MONO GRAMMAR

Submitted in Partial Satisfaction
of the Requirements for the
Degree of Doctor of Philosophy

by

Sydney MacDonald Lamb

Completed December, 1957
University of California

MONO GRAMMAR

Submitted in Partial Satisfaction
of the Requirements for the
Degree of Doctor of Philosophy

by

Sydney MacDonald Lamb

Completed December, 1957
University of California

PREFACE

This description is based upon material contained in field notes and tape recordings which were obtained in the vicinity of North Fork (Madera County), California, during the summers of 1953 and 1954. Material on other Mono dialects and on Paviotso (Northern Paiute), which serves as the primary basis for the statements of article 3 of the introduction, was obtained in the field during the same summers. Some of the data was checked and amplified during another visit to North Fork during the latter part of January, 1955. These field trips were made possible by the Survey of California Indian Languages, Department of Linguistics, University of California, Berkeley, whose generous assistance is hereby gratefully acknowledged.

The great preponderance of my corpus was provided by Mrs. Lucy Kinsman, an intelligent elderly lady who has witnessed the breakdown of her native culture with great sorrow. Her interest in this linguistic project, and her cooperativeness, patience, and enthusiasm, have rendered me exceedingly grateful for the part she has played in helping to make available a description of her language. I am grateful

also to the other North Fork informants who have supplemented the data provided by Mrs. Kinsman: Annie Wenz, Susan Johnson, Louie Carmen, Hausen Lavell, and Joe Kinsman (Lucy Kinsman's husband). Two former North Fork residents now living in the San Francisco Bay area, Mrs. Elizabeth Bethel and Mrs. Daisy Coleman, have given me some helpful additional data from time to time. Also deeply appreciated is the assistance of Mrs. Rosalie Bethel of North Fork, who served as an able interpreter during my work with Mrs. Kinsman, Mrs. Wenz, and Mrs. Johnson.

The members of the committee which has supervised this work, Madison Beeler, Murray B. Emeneau, and Mary R. Haas, have graciously offered valuable advice and encouragement. To them, and particularly to Professor Haas, the chairman of the committee, who has generously given of her time to discuss problems and to suggest improvements in style, organization, and other matters, I owe my hearty thanks.

TABLE OF CONTENTS

		Page
Preface		2
	INTRODUCTION	
1	Conceptual Framework	7
2	The Scope of the Description	13
3	Mono Dialects	14
4	Early Bibliography	17
	CHAPTER ONE - PHONOLOGY	
101	General Remarks	19
102	Inventory of Phonemes	20
103	Phoneme Classes	21
104	Segmental, Suprasegmental, Sequence	22
105	The Syllable	22
106	Arrangements of Phonemes	23
107	Stress	24
108	Notation	28
110	Obstruents	29
120	Resonants	48
130	Glottals	58

140	Vowels	64
150	Junctures	72
160	Suprasegmental Phonemes	79
170	Anomalous Phonemes	83

CHAPTER TWO - MORPHOPHONEMICS

201	Orientation	88
202	Inventory of Morphophonemes	89
203	Morphophoneme Classes	89
204	Notations	90
210	Oral Consonant Morphophonemics	92
220	Glottal Morphophonemics	102
230	Vowel Morphophonemics	113
240	Reduplication	123
250	Juncture Morphophonemics	124

CHAPTER THREE - MORPHEME CLASSES

301	Introductory	126
302	Orientation	126
303	Morpheme Class Labels	127
304	Notations	135
310	Nominal Elements	137
320	Pronominal Elements	174
330	Substantival Suffixes	194
340	Locative Elements	205

350	Miscellaneous Adverbial Elements	218
360	Verbal Elements	233
370	Verbal Suffixes	261
380	Prefixes	283
390	Minor Classes	303

CHAPTER FOUR - MORPHEME ARRANGEMENTS

401	Introductory	314
402	Orientation	315
403	Distribution Classes	317
404	Notations	318
410	Noun Stems	321
420	Pronominal Forms	330
430	Substantive Expressions	334
440	Locative Expressions	338
450	Miscellaneous Forms	346
460	Verb Stems	351
470	Verbal Expressions	365
480	Indicative Expressions	373
490	Non-indicative Frustums	386

INTRODUCTION

1. Northfork Mono is here described in terms of a framework of three structural levels containing discrete, precisely definable elements, plus two peripheral levels, which relate the linguistic structure to the extralinguistic phenomena of nature and society. The levels, listed in order, are: phonetic, phonemic, morphophonemic, morphemic, and semantic. The three middle levels (whose names end in -emic) are the structural levels. Any utterance or text has, of course, simultaneous existence on each of the five levels, but its nature on each of the levels (as ascribed by the grammarian during the analysis for the sake of a simple description) differs from that on each of the other levels. The various elements and combinations of elements which are set up on each of the structural levels, as a result of abstraction based on comparison and analysis of many utterances, are endowed with a separate existence by the analyst. Such an element or combination of elements on a given level may be spoken of as the representation on that level of that portion of an utterance or set of utterances which it accounts for. It will also be spoken of as representing on that level an element or combination of elements of another

level which accounts for the same portion of an utterance or set of utterances. For the sake of variety, the word 'realization' is sometimes used instead of 'representation', in the second sense.

a. The primary element on the phonemic level is the phoneme. A phoneme is one element of that set of elements which most economically accounts for all of the speech sounds falling within the scope delimited by the analyst (as in article 2 below). It is not a class of segmented portions of expression substance, but a single element of expression form, which accounts for certain features of the phonetic substance. The representations of a phoneme on the phonetic level may be called its allophones. Phonemes and combinations of phonemes are identified as having existence on the phonemic level by being enclosed in /.../.

b. On the morphemic level, the primary unit is the morpheme, a unit of content form, which is arrived at by the conventional methods familiar to linguistic scientists. The method of symbolizing morphemes is described below.

c. The morphophoneme is the primary unit of the morphophonemic level, and is identified as existing on that level by enclosure in //...//. The morphophonemes are set up to account for: (1) recurrent (i.e. for more than one morpheme) alternations among phonemes in alternate phonemic

representations of morphemes (except where part of the alternation coincides with an alternation of this type, and the remainder involves free variation with the alternants included in the former, as is the case with the noun roots mentioned below); (2) phonemes which undergo no alternation in phonemic representations of morphemes; (3) non-recurrent alternations involving more than one combination of morphemes which are not capable of being described in terms of alternate morphophonemic representations of morphemes, where the morphophonemes involved would be of types (1) and/or (2). Type (2) is necessary for the sake of fulfilling the requirement that all of the phonemic material be accounted for on the morphophonemic level. Other types of alternation among the phonemic representations of morphemes are described in terms of alternate morphophonemic representations of these morphemes. These alternate representations will be called allomorphs. Allomorphs thus have their existence on the morphophonemic level, not on the phonemic level as in most previous linguistic descriptions.

An example of type (3) is provided by the Northfork morphophoneme //N//, which occurs in an allomorph of a single morpheme, and therefore covers a non-recurrent alternation. This is the objective morpheme (337), which may be symbolized (according to the device described in d below) as <Na> nO 'obj.'. There are several morphemes which have (as their

morphophonemic representations) freely varying allomorphs differing by the presence or absence at their end, of the morphophoneme //'// (227), for example //ciwijahnu//~ //ciwijahnu'//, a masculine name. The morpheme <Na> nO 'obj.', when occurring after morphemes whose morphophonemic representations, or morphs, end in //V// (204), is realized phonemically as /na/. It is realized as /aa/ after morphemes whose morphs end in //'// (without the free variation). Thus we have /pihkui'aa/ (227g) representing the combination of <Na> with <pihkui'> //pihkui'//, another masculine name. For the combination of <Na> with //ciwijahnu//~//ciwijahnu'// we find /ciwijahnuna/~/ciwijahnu'aa/ in free variation. The selection of /na/ or /aa/ as the representation of <Na> depends upon its morphophonemic environment, not upon its morphemic environment. To avoid mixing of levels, with the concomitant danger of circularity, it is necessary that the representations of an element of a given level be defined in terms of its environments on that same level. Thus it is necessary that <Na> have a single morphophonemic representation in the morphophonemic environments //'-// and //V-//. To say that <Na> has the freely varying allomorphs //aa//~ //na// when occurring after <ciwijahnu(')> would be to imply the possible occurrence of *//ciwijahnuaa// and *//ciwijahnu'na//, neither of which occurs. <Na> is given a single morphophonemic representation //Na// by the setting up of the morphophoneme //N//, even though the alternation covered by it

does not occur in the representations of any other morphemes. (The morphophoneme //n// cannot be used since it is set up to account for occurrences of /n/ which do not participate in this alternation.)

On the other hand, no economy is gained by this device if only one combination of morphemes is involved, since freely varying portmanteau morphs can be set up for this single combination. This type of situation is illustrated by the combination <ʔyh ni>, with its freely varying portmanteau representations //ʔyhnih//~//ʔyih// in some environments (322b).

d. Each of the structural elements has as its properties a specific definable relationship to the adjoining levels and a distribution in relation to other elements of the same level. The phonemes and morphophonemes of Northfork are small enough in number to be kept track of easily, and they can be most conveniently symbolized by single letters of the alphabet and similar symbols. The morphemes, however, are so numerous that it is generally advisable to cite them by indication of each of their three properties. This is done as follows:

(1) An indication of the morphophonemic representation is given first, enclosed in <...>. This is considered the fundamental, or simple, symbolization of the morpheme. If the morpheme has more than one morphophonemic

representation, one of them (or some other convenient symbolization, such as <oiwijahnu(')>) is given.

(2) This is followed by the symbol indicating distribution class membership (303), without any enclosure.

(3) Following this, wherever feasible, is an indication of the basic semantic representation or meaning, enclosed in '...'.

A few morphemes of a special type have zero content and unique distribution. These are called the tactic junctures (397). They are symbolized merely by their morphophonemic representations, enclosed in <...>.

e. The relationships of the various structural elements are indicated in the table below.

Level	Primary Element	Secondary Element
Semantic		(Allo)seme
Morphemic	Morpheme	
Morphophonemic	Morphophoneme	(Allo)morph
Phonemic	Phoneme	(Allo)morphophone
Phonetic		(Allo)phone

Since the phonemic realizations of morphophonemes are usually phonemes (i.e. morphophones and phonemes usually coincide), and since these realizations are for the most part described symbolically (204b), it has not been found

necessary to make use of the terms 'morphophone' and 'allomorphophone'.

2. Each idiolect has its own structure, which differs in some details even from very closely related ones. It has been decided to describe a single linguistic structure rather than to attempt a composite description covering several dialects or several varieties of one dialect. Accordingly, the description is based on the speech of Lucy Kinsman plus that part of the material obtained from other informants which is consistent with the patterns of Lucy Kinsman's speech. In two or three places, comments on patterns of other speakers which fall outside this scope are included.

Since there is little variation of importance in the Northfork area, the structure here described can be assumed to be adequately representative of the Northfork subdialect of Mono, even though it does not necessarily coincide in all details with that of other Northfork speakers. Thus the phenomena described will be referred to as phenomena of Northfork Mono (or of Northfork).

It has not been considered profitable to account for every vocal sound emitted by the informants on the levels of linguistic structure. Some of the speech sounds have been accounted for by 'anomalous phonemes', which are not

considered part of the standard phonemic system, and are not accounted for in the description of the higher levels. The reasons for the exclusion of these sounds from the standard phonemic system are given in 170. For similar reasons, other vocal sounds too trivial to mention have been excluded altogether from the description. The junctures and the supra-segmental phonemes have not been described in complete detail with regard to their phonetic realizations; and the supra-segmental phonemes and the infrequently occurring juncture /,/ have not been accounted for on the morphophonemic, morphemic, and semantic levels. Not all of the Northfork morphemes are represented in the corpus which served as the basis for this description, and the morphemes have not been thoroughly described with regard to their semantic representations. Aside from these limitations, all of the material on each of the three structural levels and two peripheral levels has been accounted for on the adjoining levels.

3. The Mono or Monachi language was formerly spoken, in several dialects, in that part of the foothill area of the western slope of the Sierra Nevada which is drained by the San Joaquin, Kings, and Kaweah rivers, and in the area directly to the East of the southern Sierra Nevada. There still survive perhaps a few score speakers scattered throughout this territory, representing to some degree most of the

former dialects. On the basis of similarities and differences in their reflection of the Proto-Mono phonemic system, the various speech-forms can be classified into three superdialects, comprising seven dialects, five of which can be further divided into subdialects. The Northwestern Mono superdialect contains the San Joaquin and Kings dialects, each of which has two subdialects separated by the rivers. Northeastern Mono is spoken in three dialects, two of them in the northern part of the area drained by the Owens River, the third across the White Mountains to the east, in Deep Springs and Fish Lake Valleys. Southern Mono spans the Sierra Nevada, with one dialect extending from Big Pine southward to Owens Lake, the other in the area drained by the Kaweah River. It is safe to say that mutual intelligibility prevailed between any two points in the area, although a good deal of difficulty in understanding could be encountered between speakers from widely separated points. Speakers of the South Owens Valley dialect, for example, miss a great deal in attempting to understand recorded texts from the San Joaquin dialect. In the give-and-take of face-to-face conversation, however, it is very likely that a high degree of mutual understanding would be achieved rapidly.

Although resemblances between the dialects are, of course, greatest between those belonging to the same superdialect, there is also great similarity (1) between the

San Joaquin dialect and that of Long Valley and Benton in the northernmost part of the Owens River drainage, and (2) between the Deep Springs dialect (Deep Springs and Fish Lake Valley) and that of the southern Owens Valley. The Deep Springs dialect preserves most faithfully the phonemes of Proto-Mono.

The San Joaquin dialect consists of the Auberry subdialect, on the south side of the river, and the Northfork subdialect, on the north side. The Northfork area is thus at the northwestern corner of the Mono territory. It borders on the territory of the Chukchansi Yokuts, to the west, and that of the Southern Sierra Miwok, to the north.

The closest linguistic relative of Mono is the Paviotso or Northern Paiute language, whose area extends northward from the watershed divide between the headwaters of the Owens River and Mono Lake basin. The speech of the Bannock Indians of Fort Hall Reservation in Idaho, whose territory was surrounded by that of the Shoshonis, represents a dialect of Paviotso which differs only very slightly from the Paviotso of Oregon and northern Nevada. Paviotso resembles Mono strongly in lexicon, very strongly in phonology, but it differs rather surprisingly from Mono in many features of grammatical structure. Mono and Paviotso comprise one of the three subdivisions of the Numic or Plateau Shoshonean family, which in turn belongs to the Utoaztekan stock.

4. No grammatical description of Mono has ever appeared in print, but a few lists of vocabulary items, recorded with varying degrees of proficiency, have from time to time been published. The earliest of these, recorded by Oscar Loew in 1875, was published by Gatschet (1879), as number 12 ("Pa-Uta of California"). Other vocabulary lists have been published by Kroeber (1907), Steward (1933, 1938), and Driver (1937). Additional lexical items are to be found in publications of Gayton (1930, 1948), Gifford (1922, 1923, 1932), and Steward (1934, 1936).

Driver, Harold E.

1937 Culture Element Distributions: VI, Southern Sierra Nevada, UC-AR 1:2.

Gatschet, Albert S.

1879 Classification into Seven Linguistic Stocks of Western Indian Dialects Contained in Forty Vocabularies, U.S. Geographical Surveys West of the 100th Meridian, 7.403-85. (Washington).

Gayton, A.H.

1930 Yokuts-Mono Chiefs and Shamans, UC-PAAE 24:8.

1948 Yokuts and Western Mono Ethnography II: Northern Foothill Yokuts and Western Mono, UC-AR 10:2.

Gifford, E.W.

1922 Californian Kinship Terminologies, UC-PAAE 18.

1923 Western Mono Myths, Journal of American Folklore 36.301-67.

1932 The Northfork Mono, UC-PAAE 31:2.

Kroeber, A.L.

1907 Shoshonean Dialects of California, UC-PAAE 4:3.

Steward, Julian H.

1933 Ethnography of the Owens Valley Paiute, UC-PAAE 33:3.

1934 Two Paiute Autobiographies, UC-PAAE 33:5.

1936 Myths of the Owens Valley Paiute, UC-PAAE 34:5.

1938 Basin-Plateau Aboriginal Sociopolitical Groups, BAE-B 120.

CHAPTER ONE

PHONOLOGY

101. The phonemic system of Northfork Mono is simple in terms of its inventory of consonants and vowels, and in the combinations of consonants and vowels which occur, but it possesses fairly complicated patterns of junctural and intonational phenomena. Noteworthy features of the system are: (1) voicing is entirely non-distinctive throughout the roster of phonemes, and all of the phonemes except /s x ʔ/ have voiced and voiceless allophones; (2) the "word-juncture" /+/ is in general quite clearly marked by stress and by articulatory allophones of the consonants and vowels; (3) there is a systematic stress pattern and a very elaborate intonational apparatus, although no stress phonemes nor phonemic pitch levels are necessary to describe the prosody; and (4) some of the consonants have a wide variety of phonetic representations. A pervading feature of the system, which might be considered a constant for the language rather than assigned to the list of properties of any phoneme or class of phonemes, is the weak articulation of consonants in intervocalic position as opposed to strong articulation initially and in clusters.

102. Most of the speech sounds occurring in the Northfork corpus are accounted for by what will be referred to as the standard phonemes. Certain other sounds, for reasons given in section 170, are considered to be external to the standard phonemic system. They are accounted for by what will be called the anomalous phonemes. These are treated briefly in 170 and are ignored throughout the rest of the grammar.

The standard phonemes are given in the tables below.

Direct Phonemes:

	Front-Groove	Plain Front	Plain Back	Back-Labial		Plain Labial	Glottal
Stops	c	t	k	q	kw	qw	p	'
Spirants	s			x				h
Nasals		n					m	
Semivowels		j			w			
High Vowels		i	y		u			
Low Vowels		e	a		o			

Indirect Phonemes:

Junctures	+	.	,	.			
Suprasegmental Phonemes		´	^	`			()

The symbol # is used to represent pause, or the absence of any linguistic phenomena. It is not considered a phoneme, but it occasionally functions as a significant

factor in an environment. It occurs only after junctures and before the beginning of utterances.

103. The standard phonemes may be divided into two main groups: direct phonemes, those which represent phonetic events describable in terms of definite (but variable) manner and position of sound-production; and indirect phonemes, those which represent phonetic events describable in terms of their effect on the production of the direct phonemes. These classes are defined for Northfork by the listing of their members in 102. The classes of standard direct phonemes designated by the terms stop, spirant, nasal, semivowel, high vowel, low vowel, front-groove, plain front, plain back, back-labial, plain labial, and glottal are defined by the table of 102. More inclusive classes are as follows:

Obstruents: spirants plus stops, except glottals
Resonants: semivowels plus nasals
Consonants: obstruents plus resonants plus glottals
Vowels: high vowels plus low vowels
Front: front-groove plus plain front
Back: plain back plus back-labial
Labial: back-labial plus plain labial
Oral: front plus back plus labial (i.e. all except glottal)

The following cover-symbols will be used to designate any members of the following classes of direct phonemes:

V - vowel	T - oral stop	H - glottal
C - consonant	N - nasal	ǂ - juncture or #
X - obstruent	J - semivowel	‡ - + and .

