns for ‘defecate, feces’ and ‘urinate, urine’ appear to have identical verb and noun roots as well, as seen in (10) and (11). Here both the verbs and possessed nouns can be understood as derived according to the same pattern as that seen in (8), with no occurring underived form.

- (10) SE a. *\$aa-7* ‘defecate’ *-\$aa-7* ‘feces’
 b. *\$ii-7* ‘urinate’ *-\$ii-7* ‘urine’
- (11) KI a. *\$aa-7* ‘defecate’ (3.98.0271) *-\$aa-7* ‘feces’ (3.98.0271)
 b. *\$ii-7* ‘urinate’ (3.98.0271) *-\$ii-7* ‘urine’ (3.98.03 (49))

In contrast, in TV and in LU the nouns for these referents are clearly derived from the verbs with the *-i-sh* derivation, as seen in (12).¹⁶⁹

- (12) TV a. *\$e-\$ii-k* ‘urinate’ (3.105.0373) *\$ii7-e-j* ‘urine’ (3.105.0373)
- LU b. *\$a7a* ‘defecate’ *\$aa7-i-sh* ‘feces’
 c. *\$ii7* ‘urinate’ *\$ii7-i-sh* ‘urine’

The resultative derivation is also found in SE *\$e-ii7-ch* ‘feces, what has been defecated’ (< *\$aa -7 -i -ch*), possessed *-\$eii7*, whose accusative is *-\$eii7i*. The possessed form *-\$eii7* is used apparently interchangeably with *-\$aa7*, as seen above in 14.1.2 (7).

14.15.4. DENOMINAL AND DEADJECTIVAL DERIVATIONS RESTRICTED TO SUBGROUPS. A number of denominal and deadjectival derivations that are quite productive use suffixes that are

¹⁶⁹ TV, CU, and CA have developed euphemisms for ‘defecate’ and ‘feces’ based on roots for ‘drop’. For ‘urinate’, Roscinda Nolasquez preferred *kiljma* ‘(go) outside’, although had no hesitation with *-si* ‘urine’.

restricted to a single subgroup (or single language, in the instance of Tongva). These are reviewed in the following sections.

14.15.4.1. DERIVATIONS UNIQUE TO TONGVA. TV transitive verbs can be derived from adjectives with the causative suffix *-ina*, as in (1).

- (1) TV a. *araak-ena-x* ‘split’ (3.105.0106) *araak* ‘rajado (split)’ (3.105.0106)
 b. *heetk-ena-x** ‘raise, lift’¹ *heetko* ‘arriba (high up)’ (3.103.0601)
 c. *kot\$ook-ena-x** ‘cover’² *kot\$ook* ‘tapado (covered)’ (3.103.0186)
¹ Attested only in the imperative *heetk-e-7a*. (3.103.0511).
² Attested (3.105.0062) only in the future, *kot\$ook-e-ro* and imperative, *kot\$ook-e-7aa*.

The suffix sequence *-mo-k*, which usually has a stative or continuative sense, yields several de-adjectival verbs, as discussed above in 14.14.1 (10, 11, 12). Most commonly, it appears on adjectives with the *-ko* suffix, yielding verbs meaning ‘be, become’.

14.15.4.2. DERIVATIONS UNIQUE TO SERRAN. In SE, an inchoative suffix *-v(y)* derives deadjectival verbs in the meaning ‘become’, shown in (1) (and see 10.2.3.5, and discussion above in 14.4 of possible Cupan cognates). Most of these verbs form the transitive ‘make’ class with the usual k-class causative suffix sequence *-k-in(a)*. These are richly attested in SE.

- (1) SE a. *atiy^R7a-v-k* ‘get bigger, grow’ *atiy^R7a* ‘big’
 b. *chuka7-v-k* ‘go sour, become sour’ *chuka7* ‘salty, sour’, *chuka7-t* ‘salt’
 c. *namai7-v-k* ‘get soft’ *nama7i7* ‘soft’
 d. *oo^Rva-v-k* ‘get strong, stronger’ cf. KI *-oova* ‘strength (3.98.0256)’
 e. *paa^R-v-k* ‘get wet, become watery’ *paa-t\$* ‘water’
 f. *ychyy-v-k* ‘get cold, of weather’ *ychy* ‘cold’

The suffix *-vy* ‘become’ can probably be retrieved for KI as well, where it sometimes appears as *-va*. This is best attested with causative *-n*, as in (3), but there are examples with thematic *k*, seen in (2). Several color verbs have the suffix sequence; example (2d) is representative.

- | | | | | |
|-----|----|----|--|--|
| (2) | KI | a. | <i>oo\$i-va-k</i> ‘become hot’ (3.98.0445) | <i>oo\$i7</i> ‘hot’ (3.98.0081) |
| | | b. | <i>a-paahi-va-k</i> ‘it made three’ (3.98.0255) | <i>paahi7</i> ‘three’ (3.98.0255) |
| | | c. | <i>pavaha-vy-k</i> ‘have a blister’ (“become a ball”) (3.98.0481) | <i>-pavahat</i> ‘bladder’ (3.99.0256) |
| | | d. | <i>piw-vy-k</i> ‘está pardo (be dark gray, ash-colored)’ (3.98.0086) | cf. Cupan <i>*piwi</i> ‘gray, great-grandrelative’ |

The KI suffix sequence, *-va-n*, appears mainly in a series of verbs that describe actions used in gambling games, and literally mean “make it become (2, 3, etc.).” An interesting verb for which no derivational source is attested is *myj-va-n* ‘place a bet’. The first element of this verb may be cognate with CA *me-*, a prefix required on numerals when counting animates (see 15.5.2.6). However, the suffix sequence can be used in other contexts, as suggested by the translation offered to Harrington in (3e), and examples (3f,g). Anderton (1988:158) treats this as a suffix *-van*. The comparison with SE has suggested that it is really a sequence of two suffixes, ‘become’ and the causative. It is definitely not the same suffix as SE *-ivan(a)*, which appears on verbs to add an instrumental valence (see 10.2.3.6).

- | | | | | |
|-----|----|----|--|---|
| (3) | KI | a. | <i>hawkup-i-va-n</i> ‘put down one’ (3.98.0255) | <i>hawkup-i</i> ‘once’ (3.98.0255) (<i>hawkup</i> ‘one’) |
| | | b. | <i>woo-va-n</i> ‘make two’ (3.98.0255) | <i>woo-va-k</i> ‘twice’ (3.98.0255) (<i>woh</i> ‘two’) |
| | | c. | <i>paahi-va-n</i> ‘put down three’ (3.98.0255) | <i>a-paahi-va-k</i> ‘it made three’ (3.98.0255) |
| | | d. | <i>watsaha-va-n</i> ‘put down four’ (3.98.0255) | <i>watsa</i> ‘four’ (3.98.0255) (cf. SE <i>wachah</i> ‘four’, with final <i>h</i>) |
| | | e. | <i>mahat\$i-va-n</i> ‘put five (in work one is doing)’ (3.98.0255) | <i>mahat\$</i> (3.98.0255) |
| | | f. | <i>oo\$i-va-n</i> ‘heat up’ (3.98.0210) | <i>oo\$i7</i> ‘hot’ (3.98.0081) |
| | | g. | <i>numua-va-n -huun</i> ‘make heart good (not be sad)’ (3.98.0456) | <i>numua-t\$</i> ‘good, well, pretty’ (3.98.0204) |

Denominal verbs in the ‘make’ class are also derived with simplex-class causative suffixes in SE. The first of these, *-n(a)*, is not attested following the *-v(y)* suffix. Examples with *-n(a)* appear in (4).

- | | | | | |
|-----|----|----|---|--|
| (4) | SE | a. | <i>piiha7-n</i> ‘love, like, be fond of’ | <i>piiha7</i> ‘sweet’ |
| | | b. | <i>chuka7-n</i> (~ <i>chuka7-n-in</i>) ‘add salt to’ | <i>chuka7-t</i> ‘salt’ |
| | | c. | <i>oo^Rva7-n</i> ‘force (verb)’ | cf. KI <i>-oova</i> ‘strength (3.98.0256)’ |

It is easy to confuse these derivations with ‘be’ denominals with the stative suffix *-7n(a)*, as seen in (5). (5f) is a Cupan loan, complete with the *l*-reduplication which is otherwise unique to Cupan (see 10.6.2.9 (2)).

- | | | | | |
|-----|----|----|--|--|
| (5) | SE | a. | <i>y^Rt\$yy^R-7n</i> ‘be hot, of a person’ | <i>y^Rt\$y^R</i> ‘hot’ |
| | | b. | <i>hawaa~wa-7n</i> ‘be light (not heavy)’ | (cf. KI <i>hawa~wa7j</i> ‘light, swift’ (3.98.0215)) |
| | | c. | <i>hidhii~dhi-7n(a)</i> ‘be straight’ | <i>hidhii~dhi-ki-ch</i> ‘straight ahead’ |
| | | d. | <i>jaraa~ra-7n(a)</i> ‘be white’ | <i>jaraa-7n-ka-m</i> ‘white people’ |
| | | e. | <i>jy7aa~jy7a-7n</i> ‘be beautiful’ | (adjective stem unattested) |
| | | f. | <i>kawa~lawa-7n</i> ‘be crooked’ | (cf. CA <i>kawlaa</i> ‘be bent’) |

Derivations with other causative suffixes are also attested, as in (6). In (6b) and (6c) *-vy* ‘become’ suffix precedes the causative. This is the logical order, reading the morphology right to left: ‘cause to become such-and-such’.

- | | | | | |
|-----|----|----|-------------------------------------|--------------------------|
| (6) | SE | a. | <i>kut\$-ia7n</i> ‘make a fire’ | <i>ku-t</i> ‘fire’ |
| | | b. | <i>namai7-v-an</i> ‘make s.th soft’ | <i>nama7i7</i> ‘soft’ |
| | | c. | <i>pi\$ei7-vy-n</i> ‘sweeten’ | <i>pi\$aa7i7</i> ‘sweet’ |

KI has examples of derivation of ‘make’ verbs with the *-(a)n* causative (see 10.3.2), in (7). The source of the glottal stop in these examples is unclear. In the SE examples in (4) the final glottal stop appears on the noun stems. However, in KI it does not appear on nouns. It may be the denominalizing glottal stop (< **-7a*) discussed in 14.15.3, suggesting verbs meaning ‘be thatched, be sharp’, which are not attested.

- | | | | | |
|-----|----|----|--|--------------------------------------|
| (7) | KI | a. | <i>haama-7-n</i> ‘thatch a roof’ (3.98.0288) | <i>haama-t</i> ‘grass’ (3.98.0141) |
| | | b. | <i>taamaa-7-n</i> ‘sharpen’ (3.100.0487) | <i>taamaa-ts</i> ‘tooth’ (3.98.0356) |

- c. *mahaa-7-n* ‘feather (arrow, headband, etc.)’ *mahaa-ts* ‘feather’ (3.98.0019)
(3.98.0256)

14.15.4.3. DERIVATIONS UNIQUE TO CUPAN. Among the Cupan languages, denominal derivation is dominated by the major processes already discussed above.

As in all of the languages, in LU there is a tempting array of suffixes on apparent denominals with only one or two attestations. We pass over these, in favor of noting a couple of better-attested derivational elements in CU and CA.

While CU, like LU, mainly uses the major suffixes, there are a few attestations of a process specific to that language, namely derivation with the thematic suffix *-jax*, seen in (1). This suffix is usually intransitive, but examples (1a,b) have an agentive sense.

- (1) CU a. *pu~puu-jax* ‘doctor (vt.)’ *puu-l* ‘doctor, sorcerer’
 b. *puu-jax* ‘get a doctor’ *puu-l* ‘doctor, sorcerer’
 c. *chu7-jax* ‘sit cross-legged’ *-chu7u* ‘vulva’
 d. *yw-jax* ‘menstruate’ *ywy-l* ‘blood’

CA has a productive de-adjectivalizing suffix *-kw(e)* ‘become’, which yields verbs in the class with reduplicating distributives. This may be cognate with the TV *-ko* suffix on adjectives and adverbs, but it appears only in verbs. Examples are in (2).

- (2) CA a. *amna-kw* ‘grow big’, *amna* ‘big’
 amna-kwe-lu-ni ‘make big’
 b. *eléle-kw* ‘get bad’ cf. CU *ylýl7-i-sh* ‘bad, evil’
 c. *juj-kwe-ni* ‘cause to get cold’ *juj-ma* ‘cold’
 d. *mete-kw* ‘multiply’ *mete-we-t* ‘much’
 e. *pele-kw* ‘weigh, be heavy’ *pele-ma* ‘heavy’

CA also has a well-attested suffix *-vi* that means ‘put on’, often ‘put on an article of clothing’, as seen in (3). The glottal stop in (3c,d) seems to be the denominalizing suffix *-7* (< **-7a*) (see 14.15.3).

- (3) CA a. *paañu-vi* ‘put on a scarf’ *paañu* ‘scarf’ (< Spanish *pañu*)
 b. *qenxa-vi* ‘put on beads’ *qenxa-t* ‘beads’

- c. *tama7-vi* 'get teeth on' *tama-l* 'teeth'
d. *jumu7-vi* 'put hat on' *jumu7-ve-l* 'hat'
e. *waq-cha-vi* 'put on shoes' *waqa-t* 'shoes'

CHAPTER 15

SPECIAL LEXICAL ITEMS: NUMERALS, PLACE NAMES, GENTILICS

15.1. NUMERALS AND DERIVATIONS ON NUMERALS.

15.1.1. TAKIC NUMERALS. Takic numeral systems, with the exception of words for numerals from one to five and a few inflectional and derivational structures involving those, were largely replaced by Spanish by the end of the 19th century. Thus the data below, at least for numerals greater than five, in the main reflect somewhat unreliable recollections of how the system worked, and in some cases perhaps are late reinventions of the systems. Furthermore, the numerals and their derived structures show all the irregularities resulting from analogical change that are known to take place in counting systems.

The numerals come in cycles of five and then of ten. It is convenient to study the numerals ‘six’ to ‘ten’ after considering the basic forms, ‘one’ to ‘five’, displayed in (1).

(1)	‘one’	‘two’	‘three’	‘four’	‘five’
TV ¹	<i>pokuu7</i>	<i>wehee7</i>	<i>paahē7</i>	<i>wat\$aa7</i>	<i>mahaar</i>
SE	<i>hoowkp</i>	<i>wo^{Rh}</i>	<i>paahi7</i>	<i>wachah</i>	<i>maha^{Rt}\$</i>
KI ²	<i>hawkup</i>	<i>woh</i>	<i>paahi7</i>	<i>watsa</i>	<i>mahat\$</i>
LU	<i>supúl</i>	<i>weh</i>	<i>paahaj</i>	<i>wasá7</i>	<i>mahaar</i>
AC ³	<i>supul</i> ⁴	<i>weh</i>	<i>paahaj</i>	<i>wasá7</i>	<i>mahaar</i>
CU	<i>suplywyt</i>	<i>wih</i>	<i>pah</i>	<i>wichiw</i>	<i>nymakwánangax</i>
DCA	<i>suplji ~ suplje</i>	<i>wih</i>	<i>pah</i>	<i>wichiw</i>	<i>namekwánang</i>
MCA	<i>suplji7</i>	<i>wih</i>	<i>paj</i>	<i>wichiw</i>	<i>nemaqwánang</i>

¹ A set of TV numerals appears in the Harrington notes beginning at 3.102.0655.

² A set of KI numerals appears in the Harrington notes beginning at 3.98.0254.

³ AC ‘one’, ‘two’, ‘three’ (3.121.056), long vowel in ‘three’ (3.122.0038), ‘four’, ‘five’ (3.122.0039), long vowel in ‘five’ (3.124.0356).

⁴ LU and AC ‘one’ are stressed the same way; our rules for writing the accent marks are different; see chapter 3.

The numerals for ‘one’ display at least two reconstructable roots, Uto-Aztecan **syNV* (Stubbs 2011 #2619 **synu*) and Northern Uto-Aztecan **puku* ~ **kupu*. The vowel **y* of the Uto-Aztecan root **syNV* is based on comparisons of languages throughout the family;¹⁷⁰ it is not the vowel **u* that one might propose for Proto-Cupan, which probably results from an overdetermining rounding environment before *-pu*. As for the second root, TV shows only **puku* while the other languages show compound forms of the two, but, not surprisingly, with serious reductions and assimilations, blurring the separability of the presumed underlying elements. TV provides the only good evidence in support of the order **puku*.¹⁷¹ The order **kupu* is attested in numeral formatives in SE and KI (more on this below) as well as in Hopi, where it appears as *-kop*. The components involving *l* ~ *lj* in the Cupan forms have not been identified.

The numeral ‘two’, reconstructable as **woh*, has remained quite stable throughout Takic. TV shows an augment, a stressed component *-eeʔ* added on, but the other languages retain the root unmodified.¹⁷²

‘Three’ is also quite stable but the question of the reconstruction is more challenging. TV and Serran point toward a reconstruction **paahi*, with the final vowel being exceptional to apocope and therefore acquiring the protective glottal stop – or it might be the other way around. LU has a vowel added to the final syllable, possibly originating as a prolongation of quality of the first vowel across *h*, which, being a glottal sound, has no oral articulation to block such an assimilation. This has occasioned the devocalization of the original final vowel **i* to the glide *j*. Inland Cupan shows shortened forms of **paahi*, with CU and DCA grouping together in having *pah*, with loss of final **i*, and MCA showing the loss of intervocalic **h* and the retention of the final **i*, which again, as in LU, reduces to the glide *j*.

The forms of ‘four’ are also similar to each other and are quite interesting. One possibility is to reconstruct Proto-Takic **wocha*, where **wo* relates to **woh* ‘two’ and **ch* is the affricate that underlies TV *tʃ*, SE *ch*, KI *ts*, and Cupan *ch* (~ *-sh*). Here Coastal Cupan shows exceptionality in that the original affricate has lenited to the fricative *s*.

¹⁷⁰ Cf. Hopi *syy-kja* ‘one’, Nahuatl *cē* [se:] ‘one’ (with *e* < **y*, as in most of Southern Uto-Aztecan).

¹⁷¹ Kroeber (1907:71) relates TV *pokuuʔ* to Chumash <*paka*>, cf. Ineseño Chumash *paka*’s ‘one’ (Santa Ynez Band of Chumash Indians 2007:553).

¹⁷² While both Hopi and Tübatulabal show reflexes of **woh* (Hopi *löö-jöʔ*, Tübatulabal *woo*), the Numic languages have reflexes of **wa-* for ‘two’, cf. Southern Paiute *waa* (Sapir 1930:262).

The TV, Serran and LU forms seem to show anticipatory assimilation resulting in a first syllable in *wa*,¹⁷³ while Inland Cupan *wichi-* is the result of perseverative assimilation: **woca* > **woco* > *wichi*. We presently cannot account for the final *w* of Inland Cupan *wichiw*, nor for the final *h* of SE *wachah* ‘four’, which may correspond to the *w* of Inland Cupan.