104. While all of the phonemes have a certain amount of scope (i.e. overlapping with adjacent phonemes with regard to their phonetic representations), it is decidedly limited in the case of the direct phonemes, so that these may be regarded as segmental phonemes, and thus represented in the phonemic writing system as segments. Although the scope of the juncture phonemes is somewhat wider, they too can economically be represented orthographically as segments. An utterance or any continuous portion of an utterance, viewed from the standpoint of the phonemic level and represented by a sequence of phonemic symbols, together with any accompanying phonemic symbols not written segmentally (i.e. suprasegmental phonemes) will be called a <u>sequence of phonemes</u>.

105. The sequences of direct phonemes of any Northfork utterance may be divided into syllables each of which is one of a limited number of types. A syllable which is not followed by /ǂ/ is one of the following types: CV, CVH, CVV, CVVH (and rarely CVVn). A syllable which is followed by

/ǂ/ is one of the following types: CV, CVH (uncommon), CVV, CVHC (uncommon), CVVHC (uncommon). All syllables begin in a single consonant (and /ǂ/ is always followed by a single C or by #). Consonant clusters (except the rare /nt/) always have /H/ as the first member, never have more than two members, and are either ambisyllabic or at the end of a syllable which precedes /ǂ/.

106. A <u>phonemic word</u> may be defined as a sequence of phonemes occurring between two junctures, or between # and a juncture. The types of sequences which occur as phonemic words are strictly limited in their composition. Except in definable environments involving following phonemes, all words end in /V/ (i.e. /ǂ/ is usually preceded by /V/). Words ending in /C/ have alternate forms, occurring outside these environments, which end in /V/. A word may contain any number of syllables from one up to about a dozen. One-syllable words consist only of the syllable type CVV (aside from the types CVHC, CVVHC, which have two-syllable alternants).

A phoneme (always a consonant) which occurs immediately after /ǂ/ will be said to be occurring <u>initially</u>. A phoneme occurring before /ǂ/ will be said to be occurring <u>finally</u>. A phoneme (always a consonant) occurring immediately between two vowels will be said to be occurring <u>intervocalically</u>.

Any consonant may occur initially; any vowel may occur finally. Every consonant except /n s x/ occurs intervocalically. The consonant clusters which occur are: /hc ht hk hq hkw hqw hp hs hx hn hm hj hw ʔn ʔm ʔj ʔw/ and rarely /nt/ (e.g./teenteenuʔu/ 'store'). The vowel clusters which occur are: /ii yy uu ee aa oo yi ui ei ai oi/, and, in a single word (/ʔeaʔa/, an interjection), /ea/. That is, any vowel may be followed by itself or by /i/.

Examples of word types of one and two syllables are:

/nyy/ 'I' /nana/ 'man' /naana/ 'men'

/tyhpi/ 'stone' /paahpi/ 'blood' /ʔiwoo/ 'my head'

/maiwai/ 'will be' /ʔahkwoo/ 'his head'

/ʔaihkwoo/ 'their heads'

107. Stress is an automatic feature of Northfork; its positions of occurrence are determined by configurations of consonants, vowels, and junctures.

a. Except under the conditions stated in 107b,c, the position of stress is determined as follows: for words ending in /V/, the syllable which contains the next-to-last /V/ in thw word is stressed; for words ending in /C/, the last syllable is stressed. The occurrence of stress on syllables preceding the last stressed syllable of a word is determined in a similar manner: the syllable containing the second /V/ before the last stressed syllable of the word is stressed (if there is one); the syllable containing the second /V/

before such a stressed syllable is stressed; etc. Thus the incidence of stress on a given word may be predicted by counting backwards from the end of the word.

b. If the first syllable of a word does not meet the above conditions for being stressed, nor those of 107c, it nevertheless has a weak degree of stress.

c. Under certain conditions, stress may occur on the third syllable preceding s stressed syllable, with the intervening two syllables unstressed. (Except under these conditions, stress is on either the first or the second syllable preceding a stressed syllable.) There are no occurrences, however, of stress on the third syllable from the end of a word, with the intervening syllables unstressed. The conditions are as follows: (1) each of the three syllables preceding the stressed syllable must contain a single /V/ (not /VV/); (2) the vowel of the second preceding syllable must be identical to the vowel of at least one of the adjoining syllables; (3) the /C/ preceding the second preceding /V/ must be immediately preceded by /V/ (not by /C/; (4) the /C/ preceding the third preceding /V/ must be preceded by /C/ or by /#/ (but not by /V/). (In the following examples, phonemic writing is used, except that stress, which is not phonemic, is indicated.)

/ˌʔacahˌmynunu'hihti./ keeps turning it over.

/ˌsuwahˌkwinunu'hihti./ is dizzy.

/ˌqohnohˌtana?i'qoihti./ (pl.) remained standing.

/ˌnahtahˌkwinihta'tyhy./ (several snakes) coiled up.

cf. /ˌnahtahˌkwinih'tahti./ (several snakes) are coiled up.

not */nahˌtahkwinih'tahti./ (condition 3)

~/ˌqwacaca'hihti./ fell (long distance).

cf. /ˌqwacaˌcahi'tyhy./ falling (long distance).

not */qwaˌcacahi'tyhy./ (condition 4)

/?ahˌqwacaca'hihna./ its act of falling.

cf. /puˌhitu'wahpy./ has become green.

not */ˌpuhitu'wahpy./ (condition 2)

d. There are four degrees of stress. Strong stress occurs on the last stressed syllable before /./, unless the suprasegmental phoneme /'/ (161) occurs on a preceding syllable; and with /'/. Intermediate stress occurs on any other syllable which is determined as stressed by the conditions of 107a,c. Weak stress (unmarked in the examples above) occurs on initial syllables which do not meet the conditions of 107a,c for being stressed (107b). Any other syllable is unstressed.

e. A stress unit may be defined as a sequence of phonemes consisting of one to three syllables within the same (phonemic) word such that (1) the first of these syllables and

only the first one is stressed; and (2) there is either a following juncture or a following stressed syllable. From this definition, the definition of syllable (105), and the conditions for the occurrence of stress, it follows that every direct phoneme belongs to one and only one stress unit, and that any utterance (except one which is interrupted in the middle of a syllable) consists of a series of stress units (plus intervening and/or accompanying indirect phonemes). A syllable which has weak stress (107b) is always followed immediately by one with intermediate or strong stress (since if the following syllable were unstressed, the initial one would have intermediate or strong stress). Such a syllable constitutes a special type of stress unit, which may be called a weak stress unit. Weak stress units contain only one /V/. All other stress units may be called full stress units. They contain at least two vowels (unless they end in /C/ which is followed by /#/) and never more than three; they may consist of one or two syllables, or, where the conditions of 107c apply, of three. The possible types (all of which occur) are: CVV(H), CVCV(H), CVHCV(H), CVVCV(H), CVVHCV(H), CVCVCV(H), CVCVHCV(H), CVHC, CVVHC (the last two occur only before /#/).

Except where certain junctural phenomena (e.g. 151a(2)) intervene, the duration of the different types of full stress units is approximately the same at equal rates of speed of

speaking. Thus a /VV/ sequence is longer in a CVV stress unit than in a CVVCV one (under equivalent conditions). Under equivalent conditions, each vowel in a CVVCV stress unit has about 2/3 the duration of a vowel occurring in a CVCV stress unit.

The tendency to maintain equal duration of successive stress units, with equal time intervals between the onset of successive stresses, gives everyday Mono speech a rhythmic quality of the type that ungifted English speakers can acheive only by reciting poetry.

108. In the description of the phonemes, reference is made to the occurrences of a phoneme in a particular environment or set of environments by means of the following notational device: the phoneme in question is written at the left of / ; at the right of / is given the environment, with the position of the phoneme in the environment indicated by — . For example, x/y—z is to be read, "the class consisting of those occurrences of /x/ which are preceded by /y/ and followed by /z/", or, "/x/ when preceded by /y/ and followed by /z/". Parentheses enclosing a symbol denote that the phoneme represented by that symbol may be either present or absent in the position indicated. For example, w/x—(y)z includes both w/x—z and w/x—yz .

110 Obstruents

110. The obstruents /c t k q kw qw p s x/ all occur after /ɬ/ and /h/, and are fortis and voiceless in these environments. The oral spirants /s x/ never occur in any other environment, and are, with the exception of /ʔ/, the only phonemes which do not occur both voiced and voiceless. (In some Mono dialects /s/ occurs after vowels, as a lenis spirant, usually voiced.) The oral stops /c t k q kw qw p/ occur also after vowels, where they are very lenis (often not completely stopped), and voiced except when followed by /V./, where they are facultatively voiceless, along with the following vowel.

/syjeepeci./	coward.
/ʔiʔeqo./	my tongue.

The /hX/ clusters are similar in their articulation to X/ɬ, differing from them only in length and, in the case of the stops, in that they are commonly preaspirated (see 131). (Note that /h/ is not always realized as a glottal spirant.) A /hX/ cluster is about twice as long as a single intervocalic consonant, at equivalent rates of speed, while X/ɬ is about the same length as or slightly longer than a single intervocalic /C/.

The fortis-voiceless allophones of the oral stops, when followed by a voiced vowel, are usually weakly aspirated,

but there are occasional occurrences of fairly strong aspiration or, especially in the case of /t p/, lack of aspiration. The variation between aspiration and lack of it appears not to be conditioned either by stress or by the quality of the following vowel, but to be free, with a statistical predominance in favor of aspiration. The predominance is nearly absolute in the case of /c/, very marked for /k q kw qw/, and slight for /t p/, whose unaspirated occurrences are almost as frequent as aspirated ones. Aspiration of /k q kw qw/ often takes the form of a weak velar spirant.

/ciihpaʔa./	bird.
/tyhpi./	rock.
/kuna./	wood.
/qatuʔu./	no.
/ʔahkwoo./	his head.
/qwenaʔa./	far away.
/paahpi./	blood.

111. /c/. Like the other oral stops, /c/ occurs after /ǂ/, /h/, and /V/. It is always followed by /V/. It is generally represented phonetically by an apico-dental stop with apico-alveolar groove spirant release. The lenis allophones (c/V–V), however, sometimes occur without the stop component.

c/h— and c/ɬ— are always fortis and voiceless, and are almost always weakly aspirated, occasionally rather strongly aspirated. /c/ is the only oral stop whose fortis allophones practically never occur unaspirated.

c/V—V is very lenis and is voiced whenever the following vowel is voiced, but is usually voiceless if the following vowel is voiceless (110). When voiceless, it still contrasts clearly with hs/V—V. , even when its stop component fails to take place, as it is shorter and much more lenis.

c/ɬ— is pronounced with the tip of the tongue touching the back of the teeth, as in the case of /t n/, regardless of the quality of the following vowel. After a back vowel /y u a o/, /c/ and /hc/ have this same position, unlike /t ht n hn/.

/oiihpaʔa./	bird.
/cawui./	good.
/ʔacaanihtu./	bad.
/ʔihuhciʔi./	my mother's mother, daughter's child.

When /c/ and /hc/ follow a front vowel, the tongue is somewhat farther forward (having the same position as /t ht n hn/ in the same environments), with the point of the tongue extending to between the teeth.

/ʔicihoukahnuhu./ my index finger.

If the stop component does not occur for c/V–V , it is a blade-alveolar lenis spirant, slightly farther forward after front vowels than after back vowels (i.e. with the spirant component in the same position as it is when the stop component occurs). (Note that it contrasts in position with s/V–V in those dialects which have the latter, as the latter is always post-alveolar, like /hs/ in Northfork. In dialects which have s/V–V , however, there seems to be a greater tendency for the stop component to occur.)

112. /t/. /t/ occurs after /ŧ/, /h/, and /V/, and is usually followed by /V/, although it may be followed by /+/ or /./ under special circumstances (237). It is always articulated by the apex, and involves closure or near closure. The point of articulation and precise manner of articulation are functions of the environment.

t/h– and t/ŧ– are always fortis and voiceless stops and are usually weakly aspirated, occasionally strongly aspirated, often unaspirated. Unaspirated occurrences are almost as common as aspirated ones. When followed by /./ or /+/ instead of by /V/, /t/ is unreleased.

t/V–V is very lenis, usually not a stop, and is voiced whenever the following vowel is voiced, but is often voiceless if the following vowel is voiceless (110).

t/ŧ– is pronounced with the tip of the tongue touching the back of the upper teeth, like /o n/ in the same

environment.

/tii./ tea.

/tyhpi./ rock.

/toohpe./ cloud.

Somewhat farther forward are /t/ and /ht/ after front vowels, regardless of the quality of the following vowel, with the tongue well against the back of the upper teeth, the point extending to between the teeth. Intervocalic /t/ in this position is usually represented by a lenis slit spirant, similar to /ð/ of English, but it often has momentary closure preceded and followed by friction.

/kitii²i./ cat.

/²itawa./ my teeth.

When following a back vowel and preceding a front vowel, /t/ and /ht/ are alveolar. t/V–V in this position is either a lenis slit spirant or a weak stop preceded and followed by friction; there is a somewhat greater tendency for closure to occur than in the farthest front position (i.e. after front vowel). There is often a suggestion of "r-like" quality.

/jawanhxati./ a feminine name (Lucy Kinsman)

/²ahteepy./ his shoulder.

Between back vowels, /t/ and /ht/ are post-alveolar. In this position, t/V–V is usually a flap-r, often with a

slight spirantal quality. Occasionally two flaps occur in rapid succession, very occasionally more than two.

/tatape./ the sun.

/pahtahqai./ raccoon.

The four positions of /t ht n hn/, according to the environments in which they occur, are represented in the table below; the numbers 1 to 4 represent positions from front to back. (Position 4* may be farther back than 4, as suggested by the clearly perceptible difference in position of /j/ in these environments, and the general parallelism of positional allophony of /t/ and /j/.)

		following vowel					
		i	e	y	a	u	o
preceding	#	2	2	2	2	2	2
	i	1	1	1	1	1	1
	e	1	1	1	1	1	1
	y	3	3	4	4	4	4
	a	3	3	4	4*	4	4*
	u	3	3	4	4	4	4
	o	3	3	4	4*	4	4*

113. /k/. /k/ occurs after /#/, /h/, and /V/, and is nearly always (237) followed by /V/ (any /V/ except /o/). It is a stop or lenis spirant, and is articulated by the

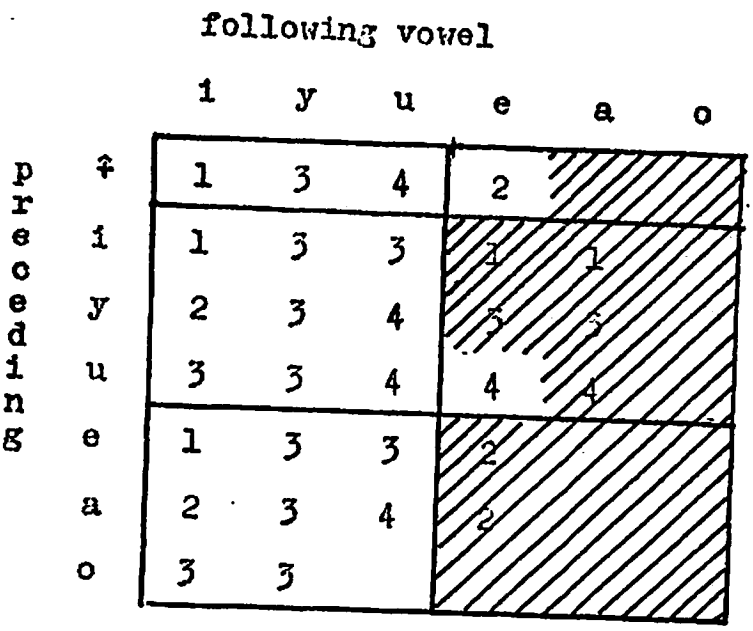
dorsum, with the point of articulation determined by the environment. It is in overlapping distribution with /q/; both phonemes occur before /e a/, only /k/ before /i y u/, only /q/ before /o/.

k/#– and k/h– are always fortis and voiceless stops, and are usually weakly aspirated, occasionally rather strongly aspirated, occasionally unaspirated.

k/V–V is very lenis, usually not stopped, and is voiced whenever the following vowel is voiced, but is usually voiceless if the following vowel is voiceless (110). In position 4 (see below), it is always or nearly always a spirant, while in the other three positions it frequently has weak momentaneous closure preceded and followed by lenis velar friction.

Four positions of /k/ and /hk/ have been distinguished and are here labeled by the numbers 1 2 3 4 representing the positions from front to back. Position 1 is about the same as the position of English /k/ in <u>key</u>. Position 3 is close to that of English /k/ in <u>took</u>, and position 2 is about midway between 1 and 3. Position 4 is somewhat farther back than 3, and is farther back than any allophone of English /k/. /k/ and /hk/ have about the same position in the same environment, except that position 4 tends to be slightly farther back for k/V–V than for hk/V–V . /k/ is perhaps slightly farther back than /hk/ also in the environments

u–i and o–i . The environments in which the various positions occur are indicated in the table below. /k/ and /hk/ do not occur o–u (231), –o , nor before /a/ when following /ɬ/ or a low vowel. The shaded area in the table denotes those environments in which /q/ occurs. Squares which have both shading and a number represent the only environments in which the contrast k:q exists. Although k/o–e has not been found, its occurrence would not be inconsistent with the patterns of the system. There is apparently some difference between the positions of some of the allophonic sets given here with the same number, especially in the case of those given as position 3, but the differences are too slight to have been consistently percieved, so they are not mentioned.. /k hk/ occur before /e/ after /a e/ only for /k/ which is initial in the phonemic representation of a noun root, e.g. /keejihsi/ 'sp. flower, and its seeds', /kehkeejihsi/ (distributive), /ʔahkeejihsi/ 'his/her ...'. Aside from <keejihsi>, only one other root has been found whose phonemic representation begins in /ke/, namely <keewii> Nf 'olam shell'. (There is only one noun root, <qety> Nf̄ '(abalone shell)' (317m), which has a phonemic representation beginning in /qe/.)



Position 1:

/kitii?i./	cat.
/?ikitii?i./	my cat.
/?ehkipe./	acorn mush.
/nopikei./	house-having.
/?ikawai./	will enter.

Position 2:

/?yhkitii?i./	thy cat.
/takitii?i./	our cat.
/keejihsi./	sp. flower.
/kehkeejihsi./	sp. flower, distributive.
/?ahkeewii./	his clam shell.