The numeral for ‘five’, **maha*, is related to the root for ‘hand’, **maa*, a pattern found throughout Uto-Aztecan. The Coastal Cupan form is pretty clearly a loan from TV. The complexities found in the Inland Cupan words for ‘five’ involve a construction *-kwánang(ax)/-qwanang* which may mean ‘half’, i.e., ‘my hand [which is] half [of ten]’. The words for ‘ten’ finish the count (see below). The vowels of the sequence *né-ma* ‘my hand’ have metathesized in DCA into the unsegmentable *name-*.

The numerals from ‘six’ to ‘ten’ are single words in Serran, as seen in (2).

(2)	‘six’	‘seven’	‘eight’	‘nine’	‘ten’
	SE <i>paa^Rvahi7</i>	<i>wachkuvik</i>	<i>wahwch</i>	<i>ma7kuvik</i>	<i>wahma^Rt\$</i>
	KI <i>paavahi7</i>	<i>kwatskavejky</i>	<i>wahwatsa</i>	<i>makavejky</i>	<i>wehmahat\$</i>

The words for ‘six’ are reduplications of the word for ‘three’, *paahi7*. The reduplication is made less transparent in SE by rhoticization. The words for ‘eight’ seem to be reduplications of ‘four’, with syncope and loss of final *ah* in SE: *wah~wachah* > *wah~wch*. However, *wah-* may represent an assimilated form of ‘two’, cf. AC *wehes wasa7* ‘eight’ (“two.times four”) (< *weheswatsa* > Woodward 2007:209).

The words for ‘ten’ are based on ‘two-five’, i.e., ‘twice five’, with vowel changes in the ‘two’ element and contraction in the ‘five’ component of SE: *wo^Rh maha^Rt\$* > *wahma^Rt\$*, perhaps with the modification *wo^Rh* > *wah-* motivated by the proximity of the syllable *wah-* of *wah~wch* ‘eight’ in the count.¹⁷⁴

¹⁷³ This process may have happened also in Nomic, where the first syllable of ‘four’ is always *wa*. More likely a doublet **wo ~ *wa* should be reconstructed since forms in **wa* are also found for ‘two’ in some of the Southern Uto-Aztecan languages (cf. Stubbs 2011:30-31).

¹⁷⁴ Cf. the well-known assimilations involving ‘four’ and ‘five’ in Indo-European languages. Bloomfield (1933:422) refers to this as “contamination.” If the Serran forms really are the result of contamination in Bloomfield’s sense, this suggests that counting might have at one time had a more culturally salient status than is usually supposed.

The words for ‘seven’ and ‘nine’ are elaborations on the words for ‘four’ and ‘five’ respectively. This can be understood by analyzing the suffixes SE *-kuvik* and KI *-kavejky* which ‘seven’ and ‘nine’ share. These suffixes are based on the root **kupu* ‘one’, mentioned above, plus a modified form of the dative ending *-ika7*, with the meaning ‘one more to get to (the next number)’. The “next number” is represented in abbreviated form. In this way, SE *wahwch*, KI *wahwatsa* ‘eight’ being “two fours” is reduced to just the “four” component, SE *wach-*, KI *kwats-* (with strange fortition of *w-* to *kw-*), and ‘ten’ being “two fives” is reduced to the “five” component, *ma-* (with glottalization added in SE).

The numerals ‘six’ to ‘ten’ are more analytic in the other languages. Those numerals for TV are given in (3), which also includes ‘eleven’ and two attested forms for ‘twelve’. ‘Six’ is a single-word construction that matches the Serran forms well, but the others are sequences of two words. The word *kaveaa7* seems to be the TV equivalent of SE *-kuvik* and KI *-kavejky*. It may contain a modified form of **kupu*, which, as mentioned above, relates to **puku* ‘one’ via metathesis of syllables. The contractions involved are as misleading as those in Serran.

(3)	TV	‘six’	<i>pa~vaahe7</i> [PL~three]
		‘seven’	<i>wat\$aa7 kav-aaa7</i> (3.102.0730) [four one-DAT]
		‘eight’	<i>wehee-\$ wat\$aa7</i> (3.103.0695) [two-times four]
		‘nine’	<i>mahaar kav-aaa7</i> (3.102.0730) [five one-DAT]
		‘ten’	<i>wehee-\$ mahaar</i> (3.103.0049) [two-times five]
		‘eleven’	<i>pavaahe7 kav-aaa7</i> (3.104.0094) [six one-DAT]
		‘twelve’	<i>wehee-\$ mahaar koj wehee7</i> (3.102.0662) [two-times five and two]
		‘twelve’	<i>paahe-\$ wat\$aa7</i> (3.103.0138) [three-times four]

The TV construction for ‘eleven’ deserves attention. Our understanding of the element *kaveaa* in ‘eleven’ is challenged by the attested forms for ‘twelve’. The only way we see to account for the form of ‘eleven’, which has a reference to ‘six’, is to propose that TV *pavaahe7 kaveaa7* ‘eleven’ relates to an unattested form for ‘twelve’, *wehee-\$ pavaahe7** [two-times six]. If we recognize “two-times six” as another way of saying ‘twelve’ in TV, then the form for ‘eleven’, with its internal reference to ‘six’, and with *kaveaa7*, in the sense proposed for the other numerals, fits gracefully into the system.

Cupan forms for ‘six’ are given in (4). Kroeber and Grace (1960:120) list four different ways of constructing an expression meaning ‘six’ in LU: “again one”, “another besides one”, “five one upon”, “passing-over to-my-hand to-one to-finger”. Even these four are not an exhaustive list. LU example, (4a), from Pablo Tac’s grammar from the 1830s (Haas 2012:73), provides yet another formula. LU example (4b), from Elliott (1999:490), corresponds to Kroeber and Grace’s “five one upon”. The other higher numerals have similarly complicated treatment. The reduplicated LU form (4c) was evaluated by Villiana Hyde as “extremely archaic” (Elliott 1999:690).

(4)	‘six’	LU	a.	<i>mahaar pi supúl</i>	[five and one]
			b.	<i>mahaar supúl pa7áq</i>	[five one on.it]
			c.	<i>pa~vaahaj</i>	[REP~three]
		CU		<i>nymakwánangax pa7ax suplywyt</i>	[five on.it one]
		DCA		<i>kwan-súplji7</i>	[five-one]
		MCA		<i>qun-súplji7</i>	[five-one]

The CA element *kwan-/qun-* is a reduced form of the numeral ‘five’ (cf. DCA *namekwánang*, MCA *nemaqwánang*), where it means “half” (of ten). It appears also as an adverb, and as the base of a noun with the absentative *-vi-sh*, e.g. *menil kwanangvish* ‘half moon’. Other examples include MCA *qwanang tamit* ‘half day’ (of school) (<kwanam tamet> 3.112.0030),¹⁷⁵ *qwanang ooranga* ‘in half an hour’ (3.113.0065-6), and *qwanang leewa* ‘half a league’ (3.113.0095). It is a marker for the numerals ‘six’ through ‘nine’, which are displayed in (5).

¹⁷⁵ Presumably the form is *qwanang tamit* but <kwanam tamet> was recorded twice by Harrington on this page of field notes. The speaker is the same as in the other examples.

(5)	Desert CA	Mountain CA	
	‘six’	<i>kwan-súplje</i>	<i>qun-súplji7</i> [five-one]
	‘seven’	<i>kwan-wíh</i>	<i>qun-wíh</i> [five-two]
	‘eight’	<i>kwan-páh</i>	<i>qun-páh</i> [five-three]
	‘nine’	<i>kwan-wíchiw</i>	<i>qun-wíchiw</i> [five-four]

The Cupan expressions for ‘ten’ are given in (6). CU *tulwynyt* and CA *chumi* mean ‘finished’. The LU expression “twice five” for ‘ten’ corresponds to that of TV (see (3) above). The CA constructions combining ‘my hands’ and the verb root are of a type unique to the numerals. Note that CA for ‘my hand(s)’ outside of the numeral constructions is *né-ma7*; in the Harrington notes from Adán Castillo the combining form is *nemi-*.

(6)	‘ten’	LU	<i>weh-kun mahaar</i>	[two-times five]
		CU	<i>ny-ma tulwynyt</i>	[my-hands (are) finished]
		DCA	<i>name-chúmi</i>	[my.hands-finished]
		MCA	<i>nemi-chúmi</i>	[my.hands-finished]

Three more LU numerals, in (7), given in Sparkman’s spellings, are restricted to gambling (Kroeber & Grace 1960:118). These may be loan words (Sparkman thought they might be Gabrielino, i.e., TV), but no possible source for ‘eight’ has been identified.

(7)	LU	a.	‘six’	< paváhi >	(cf. TV <i>pavaahe7</i> ; also SE <i>paa^Rvahi7</i> , KI <i>paavahi7</i>)
		b.	‘seven’	< kavákviš >	(cf. KI <i>kwatskavejky</i>)
		c.	‘eight’	< šölaš >	

The words for ‘twelve’ and higher numbers are all quite analytic in Takic. The attested forms meaning ‘twelve’ are given in (8). We select ‘twelve’ here because it is the only numeral higher than ‘ten’ that is attested for KI, in which the expression involves simple juxtaposition. Note that words like SE *py-hpa7* [3SG-LOC] ‘on it’ are the equivalent of ‘plus’.

(8) ‘twelve’

TV	<i>wehee-\$ mahaar koj wehee7</i>	[two-times five and two]
TV	<i>paahe-\$ wat\$aa7</i>	[three-times four]
SE	<i>wahma^{Rt}\$ pyhpa7 wo^{Rh}</i>	[ten plus (“on it”) two]
KI	<i>wehmahat\$ woh</i>	[ten two]
LU	<i>weh-kun mahaar pi7 weh</i>	[two-times five and two]
CU	<i>doosi</i>	< Spanish <i>doce</i> ‘twelve’
DCA	<i>namechúmi pe-ta wih</i>	[ten plus (“on it”) two]
MCA	<i>namechúmi pe-ta7 wih</i>	[ten plus (“on it”) two] (3.113.0077)

Samples of numerals above ten are given in (9). The TV suffix for ‘times’ is recorded variably with *s* or *\$*. It is unclear whether the pattern of counting in cycles of ten, as seen for SE in (9b-d) and for TV and CU in (9d) where the references to ‘ten’ are implicit, is aboriginal or a more recent adaptation.

(9) a. ‘thirteen’

TV	<i>wehee-\$ mahaar koj paahe7</i>	[two-times five and three]
SE	<i>wahma^{Rt}\$ pyhpa7 paahi7</i>	[ten plus three]
LU	<i>weh-kun mahaar pi paahaj</i>	[two-times five and three]
DCA	<i>namechúmi peta pah</i>	[ten plus three]
MCA	<i>namechúmi peta7 pah</i>	[ten plus three] (3.113.0080)

b. ‘twenty’

TV	<i>wat\$aa7(-e\$) mahaar</i>	[four(-times) five]
SE	<i>wo^{Rh}-ia wahma^{Rt}\$</i>	[two-times ten]
LU	<i>wasaa7-kun mahaar</i>	[four-times five]
MCA	<i>wii-s namechúmi</i>	[two-times ten] (3.113.0083)

c. ‘twenty-five’

TV	<i>mahaar-e\$ mahaar</i>	[five-times five]
SE	<i>wo^{Rh}-ia wahma^{Rt}\$ pyhpa7 maha^{Rt}\$</i>	[two-times ten plus five]

d. ‘sixty’

TV	<i>pokuu7 pa7aaajva mahaar</i>	[one (ten) plus five (tens)]
SE	<i>paa^{Rv}ah-ia wahma^{Rt}\$</i>	[six-times ten]

CU	<i>nymakwánangax suplywyt tulwynyt</i>	[five (tens) one (ten) finished]
MCA	<i>qwan-súple-vi-sh nema-chúmi</i>	[five-one-ABS-times ten (my.hand-finished)] (3.112.0013)

K. Hill recorded two SE forms glossed with ‘hundred’, *ahy^Rn7ka7* ‘hundred’ and *hyngykt\$* ‘hundreds of times’, both possibly containing the UA root **syNV* ‘one’. These do not function as numerals. When Sarah Martin was presented with *ahy^Rn7ka7 pyhpa7 hoowkp* for ‘one hundred and one’, she dismissed it, saying that she would “just be making it up.” The “real” word for hundred in SE is *sieentu7*, from Spanish *ciento*. The same loan appears in Harrington’s MCA notes: *wih sjeen* ‘200’ (3.113.0120) and *wih sjeentu* (3.113.0121). In the context of elicitation, Harrington’s consultant volunteered *nema7 chumivish nema7 chumi* ‘100’, literally ‘ten times ten’ (3.112.0422).

An expression for ‘hundred’ was also recorded for CU, with a derived adjective *syntaxwynyt* (from *syt-jax-wyn-y-t*), which means literally ‘something pressed’; see 13.2.4 for discussion of *-wyn-y-t*.

15.1.2. THE ‘TIMES’ SUFFIXES. There are two Takic suffixes meaning ‘times’ (or ‘time’ in the singular: ‘once, one time’). All languages show developments of **-isa*,¹⁷⁶ which is well attested outside of Takic, notably in Hopi. A second suffix for ‘times’, *-kun* ~ *-kan*, is found in LU, AC, and CU. (The only ‘times’ word attested for AC has *-kun*: *mahár-kun* ‘five times’ (3.124.0356).) Whether *-kun* ~ *-kan* has cognates outside of Takic has yet to be investigated. In LU this suffix appears with other quantifiers: *hik-hun* ‘several times’, *mujuk-kun* ‘many times’. In CU it was recorded by Paul-Louis Faye as an adverbial suffix in *ta\$a-tá\$a-kun* ‘straight’ and *ta\$u-kan* ‘straight for, straight ahead’ (Hill 2005:238).

The suffix **-isa* ‘time(s)’ has been seen in 13.11.2, where we showed that for TV and SE, at least, it applies also in non-numerical formations, as in TV *ajooH-e\$* ‘many etimes’ (3.104.0165) and SE *ama-ia* ‘that time’ (*-ia* < **-isa*, with Serran reduction of **s*). Numerical examples with reflexes of **-isa* are given in (1). LU has a reflex of **-isa* only in ‘once’, where there has been a Cupan modification of expected final *s* to *sh*. This modification also applies in CU *wi-sh* ‘twice’ and *wichiw-ish* ‘four times’, but not in *paa-s* ‘three times’ (and **-isa* may be attested in *a-wis-ma* ‘few’). The TV ending is variously

¹⁷⁶ Except for AC, where this series is unattested.

recorded as \$ or s, apparently depending on the speaker. To save space in (1), we give only the forms with \$. In the first column, SE *hoowkp-ia* means ‘once in a while’; otherwise unmodified *hoowkp* ‘one’ is used for the sense ‘once’.¹⁷⁷ Serran *-ia/-ea* often reduces to *-i*. (KI “times” words are all from Harrington (3.98.0276).) Again to save space, we give only one form per category. In ‘five times’ and ‘six times’, CU uses *siinko* and *sεεys-*, from Spanish *cinco* ‘five’, *seis* ‘six’.

(1)	‘once’	‘twice’	‘three times’	‘four times’
TV	<i>pokuu-\$e7</i> (3.103.0448)	<i>wehee-\$</i> (3.102.0657)	<i>paahē7-e\$ ~ paa7-e\$</i> (3.103.0448)	<i>wat\$aah-e\$</i> (3.104.0095)
SE	<i>hoowkp-ia</i>	<i>wo^{Rh}-ia</i>	<i>paah-ia</i>	<i>wachah-ia</i>
KI	<i>hawkup-i</i>	<i>woh-ea</i>	<i>paah-ea</i>	<i>wat\$aaah-ea</i>
LU	<i>supl-ish</i>	(<i>weh-kun</i>)	(<i>paahaj-kun</i>)	(<i>wasa7-kun</i>)
CU	<i>sulj-ish</i>	<i>wi-s ~ wi-sh</i>	<i>paa-s</i>	<i>wichiw-ish (~ wichiw-kan)</i>
CA	<i>suplj-ish</i>	<i>wi-s</i>	<i>paa-s</i>	—
	‘five times’	‘six times’	‘ten times’	
TV	<i>mahaar-e\$</i> (3.102.0659)	<i>pavaah-e\$</i> (3.103.0448)	—	
SE	<i>maha^{Rt}\$-ia</i>	<i>paa^{Rv}vah-ia</i>	<i>wahma^{Rt}\$-ia</i>	
KI	<i>mahat\$ah-ea</i>	<i>paavah-ea</i>	<i>wehmahat\$ah-ea</i>	
LU	(<i>mahaar-kun</i>)	—	—	
CU	(<i>siinko-kan</i>)	(<i>sεεys-kun ~ sεεjs-kan</i>)	—	
MCA	<i>nemaqwánang-is</i>	<i>kwan-súpl-ish</i>	<i>namechúm-is</i>	

Only the Serran languages have attestations for seven, eight, and nine times.

(2)	‘seven times’	‘eight times’	‘nine times’
SE	<i>wachkuvik-ia</i>	<i>wahwch-ia</i>	<i>ma7kuvik-ia</i>
KI	<i>kwat\$ka7vea7kyh-ea</i>	<i>wahwatsaah-ea</i>	<i>maakavea7kyh-ea</i>

15.1.3. MINOR NUMERAL CONSTRUCTIONS. In addition to the processes seen in the above, which are quite general and apply across the languages, additional derivational processes

¹⁷⁷ While Dorothy Ramón (Ramón & Elliott 2000) seems to use **-isa* with ‘two’, *wo^{Rh}ia* ‘twice’, transcribed <wêher> (p. 36), she uses the locative form *paahiv* ‘in three places’ for ‘three times’, transcribed <paahif> (pp. 161, 215).

have been recorded for individual languages. Some of these may have been more widely distributed but were not documented. These are treated in the remaining sections.

15.1.3.1. MINOR NUMERAL CONSTRUCTIONS IN TV. Harrington recorded plural forms with the suffix *-a-m* for TV numerals. He did not record any of the reduplicated distributives that are found in the Cupan languages. Harrington's only recorded distributive expression is *pokuu7 a pokuu7* 'one by one', using the Spanish preposition *a* (cf. Spanish *poco a poco* 'little by little'). The numeral plurals collected appear in (1).

(1)	TV		plural
	two	<i>wehee7</i> (3.103.0448)	<i>wehee7-a-m</i> (3.102.544)
	three	<i>paahe7</i> (3.103.0448)	<i>paahe7-a-m</i> (3.104.0094)
	four	<i>wat\$aa7</i> (3.103.0693)	<i>wat\$aa7-a-m</i> (3.104.0094)
	five	<i>mahaar</i> (3.103.0448)	<i>mahaar-a-m</i> (3.104.0094)
	six	<i>pavaahe7</i> (3.103.0448)	<i>pavaahe7-a-m</i> (3.104.0093)
	seven	<i>wat\$aa7 kaveaa7</i> (3.102.0660)	<i>wat\$aa7 kaveaa7-a-m</i> (3.104.0095)
	eight	<i>wehees wat\$aa7</i> (3.103.0695)	<i>wehees wat\$aa7-a-m</i> (3.104.0095)

The plural forms seem to function as predicate complements or as animate noun modifiers. The plural of 'eight', for example, is given as meaning 'son ocho (there are eight of them)' (3.104.0095). *Pavaahe7am*, the plural of 'six', is illustrated in (2).

- (2) TV a. *Paa~vahe7-a-m woororo-ta-m.*
 PL~three-AUG-PL men-ABS-PL
 'Son seis men. (There are six men.)' (3.104.0093)
- b. *paa~vahe7-a-m woo\$e7-a-m*
 PL~three-AUG-PL dog-AUG-PL
 'six dogs' (3.104.0093)

Plural agreement of the numeral seems to be optional, as shown by the equivalence provided in (3).

- (3) TV *wehee7* *woroora-m* = *wehee7-a-m* *woroora-m*
 two man-PL two-AUG-PL men-PL
 ‘two men’ (3.102.544)

Kroeber (1907:71) recorded several numerals both the Fernandeano and Gabrielino dialects of TV, some of which appear in (4). Two of these (4b,c) contain a component <bai> which looks like it could represent a contraction of ‘six’. However, Kroeber and Grace (1960:118) cite TVG (4b,c) with <hai>, not <bai> (with no mention of Fernandeano). It is possible that Kroeber was correcting a typographical error in the 1907 publication, but it seems to us more likely that the error is introduced in Kroeber and Grace (1960). Kroeber’s original field notes would probably resolve this conundrum, should this item turn out to be important. The TVF word <pabahai> ‘six’ matches LU *pavaahaj* (cf. 15.1.1 (4c)). The TVG word for ‘six’ in (4a) represents *pavaahe7* (see 15.1.1 (3)) and <baic> ‘nine’ (4d) appears to represent *paa7e\$*, ‘three times’ (see 15.1.2 (1)). TVF <mākövö> (Kroeber’s italics) ‘nine’ aligns with SE *ma7kuvik*.

(4)	Kroeber (1907)	Kroeber (1907)	Kroeber & Grace (1960)
	TVF	TVG	TVG
a. six	<pabahai>	<pabahi (?)>	<pava-hai>
b. seven	<kutsakavya>	<pukubaivi>	<puku-hai-vi>
c. eight	<>wèswetsa>	<wehebaiva>	<wehe-hai-va>
d. nine	<mākövö>	<baic>	

Harrington includes the following note from his consultant Jesús Jauro: “My mother also counted chantingly another count but inf. nesc. [informant does not know] what dialect it is: *maa7, paváhe, wih, t\$úmajkan, t\$úmaajkan, maa7, paváhe7, wih*” (3.103.0448j). These probably involve a sequence ‘five, six’ and then perhaps ‘seven’, with what may be the *-kan* adverbial suffix. The latter evidence suggests that the count may be in a variety of LU. However, the element *t\$úmaaj-* looks a bit like CA *chumi* ‘finish’, which appears in *nemachúmi* ‘ten.’

15.1.3.2. MINOR NUMERAL CONSTRUCTIONS IN SERRANO. SE, like TV, has plural inflection with numbers, seen in (1). The only reduplicated form recorded, *hohoowkp* from *hoowkp*

‘one’, means ‘just one’, with intensifying reduplication, and apparently not having the distributive sense ‘one by one’ or ‘one each’, as in the Cupan languages.

- | | | | | |
|-----|----|----|-----------------------------------|---|
| (1) | SE | a. | <i>wo^{Rh}</i> ‘two’ | <i>woo^{Rm}</i> ‘the two of them’ |
| | | b. | <i>paahi7</i> ‘three’ | <i>paahi7m</i> |
| | | c. | <i>wachah</i> ‘four’ | <i>wachaam</i> |
| | | d. | <i>maha^{Rt}\$</i> ‘five’ | <i>maha^{Rt}\$am</i> |
| | | e. | <i>paa^{Rv}vahi</i> ‘six’ | <i>paa^{Rv}vahi7m</i> |
| | | f. | <i>wachkuvik</i> ‘seven’ | <i>wachkuvikam</i> |
| | | g. | <i>wahwch</i> ‘eight’ | <i>wahwcham</i> |
| | | h. | <i>ma7kuvik</i> ‘nine’ | <i>ma7kuvikam</i> |
| | | i. | <i>wahmart\$</i> ‘ten’ | <i>wahmart\$am</i> |

Two specialized SE derivations on numeral roots are a noun *hoowkp-t* ‘one who is the same’ and *wo^{Rh}ha^{Rn}* ‘both’, which takes genitive nouns. *Wo^{Rh}ha^{Rn}* may represent ‘two’ with instrumental case (-*n*) morphology.

K. Hill recorded the arithmetic expressions such as those shown in (2).

- | | | | | | | | |
|-----|----|----|------------------------------|----------------|------------------------|-----------------|---------------|
| (2) | SE | a. | <i>Wo^{Rh}</i> | <i>py-hpa7</i> | <i>wo^{Rh}</i> | <i>wachah=t</i> | <i>ñi-iv.</i> |
| | | | two | 3SG-LOC | two | four = IRR.3SG | be-FUT |
| | | | ‘Two and two are four.’ | | | | |
| | | b. | <i>Paah-ia</i> | <i>paahi7</i> | <i>ma7kuvik=t</i> | <i>ñi-iv.</i> | |
| | | | three-times | three | nine = IRR.3SG | be-FUT | |
| | | | ‘Three times three is nine.’ | | | | |

15.1.3.3. MINOR NUMERAL CONSTRUCTIONS IN KITANEMUK. Less is known about the KI numerals than about the other systems. A few derivations appear in Harrington’s notes that are not attested elsewhere. First is a derivation with *-na* seen in (1).

- | | | | |
|-----|----|----|---|
| (1) | KI | a. | <i>woho-na</i> ‘in a line of two or three, together’ (< <i>woh</i> ‘two’) (3.98.0287) |
| | | b. | <i>paahi-na</i> ‘three together’ (< <i>paahi7</i> ‘three’) (3.98.0287) |

The second is a verbal derivation glossed as ‘make, put (some number)’, as seen in (2). This may be an expression from gambling.

- (2) KI a. *ni-woo-van* ‘hice dos (I made two)’ (< *woh* ‘two’) (3.98.0255)
 b. *ni-paahi-van* ‘I put three’ (< *paahi7* ‘three’) (3.98.0255)
 c. *ni-watsah-a-van* ‘I put four’ (< *watsa* ‘four’) (3.98.0255)
 d. *ni-mahat*̄*-i-van* ‘I put five’ (< *mahat̄* ‘five’) (3.98.0255)

15.1.3.4. MINOR NUMERAL CONSTRUCTIONS IN LUISEÑO. LU has plurals of numerals, seen in (1). The numerals ‘two’ and ‘three’ have a special plural suffix sequence *-chu-m*.

- (1) LU a. *weh* ‘two’ *weh-chu-m*
 b. *paahaj* ‘three’ *paa-chu-m*
 c. *wasaj* ‘four’ *wasaa7u-m*
 d. *mahaar* ‘five’ *mahaaru-m*

LU has a special form for ‘both’, *weeh*.

LU shares with other Cupan languages the distributive constructions with reduplication seen in (2). Elliott (1999) remarks that the accusative plural of (2b) is always *weewihmi*, even when the modified inanimate noun does not have plural marking.

- (2) LU a. *su~spul(um)* ‘one each, one by one’ (< *supúl* ‘one’)
 b. *wee~wih* ‘two by two (inanimate)’ (< *weh* ‘two’)
 c. *wee~wihchum* ‘two by two (animate)’
 d. *paa~v(j)ax(chum)* ‘three each’ (< *paahaj* ‘three’)
 e. *paa~vaj* ‘three by three’
 f. *wa~wsaj* ‘four by four’ (< *wasaj*)
 g. *ma~mhaarum* ‘five each’ (K&G 119) (< *mahaar* ‘five’)
 h. *ma~mhaar* ‘five by five’

LU has a distinction between *weeh* ‘both’ for animate nouns, and *weewih* ‘both’ for inanimates. Elliott records also *weewun* ‘two together’.

Of special interest from the LU documentation is a series of ordinals, appearing in (3). Except for ‘first’, which is not derived from *supúl* ‘one’, they appear to be examples

of the impersonal derivation discussed in 13.2.3, where the numeral base occupies the position usually filled by a verb base. The initial *po-*, in (3b,c,e,f) seems to be a 3SG possessive prefix, while (3d) is an unpossessed, absolutive form. Perhaps both forms are possible for all. (In Elliott (1999), the suffix is written as unreduced *-lo*.)

- (3) LU
- a. *angaaji* ‘first’
 - b. *po-weh-lu* ‘second’ (< *weh* ‘two’)
 - c. *po-pahaj-lu* ‘Wednesday’ (< *paahaj* ‘three’)
 - d. *paahaj-lu-wi-sh* ‘third’
 - e. *po-wasa7i-lu* ‘fourth’ (< *wasa7* ‘four’)
 - f. *po-mhar-lu* ‘fifth’ (< *mahaar* ‘five’)

The LU version of the system of multiplying fives (or tens) and adding other numbers to form larger numbers, as recorded by Kroeber and Grace (1960) and Elliott (1999) was both complex and variable. However, Pablo Tac’s numerals recorded in the 1830s (Haas 2011) are much more straightforward.

For instance, consider the record for ‘six’. Sparkman documented *pavaahaj* (a reduplication of *paahaj* ‘three’ seen elsewhere in TV and Serran, but not in Cupan), used only in gambling and probably a loan from TV. For everyday usage Sparkman recorded *mahaar supúl pa7áq*, ‘five one on.top’. Since a similar construction is recorded for CU, *nymakwánangax pa7ax suplywyt* (cf. 15.5 (4)) there is no reason to doubt this form. However, Pablo Tac gave *mahaar pi supúl* ‘five and one’. It is possible that this form is based on Spanish additive numerals like *treinta y uno* ‘thirty-one’ (“thirty and one”).

Kroeber and Grace (1960:120) commented on the clumsiness of LU counting. Not surprisingly, since the forms for numbers above five given by Sparkman are indeed cumbersome. We are suspicious that Sparkman’s consultants were dressing up the system to make it more impressive. However, these forms are somewhat like those collected by Faye for CU, so they may have been in more general use. These expressions (and the CU forms discussed below in 15.5.2.5) are so different from those recorded by Tac that they may be the product of some sort of late 19th-century language revitalization effort, shared in both LU and CU communities, rather than being descended from an older counting system. Examples appear in (4) and (5). Elliott (1999:242) comments that his consultant Mrs. Villiana Hyde rejected all such forms in favor of Spanish numerals.

- (4) LU a. *chapál na-maa-jk supúl-juk wachaaj-wun-ik*
 beside 1SG-hand-DAT one-DAT spread.apart-PRS.PL-ADVZ
 ‘six (in addition to my hand, one [finger] spread apart)’
- b. *chapál no-7ee-jk supúl-juk wachaaj-wun-ik*
 beside 1SG-foot-DAT one-DAT spread.apart-PRS.PL-ADVZ
 ‘sixteen (in addition to my foot, one [toe] spread apart)’
- c. *chapál awó-jk no-7ee-jk supúl-juk wachaaj-wun-ik*
 beside other-DAT 1SG-foot-DAT one-DAT spread.apart-PRS.PL-ADVZ
 ‘twenty-one (in addition to my other foot, one [finger] spread apart)’

Alongside expected *wehkun mahaar* ‘ten’ (two times five) and similar expressions using multiplication, Sparkman recorded a frame *choo7un ... tápaat* ‘both ... finished’ (Elliott 1999:914):

- (5) LU a. *choo7un no-maa tápaat*
 all;both 1SG-hand finished
 ‘ten (both of my hands finished)’
- b. *choo7un no-maa tápaat pi7 supúl no7e7.*
 all;both 1SG-hand finished and one 1SG-foot
 ‘fifteen (both of my hands finished and one of my feet)’
- c. *choo7un no-maa no-7e7 tápaat*
 all;both 1SG-hand 1SG-foot finished
 ‘twenty (both of my hands [and both of] my feet finished)’
- d. *choo7un no-maa no-7e7 awoo mahaar*
 all;both 1SG-hand 1SG-foot other five
 ‘twenty-five (both of my hands and feet [and] another five)’

e. *choo7un no-maa no-7e7 awoo mahaar pi7 awoo mahaar*
 all;both 1SG-hand 1SG-foot other five and other five
 ‘thirty (both of my hands and feet [and] another five and another five)’

f. *choo7un no-maa ne-7e7 tápaat ju7pan no-maa no-7e7*
 all;both 1SG-hand 1SG-foot finished again 1SG-hand 1SG-foot
choo7un tápaat
 all;both finished
 ‘forty (both my hands and feet finished [and] again both my hands and feet finished)’

Kroeber and Grace (1960:120), as mentioned above in 15.1.1 in the discussion of ways of saying ‘six’, give several examples of this type, unfortunately in English translation only. Some of their examples appear to be combinations of ordinary multiplication with these more complex forms, such as their gloss for ‘200’: “again five-times all my-hand my-foot finished.”

15.1.3.5. MINOR NUMERAL CONSTRUCTIONS IN ACJACHEMEM. AC has attestations of plural forms only for the numeral five. *Mahaaru-m* (3.124.0356) is simply presented as the plural of *mahaar* ‘five’. The other attestation is the reduplicated and strangely stressed *ma~mháara-m* ‘serán cinco (there will be five of them)’ (3.124.0124).

15.1.3.6. MINOR NUMERAL CONSTRUCTIONS IN CUPEÑO. CU has plurals for the numerals that, like LU, have a peculiar plural suffix sequence *-chi-m*. That is, these numerals behave in the plural as if they had an absolutive suffix *-chV* in the environment where there is no deletion of the final vowel of the stem (cf. 4.5.5.4). In CU, this sequence also appears in the plural of ‘four’, as seen in (1). In the plural of ‘two’, *h* consistently appears as *sh*, but the *h* of *pah* remains.

- (1) CU a. *wih* ‘two’ *wish-chi-m*
 b. *pah* ‘three’ *pah-chi-m*
 c. *wichiw* ‘four’ *wichiw-chi-m*

CU has the Cupan distributive with reduplication, shown in (2). The distributives for ‘three’ and ‘four’ have reduplication plus a plural suffix sequence.

- (2) CU a. *su~suplywyt* ‘one each’
 b. *wi~w* ‘both, two each’
 c. *pa~vas-chi-m* ‘three each’
 d. *wi~wchiw-chi-m* ‘four each’

The word for ‘both’ was documented with a plural object in the form *wiwynmi* (Hill 2005:213). This is the same plural sequence *-ni-m* seen in *awísmanim* ‘few (pl.)’ and *pytá7anim* ‘all’.

CU has a special numeral ‘one’ used in noun phrases, *sulit*.

CU has some rather complex constructions for the additive numerals above ten, documented by Faye in 1919 and 1920, that are similar to the complex numerals that Sparkman found for LU. Examples appear in (3). As suggested above for LU, these may be the product of relatively recent developments in the Cupan speech communities. The main distinctive feature of these is that they close a standard multiplicative or additive expression with a seemingly redundant quasi-verb construction *namjaxwyn* from *namjax* ‘cross (intr.)’. The construction seems irregular; it seems to be tenseless. We might expect a nonfuture form *nam=py-jaxwyn** or perhaps *nam=pym-jaxwyn**, with a subject marker.

- (3) CU a. *ny-ma tulwynyt ny-ma-kwána-ngax pa7ax suplywyt*
 1SG-hand finished 1SG-hand-half-from on.top one
nam-jax-wyn
 cross-INTR-ST
 ‘sixteen (my hands finished, one half of my hands in addition [and] one crossing over)’
- b. *ny-ma tulwynyt ny-ma-kwána-ngax pa7ax wih nym-jax-wyn*
 1SG-hand finished 1SG-hand-half-from on.top two cross-INTR-ST
 ‘seventeen (my hands finished, one half of my hands in addition [and] two crossing over)’

- c. *me-wih*
3PL-two
'two of them'
- c. *ish_ume-pah*
1PL_u3PL-three
'three of us (we are three of them)' (Seiler 1977:187.12.2)

Reduplicated distributive forms of numerical roots are attested for CA. Examples appear in (2).

- (2) CA a. *su~spul* 'each one' (< *supul* 'other', cf. *supli7* 'one') (S&H 192)
b. *wi~wi* 'two' (< *wih* 'two') (S&H 241)
c. *wi~wchiw-ka* 'having four each' (< *wichiw-ka* 'one having four', cf. *wichiw* 'four') (S&H 240)

CA has a morpheme *-kwa* that appears with numerals to express groups, as seen in (3). It also appears in a suffix sequence with the *-l* absolutive to yield *-kwa-l*, with a subtle change in meaning, and perhaps a change in form class. Harrington (3.110.0717) glossed these with the English suffix '-fold', e.g. *wichiw-kwa-l* 'four-fold.' Though the glosses provided are not particularly revealing, it seems likely that a form like (3a), without the absolutive suffix, may function as an adverb while the other examples, (3b-f), with absolutive, function as adjectives and/or nouns. Example (3d) is inflected for plural. In (3f), the stem with the absolutive allows the further attachment of the local case ending *-pa* 'on'.

- (3) CA a. *wih-kwa né-push*
two-group 1SG-eye
'both my eyes' (3.110.0703)
- b. *supli-kwa-l*
one-group-ABS
'in one, together'

- c. *wih-kwa-l*
two-group-ABS
'having two'
- d. *wih-kwa-le-m*
two-group-ABS-PL
'two of them'
- e. *pah-kwa-l*
three-group-ABS
'the group of three'
- f. *pah-kwa-l-pa*
three-group-ABS-LOC
'Wednesday' (3.113.0016)
- g. *wichiw-kwa-l-pa*
four-group-ABS-LOC
'on the fourth day, Thursday' (3.113.0033)

Numerals can appear as a base for the characterizing suffix *-ka*, pl. *-ka-te-m*, in the meaning 's.th having some number'.

- (4) CA a. *hepush wichiw-ka* 'that which is provided with four eyes (having four eyes)'
(S&H 240)
b. *wichiw-ka-te-m* 'things having four' (S&H 240)

When numerals and their derivations are verbless clause complements, illustrated in (5). Subject marking uses the subject proclitics discussed in 8.3.6.

- (5) CA a. *Hen_suplje* \emptyset .
1SG_one be
'I am one.' (Seiler 1977:332)

- b. *Esh_{me}-wih* Ø.
 1PL_{3PL}-two be
 ‘We are two.’ (Seiler 1977:332)
- c. *Esh_{me}-wih-kwa-le-m* Ø.
 1PL_{3PL}-two-group-ABS-PL be
 ‘We are the group of two.’ (Seiler 1977:333)
- d. *Esh_{kwansúplji}-kwa-le-m* Ø.
 1PL_{six}-group-ABS-PL be
 ‘We are the group of six.’ (Seiler 1977:333)

Seiler (1977:333) gives a different derivation with *namechúmi* ‘ten’. For this construction, a fully inflected verb, Seiler gives an apparent independent pronoun *chem* ‘1PL.PRO’, but no prefix in the verb construction itself. The derivational suffix sequence *-saxla-* following *nemachúmi* is unknown. It looks like *-s-ax-law* ‘times-INTR-GOPR’ but the motion suffix does not make sense here.