Position 3:

/jukikywa./	fem. name.
/toki./	right.
/kyhkykei./	foot-having.

/ʔaciʔwituhkykaa./	go stir it for her!
/ʔaceehkyhti./	held it for him.
/takyhky./	our feet.
/ʔapanoohkykaa./	go haul water for him!
/ʔikuwa./	my husband.
/hyjeehku./	has recovered (from illness).

Position 4:

/kuna./	wood.
/ʔyhkuwa./	thy husband.
/puhkukei./	dog-having.
/ʔahkuwa./	her husband.
/ʔacihcukahti./	pointed at it.

114. /q/. /q/ occurs after /ʧ/, /h/, and /V/, and is always followed by a low vowel /e a o/. It is a postvelar stop or lenis spirant, depending on the environment. It is in overlapping distribution with /k/ (113).

q/ʧ- and q/h- are always fortis and voiceless stops, and are usually weakly aspirated, occasionally somewhat strongly aspirated, rarely unaspirated. The aspiration usually takes the form of a weak postvelar spirant.

q/V-V is a lenis postvelar spirant, voiced whenever the following vowel is voiced, but usually voiceless or voiced-becoming-voiceless if the following vowel is

voiceless (110). When voiceless, it contrasts clearly with /hx/, as it is shorter and much more lenis.

There is little variation in the position of /q/; it is always postvelar, almost but not quite as far back as Arabic /q/. The lenis q/V–V is slightly farther back than the fortis q/f– and q/h– , and /q/ and /hq/ are slightly farther forward after /i/ than otherwise. The front vowels /i e/ are centralized before /q hq/.

/qawaaju²u./	horse.
/²iqawaaju²u./	my horse.
/²yhqawaaju²u./	thy horse.
/nahqaqei./	ear-having.
/²ahqahqo²jo./	strawberries.
/qohiqahmahti./	has a stomach-ache.

The environments in which /q/ and /hq/ occur are indicated in the chart of 113. With two exceptions, /q hq/ occur before /a/ after a high vowel only for /q/ initial in the representation of a noun or verb stem. The two exceptions are: /tyqahpo/ 'rope', /pahnyqaahpy/ 'the Coast Range'. Only two forms have been found in which /q/ or /hq/ occurs after a high vowel and before /e/: /tyhqeeci/ 'sp. plant (whose greens were eaten)', /puhiqety/ representing <puhi qety> Hf 'abalone shell' (312,317m). <qety> is the only noun root known whose representation begins in /qe/. Only one verb root has been found which has /qe/ initial in

its phonemic representation: <qete>, occurring in <cah qete hi> /cahqetetehi/ 'to drag noisily' (386,371d,242).

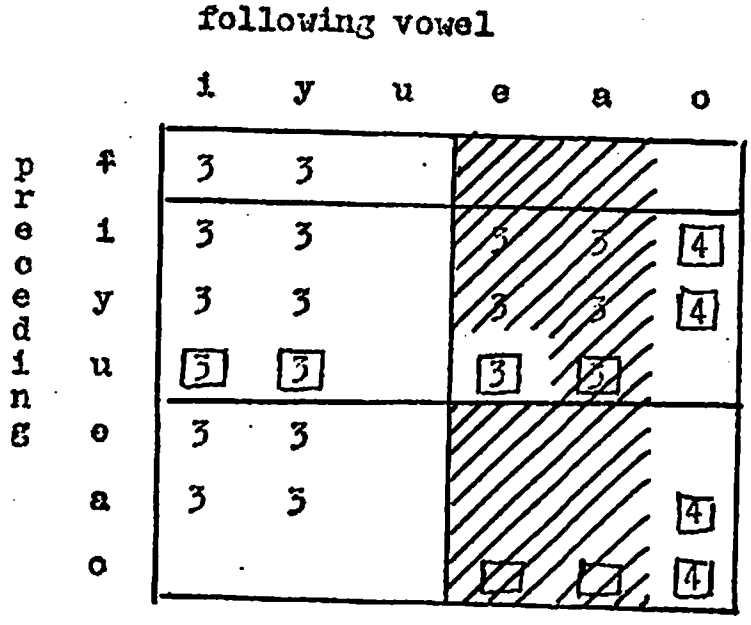
115. /kw/. /kw/ occurs after /ɬ/, /h/, and /V/, and is always followed by /V/ (any /V/ except /u/). It is realized as a stop or lenis spirant articulated by the dorsum, accompanied and followed by lip-rounding. It is in overlapping distribution with /qw/; both phonemes occur before /e a/ after high vowel or high vowel plus /h/; only /kw/ occurs before /i y o/, only /qw/ before /e a/ after /ɬ/ or low vowel or low vowel plus /h/. Neither /kw/ nor /qw/ occurs before /u/, and /kw/ occurs before /o/ only as the phonemic representation of w//h- (213). (//w// does not occur in the environment //h-u//.) Except for the form /suhkwaʔni/ 'cute', /kw hkw/ do not occur after /u o/ in representations of single morphemes. /kw/ and /qw/ are both relatively infrequent in occurrence.

kw/ɬ- and kw/h- are always fortis and voiceless and are almost always aspirated, the labial release being voiceless at its beginning.

kw/V-V is very lenis, is usually a spirant rather than a stop, but occasionally has momentary closure. It is voiced whenever the following /V/ is voiced but may be voiceless if the following /V/ is voiceless (110).

Unlike /k/, /kw/ has little variation in position of articulation. In all environments except /-o/ (where it is

always preceded by /h/), its position is about the same as position 3 of /k/ (113). When followed by /o/, its position is the same as position 4 of /k/. In the table which follows, a number is given for each environment in which /kw/ and/or /hkw/ occur. Shading indicates the environments in which /qw hqw/ occur. Small squares in certain spaces indicate environments in which the occurrence of /kw hkw/ and/or /qw hqw/ is limited. Blanks indicate environments in which neither /kw hkw/ nor /qw hqw/ occur.



/kwi?naa?a./ eagle.

/?atyyhkwiityhy./ talking to him.

/muhkwituu?u./ elephant.

/?a?ekwihti./ smelled it.

/pahkwi./ fish.

/ɨwykykoi./ olitoris-having.

/ʔilqwyky./	my clitoris.
/cyhkwyta./	vigorously.
/puhkwycyhpykihti./	is blinking.
/ʔehkwy./	ground squirrel.
/ʔahkwyky./	her clitoris.
/niihkwehci./	our (excl.) grey hair.
/ʔyhkwehci./	thy grey hair.
/ʔahupijatuhkwee./	in his singing.
/taihkwaqahna./	what we (incl.) said.
/ʔyhkwaqahna./	what thou saidst.
/ʔakuuhkwahti./	will bury him.
/niihkwoo./	our (excl.) heads.
/ʔyhkwoo./	thy head.
/ʔahkwoo./	his/her head.
/wohkwono./	burden baskets here and there.

116. /qw/. /qw/ occurs after /ɬ/, /h/, and /V/, and is always followed by /e/ or /a/. It is a post-velar stop or lenis spirant, accompanied and followed by lip-rounding. It is in overlapping distribution with /kw/ (115).

qw/ɬ- and qw/h- are fortis and voiceless stops, and are almost always aspirated, usually weakly, the labial release being voiceless at its beginning.

qw/V–V is a labialized lenis post-velar spirant, voiced whenever the following vowel is voiced, but usually voiceless if the following /V/ is voiceless (110).

There is no important variation in the position of articulation of /qw/, except that the lenis allophones tend to be slightly further back than the fortis ones, as in the case of /q/. The position is the same as that of /q/ (114).

The environments in which /qw/ occurs are indicated by the shaded area in the chart of 115. /qw/ occurs after high vowel or high vowel plus /h/ only when it is initial in the representation of a morpheme.

/qwena?a./	far.
/taihqwena?ahsu./	far from us (incl.).
/?yhqwena?a./	far from thee.
/noheqwena?a./	very far.
/niihqwaahmahqwe./	beyond us (excl.).
/qwanyhkii./	nine.
/?yhqwaahnahqwe./	beyond thee.
/huhqwapuhpukihti./	is boiling.
/?aceehqwahti./	will hold it.
/?ahqwaqahna./	what he said.
/toqohqwa./	rattlesnake.

117. /p/. /p/ occurs after /ɬ/, /h/, and /V/, and is usually followed by /V/, although it may be followed by /ɬ/

under special circumstances (237). It is a bilabial stop or spirant.

p/ǂ- and p/h- are realized as fortis and voiceless stops, and are usually weakly aspirated, occasionally rather strongly aspirated, often unaspirated. Unaspirated occurrences are almost as common as aspirated ones. In the uncommon instances in which p/h- is followed by /ǂ/ instead of by /V/, it is unreleased, except when /m/ immediately follows the juncture, in which case it is nasally released.

p/V-V is very lenis, and is usually a spirant, although momentary closure frequently takes place. It is voiced whenever the following /V/ is voiced but is often voiceless or voiced-becoming-voiceless if the following /V/ is voiceless (110).

No variation in the position of articulation of /p/ has been noticed.

/pahii./	three.
/naapahii./	six.

118. /s/. /s/ occurs only after /ǂ/ and /h/, and is always followed by /V/. It is a fortis, voiceless alveolar groove spirant. (Voiced lenis /s/ occurs intervocalically in some Mono dialects, corresponding to /hs/ of Northfork.) Aside from the difference in tongue-position in some intervocalic environments, /hs/ differs from s/ǂ- only in that it is slightly longer (110).

/s/ is always postalveolar, but it is articulated with two different parts of the tongue, depending on the environment. s/ṯ_ is apico-postalveolar, regardless of the quality of the following vowel.

/syhmy?y./	one.
/saahsi?i./	sp. mushroom.
/siija?a./	saddle.
/soo?jape./	ant.

After back vowels, /hs/ is apico-postalveolar, as initially, regardless of the quality of the following vowel. In this respect it is somewhat unlike /t n/ (112,123).

/qohso./	fire.
/suuhsi?i./	Susie.
/?yhsono./	thy lungs.

After front vowels /i e/, the tongue position is forward, as for /t n/, but contact is made between the front of the tongue and the posterior edge of the alveolar ridge, rather than with the apex. Again, the quality of the following vowel makes no appreciable difference upon the position of articulation.

/?ihsono./	my lungs.
/?ihsihi./	my guts.
/?ihsa?a./	coyote.
/?ehsipanakityhy./	grey.

In sequences of the type /sVhT/ and /sV̥/ the vowel is usually voiceless, and, if it is a high vowel /i y u/,

the tongue usually remains in contact with the alveolar ridge during its articulation (see 140).

119. /x/. Like /s/, /x/ occurs only after /ǂ/ and /h/, and is always followed by /V/. It is a fortis, voiceless postvelar spirant. The phonemic sequence /hx/ represents a long fortis spirant. There is no appreciable variation in the position of its articulation, it being always postvelar, like /q qw/. Unlike /q qw/ (which have /k kw/ as counterparts), it has no counterpart in the prevelar and midvelar positions. It never occurs in any of the environments from which /q/ is excluded (113,114), being always followed by a low vowel. Moreover, /hx/ is preceded by a low vowel everywhere except: (1) where /x/ is initial in a morpheme-representation and a preceding high vowel belongs to the representation of another morpheme, e.g. /ʔihxaahnuʔu/ 'my cup'; (2) in the form /tuhxooʔnoho/ which, although uttered by the informant, was said to be a Yokuts word not used in Mono.

/x/ is a rare phoneme, easily the least common of the direct phonemes, occurring with less frequency than other consonants even in the class of environments to which it is limited. Of the 25 morphemes in whose representations it has been found, six are place names, six are personal names, at least four are imitative elements, one of which contains an anomalous phoneme (171). The following is a complete

list of the forms containing /x/ which have been found in the corpus, written morphophonemically, with distribution class symbols (303). Those which always occur in conjunction with another morph are given with it, separated from it by a space.

//ʔaahpahxa ~ wū// L (a place name) (347,397b)

//wacahxahna ~ wū// L 'at Manzanita Lake' (place name)

//soo ʔja ʔahxeni ~ wū// L (place name)

//pajahxehne ~ wū// L (place name)

//meehmeehxa ʔa ~ paah// L (place name)

//ponoohxo ʔo// Nf¯ (place name)

//wa ʔna ʔmahxahti// Nf¯ (feminine name)

//jawaahxati// Nf¯ (Lucy Kinsman's name)

//ʔoohmo ʔohxati// Nf¯ (feminine name)

//pojoohxati// Nf¯ (feminine name)

//kiveehnehxo// Nf¯ (feminine name)

//xaahnaihni// Nf¯ 'Caroline' (feminine name)

//ʔaa ʔwohxa// Nr 'gills'

//xooto// I (sound of snoring)

//xai ʔi// I (cry of the blue-fronted jay)

//wohxo// I (imitative sound occurring in a myth)

//xorrrohto// I (imitative sound occurring in a myth) (171)

//co ʔnohxai hna'// Nf 'sp. bird'

//seehxajuu'// Nf 'white-oak mushroom'

//tah taahxo ʔi// Vt⁻ '(tire) to blow out' (385,371d)

//xaahnu'// Nf 'cup'

//xoʔmaʔna'// Nf 'long white beads'

//cahtaahxaʔi// Vi 'to make seed mush'

//ʔaaʔjaʔahxa pY// Nf 'sp. plant' (332)

//pih xoohpy ʔi// Vt '(bird) to shed tail feathers'

120 Resonants

120. The resonants /j w n m/ all occur after /ɬ/ and /h/, and are fortis in these environments, like the obstruents. All of them except /m/ (cf. 216) occur after /V/ and are, again like the obstruents, more weakly articulated here than in in other environments. Unlike the obstruents, the resonants also occur after /ʔ/, where they are fortis. With the exception of /n/, which under special circumstances (239) may be followed by /ɬ/, the resonants are always followed by /V/.

All of the resonants (like all of the phonemes except /s x ʔ/) occur both voiced and voiceless. They are generally voiced; but in the environment /ʔ—V.#/ they are voiceless, along with the vowel. The clusters /hj hw/, which occur only rarely, begin voiceless and usually end voiced; but they may be voiceless throughout if followed by /./.

/poqoʔja.#/	lizard.
/tawuhnapiʔwa.#/	our (incl.) pimples.
/ʔaahpaʔni./	apple(s).
/nahsyʔmy.#/	entirely.
/hupuhja.#/	elderberry.
/ʔipahwa.#/	my aunt.
/ʔipahwahciʔi./	my aunt (dim).

The clusters /hn hm/ are, at equivalent rates of speed, about twice as long as a single intervocalic consonant. In initial position, the nasals are as long as or slightly longer than intervocalic consonants, while the semivowels are about the same length as C/V—V .

/ʔipehu+nahnahtyyhkwiityhmahqahuna./ (161)
maybe each-other-telling that-obj.
Maybe they are talking about that.

121. /j/. /j/ occurs after /ɬ/, /H/, and /V/, and is always followed by /V/. With the exception of the form /keejihsi/ 'sp. flower, and its seeds' (cf. 113), it has not been found followed by /i/. It is a frontal semivowel, closely resembling English /y/ except in its farthest back position.

When occurring after /ɬ/, /h/, or /ʔ/, /j/ is more strongly articulated than when after /V/; but the difference is less readily perceptible than in the case of /n/ and /T/.

j/V—V tends to have wider aperture and more relaxed articulation than in other environments; the difference is very slight, and is only a relative one: in careless speech the degree of aperture is greater and the strength of articulation less, even for the fortis allophones. It is probably correct to state, however, that under equivalent conditions of speed and clarity there is a perceptible difference between j/V—V and j/V+—V .

/poihpoitai+jaqahti./ Poipoi is crying.

/taijaqahkytyhy./ making us cry.

/j/ has positional allophones corresponding to those of /t n/ (see 112) with regard to the general tongue position, differing from them only in that the apex does not make contact with the teeth or alveolar ridge, and in that the front is raised. When it is preceded and followed by /a o/, the tongue is slightly farther back than otherwise for /j/ between back vowels, and in this position, the apex is raised as well as the front, and often produces slight friction between itself and the alveolar ridge. Thus there are five positions to be distinguished, as follows: 1, after front vowel; 2, after /ɬ/; 3, after back vowel before front vowel; 4, between back vowels except when both the preceding and following vowels are /a o/; 5, between /a o/.

/wija./ (1) (black oak) acorn.

/jaqahti./ (2) cried.

/wo°ajeetyhy./ (3) has measles.

/myjy./	(4)	gopher.
/qawaaju?u./	(4)	horse.
/paja./	(5)	water.
/pojo./	(5)	road.

In the articulation of /Hj/ clusters (which occur only after /V/) the tongue position is the same as for intervocalic /j/. The tongue reaches this position either at the same time as the onset of the glottal articulation or very slightly thereafter, and there is often (especially when the glottal is /?/) a glide toward that position before the onset of the glottal articulation. The /hj/ sequence has been found in the representations of only two morphemes: <hupuhja>, <pohja> (see examples below); it does not occur at morpheme boundaries. This cluster begins with glottal friction, which is followed in rapid succession by glottal friction plus voiceless fronto-palatal friction, then voiceless fronto-palatal friction alone, then voiced fronto-palatal semivowel. The length of this sequence is equivalent to that of other consonant clusters of Northfork, namely about twice as long as a single intervocalic consonant. The /?j/ cluster, which has the same length, begins with glottal stop accompanied by the same tongue position which /j/ would have in this environment if the /?/ were not present, followed by a semivowel in that position. (On voicing in clusters, see 120.)

/hupuhja./ elderberry.

/tycipohjatyhy./	stringing things (e.g. fish) on a stick.
/poqoʔja./	lizard.
/qahnihsuʔju./	trousers.
/qahnihsuʔjukei./	having trousers.

.122. /w/. /w/ occurs after /ʧ/, /H/, and /V/, and is always followed by /V/. It does not occur in the environment /u-u/ (215b), and is followed by /u/ only under the following circumstances: (1) when it represents //m// (216), e.g. /ʔiwupi./ //ʔimupih.// 'my nose.' (224b); (2) in the locative suffix /wu/ //wū// (231b,347) which occurs in certain place names (and is of Yokuts origin); (3) in the masculine name /pahnaawuʔu/ //pahnaawu'// (227); (4) in the qualitative adverb /cawu/ 'good'. It is realized as a semivowel articulated by rounding of the lips and raising of the dorsum In the speech of Annie Wenz (but not that of Lucy Kinsman) the sequence /ywy/ sometimes occurs without the labial component of /w/.

When occurring after /ʧ/ or /H/, /w/ is more strongly articulated than when after /V/; but, as in the case of /j/, the difference is less readily perceptible than it is for /n T/. w/V-V tends to have wider aperture (of both the labial and dorsal components) and more relaxed articulation than w/ʧ-V . The difference is very slight, and is only relative; in careless speech the degree of aperture is

greater and the strength of articulation less even for w/ɬ—V . It is probably correct to state, however, that under equivalent conditions of speed and clarity of pronunciation, there is a perceptible difference between w/V—V and w/Vɬ—V .

/hiihpaatai+wa'ahnai+'aiwaqatyhy./

What is Wa'annai telling them?

The contrasts /uwi/:/ui/ and /owi/:/oi/ are relatively slight, since there is a tendency for an intrusive w-like glide in /ui oi/ in slow speech. At the same rate of speed, however, w/u—i and w/o—i are fairly strongly articulated, though they may practically disappear in fast speech. The contrast is perhaps most clearly marked by stress. In /uwi owi/ the two vowels are differently stresses, whereas in /ui oi/ the vowels share strong or intermediate stress (107). (In the following examples, strong and intermediate stresses are marked, even though they are not phonemic.)

/ˌpoih'poi./	Poipoi. (masc. name)
/ˌnowi'jahti./	moved away (to another dwelling-place).
/noˌwija'tyhy./	moving away.
/ˌ'uuˌ'uih'na'a./	roadrunner.
/ˌjuwi'tyhy./	warm.
/ju'wihpy./	has become warm.

There is little important variation in the position of the lips for /w/ in different environments; but there is variation in the position of the dorsum, the difference

between w/i—i and w/a—a , for example, being clearly noticeable in this respect; the tongue is farther forward in the former. Detailed observations of the differences in tongue position have not been made.

/kwiwihi./ north.

/ʔinawa./ my father.

In /Hw/ clusters the w-position of the lips and tongue is reached at about the same time as the onset of the glottal articulation, and there is sometimes a glide toward this position before the glottal articulation begins. This glide appears to occur less frequently than the corresponding phenomenon in the case of /j/. The /hw/ cluster occurs only in the representations of three morphemes (<pahwa>, <pihwi'>, <qwatyyhwi>) and at the boundary of one combination (<wooh wooh>). This cluster has some glottal friction at its beginning, usually voiceless, overlapping with the semivowel, which usually becomes voiced before the beginning of the following vowel (120). The length of the stretch represented by /hw/ is equivalent to that of other consonant clusters of Northfork, i.e. about twice as long as a single intervocalic consonant. The /ʔw/ cluster, which has the same length and occurs in the representations of some 15 morphemes or more as well as at some morpheme boundaries, begins with glottal stop accompanied by the tongue and lip position of /w/; this is followed by a semivowel in that

position, which is generally voiced except before /V.#/ (120).

/ʔipahwa./	my aunt.
/pihwiʔi./	sp. flower.
/ʔaqwatyyhwihti./	belched.
/woohwoohnaʔapy./	Sequoia gigantea.
/haʔwyhkahti./	light (in weight).
/heʔwiʔihti./	is limping.
/tawuhmapiʔwa./	our (incl.) pimples.

123. /n/. /n/ occurs after /ɬ/, /H/, and /V/, and is almost always followed by /V/, but can be followed by /ɬn/ or /ʻn/ (239). It is an apical nasal, the point of contact of the apex being determined by the environment.

n/ɬ- and n/H- are fortis, n/V-V lenis. The difference is more clearly and consistently perceptible than for the semivowels, but less so than for /T/, where voicing usually plays an added part in making the distinction. n/ɬ- is usually slightly longer than n/V- , but not as long as /hn/.

/maniʔihiɬnaʔineehpaʔityhy./

That's what they are saying.

/nyyhkwaɬnaʔineehti./ we (excl.) said.

The various positions at which the apex makes contact for /n hn/, according to the environment, are the same as for /t ht/ (112).

/nopinihtu./ 2 1	house-like.
/mani?ihi./ 3	like that.
/nana./ 2 4	man.

/hn/ is the phonemic representation of a long fortis apical nasal (about twice as long as n/V–V). /h/ here has no glottal articulation but (as with /hs hx hm/) is marked only by the length and tenseness of the oral articulation. /hn/ is voiced throughout except when followed by /V.#/, where it begins voiced, ends voiceless.

/?ahnahqa./	his/her ear.
/?ahpihtyhna./	his/her arrival.

In the cluster /?n/ there is glottal closure taking place at about the same time as the apical closure (which has the same position as if /?/ were not present). The apical closure often does not take place until slightly later than the glottal, but sometimes precedes it very slightly. The glottal release is followed by an apical nasal, which is voiced unless the sequence /V.#/ follows, in which case it is voiceless, along with the following /V/. The length of the stretch represented by /?n/ is about twice that of a single intervocalic consonant.

/?aahpa?ni./	apple(s).
/ho?nopi./	bat.

In the sequences /ʔn+n/ and /ʔn·n/, which occur only rarely (cf. 239), the glottis remains closed for a somewhat longer time than in /ʔn/ which is followed by /V/, and the tongue seems to move to position 2 (postdental) during the articulation of the nasal.

/caiqoʔn+nohapityhy./ bluejay sitting on its eggs.

124. /m/. /m/ occurs after /ɬ/ and /H/, but (like /s x/) never after /V/ (216). It is always followed by /V/. It is a bilabial nasal, usually voiced.

It is always fortis, as it never occurs in the environments where lenis allophones of consonants occur (namely after /V/). m/ɬ— is usually slightly longer than a single intervocalic consonant, but not as long as /hm/. No variation in the position of articulation of /m/ has been noted.

/hm/ is the phonemic representation of a long fortis bilabial nasal (about twice as long as C/V—V). /h/ here has no glottal articulation but (as with /hn hs hx/) is marked only by the length and tenseness of the oral articulation. Like /hn/, /hm/ is voiced throughout except when followed by /V.#/, where it begins voiced and ends voiceless.

/jyhmyhnaʔa./ acorn soup.

/nyyhmy./ person, Indian.

In the /ʔm/ cluster, there is glottal closure taking place at about the same time as the bilabial closure. The labial closure often does not take place until slightly later than the glottal, but sometimes precedes it very slightly. The glottal closure is followed by a bilabial nasal, which is voiced except when this occurrence of /m/ is followed by /V.#/, in which case it is voiceless along with the following vowel. The length of the stretch represented by /ʔm/ is about twice that of a single intervocalic consonant under equivalent conditions.

/wiʔmeʔni./	masc. name.
/ʔanahoʔmi./	buy it!

130 Glottals

130. The glottals /h ʔ/ are always preceded by /#/ or /V/, and are generally followed by /V/ or /C/, but the sequences /hʰ/ (225d) and /ʔ+/ (227b,238) have also been noted. Of the consonants, any except /h ʔ/ may follow /h/, while only the resonants occur after /ʔ/. Except for a few isolated occurrences of /nt/, all consonant clusters in Northfork have /h/ or /ʔ/ as the first member.

In V/V-V the mouth tends to stay in the position of the preceding vowel during the glottal articulation, especially when the following /V/ is stressed. As a result, there is

often a slight w-like glide after /H/ which follows /u o/ and precedes a stressed non-labial vowel and, less often, a slight palatal glide after /H/ which follows /i/ and precedes a stressed back vowel. These glides are much shorter and less prominent than the semivowels in the sequences /HjV/ and /HwV/; there is further difference where the glottal is /h/, as h/V—V is generally voiced.

/huhpu?ihti./	dove. (verb)
/pohihta./	skunk.
/?ihuhci?i./	my maternal grandmother.

The members of consonant clusters (except the rare /nt/) tend to be more simultaneous than successive in their articulation, though the length of a cluster is nevertheless about twice that of C/V—V . The clusters /hj hw/ begin with glottal friction and end with voiced semivowels, with an intermediate zone in which features of the two members overlap. In the clusters which have /?/ as the first member /?n ?m ?j ?w/, the articulation of the second member begins at about the same time as that of the /?/, but continues after the glottal release. In /hT/ there is usually preaspiration of the stop, a feature assignable to /h/ in these environments, but this often fails to take place. The fortis and voiceless quality and the long duration of the stop are also taken to be functions of the /h/, and they occur simultaneously with the realization of the stop phoneme.

In the remaining clusters /hm hn hs hx/, the articulation of the two members in entirely simultaneous, the function of /h/ here being limited to the fortis quality and length of articulation of the sound represented by the other member of the cluster.

/ʔipahwa./	my aunt.
/poqoʔja./	lizard.
/wiʔmeʔni./	masc. name.
/wynyhpy./	tree.
/maahnoho./	there.

131. /h/. /h/ occurs after /ǂ/ and /V/, and may be followed by any direct phoneme (103) except /h ʔ/. Under special circumstances (225c,d) it can be followed by /·/ or /,/ (152, 153), but it is ordinarily followed only be direct phonemes. /h/ is classed as a glottal since some of its allophones have glottal articulation, and because it patterns with /ʔ/. In some environments, however, /h/ has no glottal articulation.

h/ǂ—/ is a fortis glottal spirant. It is sometimes voiced throughout if the preceding juncture phoneme is immediately preceded by a vowel. Otherwise it begins voiceless, but usually becomes voiced almost immediately. Initial /h/ is accompanied by the vocalism (first voiceless, then voiced) of the following /V/.

Intervocalic /h/, where the following /V/ is not followed by /+/, is a lenis glottal spirant, usually voiced throughout, but occasionally partially voiceless. It seems usually to be accompanied by the vocalism of the preceding /V/ if the following /V/ is stressed (see 130), and often also if the following /V/ is not stressed. More often, if the following /V/ is unstressed, the vocalism accompanying /h/ is predominantly that of the following vowel; i.e. the transition (if the vowels are different) takes place near the beginning of the /h/.

In the sequences /hV+/ the /h/ and /V/ are pronounced together, as a voiceless vowel accompanied by glottal friction. The combination is often voiced at its beginning (i.e. voiced vowel accompanied by voiced glottal friction), and occasionally is voiced throughout if followed by /+/ which is immediately followed by /C/ (rather than by).

/ʾiqawyha./	my chin.
/qohsooʾmoho./	Southern Sierra Miwok.
/qohsooʾmoho+kihmahti./	Miwoks are coming.

The clusters /hJ/ begin with voiceless glottal friction accompanied by transition from the quality of the preceding /V/ to that of the semivowel. After the speech organs have reached the position of the semivowel, the glottal friction ceases and the semivowel becomes voiced and is immediately released to the position of the following /V/. (For examples see 121, 122.)

The /hT/ clusters are realized as long fortis voiceless stops, usually preaspirated. The length, fortis quality, and preaspiration are functions of /h/ in this environment. The preaspiration takes the form of a spirant of very wide aperture in the position of the stop. However, it is not always present; its presence or absence seems to be a matter of free variation, since checking fails to reveal any conditioning factors, either in the position of the stop, the quality of the preceding vowel, or the position of the syllables involved with regard to conditions determining stress. In all environments, presence of preaspiration is two to three times as frequent as absence of same.

The clusters /hs hx/ are long, fortis, and voiceless, and are never preaspirated. /hn hm/ are long, fortis, and usually voiced (123, 124). In these four clusters /h/ is represented only by the length and fortis quality of the articulation represented by the other member.

A further property of /h/, when followed by /V/ or /X/, is that the pitch of the preceding vowel is slightly lower than before other consonants, other conditions of the environment being equal. Before /hN/, however, the pitch of vowels is the same as before consonants other than /h/. (It has not been determined whether the pitch of a vowel is lower before h/—J/.)

132. /ʔ/. /ʔ/ occurs after /+/ and /V/, and may be followed by vowels and resonants or, under special circumstances (227b, 230), by /+/.

Unlike /h/, /ʔ/ is always glottal in its articulation. It is usually realized as a glottal stop, but sometimes, when initial or intervocalic, it is realized as constriction of the glottis which approximates complete closure but fails to achieve it completely. The occurrence of constriction rather than complete closure seems to be more frequent in the environment /V–V+/ than elsewhere; and the following /V/ in this sequence is usually accompanied by glottal stricture. ʔ/V–V/ is occasionally somewhat longer than other intervocalic consonants.

/ʔahpo./	cooking basket.
/hahkwihsaʔityhy./	sneezing.
/wowaʔa./	Chukchansi Yokuts.
/wowaʔa+kihmahti./	Chukchansis are coming.

In the clusters in which /ʔ/ occurs /ʔj ʔw ʔn ʔm/ there is a tendency for the articulation of the resonant to begin at about the same time as that of the /ʔ/. The articulation of the resonant always continues after the release of the /ʔ/. In /ʔj ʔw/ there is often a glide toward the position of the semivowel before the glottal closure takes place. This is more common for /ʔj/ than for /ʔw/.

/wiʔmeʔni./	masc. name.

/ha?wohca?a./ fox.

/?ahqahqo?jo./ strawberries.

The sequence /?+?/ (227b, 238) is realized as a long glottal stop, generally held long enough to be equivalent in length to sequences of the type /?V+C/ (where /C/ is other than /?/). The /+/ is marked by the same phenomena which would be present in the sequence /?V+C/ (107, 151), except that its effect on the (non-existent) preceding vowel is absent.

/?ipohso?+?apunihti./ my partner sees it.

140 Vowels

140. The vowels /i y u e a o/ occur after consonants and may be followed by /ŧ/ or by any /C/ except /m s x/. In addition, the following vowel clusters occur: /ii yy uu ee aa oo yi ui ei ai oi ea/; the last of these occurs only in the interjection /?ea?a/.

Except for /y/, the vowels have relatively minor qualitative allophonic differences.

A syllabic nucleus consists of a vowel or a vowel cluster. With the exception of /ea/, whose second member has greater sonority, the two members of a vowel cluster have approximately equal sonority and stress, and are uninterrupted

by any laryngeal or sublaryngeal process. The length of a syllabic nucleus is conditioned by several factors; under equivalent conditions, the relative lengths of various types of nuclei are as follows:

(1) /VV/ is about twice as long as /V/.

(2) A /V/ which belongs to a two-vowel stress unit is about one-and-a-half times as long as a /V/ which belongs to a three-vowel stress unit (107e).

(3) The syllabic nucleus of a closed syllable is slightly shorter than that of an open syllable.

(4) A stressed vowel tends to be slightly longer than an unstressed one. It may be quite a bit longer if it is the vowel of an initial syllable with strong stress (107d), as in a two-syllable utterance.

(5) A syllabic nucleus consisting of a single /V/ is often very short before /+/ which is followed by a full stress unit, and is always extremely short before /+/ which is followed by a weak stress unit (107e). A syllabic nucleus consisting of /VV/ is correspondingly shorter before /+/; it is only slightly longer than V/C—C/ when followed by /+/ which is followed by a weak stress unit.

(6) Before /· ,/ (especially /,/) a syllabic nucleus is quite a bit longer than before /C/; a one-vowel nucleus in the former environment is almost as long as

/VV/ before /C/, and /VV/ before /·/ or /‚/ is correspondingly longer.

Vowel clusters are always voiced. Single vowels are fully voiced except in the environments listed below, where they are always or sometimes voiceless, or fading from voiced to voiceless, as specified.

hX–̥	always voiceless in normal speech.
hX–̥C	almost always voiceless.
hV–̥	not only voiceless, but usually has no audible breath, although the mouth can be seen to be in the proper position for the /V/ involved.
h–̥	voiceless or fading from voiced to voiceless, and accompanied by glottal aspiration.
h–̥C	usually voiceless or fading, but occasionally voiced if phonemically different from the /V/ which precedes the /h/.
ʔ–̥	sometimes voiceless, but usually weakly voiced and accompanied by glottal stricture.
VT–.	voiceless or fading from voiced to voiceless.
VJ–.	fading from voiced to voiceless.
s–hX	usually voiceless when unstressed, often voiceless even when stressed; low vowels are voiced more often than high vowels in this environment.
hX–hX	(where the first /X/ is other than /s/) occasionally voiceless, but usually voiced; the

tendency to be voiceless is greater if the /V/ is unstressed.

—· usually fades to voiceless at end.

Pitch of vowels is treated in 160, stress in 107. The vowels have a partial influence upon the position of surrounding /c hc t ht n hn k hk kw hkw hs/, as described in 111, 112, 113, 115, 118.

The low vowels are always realized as vocoids, and the high vowels are realized as vocoids except in a very few environments. y/hs—hT/ and y/hs—ṯ/ are represented by syllabic [s] in free variation with a high central vocoid. u/hs—hT/ and u/hs—ṯ/ are represented by syllabic [s] accompanied by lip-rounding and raised dorsum in free variation with a high back rounded vocoid. i/hs—hT/ and i/hs—ṯ/ are represented by a palatalized syllabic [s] in free variation with a high front vocoid. When a vocoid occurs for high vowels in these environments, it is usually voiceless (see above). Syllabic [s] is in all three cases the more frequent representation. i/hn—ht/ is usually represented by a palatalized syllabic [n], but sometimes by a high front vocoid.

141. /i/. /i/ may be preceded by any /C/ except /x q qw/, and by any /V/. It is the only vowel which can follow a /V/ other than itself in vowel clusters. It may be followed by any /C/ except /s x m/, by itself, or by any juncture phoneme.

There is little variation in quality among the phonetic representations of /i/. In most environments it is represented by front vocoids varying from high to lower high, usually closer to high. The environments in which this is not the case are mentioned in the following paragraphs.

i/C—(h)q/ and i/C—(h)qw/ are somewhat centralized and slightly lower than /i/ of most environments. The height is around lower high, and it is between front and central, with occasional occurrences closer to central than front. These allophones are very close in quality to the forward allophones of /y/ (142), and the contrast between these two phonemes when preceded by a front consonant and followed by /q hq qw hqw/ is very slight.

/ʾawyhsiqoota?i./	scrape it!
/cyqoota./	dish.

i/hn—ht/ is often realized as a syllabic palatalized [n], the apex failing to be released from its point of contact for the vowel. /i/ is marked in this situation not only by the palatal quality of the syllabic nasal but also by the dental position of the following /ht/ and by the fact that no other vowel is ever represented by syllabic [n]. This phenomenon may also occur for i/hn—hc/ and i/hn—hs/, but it has not been noticed. The sequence /hniht/ has been found only in the representations of two morphemes, in both of which the vowel which precedes is /a/. As the /hn/ is

thus alveolar (123,112), the apex, if it remains unreleased for the /i/, moves forward to dental position during the syllabic nasal.

/sahnihtiija°a./	watermelon.
/sahnihte°ni./	frying pan.

In sequences of the type /hsihT/ and /hsi+/ the apex often fails to be released and the /i/ is realized as a palatalized syllabic [s]. If the vowel which precedes such a sequence is other than /i e/, the apex moves forward from its postalveolar position (118) as the front is raised, regardless of what follows the /i/.

/kihmahsi+/	having come
/pihsihtoona°a./	pistol.

142. /y/. /y/ may be preceded by any /C/ except /x q qw/, and by itself. It may be followed by any /C/ except /s x m/, by /i y/, or by /+/.

/y/ varies from high to lower high and from central to back. It is central after front consonants, back after all other consonants.

/syhmy°y./	one.
/pyyhsy°yhkihmahti./	came alone.