- (6) CA *Chem nemachúmi-saxla-wen.*
 1PL.PRO ten-(?)-PRS.PL
 ‘We are the group of ten.’ (Seiler 1977:333)

Harrington’s field notes provide a good deal of information on MCA numbers. These are designated below as MCA, but since numeral morphology does not seem to differ much between the two varieties of CA, we assume that the same constructions, with allowances for differences in the tense/aspect morphology, appear in DCA. The ablative suffix *-vax* is recorded by Harrington as a group-designating device, as in (7). The sense of example (7d) is somewhat obscure; ‘eight’ here seems to have to do with counting to three on the second hand: The first hand amounts to half of the ten fingers, then three more fingers are added.

- (7) MCA a. *suple7-vax*
 one-ABL
 ‘one by one’ (3.110.706)

- b. *wih-vax*
two-ABL
'by twos' (3.110.706)
- c. *paa-s-vax*
three-TIMES?-ABL
'three by three' (3.110.706)
- d. *qwan-pah-vax*
half-three-ABL
'eight by eight' (3.110.706)

Harrington recorded two constructions for ordinals. *Mulukvish* 'first' is not derived from the numeral one. The ordinals for 'two, three, four' and the compounds with these are formed with the 'times' suffix *-s* and an apparent ablative *-ax*. Other ordinals have the suffix sequence *-vi-sh*. Examples are given in (8).

- (8) MCA a. *wi-s-ax* *ki-sh*
two-times-ABL house-ABS
'the second house' (3.110.0707)
- b. *wichiw-s-ax* *ki-sh*
four-times-ABL house-ABS
'the fourth house' (3.113.0709)
- c. *qwan-wi-s-vax* *ki-sh*
half-two-times-ABL house-ABS
'the seventh house' (3.110.0709)
- d. *ne-ma-qwánang-vi-sh* *ki-sh*
1SG-hand-half-ABST-ABS house-ABS
'the fifth house' (3.110.0709)

Harrington recorded several construction types for locatives meaning ‘in (some number of) places’, as seen in (9), with Harrington’s spellings.

- (9) MCA a. *suple-va7*
 one-LOC
 ‘in one place’ (3.110.0713)
- b. *wi-s-pa7*
 two-times-LOC
 ‘in two places’ (3.110.0713)
- c. *paa-s-lo-va7* (or *paa-s-va7*)
 three-times-VBLZ-LOC
 ‘in three places’ (3.110.0713)
- d. *na-me-chúmi-low-va7*
 1SG-hand-finish-VBLZ-LOC
 ‘in ten places’ (3.110.0713)

The suffix that Harrington writes as *-lo* or *-low* also appears in a series of constructions meaning ‘I doubled it’, ‘I tripled it’, etc. This suffix is probably *-lu*, from **-tu7a*, forming denominal verbs. It is not clear why it appears in the nominal (locational) constructions in (9).

- (10) MCA a. *Pe-n-wih-lo-7*.
 3SG.OBJ-1SG-two-VBLZ-PST
 ‘Lo hice doble. (I doubled it.)’ (3.110.0720)
- b. *Pe-n-nemaqwanang-lo-7e*.
 3SG.OBJ-1SG-five-VBLZ-FCT
 ‘Lo hice quíntuple. (I quintupled it.)’ (3.110.0720)
- c. *Pe-n-namechúmi-lo-7e*.
 3SG.OBJ-1SG-five-VBLZ-FCT
 ‘I made it ten.’ (3.110.0720)

d. *Pe-n-wih-lo7-na7-ne.*

3SG.OBJ-1SG-two-VBLZ-FUT.IPFV.SG-FUT

'I am going to make it become double.' (3.110.0720)

15.2. PLACE NAMES AND GENTILICS. Place names (toponyms) in the Tadic languages are of several types. Often they are underived. Examples of this type are frequently of unknown meaning. Some may be from a substratal language or languages. Other examples may have had analyses, but are composed of vocabulary collected only in the place names, and not known to consultants in other contexts.

In the Serran languages and TV, most place names exhibit locational suffixes, some of which are specific to place names. Place names with such suffixes are also found in Cupan, but not as frequently. In the Cupan languages, place names which have no specific place-name-deriving element are the most common in the recorded data. The sections below treat place names of this type for the individual languages, along with gentilic derivations (ethnonyms).

Examples of place names with no locational morpheme appear in (1).

- (1) TV a. *Apuijmajam* 'Arrowhead Springs' (*puuj-* 'fill') (3.102.0456)
 b. *Iisot Kaava7a* 'Pomona' (3.102.0147) (*iisot* 'fox')
- SE c. *Maara7* 'Twentynine Palms' (perhaps < Southern Numic *marA* 'metate')
 d. *Tyrka7* 'Warren's Wells'
 (Gifford [1918:179] references this place as Big Morongo, a location near Yucca Valley.)
 (Warren's Well is in the present-day town of Yucca Valley, CA.)
- KI e. *Mahahal* (3.98.0334)
 f. *Tsoahk* 'a hill ("piled up")' (3.98.0506)
- LU g. *Ngooxilash* 'El Metate peak ("metate")'
 h. *Wikjo* 'highest peak of Mount Palomar'
- CU i. *Sawánywyt* 'place near Leed's house ("wild grapes")'
 j. *Suma* 'place near San Ysidro' (perhaps a Diegueño word)
- CA k. *Malal* 'north point of Chino Canyon ("metate")'
 l. *Paklish* 'large rock, name of dog belonging to founder of a clan'

A number of place names are short phrases that describe the place, or, often a mythic association of a place, as in (2). Both the SE and KI names contain locational suffixes (-*v*, -*vea*) which will be discussed in more detail below.

- (2) TV a. *Poினok = 7e Paar* ‘La Ballona (“[where] water fills up”)’ (3.102.0357)
 La Ballona, or Ballona Creek, is a tidal estuary. It is possible that *Poினok7e Paar* is not the place name, but just a description. La Ballona is also known as *\$a7aannga* (3.104.0515); see 15.2.2 (10e) below.
- SE b. *A^{Rt}\$awt Anyypkiv* ‘a place north of the range (“where the crow sits”)’
- KI c. *Huunavea Maat\$* ‘a place (“monte de en medio” [in the middle of the forest])’ (3.98.0013)
- LU d. *Toota Waanawmawish* ‘a rock with a petroglyph of *waanawut*, the net connecting heaven and earth (“rock having nets”)’
- CU e. *Hunwyt Ngaq = pyjaxivy* ‘a place (“where the bear sat”)’
- CA f. *Pal Muluqalet* ‘place northeast of Mecca (“water that steams”)’

Gentilic forms can be derived from place names, as seen in (3).

- (3) TV a. *haraasa-ve-t* ‘person from *Haraasa Wimuunga* (San Clemente Island)’ (3.102.0343)
- SE b. *maa-via-ta-m* ‘person or people from *Maaviat* (a wooded area along the Mojave River)’
- KI c. *kavwe-nga-ja-m* ‘person or people from *Kavweng* (Cahuenga)’ (3.98.0145)
- LU d. *kuuki-nga-wi-sh* ‘person from *Kuuki* (Potrero)’
- CU e. *paala-ngax-wi-chi-m* ‘people from Pala’
- CA f. *sex-ngax-vi-sh* ‘person from Palm Springs’ (S&H 183)

Cognate locational suffixes with initial -*p* ~ -*v* are found in all of the Takic languages, with the forms -*pa7* ~ -*va7*, -*pia* ~ -*via* in SE, -*pea* ~ -*vea* in KI, and -*pa* ~ -*va* in the Cupan languages. Locational suffixes in *p* and *v* are also found widely in other Uto-Aztecan languages. Within Takic, these suffixes appear to come from more than one historic source.

15.2.1. TONGVA PLACE NAMES AND GENTILICS. The majority of TV place names are derived by either (or sometimes both) of two suffixes, *-nga* ‘locative’ and *-pe-t* ~ *-ve-t*, the latter being a sequence including the absolutive suffix *-t*.

The suffix *-nga* also serves as a general locative meaning ‘in, on, at’. In this usage it appears also in the Cupan languages, but it is common as an onomastic suffix only in TV. Many place names with TV *-nga*, pronounced [ŋgə] in local English, survive in the Los Angeles area today; well known examples include *Cahuenga*, *Cucamonga*, and *Topanga*, no one of which has a secure etymology.

The first set of examples with *-nga* appears in (1). In these examples, the meaning of the noun stem is known.

- (1) TV a. *A\$aaw-nga* ‘Rancho del Águila’ (3.103.0111) (< *a\$aaw-t* ‘[golden] eagle’ (3.103.0014))
 b. *A\$ook-nga* ‘La Paleta Ranch’ (< *a-\$ooke-n* ‘su paleta [3SG’s shoulder blade]’ (3.103.0618))
 c. *Huuk-nga* ‘Ranchito de Lugo’ (3.102.0541) (< *huuka-t* ‘saúco [alder]’ (3.104.0068))
 d. *Ot\$uu-nga* ‘Las Flores’ (< *ot\$uu-r* ‘wild rose’) (3.104.0362)
 e. *Pa\$iino-nga* ‘Rancho de los Chinos’ (3.102.0226) (< *pa\$iino-t* ‘big chia’ (3.105.0058))
 f. *\$axaa-nga* ‘San Timoteo’ (3.105.0400) (< *\$axaa-t* ‘saus [willow]’ (3.104.0069))

The Spanish names of (1a,b,d) are pretty much translations of the TV. In (1e) *chinos*, Spanish for ‘ones with curly hair’, seems to mimic the sound of the TV syllables *-\$iino-*.

Many place names with *-nga* have no known etymology; some examples of this type appear in (2). Two names appear in the Harrington field notes glossed as ‘Santa Monica’ (2b,c). They may refer to different places within present-day Santa Monica, but equally well they might be components of a ceremonial doublet, cf. the pair of doublets for ‘San Clemente Island’, *Kiingkenga Haraasonga* and *Haraasa Wemuunga* (3.102.0343). *Haraasonga* seems to be an unsyncopated song form for *Haraasngar* (3.104.0018) or *Xaraasnga7* (3.103.0108).¹⁷⁸ Of (2e), Harrington was told that it is from *t\$aawve* ‘tierra

¹⁷⁸ Harrington sometimes wrote a word-final glottal stop at the end of the locative suffix *-nga*. This may be a variable feature between different speakers.

(land, earth)' (3.102.0383), but *t\$aawve* is not attested except in discussions of the word for San Pedro. He also collected *t\$aawvet* for 'a San Pedro person' (3.102.0384), which shows that *-ve* is almost certainly a suffix: *t\$aaw-ve-t*, leaving *t\$aaw-* unidentified.

- (2) TV a. *Hotuuk-nga* 'Santa Ana' (3.102.0140)
 b. *Ket\$eek-nga* 'Santa Monica' (3.104.0515) (see also (1b) above)
 c. *Koruu7-nga* ~ *Koruuvo-nga* 'Santa Monica' (3.102.0111)
 d. *Pemuu7-nga* 'Santa Catalina Island' (3.102.0427)
 e. *Temeeeku-nga* 'Temecula' (3.104.0082)
 f. *T\$aaw-ve-nga* 'San Pedro' (3.102.0383) (= *T\$aaw-ve-pe-t* (5c))

The name for the TV village located roughly at the site of present-day downtown Los Angeles often appears in sources as *Jaa-nga*. This name might be from *jaa-r* 'poison oak', but the speakers Harrington worked with did not accept that etymology. It is also recorded as *Jaang7ar* (3a), which might be clipped from *-ng7aro*, the dative (3b), or a derivation adding an absolutive suffix *-r* after the locative suffix. Other place names recorded with *-ng7ar* include *Aawing7ar* 'Huerta de los Ybarras' and *\$evaang7ar* 'name of a ranchería (settlement) somewhere'¹⁷⁹ (3.104.0017).

Constructions with *-nga* are not fully onomasticized in that the *-nga* suffix is treated as inflectional, being replaced by other suffixes when a different local case expression is desired, as in (3).

- (3) TV a. *Jaa-nga* ~ *Jaa-ng7a-r* 'Los Angeles' (3.102.0749, 3.102.0156)
 b. *Jaa-ng7aro* 'to Los Angeles' (3.102.0552)
 c. *Jaa-ve* 'from Los Angeles' (3.102.0160)

The initial consonant of the ablative suffix has both a lenited variant *-ve*, seen in (3c, 4a), and a fortis variant *-pe*, in (4b). Since ablative *-ve* in derived nouns induces the fortis form of the absolutive (*-t*), when doublets appear, the second ablative is fortis *-pe*, as in (4c), which is derived from (4a).

¹⁷⁹ But apparently not 'San Gabriel', which is either *\$evaanga* or *\$evaavet* (see (11b)). The noun underlying the root *\$evaa-* is unattested. The closest noun attested is *\$iivat* 'flint' (3.102.0277), with the long vowel in the wrong syllable.

- (4) TV a. *ongoo-ve-t* ‘a place that has salt’ (3.102.0226) (< *ongoo-r* ‘salt’ (3.105.0412))
 b. *Ket\$ee-pe-t* ‘Santa Monica’ (3.102.0582-3) (*ket\$ee-* is unidentified)
 c. *Ongoo-ve-pe-t* ‘Las Salinas’ (3.102.0596)

The TV suffix sequence *-ve-t* ~ *-pe-t* can appear both in full place names and in expressions that are ad hoc descriptors of places. Some place names are illustrated in (5), while descriptive expressions appear in (6). Since *-ve-t* may be used in a gentilic sense (see below), place names with this ending sometimes also refer to the place or the people of the place. We distinguish between capitalized place names and lower-case gentilics.

- (5) TV a. *\$oaa-ve-t* ‘a place this side of San Pedro, means junco’ (< *\$oaa-r* ‘junco (reed sp.)’) (3.102.0371)
 b. *Tooj-ve-t* ‘San Jose’ (3.104.0420) (< *tooj-t\$* ‘spirit, devil’)
 c. *T\$aaw-ve-pe-t* ‘San Pedro’ (3.103.0521) (= *T\$aaw-ve-nga* (2e))

The ending *-ve-t* can appear with both noun and verb stems to form descriptive labels that are not true place names, as in (6).

- (6) TV a. *mohuu-ve-t* ‘shooting range’ (3.103.0271) (< *mohuu-k* ‘shoot at target’)
 b. *naanho-ve-t* ‘race course’ (3.103.0564) (< *naanho* ‘race’)
 c. *ngaava-ve-t* ‘grinding stone’ (3.105.0133) (< *ngaava* ‘grind, sharpen’)
 d. *\$iee7e-ve-t* ‘hospital’ (< *\$iee7-ena-x** ‘cure’) ¹ (also *\$iee7enga* ‘onde curan (where they cure)’) (3.103.0470)
 e. *to-taa-ve-t* ‘rocky place’ (3.102.0313) (< *to-taa* ‘rock’)

¹ The nonfuture of ‘cure’ is unattested. The imperative is *\$iee7a* ‘¡cúralo! (cure him!)’ (3.105.0374). The future is found in the nominalization *\$iee7e-ro-wo-t*, of which the final *-wo-t* is presently not understood. The nominalization is used in *Noo = n = 7e \$iee7erowot* ‘Yo lo voy a curar. (I’m going to cure him.)’ (3.103.0470).

The ending *-ve-t* also appears in temporal expressions, including seasons (7a,b) and time of day (7c). Without the absolute suffix, these expressions are locative (7d,e) or ablative (3c).

- (7) TV a. *oroore-ve-t* ‘summer’ (3.103.0758) (< *oroo7* ‘hot’ (3.104.0117))
 b. *tomii-ve-t* ‘mid-day’ (3.104.0532)
 c. *ot\$oot\$e-ve* ‘in winter’ (3.103.0759) (< *ot\$oo7* ‘cold’ (3.104.0326))

d. *tomii-ve* ‘at midday’ (3.104.0532)

*Ot\$oot\$e-ve-t** for ‘winter’ seems not to be used, only *ot\$oot\$e-ve* (7c), which, explicitly with no absolutive suffix, was given for ‘winter’. Also, on the same page in the context of an example sentence, (8), it is glossed as ‘in the winter’.

(8) TV *Ot\$oot\$e-ve* *mjook-mo-k*.
 winter-LOC die-PROG-NFUT
 ‘He died in the winter.’ (3.103.0759)

A suffix that is homophonous with the place-name suffix *-ve-t* derives some nouns and adjectives; see 14.10.1.2.

The place-name suffix *-ve-t*, with plural *-ve-ta-m*, appears in gentilics. There are two possible analyses for the gentilic form. One is that it is from ablative *-ve*, with an absolutive suffix. The other is that it does not involve the ablative at all, but instead is the same suffix as found in the place names. The gentilic forms would then be understood as metonymic. We prefer the second analysis, given that the place name/gentilic homonymy also appears in Serran, where the ablative suffix *-nu7* and the place-name suffixes *-pa/-va*, *-pia/-via* are not the same. However, Cupan gentilic derivations do use the ablative, so the point cannot be regarded as absolutely settled.

In some cases, Harrington recorded a contrast between a place name with *-nga* and the corresponding gentilic with *-ve-t*, as in (9).

- (9) TV a. *Ahuupki-nga* ‘Santa Anita’ (3.102.0069)
 It means “el viento para atragar.” It means “the wind enters to the heart as when it is a little hot and you inhale wind to cool off.” (3.102.0069) [We have not been able to identify the verb *atragar*.]
ahuupki-ve-t ‘santaniteño (person from Santa Anita)’ (3.102.0071)
- b. *Hotuuk-nga* ‘Santa Ana’ (3.103.0215)
hotuuk-ve-ta-m ‘inhabitants of Santa Ana’ (3.103.0215)
- c. *Jaa-nga* ‘Los Angeles’ (3.102.0554)
jaa-ve-t ‘person from Los Angeles’ (3.102.0157)
- d. *Koruu7-nga* ‘Santa Monica’ (3.102.0355)
koruu7-ve-t ‘person from Santa Monica’ (3.102.0355)
- e. *Pemuu7-nga* ‘Santa Catalina Island’ (3.102.0427)

- pemuu7-ve-t* ‘person from Santa Catalina Island’ (3.102.0478)
- f. *\$a7aan-nga* ‘La Ballona’ (3.104.0515)
\$a7aan-ve-t ‘person from La Ballona’ (3.104.0515)
- g. *T\$aaw-ve-nga* ‘San Pedro’ (3.102.0383)
t\$aaw-ve-t (3.102.0384) ~ *t\$aaw-ve-pe-t* ‘San Pedro person’ (3.103.0521)
- h. *Waa7at\$-nga* ‘San Bernardino Mission site’ (3.103.0639)
waa7at\$-ve-t ‘person from San Bernardino’ (3.103.0293)

In many other examples, both the place name and the gentilic, or the place descriptor and person descriptor, can have *-ve-t*, as in (10).