Syllabic [s] (without palatalization or labialization) often occurs for /y/ in sequences of the type /hsyhT/ (especially where /T/ is /t/ or /c/), and occasionally in the

sequence /hsy̥t/. In the former sequence the tendency for /y/ to be realized as syllabic [s] is greater if its position with relation to the following sequence is such that it is unstressed.

/nohihsyhta°ihti./	is freezing.
/nohihsyhta°ityhy./	freezing.
/°iqwahsy./	my buckskin.

143. /u/. /u/ may be preceded by any /C/ except /x q kw qw/, and by itself. It may be followed by any /C/ except /s x m/, by /i u/, or by /#/.

In most environments, /u/ is high to lower high, usually closer to high; it is slightly farther back than the back allophones of /y/; and the lips are somewhat more rounded than for English /uw/.

Interconsonantal /u/ which is separated from an /a/ of the preceding or following syllable by a single consonant other than /w/ tends to have a lower tongue height, often as low as upper mid, although the lips seem to be as much rounded as for the higher allophones and moreso than for the upper mid allophones of /o/ (146).

u/hs—hT/ and u/hs—t̥/ are usually realized as syllabic [s] accompanied by lip-rounding and with the back of the tongue raised. Occasionally, however, the preceding /s/ is released and the /u/ is represented by a vocoid, as in other environments.

/puhku./	dog/pet.
/ʔapunihti./	saw it.
/pojonahsu./	along the road.
/ʔahsuhcaahti./	likes it.

144. /e/. /e/ may be preceded by any /C/, and by itself. It may be followed by any /C/ except /s x m/, by /i e/, or by /ǂ/. It occurs with a good deal less frequency than any other vowel.

/e/ is generally front and mid to lower mid, usually closer to mid. It is somewhat higher, ranging up to upper mid, when followed by /i ci hci hti hsi ni hni ʔni/ (the sequences /eti eji esi ehji eʔji/ do not occur), and when preceded by /j/. Like /i/, it is centralized before /q hq qw hqw/.

/ʔehkwy./	ground squirrel.
/nopiwee./	in the house.
/nopikei./	house-having.
/syjeepeci./	coward.
/noheqwenaʔa./	very far away.

145. /a/. /a/ may be preceded by any /C/, and by itself. It may be followed by any /C/ except /s x m/, by /i a/, or by /ǂ/. It is the most frequently occurring of the vowels.

/a/ is a low to higher low central vowel. It has a tendency to be higher when unstressed than otherwise, and in

careless speech it may range to as high as lower mid when unstressed. When followed by /i j/ or preceded by /j/ it is fronted and raised.

/nana./	man.
/mijawai./	will go.

146. /o/. /o/ may be preceded by any /C/ except /k qw/, and by itself. It may be followed by any /C/ except /s x m/, by /i o/, or by /+/.

It is realized as a back rounded vocoid varying in height from mid to lower mid, usually closer to mid, in most environments. It is somewhat higher, ranging up to upper mid, when preceded or followed by /w/, and perhaps to some extent also when preceded or followed by /m hm p hp/.

/pojo./	road.
/nowijawai./	will move away.

150 Junctures

150. The junctures /+ · , ./ are always followed by /C/ or by , and are the only phonemes which occur before . /· ,/ are generally preceded by /V/, but may be preceded by /h/; /+ ./ are usually preceded by /V/ but they occur after certain consonants under special conditions.

The junctures and are in general alike with regard to their effect upon the articulation of following consonants. The length and pitch of vowels in initial syllables is the same after /· , ·/ and , and under some conditions after /+/. The junctures are also alike in that they all play the same role in the determination of the positions of occurrence of stress in preceding words (107).

The phenomena accounted for by the junctures are related primarily to what precedes, particularly the preceding vowel. The effect of each of the junctures upon the preceding vowel may be sketchily summarized as follows:

/+/ preceding /V/ short and weakly articulated (often voiceless), with little or no drop in pitch (from the preceding level) if voiced.

/·/ preceding /V/ always voiced, has pitch level 1+, and is held to full length or longer, with fadeout at end.

/,/ preceding /V/ has pitch level 2+, is held to full length or longer, with no fadeout.

/·/ preceding /V/ short and weakly articulated (often voiceless), has pitch level 1 if voiced.

Note that, with respect to the preceding vowel, /+/ and /·/ are very similar. They are in fact the same whenever the preceding vowel is voiceless. Nevertheless, they contrast clearly with each other in their effect upon that which precedes that /V/, and often also in their effect upon the syllable which follows them.

Description of phenomena involving pitch is made with reference to a scheme which represents the pitch range of normal speech as extending from 1 (the bottom of the range) to 4 (the top of the range except in special circumstances). 2 represents the level at which utterances and sentences (i.e. sequences following /./ or and extending to and including the next /./) usually begin. Where /· ,/ and supra-segmental phonemes do not occur, the pitch level stays around 2 until the last stressed syllable before /./, where it rises to around 3. The interval between 1 and 2 is greater than that between 2 and 3.

151. /+/. /+/ is the most frequently occurring of the junctures. It is always followed by /C/ or , and is usually preceded by /V/, although it is sometimes preceded by /C/ under special circumstances (227b, 237-239). Some of the features for which /+/ is held accountable are described below.

a. Length of preceding /V/. V/C-+/ is shorter than V/C-C/, at equivalent rates of speed, if any of the following three conditions is present:

(1) The following syllable is a weak stress unit (107e). The brevity of the vowel in question is related to the tendency to maintain roughly equal time intervals between the incidences of intermediate and strong stresses. Under the condition stated, there are two

successive syllables without intermediate or strong stress; these two syllables combined cover about the same time interval as is covered by a single unstressed syllable which is internal in a word. The syllable following /+/ has roughly two-thirds the length of an internal unstressed syllable, while that preceding /+/ has roughly one-third that length. Thus the weak stress unit and the preceding full stress unit together have the duration of one usual full stress unit.

(2) The /C/ which precedes V/—+/ is /°/. Under this condition the vowel is usually considerable shorter than an unstressed vowel occurring internally in a word, even when condition (1) is not present. Thus, if condition (1) does not hold, but (2) does, the usually regular rhythm of successive stress units is upset.

(3) The syllable which precedes V/C—+/ contains a vowel cluster. Under this condition, the /V/ is the third vowel of a three vowel stress unit. When not followed by /+/, the third vowel of a stress unit has roughly 2/3 the duration of a /V/ occurring as the second /V/ of a two vowel stress unit (and not followed by /+/). When followed by /+/, however, the third /V/ of a stress unit has considerably less duration, and the preceding two vowels are correspondingly longer. Where condition (1) is present, a vowel cluster preceding /+/ is shorter than one preceding /C/. (The other

two conditions do not apply to vowel clusters preceding /+/.)

If none of the above conditions is present, V/C—+/ and VV/C—+/ are nevertheless often significantly shorter than V/C—C/ and VV/C—C/ respectively.

b. Voicing of preceding /V/. V/C—+/ is voiced or voiceless depending primarily upon further conditions of the environment. The details are given in 140.

c. Pitch. Unlike the other junctures, /+/ has little or no effect on the pitch of the preceding /V/, although it does have a slight effect on the pitch of the /V/ (or /VV/) of the next preceding syllable. Unless a suprasegmental phoneme is present, V/—+/ has pitch level 2 if it is voiced. The nucleus of the next preceding syllable has a somewhat higher pitch, which could be represented as 2+ or 3-.

152. /·/. /·/ is always followed by /C/ or by , and is usually preceded by /V/, but occasionally occurs after /h/ (225d).

Vowels preceding /·/ are always voiced and are rather long, with the voice fading if # follows. The duration of V/C—·/ approaches that of VV/C—C/; VV/C—·/ is correspondingly longer. Although they are of comparable duration, VV/C—+/ and V/C—·/ clearly contrast with regard to stress and pitch.

V/C—·/ has 1+ pitch (slightly higher than the pitch of V/C—./). VV/—·/ has a pitch contour falling from 2+ to 1+.

In the sequences /Vh·/ (which occur only as representations of //Vh+·// 225d, 253), the phonetic realization is similar to that of VV/—·/, except that the duration is shorter. In this environment /h/ is not represented by a glottal spirant, its function being to account for the stress on the preceding /V/ (according to 107a).

153. /,/. /,/ is a phoneme of very infrequent occurrence. (It occurs only as the representation of //,// which, in turn, occurs only as the representation of <,>. //,// and <,>, however, have not been treated in this grammar.) It is always followed by /C/ or , and is usually preceded by /V/, although the sequence /Vh,/ has also been found (225c).

Vowels preceding /,/ are always voiced and rather long, like vowels before /·/. Unlike the latter, however, V/—,/ does not have a fadeout of voicing, nor does it have low pitch. The pitch of V/—,/ is fairly high, around 2+ or 3, and is level. A vowel cluster preceding /,/ apparently differs from single /V/ before /,/ only in that it is about twice as long, and is stressed.

Sequences of the type /Vh,/ are similar to the sequences /Vh·/ (152), except for the difference in pitch and the lack of fadeout. The function of /h/ here is the same as in /Vh·/.

154. /./. /./ is always followed by /C/ or , and is usually preceded by /V/, but it sometimes follows /C/ (under the conditions indicated in 237).

/./ is similar to /+/ in that preceding vowels are short and weakly articulated (often voiceless). It contrasts with /+/ in the pitch contour and the degree of stress which it determines, and in some environments it also differs slightly in its effect on voicing and length of the preceding /V/.

The stressed syllable of a stress unit which is followed by /./ has strong stress, unless /'/ occurs on a preceding stress unit (461). (Where /'/ does occur on a preceding stress unit, /./ contrasts with /+/ in its effect on the following sequence. After /./ the pitch level is 2; after /+/, when there is a preceding /'/, the pitch level is 1.)

The pitch contour determined by /./ is a fall from 3 or 3+ to 1; but the fall may not reach level 1 if V/—./ is voiceless. (This pitch contour does not occur, however, if /'/, /^/, or /`/ is present in the preceding sequence, with no intervening /./ or , unless /'/ occurs on the last stress unit preceding /./.) The fall takes place on the syllable preceding /./ if it contains a vowel cluster. Otherwise it begins on the next preceding syllable. In other words, the falling pitch occurs on the last stressed syllable; if this is the next-to-last syllable and the /V/ of the last syllable is voiced, the latter has pitch level 1.

V/–./ is apparently always shorter than V/–C/, at equal rates of speed, regardless of the other features of the environment. On voicing of V/–./ see 140.

160 Suprasegmental Phonemes

160. The suprasegmental phonemes /ˈ ˆ ˋ ()/ accompany sequences of segmental phonemes of varying length, but never extending beyond an occurrence of /./. /()/ apparently always occurs with entire sentences. (A sentence, on the phonemic level, is a sequence of phonemes extending from /./ or the beginning of an utterance to, and including, the next following /./.) The sentences with which /()/ occurs are generally very short. /ˋ/ apparently occurs only with the last stress unit of a sentence. /ˈ ˆ/ have scope extending from the beginning of a full stress unit anywhere in the sentence to the end of the sentence. These four phonemes seem to be mutually exclusive, but there is a possibility that /ˈ/ and /()/ can occur together. /ˈ ˆ ˋ/ are written over the first vowel of the stress unit with which their scope begins. The symbol representing /()/ is written such that its two components enclose the sentence with which the phoneme occurs.

Each of these phonemes occurs only as the representation of a single morpheme. Since the morphemes involved

are not treated as such in this grammar, some remarks on their meanings are included in this section, in so far as these meanings have been ascertained.

161. /'/. This phoneme occurs with portions of sentences varying from a single stress unit to a whole sentence, but always including the end of a sentence with which it occurs. The scope of its coverage seems always to start at the beginning of a full stress unit.

It represents an intonation contour, and strong stress on the syllable with which its scope begins. Pitch level 4 occurs, with strong stress (sometimes extra strong) on the syllable with which its scope begins; /'/ is written over the (first) /V/ of this syllable. The pitch falls during this syllable if it contains /VV/, or on the next one if it does not. Succeeding syllables have pitch 1, with apparently the possibility of some slight variation about this level if there are several following syllables. If the beginning of this contour is on a stress unit preceding the last one of the sentence, the last one does not have strong stress and high pitch (as it does when no suprasegmental phoneme occurs). /+/ and /./ are distinguished from each other, after the occurrence of /'/ in a sentence, by the fact that the pitch level continues to be 1 after /+/, whereas after /./ it goes back up to 2 (the usual level for the beginnings of sentences).

The meaning of the morpheme <'> has to do with emphasis upon the form at which the contour begins.

162. /^/. Like /'/, /^/ occurs with portions of sentences varying from single stress units to the whole sentences, but it always extends to the end of a sentence with which it occurs. The scope of its coverage seems always to start with the beginning of a full stress unit. It represents an intonation contour which begins with a fairly high pitch level (3 to 4) and which falls gradually from this level on following syllables, till it reaches level 1 at the end of the sentence. The beginning of the contour has intermediate stress (not strong stress, as with /'/), and the last stress unit in the sentence also has intermediate stress; there seems to be no occurrence of strong stress in a sentence containing /^/. The symbol for this phoneme is written over the (first) /V/ of the first stress unit included in its scope. Unlike /'/, /^/ seems not to occur (i.e. to begin to occur) near the ends of sentences.

The meaning of <^> is not clear.

163. /`/. /`/ apparently does not vary with respect to the amount of a sentence over which its scope extends. Its distinctive characteristic is the pitch of the last stressed /V/ of the sentence, which falls from level 2 (instead of going up to 3). This fall is sometimes anticipated to a

slight degree on two or three syllables immediately preceding the last stress unit. This seems likely to be a matter of free variation; thus it may be correct to state that this phoneme occurs in only one position of a sentence. It is written over the first /V/ of the last stress unit of the sentence.

The meaning of <`> is unclear. It sometimes appears to be connected with lack of enthusiasm of the speaker regarding what he is talking about. Sometimes it appears to indicate concern or reflection.

164. /()/. This phoneme occurs with whole sentences, usually very short ones. It is marked by a shift of the entire pitch register to around two or more tones lower than that of a preceding sequence not occurring with /()/. The lowered pitch register is characterized also by diminution of the intervals between the pitch level. In addition, the volume of the voice is considerably less than that in surrounding sequences not enclosed in /()/; and the last stressed syllable before /./ does not usually have higher pitch than the preceding syllables (as it does when there is no accompanying suprasegmental phoneme).

The sentences occurring with /()/ are usually very short, often containing only a single word. In terms of its meaning, the sequence containing <()> is a word or phrase which amplifies or clarifies some idea expressed in the

preceding sentence; or, most often, the sequence accompanying /()/ is a form like /ʔinetyhy./ 'saying' or /ʔinehti./ 'says/said' or an expression of the like containing another verb of saying; these forms can be freely translated, 'one might say' or 'one would say', where reference is to the preceding sentence.

/ʔipehuhmahu+nyyhmy.(ʔinetyhy.)/

Maybe that's an Indian. (One might say.)

170 Anomalous Phonemes

170. Some sounds which have occurred in the speech of Lucy Kinsman and/or other Northfork speakers are, for one reason or another (as indicated below), considered not to belong to the standard phonemic system of Northfork Mono. These sounds are accounted for by what are called the anomalous phonemes. Some of them are treated briefly in this section; they have been ignored throughout the remainder of the grammar.

171. An apico-alveolar trill has been found in two imitative expressions, which themselves are somewhat anomalous morphemically, in that they do not (like most imitative expressions) occur with the suffixes <hna'> iNf 'being which makes the sound ...' (318d) and <ʔi> iV 'to make the

sound ...' (367c); i.e. they occur only as frustums (402b). One of these imitatives is accompanied by a very high pitch, with an intonation contour that is not found elsewhere in the language (176).

172. An alveopalatal affricate, long, fortis, and voiceless, occurs (intervocalically) in an imitative word occurting in a mythological text. This word is accompanied by a distinctive intonation, and occurs only as a frustum. In accordance with its long, fortis, voiceless quality and the patterns involving other consonants, this sound can be represented by /hč/. It is not, however, considered elsewhere in this description.

173. In the text mentioned above, another element occurs which contains a long fortis voiced bilabial stop intervocalically. The word occurs in a quotation uttered by the same character who utters the imitative expression mentioned in 172. The occurrence of length and fortis quality in conjunction with voicing is contrary to the standard pattern of Northfork consonants. The word in question is clearly a borrowing from Northeastern Mono or from Southern Paviotso (in which long fortis voiced stops occur). Northfork has the cognate, with the corresponding stop voiceless. The Northforkcoognate is /ʔyhpety/ 'thy daughter'; the form occurring in this text might be rendered /ʔyhbaatyʔy/.

174. A velar nasal, long, fortis, voiced, intervocalic, and thus representable by /hŋ/, has been found in a hand-game song which appears to be of Yokuts origin.

175. A phoneme /l/ occurs in at least two songs, which may be of Yokuts origin. It also occurs in a few personal names of English origin (where it corresponds to English /l/), in which it varies freely with /n/. In these names, the variants containing /n/ are taken as standard.

176. A number of phonetic features involving pitch, intonation contours, modification of tone of voice, and/or anomalous stress patterns, which are associated with specific imitative expressions, are classed as anomalous and are not described in this grammar.

177. Another suprasegmental phoneme which has been classed as anomalous comes closer to the possibility of being considered standard, since it occurs somewhat more freely than those mentioned above. It may be referred to as allegro, and might be written with a raised line extending over those segments which it affects. A sequence of phonemes accompanied by the allegro phoneme is uttered at about double the speed of the adjacent syllables (which have a fairly definite rhythm established by the regular stress pattern). Phonemes accompanied by allegro have

phonetic features differing from those occurring when allegro is not present, mainly in the following respects: the obstruents and nasals usually occur with only an approach of the articulator to the point of articulation, or with very fleeting contact; /i e u o/ are more centralized, /a/ is higher, /i y u/ are lower. There is often extreme difficulty in determining the phonemic segments represented in such a sequence, but the determination of the phonemes present is usually aided by consideration of the semantic context and knowledge of the fact that the allegro phoneme has a tendency to occur with particular forms. The forms which have most frequently been found with allegro are /qatuʔu/ 'no, not, none' and /ʔawaahiiʔihti/ 'wants/wanted it'; the latter often sounds almost as if it might be approximately rendered as */ʔawaihti/. Often, when one of these forms occurs with the allegro phoneme, the scope of that phoneme extends also to one or more syllables (in one or both directions) of contiguous forms, sometimes as far as to include three or four words in all.

The primary argument for considering allegro an anomalous phoneme is based on the following fact: wherever it occurs, it varies freely with zero, i.e. with its absence. Moreover, in every case in which the informant was asked to repeat, as closely as possible, a sequence containing allegro which had been recorded on tape, the repitition occurred without the occurrence of allegro. Allegro tends to occur

most commonly in conversation and in spontaneous, unpremeditated texts.