- (10) TV a. *A\$uuk\$a-ve-t* ‘Azusa’ (3.102.0086)
a\$uuk\$a-ve-t ‘person from Azusa’ (3.104.0016)
- b. *Pa\$eek-ve-t* ‘San Fernando Alamitos, north of Long Beach’ (3.103.0323)
pa\$eek-ve-t ‘person from San Fernando Alamitos’ (3.104.0108)
- c. *\$e\$oo7-ve-t* ‘hell, the underworld, San Antonio’ (3.104.0336) (< *\$e\$oo7* ‘devil, spirit’)¹⁸⁰
\$e\$oo7-ve-t ‘someone from the underworld’ (3.104.0336)
- d. *totaa-ve-t* ‘a rocky place’ (3.103.0212)
totaa-ve-t ‘someone from a rocky place’ (3.103.0228)

Parallel to the place-name/place-descriptor dual function of *-ve-t* is that alongside true gentilics that label socially significant groups of persons, there are general descriptors of persons (and things, cf. (10c)), according to their origin, as seen in (11).

- (11) TV a. *honuuk-ve-t* ‘person of long ago’ (3.104.0446)
- b. *metaa-ve-t* ‘someone from here’ (3.104.0116)
- c. *namaake-ve-t* ‘something in the middle’ (3.104.0164)
- d. *naaxar-ve-t* ‘someone from the cliff, barranca’ (3.103.0494)
- e. *paa-ve-t* ‘one who is of the water’ (3.103.0461)
- f. *tuumka-ve-t* ‘someone from the north (e.g. a Chumash person)’ (3.102.0030)

¹⁸⁰ The reference to “San Antonio” in (10c) is unclear. San Antonio, California is in Marin County, far from the Takic area.

Some place names were recorded with either *-nga* or *-ve-t*, or with both (*-nga-ve-t*), as in (12).

- (12) TV a. *Pa\$eek-nga* (3.104.0108), *Pa\$eek-ve-t* (3.103.0323), *Pa\$eek-nga-ve-t* (3.104.0017) ‘San Fernando’
 b. *\$evaa-nga* (3.102.0277), *\$evaa-ve-t* (3.104.0028) ‘San Gabriel’

In some cases, Harrington’s notes suggest that the *-ve-t* form is a place name, but the *-nga* form is not, as in the examples in (13).

- (13) TV a. *Moniika-ve-t* ‘Palos Verdes’ (3.103.0367) (< *moniika7* ‘pointed hill’)
 b. *moniika-nga* ‘at the pointed hill’ (3.103.0367)

Harrington recorded combinations of *-nga* and *-ve(-t)*, in either order, as in (14).

- (14) TV a. *Kawee-nga-ve-t* ‘Cahuenga’ (3.104.0018)
 b. *Pa\$eek-nga-ve-t* ‘San Fernando’ (3.104.0017)
 c. *Tooj-ve-nga* ‘San Jose’ (3.102.0305)

15.2.2. SERRANO PLACE NAMES AND GENTILICS.

15.2.2.1. SERRANO PLACE NAMES. Harrington’s work on SE focused on place names, so we have a fairly large sample. Unfortunately most locations of these places are described, or indicated on sketch maps, using as reference points roads, ranches, creeks and other landmarks that have long since disappeared. Determining the locations, even approximately, is definitely beyond the scope of this chapter.

Many of these place names are derived with the suffix *-pa7* ~ *-va7* or with this suffix plus the absolutive suffix *-pa7-t(a)* ~ *-va7-t(a)*. This is presumably cognate with TV *-ve-t* ~ *-pe-t*, although this is not a regular vowel correspondence.

Sometimes the place name root is of known meaning, but more often it is not. Examples of *-pa7* ~ *-va7* with the absolutive suffix appear in (1).

- (1) SE a. *A7at\$a-va7-t* ‘a village at Big Bear Lake’ (3.101.0053)
 b. *A-tan-pa7-t* ‘a mountain west of Highland’ (3.101.0024)

- [3SG-hoof-PLACE-ABS]
- c. *Paavaku-pa7-t* ‘a big mountain’ (3.101.0083)
- d. *Wa7at\$-i-va7-t* ‘a small hill below West Highland’ (3.101.0273)
[plant.sp.-PLACE-ABS]
- e. *Wiri~wiri-k-i-va7-t* ‘a bare mountain’ (3.101.0118)
[REP~whirl.around-K-NMLZ-PLACE-ABS]

Examples in Harrington’s notes where the final *-t* does not appear, including examples where there is variation, are seen in (2).

- (2) SE a. *Avaa\$a-va7* ‘a plain with alkali on the surface’ (3.101.0086, 0145)
- b. *Hutuuk-va7* ‘Santa Ana’ (3.101.0125)
- c. *Jukai7-pa7* ~ *Jukai7-pa7-t* ‘Yucaipa’ (3.101.0061, 3.101.0443)
- d. *Kihuu-va7* ‘a place north of the range’ (3.101.0256) (< *kihuu-t\$* ‘fish’)
- e. *Pyhy-va7* ~ *Pyhy-va7-t* ‘a place’ (3.101.0247)
- f. *Tyky-pa7* ‘Redlands’ (< *tyky-t* ‘alder’)
(Given by Harrington as *Tookopa7* (3.104.0497), evidently with TV phonetic influence; *Tykypa7* and its identification with *tykyt* are from Sarah Martin, who said that Redlands is also referred to simply as *Tykyt*.)
- g. *Waa7t\$a-va7* ~ *Waa7t\$a-va7-t* ‘San Bernardino’ (3.101.0247) (< *waa7-t* ‘juniper’)

A few examples listed by Harrington among the place names have final *-v*, shown in (3), a general non-place-name locative that serves the same functions as TV *-nga*.

- (3) SE a. *Apujdha-v* ‘a hill’ (said to mean ‘at the buttocks’) (3.101.0223)
- b. *Pyhy7y-v* ‘a canyon draining to the southeast’ (‘plant.sp-place’) (3.101.0118)
(compare (2d) above, perhaps the same place)
- c. *Pyynat\$y7-v* ‘a narrow canyon’ (3.101.0103)

The suffix *-pa7* ~ *-va7* without final *-t* appears in expressions for time and in space descriptors, as in (4).

- (4) SE a. *pyy7-ashta-va7* ‘on horseback (“on their horses”)’ (< *-achi7* ‘horse, animal’,
pl. *-aashta-m*)
- b. *haam-pa7* ~ *haama-va7* ‘on the grass’ (< *haam-t* ‘grass’)

- c. *jaama-va7* ‘(in the) spring’
- d. *ny-kwak-pa7* ‘in my youth’ (cf. *kwakii-t* ‘young one’)
- e. *navyy^R-pa7* ‘in last position’ (< *navyy^R-ch* ‘foot’)
- f. *too^Rnga-va7* ‘(in the) summer’
- g. *tyyvy-va7* ‘down on the ground’

Several SE place names show *-pia-t* ~ *-via-t*. This ending seems quite productive. Some examples are given in (5).

- (5) SE
- a. *Anuu-pia-t* ‘a place’ (3.101.0119)
 - b. *Apaavu-t*§*i-via-t* ‘a place in the mountains’ (3.101.0015) (*a-paavuha7* ‘his planting’)
 - c. *Hikiiha-via-t* ‘a place near Banning’ (3.101.0077) (< *hikiihat*§** ‘nettle’ (3.101.0095))
 - d. *Jaa-via-t* ‘Los Angeles’ (3.101.0132)
 - e. *Kuupa7it*§*a-via-t* ‘a shiny rock’ (3.101.0150) (< *kupaa7* ‘shine, as of stars’)
 - f. *Maa-via-t* ‘the section of the Mojave River between Barstow and Victorville’ (3.101.0219) (< *maa-t*§** ‘wooded area’)
 - g. *Paaqa-via-t* ‘carrizo place’ (3.101.0088) (< *paaqa-t*§** ‘reed’)
 - h. *Qajav-pia-t* ‘Bear Valley and Big Bear Lake’ (3.101.0082) (cf. *qajavi-t* ‘plant, like camotes [sweet potatoes]’ (3.101.0072))
 - i. *Qavikta-via-t* ‘a place in the mountains’ (3.101.0047)
 - j. *§yyka-pia-t* ‘a place in the mountains’ (3.101.0248) (< *-*§*yka7* ‘shoulder’)
 - k. *Tuuka-via-t* ‘a mountain way out in the desert’ (“Way in the Night”, said to be Sarah Martin’s people’s mountain) (cf. *a-tuuk* ‘night’)
 - l. *Tyyvi-via-t* ‘a place’ (3.101.0086) (< *tyyvi-ch* ‘white clay’)
 - m. *Wany-pia-t* ‘a canyon’ (3.101.0119) (< *wany-t* ‘river, flowing water’)

There are examples in Harrington’s SE place-name data with *-pea-t* ~ *-vea-t*, as in (6). Of these forms, Harrington’s consultant Manuel Santos stated (3.101.0175) that two of the SE groups, the *paaviatam* and the *qaii7yjam* (the latter was his home group), used to talk more like the Kitanemuk and had only recently adopted the pronunciation of the *maarynga7jam*, the Morongos, the pronunciation reflected in the materials from Mrs. Sarah Martin (K. Hill’s consultant in the early 1960s) and Dorothy Ramón (Eric Elliott’s collaborator in the 1990s). The *-pea-t* ~ *-vea-t* spellings (which would not have the final

-t in Kitanemuk) reflect this pronunciation. Example (6a) was transcribed by Harrington on different occasions with *-pea-t* and *-pia-t* and with *ts* (as in KI) and *ch* (Harrington's <tš>, not <tʃ>). One suspects that at least some of the time Harrington was working with speakers whose pronunciation was rather like that of KI.

- (6) SE a. *Tutu-pea-t* 'Victorville' (3.101.0250)
 b. *Maa-vea-t* 'place along Mojave River' (3.101.0064) (= *Maaviat*, cited in (5e))
 c. *Oo^R-vea-t* 'place towards Barstow from Morongo' (3.101.0087) (<oo^R-tš' 'mesquite')

There are also items in the SE place-name list in *-pi-t* ~ *-vi-t*. These almost certainly represent SE pronunciations of TV place names in *-pe-t*, *-ve-t*. Harrington was concerned to establish the SE/TV boundary and was unable to do so, concluding that there had been zones where the two groups both had villages and other named sites.

- (7) SE a. *Amuts-kupea-vi-t* (3.101.0267) ~ *Amuts-kupea-t* (3.101.0134) 'a place near San Bernardino'
 From KI *amu-ts* 'rib, body', KI *-kupea* 'top of head or mountain'? Harrington says "name means 'the point', referring to the point of the mountains" (3.101.0267).
 b. *A\$uuk\$a-vi-t* ~ *A\$uuk\$a-nga7* 'Azusa' (3.101.0267) (also with *s* for *\$*) (TV *A\$uuk\$anga*)
 c. *Chaawvi-vi-t* ~ *Chaawvi-nga7* 'the whole San Pedro region' (101.0132) (TV *T\$aawvepet* at 14.1 (5d) ~ *T\$aawvenga* at 14.1 (4d))
 d. *Hyyva-vi-t* 'Arrowhead Springs' (3.101.0268) (TV *hevii-ve7* 'the hot spring where the hotel is now [at Arrowhead Springs]')
 e. *Pipiima-vi-t* 'Santa Catalina Island' (3.101.0114) (TV *pepiimar* 'person from the islands')
 f. *Wa7at\$-vi-t* 'San Bernardino' (3.101.0273) (TV *wa7aat\$nga*, said to refer to SE *waa7-t* 'guata, juniper') (see also (2f))

The few SE place names in *-nga7* are probably of TV or LU origin since *-nga7* is not a productive suffix in SE. Example (8c) with vowels *e* is a rather unassimilated loan word.

- (8) SE a. *Kuroovu-nga7* ‘Saddleback Hill, between Highland and San Juan Capistrano’ (3.101.0254) ~ *Kurooviat*
 b. *Lukuup-nga7* ‘(perhaps) “Lukúp, a large village on coast south of Santa Ana” (Elliott 1999:473)’ (3.101.0106)
 c. *Ngilengle-nga7* ‘a ciénega (marshy area) near Arrowhead Springs’ (3.101.0271) (note LU *Ngiléngli*, probably “curvy place”, collected by Harrington as <nilíngle>; cf. *ngilé~ngl-i-sh* ‘curvy, curve’ (Elliott 1999:640))
 d. *Pat\$ii-nga7* ‘a small arroyo with water above Morongo’ (3.101.0247)

Not included in (8) is *Maarynga7*, a historic SE site near present-day Morongo Valley. Since the site is named for *Maarynga7*, the Morongo clan ancestor, the final *-nga7* here cannot be securely labeled as a locative derivational element. It is, though an onomastic element in that the personal name relates to the place name *Maara7* ‘Twentynine Palms’, the home of the *Maarynga7* (Morongo) clan. *Maara7* may be based on the Southern Numic word *mara* ‘metate’.

Another instance of onomastic *-nga7* is found in the place name *Markinga7*, said to be the SE equivalent of CA *Malki7*, the name of the location where the Morongo Reservation is today. The reservation was named “Morongo” reportedly over the objections of people who wanted the place to retain the name “Malki” (Ramón & Elliott 2000:44).¹⁸¹

This has given rise to confusion in SE texts, where *Maarynga7* can refer to the present-day reservation or to the Morongo Valley site.

- (9) SE a. *Paa-t\$-i* *ama-j* *\$yrii7n-ka7-ti = tqa* *pyn-k-in*
 water-ABS-ACC DIST-ACC red-K:CHAR-ACC = INFR.3PL > 3SG pass-K-CAUS
pa-ta-j *Maara7-ti* *ii-ngkwa7* *maarynga7-ja-m*
 PROX2-ABS-ACC Twentynine.Palms-ACC PROX-DAT Morongo-AUG-PL
Maarynga-j7ka7.
 Morongo.Reservation-DAT
 ‘The Morongos must have passed the Colorado River and Twentynine Palms on the way here to Morongo.’
- b. *Pajykja7* *uvia* *Maarynga7-pia = m* *pyn-k.*
 away;over.there already Morongo.Valley-LOC = 3PL pass-K

¹⁸¹ *Malki7*, like *Maara7*, may relate to ‘metate’, cf. the Cupan words LU *mala-l*, CU *malá-l*, CA *mala-l*.

‘They passed by Morongo Valley.’

A few other suffixes appear with some frequency in the Harrington SE place names. These include *-qa7j*, seen in (10), and *-nyh-t*, in (11). *-qa7j* appears in both place names and personal names, while *-nyh-t* is attested only in place names. *-qa7j* does not appear to be the characterizing suffix *-ka7j* proposed by Anderton (1988:143) for Kitanemuk. Instead, it appears to be a clipped form of *qaiit\$* ‘mountain’. Harrington’s *<-ka7j>* is probably *-qa7j* in many examples; Harrington did not consistently distinguish the *k : q* contrast for SE. The final *-7j* is very much a KI type of pronunciation; no example of syllable-final *7j* has been found by any contemporary worker on SE.

- (10) SE a. *Chukwaa-qa7j* ~ *Chukwaa7-qaiit\$* ‘some small hills’ (*chukwaa-ch* ‘barrel cactus’) (3.101.0145, 0224)
Chukwaa7qaiit\$ is glossed as ‘a hill of pure salt’ (3.101.0224), and Harrington recorded *Chukwaat* ‘salt’ (3.101.0152, 0175). K. Hill recorded ‘salt’ as *chuka7t*.
- b. *Jua-ka7j* ‘Mount Baldy’ (*jua-t* ‘snow’) (3.101.0026)
- c. *Paaqi-qa7j* ‘a hill, said to mean ‘horqueta’ (forked)’ (3.101.0080)
- d. *Qo^Rqu\$-qa7j* ‘point of a mountain, east of Redlands’ (3.101.0034)
- e. *Wihaa-ka7j* ‘cholla place’ (*wihaa-t\$* ‘cholla’) [= Sarah Martin’s *Wihaaqa7j*] (3.101.0071)

The suffix sequence *-nyh-t* is found in many of the Harrington place names and does not appear in other types of constructions. This ending may be *-ny^Rh-t*. Harrington’s representations only rarely included the rhotic feature of SE vowels (and recall that his consultant had a “Kitanemuk” accent; Kitanemuk does not have rhotic vowels). When an element with the rhotic feature is known, that feature is added in the Harrington example.

- (11) SE a. *Atama-nyh-t* ‘mountain seen from Big Meadows’ (*a-tam(a)* ‘its-tooth’) (3.101.0035, 0089)
- b. *Apiiha-nyh-t* ‘mountain seen from east of Redlands (‘its sweetness?’ ‘its suckling place?’) (3.101.0135, 0154)
- c. *A^Rt\$awt Akii-nyh-t* ‘crow’s house place, east of the range’ (*a-ki(i-)* ‘its house’) (3.101.0044)
- d. *Atiy^R-pa-nyh-t* ‘a big mountain’ (*atiy^R7a7* ‘big’) (3.101.0145)

- e. *Hikiiha-nyh-t* ~ *Hikiihaveat* ‘a mountain seen from Big Meadows, where God died’ (3.101.0093)
- f. *Hyy^Rng-t A-uuva-nyh-t* ‘big dirty rocks’ (‘rattlesnake’s eye’, cf. *a-uuva7* ~ *o-uuva7* ‘3SG’s eye’) (3.101.0249)
- g. *Kuchuumupi-nyh-t* ~ *Kut\$umukpin* ‘a place’ (3.101.0096) (*-mukpi* ‘nose’)
- h. *Kuukamy-nyh-t* ‘Cucamonga’ (3.101.0270)
- i. *Muum-t A-qa^Rva-nyh-t* ‘owl-shaped rock (Great Horned Owl’s Ear Place)’ (3.101.0027)
- j. *Wahi7-nyh-t* ‘Cajon Pass’ (*wahi7* ‘coyote’) (3.101.0092)
- k. *Wamat Wyy^Rhy-nyh-t* ‘many cottonwoods place’ (*wama-t* ‘cottonwood’, *wyy^Rha-m* ‘many’) (3.101.0248)

Two place names end in *-tsu7k*, in (12), with Harrington’s spelling, *ts* for expected *ch*, reflecting the “western” SE pronunciation, with phonetic details more in line with KI.

- (12) SE a. *Akyng-tsu7k* ‘a mountain’ (3.101.0158)
 b. *Myk-tsu7k* ~ *Myko-chu7k* (perhaps [?]*Mykw-chu7k*) ‘a rocky hill with a hot spring (an important place that figures in the Creation account)’ (3.101.0063, 0247)

SE place names occasionally have the “characterizing” suffix *-qa7* ~ *-ka7*, as in (13). Again, Harrington did not represent the difference between SE *k* and *q*, just as he did not for KI.

- (13) SE a. *Munaa7n-ka7* ‘where Bill Shea lives (‘one that boils’)’ (3.101.0068)
 b. *Paat\$ Rou7n-ka7* ‘a hill (“Blue Water”)’ (3.101.0084)
 c. *Pi7chung-ka7* ‘a mountain northwest of Big Bear Lake’ (< *pi7chung-ch* ‘a weed’) (3.101.0084, 3.101.0483)

One place name, ‘Big Bear’ (14), which is based on *juhaa-t\$* ‘ponderosa pine’, is attested only in inflected form.