178. One juncture phoneme which has been classed as anomalous is associated with interruption of an utterance by the speaker in the midst of a sentence (often in the middle of a word), under circumstances which make it apparent that the speaker has changed his mind about what he was going to say. Occurrences of this anomalous juncture are followed by (what the speaker apparently chooses as) an alternative beginning (and continuation) of the utterance or some portion of the utterance. As in the case of allegro, occurrences of this phoneme and the immediately preceding sequence are never repeated by the informant, even immediately after she has heard their reproductions on the tape recorder. The phoneme is marked by a shortening of the time span covered by the preceding two or three segments, becoming progressively shorter, with no change in the pitch level.

CHAPTER TWO

MORPHOPHONEMICS

201. This chapter describes the relationships between the phonemes and morphophonemes of Northfork by means of statements defining the phonemic representation, or realization, of the morphophonemes, whose inventory is indicated below (202). Additional data, on distribution and on relationships to the morphemic level, are added wherever they are considered to be of particular interest.

As indicated in 1d, the morpheme is characterized by: (1) one or more morphophonemic representations, or morphs; (2) distributional properties, or membership in one or more distribution classes; (3) one or more semantic representations, or semes. Where a morpheme has more than one morphophonemic representation, each of them may be referred to as an allomorph of the morpheme. (Similarly, two or more semes of the same morpheme may be called its allosemes.) (Allo)morphs and morphophonemes are enclosed in //.../.

A morphophoneme will be said to correspond to a phoneme if it is written with the same symbol as that phoneme, and is represented by that phoneme in at least some of its (morphophonemic) environments.

202. The inventory of morphophonemes includes one morphophoneme corresponding to each of the phonemes (102), plus the following:

Oral Stop:	k̄		
Nasal:	N		
Semivowels:	j̄	w̄	
Glottals:	ĥ	'	'
High Vowels:	ū	Y	
Reduplicatives:	R	Ꞩ	
Juncture:	~		

represents pause, which is considered to be the absence of linguistic phenomena. It is not set up either as a phoneme or a morphophoneme, but sometimes functions as a significant factor in an environment. As it is not given a structural status, it is allowed to circulate freely among the various levels, representing the same thing whether enclosed by /.../ or by //...// or by nothing. It occurs only after junctures, except //~//, and before the beginning of utterances.

203. The classification of the morphophonemes is based upon that of the phonemes (103), as follows: morphophonemes which have corresponding phonemes (201) belong to classes having the same names as the classes to which their

corresponding phonemes belong. The morphophonemes without corresponding phonemes are classed as indicated in 202.

204. The notational devices used in this chapter are described below.

a. The following morphophonemic cover symbols are used:

V	- any vowel	J	- any semivowel
C	- any consonant	I	- any high vowel
H	- //h// or //°//	A	- any low vowel
X	- any obstruent	↟	- //+//, //,//, or //.//
T	- any oral stop	"	- //Ø// or //~// or a glottal, or any combination of these
⋈	- any combination made up solely of //C ~ u//		

b. Except where they are too complicated, morphophemic rules are stated in the following type of notation:

$$x//y_1 \ldots y_n - z_1 \ldots z_n / w$$

This is to be interpreted as follows: The morphophoneme //x//, when preceded by the morphophonemic sequence $//y_1 \ldots y_n//$ and followed by the morphophonemic sequence $//z_1 \ldots z_n//$, is represented phonemically by /w/. That is, the morphophoneme under discussion is given at the left. The environment for which the rule applies is given in the space between // and /, with the position in the environment

designated by —. The phonemic representation is given after /. When — is not preceded or followed by any morphophonemic symbols, the rule applies for any preceding or following morphophoneme, respectively. If the rule applies for all environments, -- is written in the space for environment.

c. Wherever some special statement concerning an environment is needed, an asterisk * accompanies the appropriate symbol, and an explanation is given.

d. In some of the examples in this and the following chapters, morphs are separated by spaces (which have no morphophonemic significance). E.g. //ta ta// = //tata//.

e. Most morphs are continuous and follow one another in linear order. When this is not the case, the following devices are used if it is desired to indicate morph boundaries:

(1) Two dots following a morph-initial morphophonemic symbol indicate that that morphophoneme occurs (a) immediately before the second preceding morphophoneme, if the latter is a consonant, or (b) immediately after the second preceding morphophoneme if the latter is a vowel, or if the first preceding morphophoneme is //R//.

//mija ʔ..hki// = //miʔjahki//

//ʔehki ʔ..hki// = //ʔehʔkihki//

//wyy ʔ..hki// = //wyʔyhki//

//kwipi Ṛ h..ki// = //kwipihṚki//

//wynacu h..// = //wynahcu//

(2) Two commas preceding a morphophonemic symbol indicate that that morphophoneme occurs (a) immediately after the third following morphophoneme if the fourth is a consonant, or (b) immediately before the third following morphophoneme if the fourth is a vowel.

//,,˜ ʔahca pana// = //ʔah˜capana// (319f)

//Rh,,ʔ syy mano htu// = //Rhsyyʔmanohtu// (382)

//,,h ʔyty ʔy// = //ʔyhtyʔy// (384b)

210 Oral Consonant Morphophonemics

210. The class of oral consonant morphophonemes comprises one member corresponding to each of the oral consonant phonemes, plus three others of rare occurrence, //k̄ j̄ w̄//, and one other, //N//, which occurs in a single very frequently occurring morph, //Na// representing <Na> nO 'obj.' (337a)

Except where specified otherwise by the statements of 211-217, any oral consonant morphophoneme is represented phonemically by its corresponding phoneme.

211. The phonemes /k q/ are in overlapping distribution, as shown by the table of 113. Since /q/ never occurs before high vowels, and /k/ never occurs before /o/, //k// is set up for all morphs whose phonemic representations have /k/ followed by high vowel, and //q// for those whose phonemic representations have /q/ followed by /o/. /k/ occurs before /a/ only in suffixes and in the interior of morph representations, never initially in the representation of a root morpheme. Thus root-initial /q/ which is followed by /a/ never alternates with /k/. In other than root-initial position, /k/ occurs before /a/ when preceded by high vowel or high vowel plus /h/, except in the case of two morph representations which have /q/ instead: /tyqahpo/ 'rope', /pahnyqaahpy/ 'the Coast Range'. There are only two known roots whose representations begin in /ke/, /keejihsi/ 'sp. flower or its seeds' and /keewii/ 'clam shell'; and two whose representations begin in /qe/, /qety/, which occurs in the combination /puhi qety/ 'abalone shell', and /qete/, which occurs in the combination /cah qete tehi/ 'to drag noisily'. As with the roots with initial /qa/ (and all roots with initial velar stop), there is never any alternation involving the initial consonant for these roots with initial /ke/ and /qe/. In other than root-initial position, /k/ but not /q/ occurs when there is following /e/ and preceding high vowel or high vowel plus /h/, except in one form, /tyhqeeci/ 'sp. plant (whose greens were eaten)'. This form, like the two cited

above which have /qa/ where /ka/ might be expected, are set up with //q//. //jaqa// 'to cry' is the only morph having the alternation in its interior (235).

Thus the alternation /k/~/q/ occurs only for suffixes with /ke/~/qe/, /ka/~/qa/, /ku/~/qo/ (231a), and for //jaqa//. These suffixes are set up with //k//; the two roots mentioned above whose representations begin in /ke/ are set up with //k̄//. The alternations involving /k/ and /q/ are covered by the statements below.

a. k//A"—A/q

//no pih ~ ke i//	house-having (396b)
/nopikei/	(224a)
//ʔahpo ~ ke i//	basket-having
/ʔahpoqei/	
//ʔa puh ~ni kaa hpy//	has gone to see it
/ʔapunikaahpy/	
//pa hkwi ka kaa hpy//	has gone fishing
/pahkwikaqaahpy/	

b. k//o×—u/q

//wahahku//	two-obj.
/wahahku/	
//syywanohku//	ten-obj.
/syywanohqo/	(231a)

c. k̄//--/k

//ʔah k̄eewii//	his clam-shell
/ʔahkeewii/	

d. q//-a˜i/k

//jaqa ˜i//	to cry at/to
/jaki/	(235)

212. /kw/ and /qw/ are in overlapping distribution, as shown by the table of 115. The only environments in which both occur are /i–e/, /i–a/, /y–e/, /y–a/, and /u–a/. Of the two phonemes, only /kw/ occurs before /i y o/, and it occurs before /o/ only as the representation of //w//. Neither occurs before /u/. As in the case of /k q/, /kw/ and /qw/ undergo no alternation if they are initial in representations of roots. There are only two suffixes whose representations begin in /hkw/~/hqw/, aside from those in which the stop represents //w//; (there are no suffixes having representations beginning in /kw/ or /qw/.) These two suffixes are <hkwa> vVg 'remote future' (378), and <hkwa'> nNp 'plural' (322a). The sequence /kwe/ occurs only when this /kw/ is the realization of //w//. Thus there is no statement needed for the alternation of /kw qw/ representing //kw qw// except before /a/. The only forms involved are the suffixes mentioned above. //kw// is set up for these, paralleling the treatment of /k/~/q/ (211).

kw//A"–a/qw

//ʔa puh ¯ni hkwa hti// will see it

/ʔapunihkwahti/

//pa hkwi ka hkwa hti// will go fishing

/pahkwikahqwahti/

The distribution of post-vocalic //kw// and //qw// is indicated in the table of 213.

213. /w/~/kw/~/qẇ/ represent //w//. Aside from the two suffixes beginning in //hkwa// mentioned in 212, /kw/ never occurs before low vowels except as the representation of //w//. The morphophoneme //w̄// is set up for the three forms which contain the sequence /hw/: //pahw̄a// 'father's sister; uncle's wife', //pihw̄i'// 'sp. flower', //qwatyyhw̄i// 'to belch'. In the statements a and d below, ĥ signifies //h// or //x̄// (225).

a. w//Iĥ–/kw

//wyh weni// to hang (smthg.) up

/wyhkweni/

//ʔi wehoi// my grey hair

/ʔiwehoi/

//ʔyh wehoi// thy grey hair

/ʔyhkwehoi/

//waqa// to say

//ʔi waqa hna// what I said (318a)

/ʔiwaqahna/

//ʔyh waqa hna// what thou saidst

/ʔyhkwaqahna/

b. w//Ah–I/kw

//cah wyna ʔi// to knock down

/cahkwynaʔi/

c. w//h–o/kw

//ʔi wooh .// my head.

/ʔiwoo./ (225)

//ʔyh wooh .// thy head.

/ʔyhkwoo./

d. w//Aĥ–e/qw

//ʔah wehci// his grey hair

/ʔahqwehci/

//no pih ~ paʔaĥ weeh .// over the house

/nopipaʔahqwee./

e. w//Ah–a/qw

//ʔah waqa hna// what he/she said

/ʔahqwaqahna/

f. ẅ//--/w

//qwatyyhẅi// to belch

/qwatyyhwi/

These statements are summarized in the following table:

preceding vowel	following vowel: i	y	u	e	a	o
i	⌊kw	⌊kw		⌐kw	⌐kw	kw
y	⌊kw	⌊kw		⌐kw	⌐kw	kw
u	⌊kw	⌊kw		⌐kw	⌐kw	kw
e	⌊kw	⌊kw		⌐qw	⌐qw	kw
a	⌊kw	⌊kw		⌐qw	⌐qw	kw
o	⌊kw	⌊kw		⌐qw	⌐qw	kw

kw : //hw// represented by /hkw/

qw : //hw// represented by /hqw/

⌊ : //kw// and/or //hkw// occur

⌐ : //qw// and/or //hqw// occur

Note that when /kw/ occurs after /Ih/ and before /a/ it can automatically be known that it is either (a) not the initial phoneme of a root, or (b) the initial phoneme of a root, representing //w//. Where /qw/ occurs in the same environment, it must be initial in a root, and represent //qw//.

//ʔyhwahnihni//	thy barrel
/ʔyhkwahnihni/	
//ʔyhwahkihta//	on this side of thee
/ʔyhkwahkihta/	

//ʔyhqwaahnahqwe// on the other side of thee

/ʔyhqwaahnahqwe/

214. The alternation /j/~/t/ corresponds to that of /w/~/kw/~/qw/, but is simpler, as there is only one stop taking part in the alternation. The morphophoneme //J// is set up for the two forms in which the sequence /hj/ occurs: /hupuhja/ 'elderberries', /cį pohja/ 'to string (fish) on a stick'.

a. j//h–/t

//ʔi jatuha ˜i hti// spoke to me

/ʔijatuhihti/

//nah nah jatuha ˜i hti// spoke to each other

/nahnahtatuhihti/

b. J//–/j

//hupuhJa// elderberries

/hupuhja/

215. Intervocalic //w// is sometimes represented by /ø/, according to the following statements.

a. In the environments //V–V// and //Vh˜–V//, except (1) //y(h˜)–i//, (2) where the preceding //V// is //i// and the following //V// is other than //i//, (3) //VV(h˜)–V//, (4) //V(h˜)–VV//, //w// is represented sometimes by /w/

(unless 215b applies), sometimes by /ø/. The tendency for //w// to be represented by /ø/ rather than /w/ is somewhat greater if its position with regard to the following syllables up to the next occurrence of //ɬ// is such that, were it represented by /w/, this /w/ would be the beginning of a stress unit (107e). This is especially the case if the preceding and following vowels are identical.

//pa hkwi wihsi .// fish-line.
/pahkwiihsi./

//pa hkwi wihsi Na .// fish-line-obj.
/pahkwiwihsina./ (217)

b. w//u˜–ū/ø

//ouhmuujuju˜wūh.// (a place name)
/ouhmuujujuu./ (231b, 224b)

(The sequence //wū// occurs only in the representation of <wū> nL˜ 'at' (348a), which is always preceded by <˜>.)

c. In the environment //i–a//, //w// is usually represented by /j/, but occasionally by /w/, if its position with regard to the following sequence up to the next occurence of //ɬ// is such that its phonemic representation falls at the beginning of a stress unit; if its position is otherwise, it is always represented by /w/.

//pa hsiwah Py// sand
/pahsijahpy/

//pa hsiwah noo kaa wai//	will go haul sand
/pahsiwahnooqaawai/	(211a)

216. Intervocalic /m/ does not occur. In those environments where it might be expected, /w/ occurs instead.

a. m//V-V/w

//ʔyh mah ˜ja//	thy hand (224a)
/ʔyhmaja/	
//ʔi mah ˜ja//	my hand
/ʔiwaja/	

b. m//Vh˜-V/w

//wijah ˜mahqa//	to give acorns to
/wijawahqa/	

c. m//'-V/w

//pahnijoohna' my//	Mexicans
/pahnijoohnaʔawy/	(227c)

217. //N// occurs only in the representation of <Na> nO 'obj.' (337a). Its phonemic realizations are covered by the following statements:

a. N//'-/a (cf. 227g. i.e. N'//--/ʔa)

//pahnijoohna' Na//	Mexican-obj.
/pahnijoohnaʔaa/	

b. YN//--/yn-a (232)

//wijah pY Na// (black) oak-obj.

/wijahpyna/~/wijahpaa/

//pahnyqaahpY Na// the Coast Range-obj.

/pahnyqaahpyna/~/pahnyqaahpaa/

c. yñN//--/a (225m, 233)

//mija tyñ Na// going-obj.

/mijataa/

//ʔi kwyytyñ Na// my friend-obj.

/ʔikwyytaa/

d. N//--*/n *except where 217a, b, or c applies.

//puhku Na// dog-obj.

/puhkuna/

//wijah Na// black oak acorns-obj.

/wijana/ (224c)

220 Glottal Morphophonemics

220. The glottal morphophonemes are //ʔ ' h ñ '//. Those without corresponding phonemes //ñ ' '// are defined in 225, 226, and 227 respectively. Except where specified otherwise by the statements of 221-224, or 236, //ʔ h// are represented phonemically by their corresponding phonemes.

221. /s x/ do not occur intervocalically. Where they might be expected, one finds instead /hs hx/, as specified by the following statements.

a. Ø//V(˜)–s/h

//ʔyh sono//	thy lungs
/ʔyhsono/	
//ʔi sono//	my lungs
/ʔihsono/	

b. Ø//V–x/h

//ʔi xaahnuʼ .//	my cup.
/ʔihxaahnuʔu./	(227a)

222. ʔ//–X/h

//mija ʔ..hki hti//	(204e)	went hesitantly (373a)
/miʔjahkihti/		
//ʔa wyy ʔ..hki hti//		took it hesitantly
/ʔawyʔyhkihti/		
//jaqa ʔ..hki hti//		cried hesitantly
/jahqahkihti/		
//ʔehki ʔ..hki hti//		ate acorn hesitantly
/ʔehkihkihti/		(223a)

223. Phonemic sequences of the type /HH/ do not occur.

a. H//–H/Ø

//ʔyh hahma' .//	thy older sister.
/ʔyhahmaʔa./	
//ʔah ʔawa//	his horns
/ʔaʔawa/	
//hahkwihsa ʔi ʔ..ki hti//	is sneezing inter-
/hahkwihsaʔikihti/	mittently

b. h//–'/Ø

//typah ' .//	piñon nuts.
/typaʔa./	

224. //h// is represented by /Ø/ in a few additional environments, as specified by the following statements.

a. h//–~/Ø

//no pih ~ weeh .//	in the house. (396b)
/nopiwee./	(224b)

b. h//–ǂ/Ø

//ʔi no pih .//	my house.
/ʔinopi./	

c. h//–N/Ø (217)

//ʔi no pih Na//	my house-obj.
/ʔinopina/	

d. h//ǂ*–C/Ø ǂ*: any juncture, or //

//nohi hmukih pY//	object with very
/nohihmukihpy/	sharp point

//# hmukih pY// pointed object

/mukihpy/

225. The special "h" morphophoneme //ĥ// occurs finally in all morphs containing it. Most of these morphs represent locative morphemes (340), but there are some which represent morphemes of other classes:

//tyĥ// representing <tyĥ> vNf,lN (319a,b)

//neĥ// <neĥ> vT 'while ...ing' (358b)

//hnuĥ// <hnuĥ> vNr+ (319a)

//eĥ//, //neĥ// <hti> vIN (379b)

//qeĥ// <qeĥ> hN indef. pron. base (328)

//hsy'yĥ// <hsy'yĥ> F 'only' (395)

//~tijaĥ// <~tijaĥ> .E,F 'also, anyway, okay' (392b, 393b, 395)

//jaqaĥ// <jaqaĥ> C,Ce 'perhaps, apparently' (393)

//kwyytyĥ// <kwyytyĥ> Nf 'friend' (318)

The two final morphophonemes //Vĥ// of the morphs containing //ĥ// are realized phonemically by sequences of the types /VhV/, /Vh/, /V/. In the /VhV/ realization, the vowel which follows the /h/ is the same as that which precedes it, and is thus predictable. The special morphophoneme //ĥ//, differing from //h//, must be set up since there are other morphs ending in //Vh// whose phonemic realizations exhibit a different type of alternation (224). The possibility of

setting up //VhV// to cover this alternation is ruled out by the fact that there are morphemes with morphs ending in //VhV// whose phonemic realizations have /VhV/ in all environments, for example:

<qohsoo?moho> Nf 'Southern Sierra Miwok'

<ceehpahnihi> Nf 'magic; magician'

<mowahu> T 'now'

//Vh̃// is realized as /VhV/ only when followed by //.// or //+#//. Otherwise the sequence is realized as /Vh/ or /V/. The statements which govern the phonemic realization of //h̃// are as follows:

a. h̃//V_1*—./hV_1 *except where 225b applies

//mijatyh̃.//	going.
/mijatyhy./	
//nopih̃pa?ah̃tyh̃.//	that which is on top
/nopipa?ahtyhy./	of the house. (224a, 225l)
//typihnah̃tukuh̃.//	onto the ground.
/typihnahtukuhu./	

b. h̃//o*u—./ho

//?ahnapanoohnuh̃//	bucket.
/?ahnapanoohnoho./	(231a)

c. h̃//—,/h (153)

//mijatyh̃,//	going,
/mijatyh,/	

d. ñ//—+•/h (152, 253)

//nymahmañ+•cipuhihti//	is climbing on me
/nywahmah•cipuhihti/	(216a)
//nyhohtuneñ+•mijatyñ.//	going with me.
/nyhohtoneh•mijatyhy./	(231, 225a)

e. ñ//V_1*—+#/hV_1 *except where 225f applies

//nyhohtuneñ+#mijatyñ.//	going with me.
/nyhohtonehe+#mijatyhy./	

f. ñ//o×u—+#/ho

//ʔahnapanoohnuñ+#//	bucket
/ʔahnapanoohnoho+#/	(231a)

g. ñ//—+H/ø

//ʔyhmah˜ja˜hmañ+ʔamah˜tyhoi.//	dig with your
/ʔymajahmaʔawatyhoi./	hands! (224a, 252)
//hahqaa+ʔijoñ+ʔahpuhku+pihtytyñ.//	whose dog is this
/hahqaa+ʔijoʔahpuhku+pihtytyhy./	coming? (252)
//nymahmañ+hohpohpoʔ+cipuhihti.//	a spider crawled
/nywahmahohpohpoʔo+cipuhihti.//	on me. (227a)

h. ñ//—+J/ø

//kihmahkwañ+wahkihta.//	come ye hither!
/kihmahqwawahkihta./	(212, 252)

i. ñ//—+C*/h C* not H or J

//ʔimah˜ja˜hmañ+nywihti//	is walking on my hand
/ʔiwajahmahnywihti/	(216a, 224a)

//nymahmañ+cipuhihti//	is climbing on me
/nywahmahcipuhihti/	(216a, 252)
//nyhohtuneñ+mijahti.//	went with me.
/nyhohtonehmijahti./	(231, 252)
//ʔiwijah˜paʔañ+kuhsa.//	on top of my acorns,
/ʔiwijapaʔahkuhsa./	a bag. (224a, 252)

j. ñ//–˜/∅

//pa˜ja˜tukuñ˜tai+mijahti.//	went through the
/pajatukutai+mijahti./	water (251)
//ʔijoñtyñ˜tii+wijah+//	here are acorns
/ʔijohtytii+wija+/	(2251, 224b)

k. ñ//–H/∅

//haqeñhoi//	with whom
/haqehoi/	
//mijatyñʔahqa//	among those going
/mijatyʔahqa/	

l. ñ//–C*/h C* not H

//mahsihkaata'˜hmañtukuñ.//	into the handkerchief.
/mahsihkaataʔahmahtukuhu./	(227d, 225a)
//nopih˜paʔañtyñ.//	that which is on top
/nopipaʔahtyhy./	of the house (224a)
//sipiñtyñmy.//	easterners (i.e.
/sipihtyhmy./	the Northeast Mono).

m. yñN//--/a (217)

//mijatyñNa//	going-obj.
/mijataa/	
//ʔikwyytyñNa//	my friend-obj.
/ʔikwyytaa/	

226. Another special "h" morphophoneme is necessary for an alternation of the type /V/~/VhV/ (with no /Vh/ alternant), with the conditions of the alternation differing from those of //h// and //ñ//. This morphophoneme is symbolized as //'//, and occurs in <hkwa'> nNp (322) and in four verbal suffixes: <hky'> vVt (372a), <ki'> vVf, <hmi'> vVf, <hti'> vVf (377b).

a. $'//V_1-./hV_1$

//ʔajoqahsitihky'.//	make her blow her
/ʔajoqahsitihkyhy./	nose!
//ʔapuh˜niki'.//	come see it!
/ʔapunikihi./	

b. '//--*/ø *except where 226a applies

//ʔanapoohky'kaa.//	go have his hair cut!
/ʔanapoohkykaa./	
//ʔapuh˜niki'hti.//	came to see it.
/ʔapunikihti./	

227. The special glottal stop morphophoneme //'// occurs in many free noun roots (318) and several suffixes, three of which have only //'// as their morphophonemic representation, another of which has an allomorph consisting only of //'//. //'// occurs finally in all morphs containing it. The noun roots ending in //'// belong to a limited number of semantic categories (but not all members of these categories end in //'//), namely: (1) kinship terms (some of which have freely varying allomorphs differing by presence or absence of final //'//; (2) personal names (both native and introduced); (3) other terms which refer to various types of people; (4) non-human animals; (5) plants, foods derived from plants, parts of plants (as seeds) used for food; (6) artifacts introduced by European culture, plus //ʔoono'// 'gold'. The suffixes containing //'// are the affectives //ci'// and //kita'// (335), the limited noun suffix //'// (331b), the allomorph //pi'// of the absolutive suffix (333), the agentive suffixes //hty'// and //'// (319a), the nominalizing suffixes //h..'// (319b) and //hna'// (319c), the nut suffix //'// (332), and the allomorphs //h..'// and //'// of the place suffix (334).

Sequences of the type //V'// have the phonemic representations /V/, /Vʔ/, /VʔV/, depending on the morphophonemic environment in which they occur. In the last of these, the two vowels are identical, i.e. the second is predictable.

The special glottal stop morphophoneme //'// is necessary since there are morphophonemic sequences //V?// which are always represented phonemically by /V?/ (e.g. internally in a number of noun and verb roots, and finally in allomorphs of some prefixes), and there are morphophonemic sequences of the type //V?V// (with both vowels the same), always represented by /V?V/, occurring, among other places, finally in some noun roots, e.g. //nato?o// 'shirt', //kutu?u// 'stick'.

//kutu?u.//	/kutu?u./	stick.
//kutu?uhci'.//	/kutu?uhci?i./	stick-diminutive.
//kutu?uNa.//	/kutu?una./	stick-obj.
//?aahmu'.//	/?aahmu?u./	boss.
//?aahmu'hci'.//	/?aahmuhci?i./	boss-dim.
//?aahmu'Na.//	/?aahmu?aa./	boss-obj.

The statements defining the phonemic representation of //'// are given below.

a. $'//V_1(h)-\ddagger^*/?V_1$ *except where 227b applies

//kitii'.//	oat.
/kitii?i./	
//?yny'+kihmahti.//	A white-man is coming.
/?yny?y+kihmahti./	
//Rhtuwahpi'+Rhnahna?waacityñ.//	the children are
/tuhtuwahpi?i+nahnahna?waacityhy./	hiding from each other. (241, 225a)

//typah'.// piñon nuts.

/typa?a./

b. '//–+?/? cf. 238.

//?i pohso' + ?a puh ~ni hti// my partner sees it

/?ipohso?+?apunihti/ (224a, 251)

c. '//V_1(h)–(~)C*V/?V_1 *any //C// except //? N//

//tahqaahti'pY.// sourberry bush.

/tahqaahti?ipy./ (332)

//?yny'~nihtu.// like a white-man

/?yny?ynihtu./ (396b)

//qanaaqa'my.// Negroes.

/qanaaqa?awy./ (216c)

//tunah'hoi// with pine nuts

/tuna?ahoi/ (223b)

d. '//V_1–(~)hC*/?V_1 C* any //C// except //T//

//mahsihkaata'~hmañtukuñ.// into the handkerchief.

/mahsihkaata?ahmahtukuhu./ (226, 348a, 396b)

//?yny'hsy?yñ.// only a white-man.

/?yny?yhsy?yhy./

e. '//–hT/Ø

//kitii'hoi'.// oat-diminutive.

/kitiihoi?i./

//Rhhyhpi'hci'hqo'jo.// darn old women.

/hyhyhpihciihqo?jo./ (223a, 335)

f. '//–(˜)ʔ/∅

//ʔahnapaatate'ʔihnuñ.//	church. (421b, 387a,
/ʔahnapaatateʔihnuhu./	319a, 225a)
//qahnihpaahna'ʔihti.//	(bell) rings.
/qahnihpaahnaʔihti./	(387a)

g. '//–N/ʔ (217a)

//kitii'Na.//	cat-obj.
/kitiiʔaa./	
//Rhtuwahpi'Na.//	children-obj.
/tuhtuwahpiʔaa./	
//ʔyny'Na.//	white-man-obj.
/ʔynyʔaa./	

h. '//–y/∅ (331a)

//ʔny'y˜nihtu.//	strange, fearful.
/ʔnyynihtu./	

(The morphemic sequence <ʔyny' y> furnishes the only known instance of //'// followed by //V//.)

230 Vowel Morphophonemics

230. The class of vowel morphophonemes comprises one member corresponding to each of the vowel phonemes, plus two others: //u̅ Y//. Except where specified otherwise by

the statements of 231-239, each vowel morphophoneme is represented phonemically by its corresponding phoneme.

231. /u/ does not occur after syllables whose vocalic nucleus is /o/ or /oo/ except in the representations of a very limited number of morphemes. For these morphemes, //ū// is set up. The general case is covered by 231a.

a. u//o×—/o

//wahahtu//	two
/wahahtu/	
//syywanohtu//	ten
/syywanohto/	
//pa noo ʔi htuha tyň.//	(dim.) hauling water
/panooʔihtuhatyhy./	(somewhere else).
//pa noo htuha tyň .//	hauling water (some-
/panoohtohatyhy./	where else).
//pa noo hu htuha tyň .//	hauling water (brief-
/panoohohtohatyhy./	ly somewhere else).

b. ū//--/u

//ū// has been found in only three morphs: //jūhu// 'fat', //hmūhsu// 'almost, nearly', //wūh// (locative suffix occurring in some place names).

//ʔa nohi toh jūhu wii hky' hti//	made it very
/ʔanohitohtuhuwiihkyhti/	greasy (214a, 226b)

//na to? noo hmūhsu ?i hti//	was almost carried
/nato?noohmuhsu?ihti/	away (by the current)
//poonono wūh tyñ .//	(a place name)
/poononowuhtyhy./	(225a)

232. The morphophoneme //Y// occurs finally in some nominal suffixes and noun roots. It is always preceded by //p//.

a. YN//--/yn~a (217b)

//wynyh pY Na//	tree-obj.
/wynyhpyna/~/wynyhpaa/	

b. Y//--*/y *except where 232a applies

//wynyhpY.//	tree.
/wynyhpy./	

233. yñN//--/a (217c, 225m)

//mija tyñ Na//	going-obj.
/mijataa/	

234. The sequence //ae// occurs where a morph ending in //a// is followed by the morph //eñ//, an allomorph of <hti> vIN 'neutral tense'. The sequence //eee// occurs when //htee//, representing <htee> vVf (377b), is followed by //eñ//. This situation makes necessary the following statements:

a. a//–e/ø

//pa noo htuha eñ .//	hauled water (somewhere
/panoohtohehe./	else). (231a)

b. a//–ae/eʔ (i.e. aa//–e/eʔ)

//pa noo kaa eñ .//	went to haul water.
/panooqeʔehe./	(211a, 234a, 225a)

c. e//e–e/ʔ

//ʔa oee htee eñ .//	held it for a while.
/ʔaoeehteʔehe./	

235. The morpheme <~i> vV~ (371b), which occurs only after three verb roots, makes necessary the following statement:

a//–~i/ø

//jatuha hti//	talked
/jatuhahti/	
//ʔa jatuha ~i hti//	talked to him
/ʔajatuhihti/	
//jaqa hti//	cried
/jaqahti/	
//ʔa jaqa ~i hti//	cried at it
/ʔajakihti/	
//ta pyha hti//	day is breaking
/tapyhahti/	

//ʔa suh ta pyha ˜i hti//	understands it
/ʔahsuhtapyhihti/	(221a)

236. One morph, representing <˜˜ai> (Ɛ) (392a), is set up as beginning with //˜˜// to account for the forms given in the examples below.

a. yʔy//–˜˜/ø

//ʔoyʔy ˜˜ai//	(exclamation of pain
/ʔycai/	resulting from cold)
//ʔytyʔy ˜˜ai//	(exclamation of pain
/ʔytai/	resulting from heat)

b. y'//–˜˜/ø

//ʔyny' ˜˜ai//	(exclamation of fear of or
/ʔynai/	wonder at something strange
	or fearful)

237. //V// which is preceded by //ht//, //hk//, or //hp// and followed by //+// or //.// is sometimes represented by /ø/, sometimes by its corresponding vowel phoneme (or by /o/ if 231a applies), according to the following conditions:

a. When preceded by //ht// or //hk// and followed by //.// which is followed by //T// without an intervening #, it is usually, but not always, represented by /ø/. (Such sequences of morphophonemes occur only occasionally, due to the

rarity of the combination of morphs necessary to bring them about, so that an extensive body of texts must be examined in order to arrive at a complete statement.) In an examination of fifty minutes of tape-recorded text, only one example was found of //hkV.T//, namely //hku.q//, and the //V// was represented by /ø/:

//wahahku.qatu?u˜po?o// ...two-obj. But not...

/wahahk.qatu?upo?o/

It may well be the case that V//hk-.T//is represented by /ø/ only for //T// = //k// or //q//, and it is also possible that there is free variation even in this environment, with /V/ occurring in some instances. In the case of //t//, examples were found, in the same portion of texts, in which the stop morphophoneme following the //.// was any of the following: //t// (three examples), //p// (one example), //q// (three examples). In all of these examples except one of those involving //q//, the //V// was represented by /ø/. The one exception is:

//?acaa˜nihtu.qatu?u// ...bad. Not...

/?acaanihtu.qatu?u/

The environment in which the //V// in question appears is practically identical to that in which it appears in another example, in which it is represented by /ø/:

//nahsy?myhtu.qatu?u// ...all. Not...

/nahsy?myht.qatu?u

We must therefore assume free variation in this environment, but there is some indication that /ø/ is the more frequent representation. Where the stop following the //.// is //p// or //t//, there is also the likelihood that the representation might be /V/ rather than /ø/, since the examples are too few to allow a definite conclusion. It seems likely that /ø/ is the more frequent representation also when the following stop is //c//, //k//, //kw//, or //qw//, though none of these occurred in the position in question in the material examined. No example occurred in which any stop other than //t k// occurred preceding the //V// in sequences of the type //hTV.T//, because of the rarity of other stops in this position in morphemes which occur freely before //.//; but we may judge that /ø/ is a frequent, if not the usual, representation of the //V// in these sequences, when they do occur, except when the preceding stop is //kw//, //qw//, or //c//, since the phonemes /kw qw c/ always have a non-stop component following their oral closure.

b. When preceded by //ht//, //hk//, or //hp// and followed by //.// or //+// which is followed by //m// without an intervening #, //V// is represented sometimes by /V/, sometimes by /ø/, the two representations being in free variation, as follows: /V/ is the more frequent representation after //k//, /ø/ the more common after //p//, with /V/ and /ø/ having approximately equal frequency after //t//.

//hiihpy+mahu+//	what (is) that...
/hiihp+mahu+/	(161)
//+ʔasuhtapyha˜ituwahpy.mahu//	...could understand it.
/ʔahsuhtapyhituwahp.mahu/	That...(221a, 235)
//+ʔapuh˜nihkwahti+mowahuhsu.//	...will see him
/ʔapunihkwaht+mowahuhsu./	tomorrow.
//ʔasuhpihtahti+maahnohkuhuñ+#//	...thought of him who
/ʔahsuhpihtahti+maahnohqohoho+#/	was there... (221a, 211b, 231a, 225g, ~~252~~)

c. When preceded by //ht// and followed by //+// or //.// which is followed by //n// without intervening #, //V// may be represented by /V/ or by /ø/. The two representations are again in free variation, with /V/ being more frequent. (When this //V// is represented by /ø/, the /t/ is nasally released.)

//ʔinehti+nyyhkwa'.//	we said.
/ʔinehti+nyyhkwaha./~/ʔineht+nyyhkwaha./	(226)

d. When preceded by //ht// or //hp// and followed by //.// or //+// which is followed by #, //V// is represented sometimes by /V/, sometimes by /ø/, as follows:

(1) When the preceding stop is //p//, there is free variation between /V/ and /ø/, the former occurring nearly twice as frequently as the latter.

(2) When the preceding stop is //t//, the representation of //V// under these conditions is as follows:

(a) The sequence //iht.#// (with or without suprasegmental phonemes, which were found to play no significant role in this respect) is almost always represented by /iht.#/. In 26 examples of this morphophonemic sequence found in the 50 minutes of text examined, only one was represented by /ihti.#/.

(b) In the sequence //yhti.#//, /i/ and /ø/ occur with approximately equal frequency as the representations of //i//.

(c) In the sequence //ehti.#//, /ø/ is much more frequent than /i/ as the representation of //i//.

(d) In the sequence //ahti.#// the two representations have approximately equal frequency.

(e) For the sequence //ohti.#// there are only two examples, both having /i/ as the representation of //i//. (The great frequency of examples of the sequence //hti.// is due to the frequency with which the actual tense morpheme <hti> occurs as the final morpheme of a sentence.)

(f) For other situations, there are not enough examples to allow a statement of relative frequencies. Where //+// is the juncture involved, the relative frequencies of /V/ and /ø/ are probably about the

same as in the case of //.//, but too few examples occur to permit a definite statement. Where the //V// is other than //i// (and not considering here what vowel precedes the //ht//), the two representations seem to occur with about equal frequency.

e. In situations other than those described in a-d, V//hT–+// and V//hT–.// are always or nearly always represented by /V/.

For all these situations, and those described above, in which /ø/, if it occurs as the representation of //V//, is in free variation with /V/, the /V/ representation is taken as the standard one (even though it is not the more frequent in some environments). The standard representation (i.e. with //V// represented by /V/) is used in general in examples cited throughout this grammar.

238. V//ʔ–+ʔ/ø

//nyytihpoʔo+qatuʔu+apuhtapyha˜iʔihti.//

/nyytihpoʔo+qatuʔ+ʔapuhtapyhiʔihti./ (235)

But I don't see it.