- (14) SE a. *Amaj7 pa-t cha-cha-my-v qat\$, ama7*
 now PROX2-ABS 1PL-song-PL-LOC be.there DIST

juhaa-t\$ *pajykja7* ***Juhaa-jka7***.
 ponderosa.pine-ABS away;over.there Big.Bear-DAT
 ‘Now that’s in our songs, the pine tree over at Big Bear.’

- b. ***Juhaa-nu7*** = *vy-7* *kima-j*.
 Big.Bear-ABL = 3SG-PST come-IND
 ‘He came from Big Bear.’

The word for ‘at the pines’ is *juhaa-v*, but this may not have been used in the sense ‘at Big Bear’. The normal citation form for ‘Big Bear’ seems to be the dative *Juhaajka7*.

15.2.2.2. SERRANO GENTILICS. SE gentilics are morphological plurals (1) even with singular reference, and with singular reference, agreements are singular, as in (1b).

- (1) SE a. *Ama-j* *a-tiy^R7a-t\$-i = kwyny = my-7* *tywan-7-k-in*,
 DIST-ACC ADJZ-big-ABS-ACC = QUOT = 3PL > 3SG-PST name-VBLZ-K-CAUS
A-tiy^R7a-via-t *ky-j = kwyny* *ama-j* *añii7chi-ti*
 ADJZ-big-ONOM-ABS say-IND = QUOT.3PL DIST-ACC small-ACC
Maarynga7. ***Maarynga7-ja-m*** *ky-j = kwyny*.
 Morongo Morongo-PL say-IND = QUOT.3PL
 ‘They named the big one (the older twin) *Atiy^R7aviat* [“Big Morongo”] and the
 small one (the younger twin) one Morongo. They called them Morongos.’
- b. *Ama7 = kwyny = vy-7* *pyy-chyva7* *pichy-j* ***juaaka-ja-m***¹
 DIST = QUOT = 3SG-PST 3PL-following arrive;come-IND Chemehuevi-AUG-PL
ty^Rchin-t.
 boy;young.man;youth-ABS
 ‘The Chemehuevi youth came with them.’ [= 7.2.5 (2h)]
¹ *Juaaka-* is a Southern Numic loan, cf. Southern Paiute *juaakanty* <yua·’-χa-nti> ‘being level,
 desert’ (Sapir 1931:727).

The origins of two SE clans are specified in (1a), above. When clan names are used to specify a group or membership in the group, they are in plural form: *atiy^R7aviatam*, *maarynga7jam*. But they appear in singular form as part of personal names, where they precede the given name: *Maarynga7 \$ajujvam* was Sarah Martin’s SE name.

Typical examples of SE gentilics are given in (2). All are plural. Example (16a) shows *ts* for *ch* characteristic of vocabulary collected by Harrington from “western” SE. Example (2e) raises the question whether an uninflected form meaning ‘Big Bear’ might have been unattested *Juhaaviat*.

- (2) SE
- a. *amuts-ka7-ja-m* ‘people from Amutskuepat’ (3.101.0023, 3.101.0134)
 - b. *apaache-via-ta-m* ‘Apaches, people beyond the Cahuillas’ (3.101.0127)
 - c. *atiy^R7a-via-ta-m* ‘the senior Coyote clan’ (3.101.0015) (< *atiy^R7a* ‘big’)¹
 - d. *juhaa-via-ta-m* ‘People from Big Bear’ (3.101.0070) (cf. *Juhaa-nu7* ‘from Big Bear’, *juhaat\$* ‘ponderosa pine’)
 - e. *oo^Rqa-via-ta-m* ‘people from San Jose’ (3.101.0268) (< *oo^Rq-t\$* ‘sand’)

¹ The *Atiy^Rviatam* are often referenced as the “Big Morongo” lineage.

Two ethnic labels were collected in the singular (3). Both are CA words but apparently they were known and used in SE. Both also have plural forms, but the plurals provided are definitely of CA form. Their SE equivalents are used only in plural form.

- (3) SE
- | | Cahuilla form | Serrano equivalent |
|----|-----------------------|--|
| a. | <i>qawisik(-te-m)</i> | <i>qaiiky-ja-m</i> ‘Palm Springs Cahuilla(s)/Desert Cahuilla(s)’ |
| b. | <i>wanikik(-te-m)</i> | <i>wanypypaa7-ja-m</i> ‘Whitewater Cahuilla(s)/Pass Cahuilla(s)’ |

15.2.3. KITANEMUK PLACE NAMES AND GENTILICS.

15.2.3.1. KITANEMUK PLACE NAMES. Anderton (1988:146-148) provides a discussion of KI place names derived with local case suffixes. There are two major suffixes, locative *-pea* ~ *-vea*, and dative *-jyk*. Several place names are attested with both suffixes. Both serve as general locational suffixes that mean ‘at, on’ and ‘to, toward’ respectively. It is also possible to use the ablative suffix *-nu7* with place names (e.g. *Kutsi-t a-hoo-nu7* ‘from Tejon’ (“from the dog’s den”) (3.98.0479), where the citation form of the place name is *Kutsi-t a-hoo-vea* ‘Tejon’ (3.98.0314), but this construction is not as “onomastic” as those with the other local cases.

Examples of place names attested with *-pea* ~ *-vea* are seen in (1). These are often attested simply as *-pe* ~ *-ve* without the final *a*; there seems to be no difference in meaning. In contrast to their cognates in TV and SE, these place names in KI never occur

with the absolutive suffix *-t*, although they can have additional locational suffixes (as seen further on in (4)). Examples (1b,c) are interesting because the *-w-* that is attested in the cognate forms in Cupan (as in LU *\$ukaawut* ‘tree squirrel’) appears before the onomastic suffix, but it is lost in the related noun. These appear to be instances of the not uncommon persistence of archaic features in onomastic vocabulary. Examples (1a,f) show verb roots in place names.

- (1) KI a. *A-majka-pea* ‘Kern River Falls’ (3.98.0615) (< *majyk* ‘peek out, appear’)
 b. *Hikaw-pea* ‘Flying Squirrel Spring’ (3.99.0205) (< *hikay-t* ‘flying squirrel’)
 c. *Kokaw-pea* ‘San Emigdio’ (3.98.0046) (< *kokay-t* ‘soaproot’)
 d. *Maarynga-pea* ‘Morongo [Valley?]’ (3.98.0157) (cf. the SE lineage name *Maarynga7*)
 e. *Maa-vea* ‘El Monte’ (3.98.0114) (< *maa-t\$* ‘forest’)
 f. *Nakwaark-i-vea* ‘El Paso’ (3.98.0013) (< *nakwaaryk* ‘cross’)

Note that in (1b) the suffix *-pea* can be construed only as onomastic: ‘squirrel place’. In its locative function, if KI is like the other Takic languages in this matter, *-pea* could not be affixed directly to an animate noun and one would have to use a construction like *hikayt py-pea* ‘the squirrel on-it’.

KI place names given with dative *-jyk* appear in (2).

- (2) KI a. *Ipko-jyk* ‘El Pleito’ (3.98.0014) (< *ipko-t\$* ‘mulefat, *Baccharis glutinosa*’)
 b. *Kut\$aa-jyk* ‘Gorman’s Station’ (3.98.0014) (< *kut\$aa-t* ‘wood, tree’)
 c. *\$y-\$yvy-jyk* ‘Willow Springs in Antelope Valley’ (3.98.0044) (< *\$yvy-t* ‘cold wind’)
 d. *Tymyt Oo\$ani-jyk* ‘Castro’ (3.98.0334) (< *tymy-t* ‘rock’, *oo\$an* ‘write, paint’)
 We have not been able to identify “Castro.”
 e. *Tymy-jyk* ‘Quail Lake’ (3.98.0042) (< *tymy-t* ‘rock’)

Anderton’s (1988:147) examples of place names that can be formed with either suffix appear in (3). Examples (3a,b) (< *haka-t* ‘willow sp.’) apparently refer to different places while both (3c) and (3d) seem to refer to the same place.

- (3) KI a. *Haka-pea* ‘Cummings Valley’ (Anderton 1988:147)

- b. *Haka-jyk* ‘same as Gab. *ʃaqāŋa* (*\$axaanga*)’ (3.98.0147); cf. TV *\$axaanga* ‘San Timoteo’ (3.105.0400), CA *Saxatapa* ‘a village in San Timoteo Canyon’ at 15.4.1 (4d) below.
- c. *Tuuvi-pea* ‘Brite Valley’ (3.99.0206) (< *tuuvi-t* ‘grass sp.’)
- d. *Tuuvi-jyk* ‘Brite Valley’ (3.99.0203)

Anderton (1988:148) gives examples showing that additional local case suffixes can follow *-pea* ~ *-vea*. Examples of non-final *-jyk* are not found in the corpus, suggesting that this suffix has been less thoroughly onomasticized than has *-pea* ~ *-vea*.

- (4) KI a. *A-muuts-ky-pea-vea* ‘variant of a place name’ (3.98.0143; Anderton 1988:148) (< *muutsyk* ‘be crowded’) (perhaps the same as SE *Amuts-kupiaa-vi-t* in 15.1 (7a))
- b. *Paakwini-pea-jyk* ‘toward Ventura’ (3.98.0378) (< *paakwini-t* ‘mud’)
- c. *Paa-vea-jyk* ‘Kern Lake’ or ‘Buena Vista Lake’ (Anderton 1988:447; 3.98.0064) (< *paa-t\$* ‘water’)

However, two doublets are found where Harrington asserts that one item is the place name and the other is a local case form (5). This shows that both kinds of pairs can appear.

- (5) KI a. *Tahit\$-pea* ‘Tehachapi (Old Town)’ (3.98.0299)
- b. *Tahit\$-jyk* ‘to Tehachapi’ (3.98.0412)
- c. *Mymy-jyk* ‘Chico Lopez’s lake’ (3.98.0064)
- d. *Mymy-pea* ‘at Chico Lopez’s lake’ (3.98.0064)

Many place names are based on verbs. Often the sense of a place name is obscure but equally well many of the place names provide interesting insights into verb morphology. Suffixes transcribed as *-ea-*, which might be from causative *-ea7n* or passive *-ea* ~ *-hea*, appear in a number of place names where the translation provided does not contain a causative or passive reference. With a k-class verb, the element *-ea-* has to be regarded as ‘passive’ and not ‘causative’ since k-class verbs do not take causative *-ea7n*.

Several of these place names may be best regarded as “impersonal” formations. Impersonal is a category not otherwise attested in KI but semantically well suited for

place names. Some such examples appear in (6) and (7). Here and there the SE cognate is noted, especially when a place name contains a root that is not otherwise attested in the KI materials as in (6f). Place names often relate to deep cultural threads. Some contain what seem to be references to causation by creation-time beings, suggesting that *-ea* may be from *-ea7n*. For instance in (6h) a possible translation is ‘where he closed it’. Harrington’s consultant’s explanation of the place name in (6f) has reference to a creation-time bird. The problematic segment *-ea* is bolded. Locational suffixes *-vea* and *-jyk* follow passive (or causative?) *-ea-*. The examples in (6) seem to have various readings, causative, passive, or impersonal. To select from them (or to have a still different understanding) would require appropriate but no longer accessible cultural knowledge.

- (6) KI a. *A-7aah-**ea**-vea* [3SG-bathe-CAUS/PASS-LOC] ‘plcn means onde se baña el oso. (place name, [it] means where the bear bathed)’ (3.98.0528); “Winters Ranch – means bear bathed there” (Anderton 1988:265)
 causative: ‘where he bathed himself’
 passive: ‘where he was bathed’
 impersonal: ‘where there was bathing’
*my-aah-**ea**-j* ‘your bathing place’, *aar* ‘bathe (intr.)’
- b. *Haajin-**ea**-vea* [rest-CAUS/PASS-LOC] (no trans.) (3.98.0217); “no gloss: apparently = loc.: a resting place.” (Anderton 1988:306)
 causative: ‘where one rests oneself’
 passive: ‘where one gets rested’
 impersonal: ‘where there is resting’
haajin ‘rest (intr.)’
- c. *A-hii7n-k-**ea**-vea* [3SG-float-K-PASS-LOC] ‘where I live, where the flood from Piivungatsapea passed’ (3.100.0354); “ ‘where the flood passed’ – Caliente or Agua Caliente” (Anderton 1988:309)
 passive: ‘where things got floated’
 impersonal: ‘where there was floating’
hii7n-yk ‘float (intr.)’
Piivungatsapea “aguaje plcn (spring/waterhole, a place name)” (3.98.0186), “where red clay is found for ollas (pots)” (3.99.0501)

- d. *Ku7kunit\$ A-wy7r-k-in-ea-vea* [3SG-go.down.out.of.sight-K-CAUS-PASS-LOC] (no gloss) (3.100.0797); “a deep lake where *Ku7kunit\$* – a myth. figure who killed people – was pushed in” (Anderton 1988:367)
 passive: ‘*Ku7kunit\$*’s place where he got pushed in’
 impersonal: ‘where there was pushing down of *Ku7kunit\$* out of sight’
 (probably not ‘the place that he pushed *Ku7kunit\$* in’, because then the accusative form *Ku7kunit\$aj** might be expected)
- e. *A-kyyt-k-in-ivy-jyk* [3SG-get.wet-K-CAUS-NMLZ-DAT] ‘plcn, hay aliso (there is alder) there, and an aguaje (spring/waterhole) and a low hill where *Tataknit\$* had his house, means wet ground’ (3.98.0335), ‘means onde se mojó alisos (where it got wet [and it has] alders)’ (3.99.0672); “[it] means where the ground got wet” (Anderton 1988:358)
 causative: to where it got [the ground] wet’
 passive: ‘to where [the ground] got wet’
 impersonal: ‘to where there was wetting [of the ground]’
kyyt-yk ‘get wet’
- f. *A-muna-k-in-i-vy* [3SG-boil-K-PASS/CAUS-NMLZ-LOC] ‘plcn, the piedras (rocks) at top of sierra (hill), where the bird lived that boiled people’ (3.98.0335; Anderton 1988:270)
 causative: ‘the place where it boiled them’
 passive: ‘where they got boiled’
 impersonal: ‘where there was the boiling of them’
 cf. SE *munan-k-in* ‘boil (tr.)’
- g. *Tsuh~tsuu7r-k-ea-vea* [REP~bog.down-K-PASS-LOC] ‘atascadero (deep miry place)’ (3.100.0513); “bog – e.g. where we got the watercress” (Anderton 1988:294)
 passive: ‘where one repeatedly gets bogged down’
 impersonal: ‘where repeatedly there is bogging down’
tsuu7r-yk ‘atascarse (get stuck in mud, bogged down)’ (3.98.0081)
- h. *A-tym-k-in-i-jyk* [3SG-shut-K-CAUS-NMLZ-DAT] “plcn” (3.100.0494); “on El Paso creek; means arroyo zig-zags there” (Anderton 1988:530)
 causative: ‘to where it plugs things up’ (?) or ‘to where he closed it’ (?)

impersonal: ‘to where there is blockage’
tym-k(-in-) ‘shut, lock, plug up’ (?)

Not all place names derived from verbs behave this way. Examples of other place names based on verbs are given in (7). (7a) is a passive construction, ‘shaded place’. In the Harrington field notes passive *-hea* (see below) is often written simply *-ea* and is easily confused with the causative suffix *-eaʔ*.

- (7) KI a. *Tyh~tykwaka-ʔ-hea-vea* [REP~shade-VBLZ(?) -PASS-LOC] ‘plcn’ (3.100.0482); “in El Monte, at the foot of the mountain; means where people find shade” (Anderton 1988:525)
 ‘the place that is recurrently shaded’
tykwaka ‘shade’
- b. *A-wiroʔjn-i-vy Wahiʔ-t* [3SG-play.flute-NMLZ-LOC Coyote-GEN] ‘plcn onde toca el coyote (place name, where the coyote plays [a musical instrument])’ (3.98.0443); “where coyote played the flute” (Anderton 1988:574)
 ‘Coyote’s flute-playing place’
wiroʔj(n-) ‘play instrument’; cf. SE *wiiro^aiʔn(a-)* ‘play the flute’
- c. *At\$awa-t A-raʔwh-k-i-vy* [raven-ABS 3SG-seat.oneself-K.CAUS-NMLZ-LOC] ‘where the raven sits’ (3.100.0066); “raven’s roost” (Anderton 1988:491)
 ‘raven’s seating place’
raʔwh-k ‘seat oneself’
- d. *Hot\$-i-jyk* [dig-NMLZ-DAT] ‘plcn una sierra, means onde ay escarbaron (place name, a mountain, it means where they dug/scraped there)’ (3.98.0443; Anderton 1988:315)
 ‘to where they dug’
hot\$ ‘dig (tr.)’
- e. *A-tsoot-ky-pea* [3SG-sink-K-LOC] ‘plcn’ (3.100.0512); “San Fernando: the water sinks thus.” (Anderton 1988:291)
 ‘where it sinks’
tsooty ‘sink’

This construction attests to the expected underlying final vowel of the *-k* suffix. We have not tried to recover the underlying final vowels of verbs for KI, since they are attested only sparsely. KI provides no convenient environment, like the indicative suffix of SE, where these vowels can be regularly revealed.

15.2.3.2. KITANEMUK GENTILICS. The KI plural gentilic derivations have the *-pea ~ -vea* suffix, plus absolutive *-ta* and plural *-m*, as in (1). The suffix *-jyk* does not appear in gentilic labels (but see (2)). In KI, the gentilic forms are distinguished from the place-name forms with *-pea ~ -vea* by the presence of the absolutive. In contrast, in SE the place-name suffix is *-pa7(-t) ~ -va7(-t)*, while the gentilic is *-p-ia-t ~ -v-ia-t*.

- (1) KI a. *pakwini-pea-ta-m* ‘Ventureño Chumash people’ (3.98.0046)
 b. *paa-vea-ta-m* ‘Kern Lake Yokuts people’ (3.98.0151) (< *paa-vea-jyk* ‘Kern Lake’)
 c. *tyva-pea-ta-m* ‘Tübatulabal people’ (3.98.0385) (< *tyva-t* ‘piñon’)
 d. *wihaa-vea-ta-m* ‘people from *Wihaa-vea*’ (3.98.0150) (< *wihaa-t\$* ‘cholla’)

There is confusion in the notes about the singular. In one example, seen in (2a), the singular does not have the *-pea-ta-m ~ -vea-ta-m* suffix sequence, but instead has what is possibly characterizing *-ka7j*. The consultant, Eugenia Méndez, suggested the alternative sentence in (2b).

- (2) KI a. *Ny7 tymy-jy(k)-ka(7)j.*
 1SG.PRO rock-ONOM.DAT-CHAR
 ‘Yo soy təməjəqueño. (I am a person from *Tymyjyk*.)’ (3.98.0078)
- b. *Ny7 taaka-t Tymy-jyk.*
 1SG.PRO person-ABS rock-ONOM.DAT
 ‘Yo soy gente de T... (I am a person from *Tymyjyk*.)’ (3.98.0078)

However, in most examples the plural is used where a singular might be expected. This pattern is also found in SE, as mentioned above at the end of the previous section.

- (3) KI a. *Tyva-pea-ta-ma = t ? ymy7.*
 piñon-ONOM.LOC-ABS-PL = Q 2SG.PRO
 ‘Are you R.C. [Río Chiquito] gente? (Are you a Tübatulabal person?)’
 (3.98.0385)
- b. *Ny7 kwiake7y akikika-m.*
 1SG.PRO woman Kitanemuk-pl
 ‘Yo soy jamine woman. (I am a Kitanemuk woman.)’ (3.98.0065)
- c. *Ny7 tataa-vea-m.*
 1SG.PRO ethn-ONOM.LOC-PL
 ‘Yo soy t... (I am a Tataviat.)’ (3.98.0120)
- d. *hawkup tataa-vea-m*
 one ethn-ONOM.LOC-PL
 ‘one pujador (one Tataviat)’ (3.98.0120)
- e. *hawkup ky\$a7ni-hungu-ka-m*
 one bad-language-CHAR-PL
 ‘one Ventureño’ (3.98.0358; Anderton 1998:149)

Some gentilics are given with the augmented plural suffix sequence *-ja-m*, as in (9). In KI, *-ja-m* is the plural ending for \emptyset -class nouns (Anderton 1988:81) and as a consequence it is a common plural for gentilics. Example (4c) seems to be exceptional, being based on *myymy-t* ‘lake’, a *t*-class noun. Perhaps the use of *-ja-m* here is triggered by the onomastic status of the stem to which it is attached. Note the suffix *-nga* that appears in (4a,d). We concur with Anderton (1988:146) that place names with *-nga* are likely Tongva in origin; those with *-ng* (like *Akure7eng* ‘Newhall’) may be Tataviam, a possibility not noted by Anderton.

- (4) KI a. *kavwe-nga-ja-m* ‘people/person from *Kavwenga* (Cahuenga)’ (3.98.0145)
 b. *kawija7-ja-m* ‘Cahuillas’
 c. *myymy-ja-m* ‘people/person from Chico Lopez’s lake’ (3.98.0064) (< *myymy-t* ‘lake’)

- d. *tsivu-nga-ja-m* ‘people/person from *Tsivujyk*’ (3.98.0143) (< *tsivu-t* ‘wild tobacco’)
- e. *joaa-ka-ja-m* ‘people/person from a snowy mountain’ (3.100.0061) (in SE, this is the word for ‘Chemehuevi’ or ‘Paiute’, cf. 14.2 (15b))

15.2.4. CUPAN PLACE NAMES AND GENTILICS.

15.2.4.1. -PA/-VA IN CUPAN. The Cupan languages all have place names with the *-p ~ -v* family of suffixes, but these are not the most important place-name-deriving suffix in any Cupan language. They are best attested in LU. Unlike in TV and SE, the *-p ~ -v* suffixes appear only in place names, and are never followed by absolute suffixes. In LU, other locational and directional elements follow the *-pa/-va* suffix, rather than replacing it. Their cooccurrence with other local case suffixes is poorly documented in CU and CA.

These mysterious onomastic elements may be the same as the suffix *-pa ~ -va* of Hopi, which is found in the names of springs. Hopi *-pa ~ -va* is from *paa-hy* ‘water’, where *-hy* which figures somewhat like an absolute.¹⁸² The Cupan place names in *-pa ~ -va* may likewise reference places with springs.

LU *-pa ~ -va*, shown in (1), can be followed by the locative suffix, as seen in the forms in (2). Examples are from Elliott (1999), unless otherwise noted.

- (1) LU
 - a. *Kulaaw-pa* ‘mountain near Santa Margarita’ (< *kulaawu-t* ‘wood’)
 - b. *Paaxa-l-pa* ‘place across from San Jose’ (< *paaxa-l* ‘a type of grass or reed’)
 - c. *\$ivee-l-pa* ‘a place’ (< *\$ivee-la* ‘sycamore’)
 - d. *Malaa-va* ‘a place’ (< *malaa-l* ‘metate’)
 - e. *Ngoori-va* ‘a spring between Cupa and Puerta La Cruz’ (< *ngoori-sh* ‘notch’ or maybe < *ngoor-i/-ax* ‘rumble’)

- (2) LU
 - a. *Uula-pa-nga* ‘at *Uulapa* (a place on Mount Palomar)’
 - b. *Paara-va-nga* ‘at Fallbrook’ (< *paara* ‘take a dust bath (of birds)’)
 - c. *\$ungaa-va-nga* ‘at *\$ungaava* (a swampy place north of Temecula)’ (< *\$ungaa-l* ‘woman’)

¹⁸² Hopi *-hy* occurs only after monosyllabic noun roots, seemingly to fill out a phonological template. Its form is intriguingly similar to that of the CA empty prefix *he-*.

The *-pa* in the important CU place name *Ku-pa* ‘Cupa, Warner Springs’ also remains before local case suffixes, e.g. *Ku-pa-jka* ‘to Cupa’. This has been a problematic place name. If the word *Kupa* was a Cupeño-internal derivation from the word for ‘fire’, *ku-t* with a locative suffix, as has recurrently been suggested, we would expect the absolutive suffix to appear, as it does in the CU examples in (3). J. Hill (2005:10) speculated that *Kupa* may have originated in some Diegueño language, perhaps from ‘Iipay Aa *hakupin* ‘warm water’. CU heritage people believe that the word comes from *kup* ‘sleep’ and means “where we slept”.¹⁸³ This, however, leaves the final *-a* unexplained.

We suggest that *Ku-pa* may be an old compound, old enough either to have been phonetically simplified from **ku-t-pa* [fire-ABS-water], or more likely, to have been formed at a time when compounding did not entail the retention of the absolutive suffix as is seen in more recent and more transparent formations, such as those in (3). Ancient *Kupa*, then, would have meant the same thing as contemporary *Pal Atíngvy* ‘Hot Spring’. Here we may have another example of the persistence of archaic features in onomastic vocabulary

Other CU names with *-p* ~ *-v* probably also behave like those in LU, permitting the addition of the regular local case suffixes, but examples are lacking. Examples of place names with *-pa* ~ *-va* in CU appear in (3).

- (3) CU
- a. *Kyly-l-va* (~ *Kyly-l-ma*) ‘Puerta La Cruz’ (< *kyly-l* ‘manzanita’) “Manzanita Spring”
 - b. *Kiwy-t-pa* ‘Los Tules’ (< *kiwy-t* ‘deerweed’) “Deerweed Spring”
 - c. *Ngylyl-va* ‘Puerta La Cruz’ (perhaps < *ngylyl-* ‘be all around, surrounding’; or maybe just confusion about which consonant the word for Puerta La Cruz starts with; cf. (3a))
 - d. *Ti7i-sh-pa* ‘a place’ (< *ti7i-sh* ‘sedge’) “Sedge Spring”
 - e. *Wi7a-t Á-va* ‘Lost Valley’ (< *wi7a-t* ‘live oak sp.’) “Live Oak Spring”
Á-va ‘may be an archaic form for ‘its spring’, with ‘water, spring’ treated as a stressless root.
 - f. *Wiláka-l-pa* ‘San Ysidro, the smaller of the two Cupeño settlements, south of Cupa’ (< *wiláka-l* ‘buckwheat’) “Buckwheat Spring”

¹⁸³ <http://www.palatribes.com/about/the-history>, accessed March 16, 2017.

We note that in *Tuk-vá-l* ‘a place near Cupa’ (< *tuk* ‘pass the night’), *pa-l* ‘water’, in its combining form *-va-l*, retains its absolutive suffix in word-final position. *Tukvál* may refer to a spring – perhaps “Pass-the-night Spring” – but here the *-va-l* component is grammatically treated as a noun, not the onomasticized ending.

Strong (1929) provides a list of CA villages and other place names in accounts of clan migrations, and a few other early sources provide scattered examples. Evidently by the time Harrington worked on Cahuilla in the 1930s knowledge of, and interest in, place names had begun to fade, although CA people as of this writing are very interested in them. Bean et al. (1991) and Lewis (2013) are more recent treatments.

As with CU, it seems likely that place names in *-pa* ~ *-va* could appear with other locational suffixes, but these are not attested.

- (4) CA a. *E7w-va* ‘a place in the Santa Rosa Mountains’ (< *-e7e7wa-* ‘sweat?’)
 b. *Ingi-l-pa* ‘Salton Sea’ (< *ingi-lj* ‘salt’)
 c. *Paw-va* ‘a spring’ (< *pawi-sh* ‘scrub oak’)
 d. *Saxa-ta-pa* ‘a village in San Timoteo Canyon’ (< *saxa-t* ‘willow sp.’)

15.2.4.2. LUISEÑO PLACE NAMES AND GENTILICS. LU place names are comparatively well documented, and most are conveniently assembled in a single long entry in the English>LU section of Elliott’s (1999) dictionary. In addition to the *-pa/-va* pair, reviewed above, LU exhibits several other suffixes in place-name derivations. These derivational suffixes are not general locationals – although there are one or two examples with locative *-nga* ‘in, on’, and also one or two with (archaic) dative *-ka* (contemporary LU has *-jik/-ik* ‘to, toward’). The suffix *-wuna*, which appears in 17 place names (see examples in (1)), may be the same element as *-wunax* ‘alongside of’.

- (1) LU a. *Chawáj-wuna* ‘a place behind Modjeska Peak’ (perhaps < *chawáj* ‘have shaggy, uncombed hair’)
 b. *Oopu-wuna* ‘a place at the bottom of the grade descending to Pala on the Pala-Temecula highway’ (perhaps < *oopu* ‘lie face upward’)
 c. *Qaaji-wuna* ‘a place in a canyon near Potrero’ (< *qaaji* ‘wash’, referring to a hero washing his hands here)
 d. *\$ang-wuna* ‘a corral on a mountaintop between Pala and Pauma’ (< *\$anga* ‘be piled up’)

An interesting process that as far as we know derives place names only in LU is truncation of the absolutive. The noun stem thus derived can be used by itself, as a place name. We give a complete list of the 42 examples that we have found, even where the source noun is unattested, because the morphology is unusual.

The process is as follows: If upon loss of the absolutive a resulting final vowel is retained and is unstressed, no further modification of the form occurs, as in (2). However, if upon loss of the absolutive its preceding vowel is deleted, the resulting final syllable is stressed and a glottal stop and a short copy of the stressed vowel is infixes to yield the place name, as in (3).

Note that several of the examples in (2) have final *-ma*, presumably the diminutive suffix *-ma-l*, but with loss of the absolutive. These may be related to the much more common place names in *-may* discussed below.

- (2) LU
- a. *Eevaka* ‘a hill near Mesa Grande’ (< *eevaka-l* ‘lid of coffin’)
 - b. *Jujma* ‘where Juan Despierto used to live’ (< *juuji-t* ‘snow’, *-ma-l*) [= (3c)]
 - c. *Naqwu* ‘El Manglar area around Corona’ (< *naqwu-t* ‘laurel sumac’)
 - d. *Palnima* ‘place between Pala and Mesa Grande’ (< *palni-t* ‘brush sp.’, *-ma-l*)
 - e. *Paawma* ‘Pauma’ (< *paawi-sh* ‘scrub oak’, *-ma-l*)
 - f. *Paaxama* ‘a place’ (< *paaxa-l* ‘reed sp.’, *-ma-l*)
 - g. *Pavla* ‘acorn camp on Mount Palomar’ (< *pavla-sh* ‘mountain ash’)
 - h. *Piveesima* ‘corral by Moojilpa’ (< *piveesa-sh* ‘reed sp.’, *-ma-l*)
 - i. *\$axa7* ‘place at Rincon’ (< *\$axá-t* ‘willow sp.’)
 - j. *\$iva7* ‘a place’ (< *\$ivá-t* ‘plant sp. of which granaries are made’)
 - k. *\$oovama* ‘Puerta La Cruz crossing’ (< *\$oova-l* ‘*Rhus trilobata*’, *-ma-l*)
 - l. *\$ojma* ‘a marsh’ (< *\$oj-la* ‘*Juncus* sp.’, *-ma-l*)
 - m. *Talaama* ‘Miller’s place near Valley Center’
 - n. *To7xa* ‘place at Rincon’ (< *to7xa-t* ‘red clay’)
 - o. *Toovasa* (unidentified place) (< *toova\$a-l* ‘white oak’)
 - p. *Tu7itama* ‘where Soboba hospital is’ (< ?, *-ma-l*)
 - q. *Tutpásma* ‘Quelite Place’ (< *tutpás-ABS** ‘kind of greens’, *-ma-l*)
 - r. *Wa\$xa* ‘place at Rincon’ (< *wa\$xa-t* ‘grass sp.’)
 - s. *Waavjama* ‘place on descent to Pauma’ (< *waavi-sh* ‘foxtail’, *-ma-l*)
 - t. *Wixe7tu* ‘a rounded peak near Pala’ (< *wixe7tut* ‘Coulter pine’)

- (3) LU
- a. *Avaa7ax* ‘Murrieta Town’ (< *avaaxa-t* ‘cottonwood’)
 - b. *Chee7ev* ‘a place’ (< *cheevi-sh* ‘act of picking’)
 - c. *Juu7uj* ‘where Juan Despierto used to live’ (perhaps < *juuji-t* ‘snow’) [= (2b)]
 - d. *Kulaa7aw* ‘biggest hill facing San Diego from Batiquito’ (< *kulaawu-t* ‘wood’)
 - e. *Lavoo7uv* ‘Reverend Woosley’s place at Rincon’ (< ?; locative is *Lavóv-nga*)
 - f. *Naa7ash* ‘a canyon near La Jolla’ (< *naash-la* ‘a kind of fern’; locative is *Naash-nga*)
 - g. *Naa7a\$* ‘a place near Potrero’ (< ?)
 - h. *Naa7av* ‘a place on Mount Palomar’ (< *naavu-t* ‘prickly pear’)
 - i. *Naa7ax* ‘a place near Potrero’ (< *naaxu-t* ‘praying mantis’)
 - j. *Pa7aa7aw* ‘Mount Palomar’ (< ?)
 - k. *Pichaa7a-v* ‘a canyon’ (< ?)
 - l. *Pii7iv* ‘place on highway between Lake Elsinore and Temecula’ (< *piiva-t* ‘tobacco’)
 - m. *Qee7ish* ‘San Luis Rey’ (< *qesh-la* ‘shellfish sp.’) (also *Qech* [Elliott 1999:803], with word-final *ch*)
 - n. *Qiwee7iw* ‘village on north side of Lake Henshaw’ (< *qiweewi-sh* ‘fox’)
 - o. *\$ivee7iv* ‘canyon near Agua Hedionda’ (perhaps < *\$ivee-la* ‘sycamore’)
 - p. *\$ee7ing* ‘a place’ (< *\$eenga-t* ‘bedrock’)
 - q. *\$ivee7ing* ‘Los Alisos’ (< *\$ivee-la* ‘sycamore’ [*aliso* is normally ‘alder’ in Spanish but it also covers ‘sycamore’ (Schoenhals 1988:15)])
 - r. *Too7uv* ‘a hill’ (< *toovi-sh* ‘white clay’)
 - s. *Waa7a\$* ‘Rincon’ (perhaps < *waa\$i-sh* ‘stretched’)
 - t. *Wulaa7aq* ‘San Ysidro’ (*wuláq-la* ‘buckwheat’)

A few irregular forms, where we would expect derivations of the type seen in (3) but do not encounter them, are shown in (4). Locatives are recorded for two of these forms: *Tuuku* ‘Wildcat Place’ has alternate locatives: *Tuuku-nga* ~ *Tuk-nga* ‘at *Tuuku*’. The locative identified for (4b) is *Jej-nga*. These locatives are like those shown in (7) below.

- (4) LU a. *Meexa* ‘place in Rincon, Santa Rosa’ (< *meexa-l* ‘cactus sp.’)
 b. *Jeeji* ‘a rock near the Rincon store’ (< *jeeji-sh* ‘tall’)
 c. *Tuuku* ‘Wildcat Place’ (< *tuuku-t* ‘wildcat’)
 d. *Wi7aa\$a* ‘a place’ (< *wi7aa\$a-l* ‘live oak’)

The place names in (2) exhibit regular suffixation with locational and gentilic suffixes, which are simply added without any change in the place name, as in (5):

- (5) LU a. *Eevaka-nga* ‘at *Eevaka* (a hill near Mesa Grande)’
 b. *Wixe7tu-jik* ‘toward *Wixe7tu* (a peak near Pala)’

There are irregularities with place names that end in glottal stops, as seen in (6), suggesting possible confusion between the place names and their source nouns. With *\$axa7*, the place name (6a) and the source noun (6b) behave differently, but the gentilic form from *\$iva7* (6c) appears to exhibit analogy with the phonological pattern seen in the ordinary locative of the source plant name (6d).

- (6) LU a. *\$axa-7-nga* ‘at *\$axa7*’
 b. *\$axaa-nga* ‘on the willow’ (cf. *\$axá-t* ‘arroyo willow’)
 c. *\$ivaa-nga-wi-sh* ‘person from *\$iva7*’
 d. *\$ivaa-nga* ‘on the *\$ivá-t* plant’

The derivations in (3) – the ones with infixes – are not the bases for suffixation. Instead, before locative and gentilic suffixes, the infixes and the vowel copy are lost. The stressed vowel, an underlyingly short vowel, appears as a long, open-syllable vowel in the place name and it becomes a short, closed syllable vowel before the consonant-initial suffixes, as in (7). Note the retention of underlying *ch* (not changed to *sh*) in (7c) before the derivational suffixes, while in word-final position it changes to *sh*.¹⁸⁴

- (7) LU a. *Kulaa7aw* ‘a hill’
 Kuláw-nga ‘at *Kulaa7aw*’

¹⁸⁴ But not in *Qech*, as mentioned above.

- Kuláw-juk* ‘toward *Kulaa7aw*’
- b. *Naa7av* ‘a place on Mount Palomar’
Nav-nga ‘at *Naa7av*’
Nav-juk ‘to *Naa7av*’
- c. *Qee7i-sh* ‘San Luis Rey’
qech-nga-wi-sh ‘person from *Qee7ish*’
qech-ja-m ‘people from *Qee7ish*’
- d. *Wulaa7aq* ‘San Ysidro’
wuláq-nga-wi-sh ‘person from *Wulaa7aq*’
wuláq-ja-m ‘people from *Wulaa7aq*’

When the stressed vowel is underlyingly long, it appears both in the derived place name and in its inflections and forms derived from it, as seen in (8). Note for (8c) that the inflectional possibilities reported for the place name and for its underlying noun are slightly different.

- (8) LU a. *Avaa7ax* ‘Murrieta Town’
avaax-nga-wi-sh ‘person from *Avaa7ax*’
- b. *Naa7ash* ‘a canyon near La Jolla’
Naash-nga ‘at *Naa7ash*’
Naash-juk ‘to *Naa7ash*’
- c. *\$ivee7ing* ‘Los Alisos’
\$ivee-nga ‘at *\$ivee7ing*’
\$ivee-nga ~ *\$ive7-nga* ‘at the sycamore tree’
- d. *Waa7a\$* ‘Rincon’
Waa\$-nga ‘at *Waa7a\$*’

The most common derivation for LU place names, with about 75 examples attested, is with a suffix *-maj*. The same suffix is also used to derive junior kin terms in reciprocal pairs, such as *-kmo* ‘father’s older brother’ and *-kmo-maj* ‘man’s younger brother’s son’ (see 13.11.2). These examples appear to show the base form of the diminutive suffix. Recall that underlying *-maj* contracts to *-ma* before the absolutive suffix (see 4.4.2). With no absolutive suffix in the place name, the uncontracted form *-maj* can occur. However, we hypothesize that the place names in *-ma* (not *-maj*), such as example (9d.1), are

derived directly from common nouns in *-ma-l*, with no allomorphic adjustment of the diminutive upon loss of the absolutive suffix, while the forms in *-maj* are diminutives of the place names themselves, perhaps as a newer place in relation to the non-diminutivized name. This pattern has been encountered in other Uto-Aztecan languages, as in the relation between Nahuatl *Tlaxcallān* ‘Tlaxcala’ and *Tlaxcallāntzīnco* (Tlaxcalanzingo) ‘Little Tlaxcala’ or ‘New Tlaxcala’, and between *Chuk\$on* ‘Tucson (black-base)’ and *Ali Chuk\$on* ‘Little Tucson’ in Tohono O’odham. There are several LU examples of doublets that are consistent with this analysis and will serve to illustrate the construction. Example (9d.2) shows the result of suffixal haplology: *-ma-maj* > *-maj*.

- (9) LU a. 1. *Pii7iv* ‘a place between Lake Elsinore and Temecula’
 2. *Piiv-maj* ‘a place near Elsinore, Little *Pii7iv*’
 b. 1. *Qee7ish* ‘San Luis Rey’
 2. *Qesh-maj* ‘Little *Qee7ish*’ (with *ch* > *sh* before the diminutive suffix)
 c. 1. *\$ee7eng* ‘Bedrock Place’
 2. *\$eng-maj* ‘Little *\$ee7eng*’
 d. 1. *\$oj-ma* ‘a marsh’
 2. *\$oj-maj* ‘Little *\$ojma*’
 e. 1. *Toova\$a* ‘a place’
 2. *Toova\$a-maj* ‘Little *Toova\$a*’

The final derivational suffix for place names is simply *-j*. There are 18 place names of this type attested, apart from the 75 or so examples of *-j* as part of the diminutive suffix. Some examples of *-j* are given in (10). Nearly all of these names appear to be derived from verb roots, and they are attested mainly in songs and chants, usually appearing in couplets like that in (10d).

- (10) LU a. *Heeta-j* ‘a place in heaven’ (< *heeta* ‘descend?’)
 b. *\$uuva-j* (a place mentioned in the Creation chant) (< *\$uuva* ‘rustle?’)
 c. *Wiiva-j* ‘site of Jesús Machado’s old ranch’ (a song word)
 d. *Xwaja-j*, *Piwa-j* ‘White Place, Gray Place’ (the fourth pair of places listed in the Creation chant)

Place names derived with *-maj* and *-j* exhibit regular locational paradigms, with a local case suffix but no loss of other suffixal material.

- (11) LU a. *\$eng-maj-ik* ‘to *\$engmaj*’
 b. *Heeta-j-nga* ‘at *Heetaj*’

Gentilic derivations in LU are notable because the singular and the plural are always distinguished (that is, plural forms are not used of singular referents), and the endings are suppletive. The singular gentilic suffix sequence is *-nga-wi-ish*, but the plural is *-ja-m*. The suffix *-nga* may be a combining form of ablative *-ngaj*. Combined with *-wi-sh* it references ‘origin’ or ‘belonging’, and can be used as well with stems other than place names, e.g. *qawii-nga-wi-sh* ‘from the mountains’, *-juu-nga-wi-sh* ‘originating on one’s head’, *awaal poo-nga-wi-sh* ‘belonging to a dog’, *awoo-nga-wi-sh* ‘different’ (*awoo* ‘other’). The suffix *-wi-sh* also appears without *-nga* in some tribal names, e.g. *kichám-ka-wi-sh* ‘Diegueño (literally, ‘one to the south’). However, in these cases, where the base is not a place name, the plural is regular: *awoo-nga-wi-chu-m* ‘different ones’, *kichám-ka-wi-chu-m* ‘Diegueños’.

Examples of these suffixes with place names formed by truncation appear in (7c,d) and (8a) above. With other place names they behave like the local case forms in (11), as seen in (12). There are a few irregularities, as in (12b), where the locative *-nga* of *Awa-nga*, which is not part of the gentilic sequence, is lost in the plural, presumably by analogy, with (12b) based on (12a) where *nga* is in fact part of the gentilic sequence. Note that we do not find **awaa-nga-nga-wi-sh*. There is a strong tendency throughout Cupan to delete one of a pair of identical suffixes if for some reason such a sequence could occur. See (9d) above for another example.

- (12) LU a. 1. *Awa7* ‘Aguanga’
 2. *awaa-nga-wi-sh* ‘person from Aguanga’
 3. *awaa-ja-m* ‘people from Aguanga’
 b. 1. *Ushmaj* ‘Las Flores’
 2. *ushmaj-nga-wi-sh* ‘person from Las Flores’
 3. *ushmaj-ja-m* ‘people from Las Flores’

- c. 1. *Kuupa* ‘Cupa’
 2. *kuupa-nga-wi-sh* ‘person from Cupa, a Cupeño’
 3. *kuupa-ja-m* ‘people from Cupa, Cupeños’

15.2.4.3. CUPEÑO PLACE NAMES AND GENTILICS. The two major sources for CU place names are a single microfilm reel (3.130) of J. P. Harrington’s field notes, and Strong (1929), which includes a list of 90 named sites under control of individual CU clans. An astonishing 271 place names are recorded for the small CU territory and its immediate surroundings, and Strong believed that his list of 90 clan-owned sites, collected 20 years after the Cupeños had been expelled from Cupa, probably included only about half of these.

While Strong’s transcriptions are sometimes difficult to interpret, and often there is no etymology to be found for his place names or Harrington’s, it is possible to determine whether the place names have derivational suffixes. This determination suggests that, in contrast to LU, the majority of CU place names do not exhibit place-name-specific derivational suffixes. CU has about 28 place names in *-pa* ~ *-va*. This number is approximate, because for a few of Strong’s transcriptions, it is difficult to determine if the final *-va* is the place name suffix or the realis subordinating suffix *-vy*. For instance, Strong’s <nañova> might be a transcription of *Nangʔaw-vy* ‘where funerary images were made’, or *Nangi-va* ‘fight place’.

There are also 17 place names with the diminutive suffix *-ma*. For LU, we analyzed this as a product of absolute truncation on the suffix sequence *-ma-l*. CU does not, however, seem to have absolute truncation as a regular derivational process in place names. It may be that *-ma* is the equivalent of LU *-maj* ‘junior place name’. For instance, Harrington collected *Ushma* ‘a place by Oceanside’. J. Hill collected *Ushmaj*, identical to the LU form. Opposed to this hypothesis is another example that suggests that CU *-ma* is simply a place-name suffix. The third son of the CU founder was named *Changalángaʔash*. The place given to him by the founder is *Changlá-ma* (3.130.0667, 0669). There are a few doublets, shown in (1). These hint that the *-ma* forms may be junior place names. Example (1d.1) has the absolute suffix *-l*.

- (1) CU a. 1. *Kylyl-ma* ‘place in the Cañada Verde’ (3.130.0683)
 2. *Kylyl-va* ‘manzanita place’ (H&N 158[244])
 b. 1. *Kupa-ma* ‘a pile of rocks by the arroyo’ (3.130.0669)
 2. *Kupa* ‘Cupa, Warner’s Hot Springs’
 c. 1. *Maa\$í7-ma* ‘a place’
 2. *Ma\$í-lj* ‘a Kavalj clan acorn site’ (< *ma\$í-lj* ‘fern sp.’)
 d. 1. *\$a7í-ma-l* ‘a Norte clan gathering site’ (< *saimal* > Strong 1929:245)
 2. *\$a7í-lj* ‘a Kavalj clan gathering site’ (< *saíyil* > Strong 1929:247) (cf. CU *-\$a7í* ‘guts’. Strong did not write the difference between *s* and *\$*. Initial *s* would be a CA pronunciation; cf. CA *sa7í-lj* ‘guts’.)

In addition to *-ma*, another derivational element that is common in CU place names but rare and apparently archaic elsewhere is a suffix *-7i*. It appears in a few CU adjectives, showing up in the modifiers in (2a-c). The more usual suffix is *-7a*. However, in (2d) and (3), the forms suffixed with *-7i* are nouns, and an apparent verb stem in (3c.2). Examples of place names with *-7i* appear in (2). In the case of *-7i* with absolutive nouns, there are some doublets, shown in (3).

- (2) CU a. *Kawí-sh Atúl-7i* [rock-ABS black-PLACE] ‘a Kavalj lineage acorn site’
 b. *Pa-l Kwa\$-7i* [water-ABS ripe-PLACE] ‘the meadow with cottonwoods near Warner’s ranch house’ (3.130.0629)
 c. *Ku7u-t Kyjí-t-7i* ‘place where the founder of Cupa lived’ (said to mean ‘elderberry (*ku7ut*) which has all foliage taken off bottom, left at top’)
 d. *Paxa-l-7i* [reed-ABS-PLACE] ‘the reedy place on the Cupa side of Santa Ysabel’ (< *paxa-l* ‘reed’) (3.130.0683)
- (3) CU a. 1. *Naxat* ‘a Norte lineage site near *Ali7ma*’ (< *naxat* > Strong 1929:245)
 2. *Naqat-7i* (130.0628)
 b. 1. *Tashvala7ash* ‘place beyond the alfalfa toward Mesa Grande’
 2. *Tashval-7i* (Harrington comments “good either way”) (3.130.0683)
 c. 1. *Wiljaxwyny* ‘where the American lives’
 2. *Wilji-7i*

There are also a number of place names that have final *-i* without a glottal stop. Where these are recorded only by Strong, who never wrote the glottal stop, we can perhaps

safely interpolate it, but there are similar recordings by Harrington, who almost certainly would have heard it if it was present. Harrington sometimes recorded final *-i* as *-e* (as in the example in (3c.1) above). A few examples with final *-i* appear in (4).

- (4) CU a. *Hiljaqal-i* ‘Kavalj acorn site’ (<hilyakali> Strong 1929:245); [*H*]iljaqale ‘George Keyser’s place, meaning where water is dripping’ (3.130.0690) (*hily-a-qal* ‘it was dripping’)
 b. *Kawa-l Ki-ch-i* ‘Rat’s House’ (3.130.0627)
 c. *Pajaxch-i* ‘a place, means water “medio pasado un poco” [polluted?]’ (3.130.0657)
 d. *Pawy-t-i* ‘a place’ (3.130.0308) (< *pawy-t* ‘water baby’)

The CU inflected postposition *py-ta* ‘on it, in it, on top of it’ also means ‘at a place’, seen in (5). In CA, *pe-ta* means ‘over, above’ and is used in comparative expressions (Seiler 1977:207) and in counting (e.g. *namechúmi pe-ta wih* ‘two on ten, twelve’).

- (5) CU a. *Tukvál py-ta* ‘at Tukvál’
 b. *A\$wy-t Pý-ki py-ta Py-nash-lja7*
 eagle-ABS 3SG-house 3SG-at 3SG-sit-INS
 ‘a big flat rock where they put eagle in its cage’ (“the place for setting down the eagle’s house”) (3.130.0630)
 c. *py-ta ishmiví-j kwa7-í-sh py-7a~7chiwin-pi*
 3SG-on something-ACC eat-NMLZ-ABS 3SG-REP-make-IRR.SUB
 ‘a place for him to prepare some kind of food’ (Coyote kills his daughter 27)

However, ordinary local case suffixes can appear with place names. Where the place name has an absolutive suffix, it is not usually lost before the local case suffix, as in (6a).

- (6) CU a. 1. *Jujka-t* ‘Soboba’
 2. *Jujka-t-nga* ‘at Soboba’
 b. 1. *Kupa* ‘Cupa, Warner’s Hot Springs’
 2. *Kupa-ngax* ‘from Cupa’

CU gentilics, unlike those of LU, have regular, non-suppletive plurals. The singular is *-ngax-wi-sh* ‘ablative-origin-ABS’, and the plural is *-ngax-wi-chi-m*. The local case element in the sequence is different from that in LU. LU has *-nga* ‘in, on, at’, while CU has *-ngax* ‘from’ (LU ‘from’ is *-ngaj*). CA has the same suffix sequence seen in CU. Examples appear in (7). As in LU, the ‘origin’ suffix sequence *-wi-sh* can appear, without *-ngax*, with bases that are not place names, as in (7c). In one instance, (7d), CU has the same suppletion as seen in LU.

- (7) CU a. 1. *pal atíngvy-ngax-wi-sh* ‘person from Cupa’
 2. *pal atíngvy-ngax-wi-chi-m* ‘people from Cupa’
 b. 1. *wiláqalpa-ngax-wi-sh* ‘person from *Wiláqalpa*’
 2. *wiláqalpa-ngax-wi-chi-m* ‘people from *Wiláqalpa*’
 c. 1. *kichámka-wi-sh* ‘Diegueño person’ [south-origin-ABS]
 2. *kichámka-wi-chi-m* ‘Diegueño people’
 d. 1. *mym-ngax-wi-sh* ‘White person’ [ocean-from-origin-ABS]
 2. *mym-ja-m* ‘White people’

15.2.4.4. CAHUILLA PLACE NAMES AND GENTILICS. The best source of information on CA place names is Strong (1929). His transcriptions are often difficult to interpret, and many of the names apparently lacked etymologies. However, it is usually possible to distinguish derivational suffixes. Even more than in CU, in CA the vast majority of place names are simply ordinary words or phrases. There does not appear to be any set of suffixes that are productive and restricted to place names. There are about 170 place names recorded in Strong (1929), in Harrington’s notes, and in Seiler and Hioki (1979). Of these, the largest single group with a single derivation are 10 place names with finals in *-paʔ ~ -vaʔ*, illustrated above in 15.4.1. There are five examples with a suffix *-k*, probably a frozen dative form, e.g. *alxawi-k* ‘perhaps Indio Mountain’ (literally, ‘Bowstring Place’) (Strong 1929:101). There is one example with *-ma*: *Kuʔal-ma* (3.130.0309) ‘louse place’. There is one example with *-ʔi*, *Mawulmʔi*. Strong (1929:41) transcribed < māuūlmīi >. Strong’s < māuūl > is surely *mawul* ‘California fan palm, *Washingtonia filifera*’.

Several CA gentilic suffixes and suffix sequences are recorded. Examples appear in (1). These include *-kik* (singular – not expected *-kikat*), plural *-kik-ta-m* (1a,b), and *-ngax-vi-sh* (singular), with regular plural *-ngax-vi-che-m* (1c-e). The latter form is often clipped,

yielding *-ax-vi-sh*, *-ax-vi-che-m*. It also appears as *-pax-vi-sh*, *-pax-vi-che-m* (1f) or lenited *-vax-vi-sh*, *-vax-vi-che-m*. It may be that the first type tend to be clan labels, while the second labels village origin, but this is not clear. *-vi-sh* is also a general characterizing suffix, e.g. *muluk-vi-sh* ‘one in first position’ (Seiler 1977:104). Example (1d) provides interesting documentation that the LU place name *Qee7ish*, a regular result from LU absolute truncation, was known to the CA, although the place name is often recorded simply as *Qech* in the LU records.

- (1) CA
- a. *wani-kik* ‘Pass Cahuilla person’
wani-kik-ta-m ‘Pass Cahuilla people’
 - b. *wachi-nga-kik-ta-m* ‘members of a clan originating at Wachinga, a mountain in the Santa Rosa range’
 - c. *pawi-ngax-vi-sh* ‘person from *Pawi7* (Cahuilla Valley)’
pawi-ngax-vi-che-m ‘people from *Pawi7*’
 - d. *qe7ish-ngax-vi-sh* ‘Luiseño person (person from *Qee7ish* ‘San Luis Rey’)’
 - e. *sexe-ngax-vi-sh* ‘person from Palm Springs’
sexe-ngax-vi-che-m ‘people from Palm Springs’
 - f. *wani-sh-pax-vi-sh* ‘river person (any river)’
wani-sh-pax-vi-che-m ‘river people’

There is almost no information on how CA place names work with local case elements. Seiler (1977:104) uses the English loan *Vaani(-nga)* ‘Banning’ to illustrate a claim that place names add local case suffixes without modification, e.g. *Vaani-nga* ‘in Banning’, *Vaani-ngax* ‘from Banning’.¹⁸⁵ However, the few examples found in Seiler (1970) give a more complex picture. They appear in (2). In the case of *Tuva*, if the second syllable can be identified as the “spring” suffix *-va*, then this CA suffix behaves like the same element in other Takic languages, permitting further locational suffixation. (2a) and (2b) show different treatment of the second vowel. In (2a) it is found before both locational suffixes while in (2b) the vowel occurs only before the glide-initial dative suffix *-jka* but undergoes syncope before ablative *-ngax*. Example (2c) is an attestation of *-pa7* apparently as a locative suffix; note that this suffix is homophonous with a particle *pa7* which may introduce a locational clause, as in (3). The example in (2d) with an inflected

¹⁸⁵ Harrington gives the MCA name *Chikisva7* ‘Banning town’ (3.114.0416).

postposition is unique, so we do not know what kinds of place names require this kind of treatment. This is reminiscent of CU examples like *Tukvál py-ta* ‘at *Tukvál*’ cited above in 15.4.3 (5a).

- (2) CA a. 1. *Tuva-nga* ‘to/at *Tuva* (Oasis)’ (Seiler 1970:75 (12)) (Harrington’s ‘Fish Springs’ (3.108.0132))
 2. *Tuva-jka* ‘to/towards *Tuva* (Oasis)’ (Seiler 1970:77 (37))
 b. 1. *Sex-ngax* ‘from *Sexe* (Palm Springs)’ Seiler 1970:189 (24))
 2. *Sexe-jka* ‘to *Sexe* (Palm Springs)’ (Seiler 1970:193 (39))
 c. *Kaviñi-sh-pa7* ‘at *Kaviñish* (Indian Wells)’ (Seiler 1970:189 (24))
 (< *kavi-ni* ‘make holes’)
 d. *Jamesével pijik* ‘to *Jamesével* (Mission Creek)’ (Seiler 1970:157 (11, 14))
 e. *Jamíwo-jka* ‘to Mt. San Jacinto’ (3.112.0397)

- (3) CA *enga pe haxate-nga, Qawuwaxa-l¹ pa7 penga*
 here FOC what’s.its.name-LOC mortar.and.pestle-ABS where there
he7i mijax-wen pa7 hing-ive
 3SG:footprint be-ST.PST where jump-REAL
 ‘here at what’s-its-name, Mortar-and-Pestle, where his footprint was, where he jumped’ (Seiler1970:75 (11))

¹ Seiler (1970:74) inexplicably translates *Qawuwaxal* as “the RAT’S FOOT” (sic, with capital letters) though in his dictionary the word is given as meaning ‘mortar, mortar and pestle’ (Seiler & Hioki 1979:169).

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