239. a. V//ʔn–+n/ø

//caiqoʔno + no hapi tyñ .// bluejay sitting on

/caiqoʔn+nohapityhy./ its eggs. (225a)

//ʔaahpaʔni + niih copa hna// apples which we have
/ʔaahpaʔn+niihcopahna/ picked up

b. V//ʔn—+·n/Ø

//caiqoʔno+·nyqope˜weeh+johcihti.//
/caiqoʔn·nyqopewee+johcihti./ (253, 251, 224b)
A bluejay flew in front of me.

240 Reduplication

240. Each of the reduplicative morphophonemes //R Ṛ// occurs in the representations of a single morpheme. The morphemes involved are <Rh> Pd 'distributive' (382) and <Ṛhi> vVr 'durative' (371d).

↳ Pg 263

241. R//—(H)C_1V_1/C_1V_1

//Rpojoha// to run distributively
/popojoha/
//Rh pa ʔooh pY .// pebbles here and
/pahpaʔoohpy./ there.

242. Ṛ//C_1V_1(H)—/C_1V_1

//qwaca Rhi hti// fell a long distance
/qwacacahihti/

//kwipi R h..ki hti// shook/shivered
/kwipihpikihti/ (204e)

250 Juncture Morphophonemics

250. The class of juncture morphophonemes includes one member corresponding to each of the juncture phonemes, plus //~//. Each of the juncture morphophonemes occurs (by itself) as the representation of a morpheme (396-398), and //~// occurs in combination with other morphophonemes in some morphs. One or more of the junctures is a significant factor in the environment for the following morphophonemic statements: 211d; 215a, c; 216b; 224a, b, d; 225a-j; 226a; 227a, b; 235; 236; 237; 238; 239; 253.

As far as is known, each of the juncture morphophonemes is represented phonemically by its corresponding phoneme except as specified below.

251. ~//--/∅

(numerous examples in preceding sections)

252. +//h̃-C/∅ (225g-i)

//no pih ~ paʔah̃ + qahty hti .// sat on top of
/nopipaʔahqahtyhti./ the house. (224a, 2251)

//Rh nah pih naň + mija qoi tyň .// going after
/nahnahpihnahmijaqoityhy./ one another. (241)
//kihma hkwaň + wahkihta .// come ye hither!
/kihmahqwawahkihta./ (212, 225h)

253. +//–·/ø (//·// occurs only after //+// 397)
//ny mahmaň + · cipuhihti// climbed on me
/nywahmah·cipuhihti/ (216a, 225d)

CHAPTER THREE

MORPHEME CLASSES

301. This chapter gives a rough classification of the morphemes according to their distribution and describes the morphophonemic representations of the morphemes listed. The breakdown of the inventory of morphemes into classes is by no means intended to be complete, or even nearly complete; there are minor differences in the distribution of members of the same class of the present classification. Thus the classification, with the statements of morpheme arrangements of Chapter Four, is not intended to enable the reader to synthesize Northfork utterances (though many correct utterances can be synthesized on the basis of the information given), but is intended merely to account for utterances which occur in the corpus.

302. The distributional properties of the various morphemes, in so far as they are described, are indicated by distribution-class labels (303) (with occasional additional statements), and are defined on the basis of the forms with which they occur in immediate constituency, and the distribution of the respective constituents. The terms 'prefix',

'suffix', 'root' are used, where convenient in facilitating discussion, not as defining terms but as handy descriptive labels for certain forms which are similar to forms of other languages traditionally referred to by these labels. (The defining terms are the morpheme-class labels.) Thus there are instances in which forms called 'prefixes' are followed directly by forms called 'suffixes' with no intervening 'roots' (Pp can be followed by nQl).

The groupings of the morpheme classes into larger sets, such as "nominal elements" (310), "substantival suffixes" (320), etc., are made largely for purposes of convenience of organization, and do not necessarily reflect fundamental differences and similarities in distributional properties.

303. The morpheme class labels are listed in 303a. They serve as basic indications of distributional properties. Modifications of these symbols are described in 303b-f.

a. In the list of class labels below, brief notes suggesting the defining characteristics of the classes represented by each are followed by references to the places in this chapter where the classes are treated.

Nominal Elements 310

type 'Nb' occur with Pb 311

Nbb constitute occurs with Pb 311a

Nbr constitutes are Nr 311b

Nbf constitutes are Nf 311c

Nu occur with <pono> nU 312

Nt, Ntn, Nn occur with nNt and/or nNn 313

Nc "cranberry morphemes" 314a

Nx <tohpo> 314b

Nw occur with <wano> nT 315

Nr restricted noun roots 316

Nl place names 317

Nf free noun roots 318

vNr, vNf deverbative nominalizing suffixes 319a

qN, lN nominalizing suffixes occurring with Q, L 319b

qcN <hpY> (occurring with <cyhkwyta> Qc) 319c

iN nominalizing suffix occurring with I 319d

hNr nominalizing suffix occurring with H 319e

uNf <,,~> (occurring with <ʔahcapono> U) 319f

Pronominal Elements 320

Pp personal pronominal morphemes 321a

Pr reflexive pronominal morpheme 321b

pp, nNp personal pronominal plural 322

pN personal and reflexive pronoun base 323

Pt indefinite verbal object 324

D demonstrative morphemes 325

dN demonstrative base 326

H interrogative-indefinite pronominal morpheme 327

hN interrogative-indefinite pronoun base 328

o <hka> 329

Substantival Suffixes 330

limited noun suffixes 331

nNx <h..>, <y>, <X>, <ʔnuku'> 331a

nN' <'> 331b

nNc <hcoʔo> 331c

nNj <ja> 331d

nNt tree suffix 332

nNn nut suffix 332

nNf absolutive suffix 333

nNl place name suffix 334

nNh affective suffixes 335

nNm animate plural suffix 336

nO <Na> 'obj.' 337a

hO <ihmaa>, <eehti> 337b

Locative Elements 340

(Kt), (Kh), (Km) components of K 341

K occurs with <hnahqweh> kL 342

pK <qwaa> 343a

x <tyh> 343b

(pL) <qope>, <kwita>, <kywa> 343c

(pK) <naah> 344

(L) <typihi> 345

kL <hnahqweh> 346

L locatives 347a, b

pL occur with Pp (set 2) 347b

nL occur with noun stems, Pp, L 348a

dL occur with D 348b

xL <nañ> 348c

Miscellaneous Adverbial Elements 350

(Qn) <naa>, <taah>, <wooh> 351a

qQn <mano> 351b

Qn- <hyy> 351c

Ql- <ʔino>, <tapaa>, <syta> 352

(-A) <ʔ> 353a

hA <ihnoʔo> 353b

Qn quantitatives 354a

Ql qualitatives 354b

Qc <cyhkwyta> 354c

nQl qualitativizing suffixes 355

T- occur with <hsu> (T) 356a

t <ʔuhsu> 356b

(T) <hsu> 356c

T temporals 357

nT temporalizing suffix occurring with Nw 358a

vT temporalizing suffixes occurring with Vi 358b

qT temporalizing suffixes occurring with Qn 358c

Aq <qatuʔu> 359a

Am <minoʔo> 359b

Verbal Elements 360

nU <pono> 361a

(U) <pata> 361b

-U occur with preceding (U) 361c

U- <sihki> 361d

pU <cimyty> 361e

U occur with uV 361f

morphemes occurring with vVr 362

V?a occur with <?i>, constitutes are vVa 362a

V?x occur with <?i>, constitute is Vx 362b

Vr occur with <Rhi> 362c

Vr? occur with <Rhi> or <?i> 362d

V?t occur with <?i>, constitute is Vt 362e

Vx occur only with Pi 363

Vi intransitive 364

Vt transitive 365

Vtt double-transitive 366

nVi, nVt verbalizing suffixes occurring with N 367a

uV verbalizing suffixes occurring with U 367b

iV verbalizing suffix occurring with I 367c

pV <ni> 367d

Verbal Suffixes 370

limited verbal suffixes 371

vVi <i>, <h..> 371a

vV~ <~i> 371b

vVtt <~a..> 371c

vVr <Rhi>, <ʔi> 371d

vVt <hky> 372a

vVw <wi> 372b

vVp <ʔ..ki>, <hpaʔi> 373a

vtV <ta> 373b

vVa auxiliaries 374

vVb <hu> 375a

vVc <poto>, <jaʔwi>, <nawi> 375b

vVd <qoi>, <ʔo> 375c

vVe <ʔi>, <ʔawi> 375d

vWk <hku> 376

vv component of vVf 377a

vVf directionals 377b

vVg <hkwa>, <hmaa>, <tuwa> 378

vWw <waih> 379a

vIN <hti>, <hpy> 379b

vIM <hnaʔi> 379c

Prefixes (other than pronominal) 380

Pq <qaha> 381

Pd <Rh> 382

Pn <nohi> 383

pPa <mi> 384a

Pa adverbial prefixes 384b

Pb nominal prefixes 385

Pi instrumental prefixes 386

Minor Classes 390

I imitatives 391

(E) component of E 392a

E interjections 392b

hC <hni°i> 393a

C, Ce conjunctions 393b

op <sahqwa> 394

F postfixes 395

taotic junctures 396

<h> 396a

<ˇ> 396b

<+> 396c

X <·> 397

Z <.> 398

b. The members of Nr (monomorphemic and polymorphemic) occur in immediate constituency with <pi> nNf, the absolutive suffix (333), and/or with members of Pp (321a, 421, 423). The details are given in parentheses following the class symbol Nr, when these forms are cited, as follows:

(1) P indicates that the form occurs with Pp, e.g. <nahqa> Nr(P) 'ear'.

(2) If the form occurs with <pi> nNf, the allomorph of <pi> nNf which occurs with it is indicated, e.g. <toja> Nr(pi) 'mountain', <pohina> Nr(P,pe) 'chief' (i.e. <pohina> occurs with Pp or with the allomorph //pe// of <pi> nNf).

c. In citing members of the class Nl (place names) a further indication of distribution is given in parentheses after the symbol Nl, as explained in 317.

d. A raised plus sign ($^{+}$) accompanying a distribution-class symbol (e.g. Pb^{+}) indicates that the form in question has certain special distributional properties in addition to those which it shares with other members of that class. This symbol, and those described in 303e, f, are often not used, however, when the special distributional properties are specified in the statements of constructions given in Chapter Four.

e. A raised minus sign ($^{-}$) accompanying a distribution-class symbol indicates that the form in question has more limited distribution than other members of that class.

f. A raised ^{x} accompanying a distribution-class symbol, e.g. <ʔa> Pp^{x} 'third person' (321a), indicates that the form in question does not occur in some types of environments in which other members of the class occur, but does occur in some environments from which other members are excluded.

g. The symbol N' is used to designate the class consisting of Nr + Nf (monomorphemic and polymorphemic) except those members of Nf which are constitutes of the constructions of 416.

h. The symbol N designates the class consisting of Nf (monomorphemic and polymorphemic) plus the following classes of composite forms which are defined in Chapter Four: Nq, Np, Nd, Nh.

i. The symbol V is used as a cover symbol for Vi, Vt, and Vtt (monomorphemic members and composite forms).

304. The following notational devices are used in this chapter (other than those used for indicating distribution which are described above):

a. In the lists of members of the various classes, the convention for citation of morphemes described in 1d is departed from as follows:

(1) The "morphemic brackets" < > are not used for morphemes having a single morph. The brackets are used only for those with allomorphs, and the allomorphs are listed and enclosed in // //.

(2) The meanings are given without being enclosed in ' '.

b. Composite forms are cited in a manner similar to that used for single morphemes. The distribution-class symbols and indications of meaning are those of the composite forms taken as units. Enclosed in < > are the fundamental symbolizations of each of the morphemes, in the order in which they occur, separated by spaces wherever necessary for the sake of clarity. For example, the sequence consisting of <nohi> Pn 'very' followed by <cawu> Ql 'good' is written <nohi cawu> Ql 'very good'.

When composite forms are given as examples, the meanings are given without enclosure in ' ', and the morphemic brackets < > are omitted if the symbolization which would be included in them coincides with the morphophonemic representation. Otherwise, the morphophonemic representation (identified by enclosure in // //) is given.

c. Any other deviations from standard practice (ld), or from the conventions indicated above, should be clear from the context in which they occur.

d. Statements concerning immediate constituency will be abbreviated as follows:

IC - immediate constituent

ICs - immediate constituents

occur in IC with - occur in immediate constituency with

310 Nominal Elements

310. Included in the nominal elements are two very large classes, the "restricted noun roots" Nr (316) and the "free noun roots" Nf (318). There are also several smaller classes (given in 311-315 and 317) consisting of either (1) morphemes similar in distribution to members of Nf or Nr, or (2) morphemes of limited distribution which occur as components of polymorphemic members of Nf or Nr. Nominalizing affixes are given in 319.

311. The classes of the type 'Nb' consist of noun roots which occur in immediate constituency with Pb (385). Three classes are distinguished, according to the distribution of the constitutes.

a. Nbb. Constitute occurs in IC with Pb (385). There appears to be but one member in this class.

hkwi Nbb (fish) only with <pa> Pb 'water'

pahkwi Nbr,Nf fish as Nbr, occurs with <mah> Pb 'hand, arm'

mahpahkwi Nr(P) flesh of forearm: "arm-fish" (303b)

b. Nbr. Constitute is Nr like noun roots of 316.

With <kuh> Pb 'fire, heat':

kuhih Nbr (smoke)

kuh kuhih Nr(pe) smoke

jūhu Nbr, Nr(pi) fat

kuh jūhu Nr(pi) soot (214a, 231b)

With <pa> Pb 'water, moisture':

ʔooh Nbr (pebbles, etc.)

paʔooh Nr(pY) pebbles, gravel, or rocks which have been made smooth by running water

hsiwah Nbr (sand)

pahsiwah Nr(pY) sand

waha Nbr (meadow)

pawaha Nr(pY) meadow

joqa Nbr, Nr(pY) nasal mucous, slime

pajoqa Nr(pY) the slimy green substance which appears in standing water

puhi Nbr, Nu blue, green

papuhi Nr(pY) grass (see also 312)

ooo Nbr (moss)

paooo Nr(pY) moss

With <tyh> //tyh//, //tah// Pb 'rock':

tahsiʔa Nbr (sp. rock)

tyhtahsiʔa Nr(pi) sp. rock (pale green to turquoise in color, sometimes used for arrowheads)

qah Nbr (obsidian)

//tahqah// Nr(pi) obsidian

hanii Nbr (sp. rock)

tyhhanii Nr(pY) sp. rock (looks like granite, but is soft, crumbles) (223a)

<paha> Nbr, Nf (bedrock mortar), pestle when occurring as Nf, has the allomorph //paha// and the alloseme 'pestle'; when occurring as Nbr, has the allomorph //pahaa// and the alloseme '(bedrock mortar)'

//tyhpahaa// Nr(pY) bedrock mortar

With <ty> Pb 'earth':

pooh Nbr (land etc.)

typooh Nr(pY) land, earth, place

caqa Nbr (clay)

tycaqa Nr(pY) clay

With <ta> Pb 'sun, heavenly body'

my'a Nbr^{+} moon, month

tamy'a Nr(ta) moon, month (216a, 416b) occurs also in names of some months as second member of compound.

oinuh Nbr (star)

taoinuh Nr(pe) star

pe Nbr^{x} (sun, day)

tape Nr(ta) sun, day (416b)

With <no> Pb egg, dwelling:

jo (egg)

nojo Nr(P,pi) egg (excepting roe)

ʔa (roe)

noʔa Nr(P,pY) roe

hypi (yolk)

nohypi Nr(P) yolk alternates freely with //hypinojo// Nr(P)

ʔaahpy (afterbirth)

noʔaahpy Nr(P) afterbirth

With <coh> Pb 'head':

piki (brains)

cohpiki Nr(P) brains

With <puh> Pb 'eyes':

~tuhsi (eyelashes)

puh~tuhsi Nr(P) eyelashes

tahqaa (eyebrows)

puhtahqaa Nr(P) eyebrows

With <mah> Pb 'hand, arm':

kiipy Nbr (elbow)

mahkiipy Nr(P) elbow

With <tah> //tah//, //toh// Pb 'foot, leg':

nopoto Nbr,Vi~ (knee)

//tohnopoto// Nr(P),Vi knee as Vi, 'to sit with legs curled up'

With <mah> Pb 'hand, arm' and <tah> Pb 'leg, foot':

ʔwicoqo (wrist, ankle)

mahʔwicoqo Nr(P) wrist (223a)

tahʔwicoqo Nr(P) ankle

ʔowa (astragalus)

mahʔowa Nr(P) protruding knob of wrist bone

tahʔowa Nr(P) astragalus

peta (palm, sole)

mahpeta Nr(P) palm

tahpeta Nr(P) sole

toqo (thumb)

mahtoqo Nr(P) thumb

tahtoqo Nr(P) big toe

piicyky (little finger, toe)

mahpiicyky Nr(P) little finger

tahpiicyky Nr(P) little toe

tahna (knuckles)

mahtahna Nr(P) knuckles

tahtahna Nr(P) toe-joints

situ (claws)

mahsitu Nr(P) fingernails

tahsitu Nr(P) toenails

With <ty>, <puh>, <mah>, and <pih> Pb 'buttocks, back', <muh> Pb 'nose':

<pih> //pih//, //si//, //ˉja//, //qo//, etc.,

Nbr,Nbf 'empty noun root' (See also 311c)

//ty pih// Nr(pY) dirt, ground, earth

//puh si// Nr(P) eye(s)

//mah ˉja// Nr(P,pi) hand, glove

//ʔahmaja// Nf his hand(s), his glove(s)

//majapi// Nf glove(s)

//pih qo// Nr(P) buttocks, lower part of back

mu pih Nr(P) nose

c. Nbf. Members of Nbf occur in IC with Pb, the constitutes being Nf.

With <kuh> Pb 'fire, heat':

ˉnah Nbf (fuel, wood)

kuhˉnah Nf fuel, wood (224a)

With <pa> Pb 'water, moisture':

ʔowaaˀ Nbf,Nfˉ,I (baby)

paʔowaa' water-baby (317e)

hsakyh Nbf (bridge)

pahsakyh Nf bridge

ooʔo Nbf (spring)

paooʔo Nf spring

hsoojona Nbf

pahsoojona Nf depressions formed in rock by running water

//toqowa// <toqohqwa> Nf,Nbf rattlesnake, snake

//pahtoqowa// Nf water snake

With more than one member of Pb:

<pih>//pih//, //so//, //ˇja//, etc. Nbf,Nbr 'empty noun root' (see also 311b)

<kuh pih> //qohso// Nf fire, match (385)

<pa pih> //pa ˇja// Nf water

<tyh pih> //tyhpih// Nf rock

<no pih> //nopih// Nf house

312. Nu. This class comprises the forms which occur in IC with <pono> nU (361a) which in turn occurs only in IC with members of this class. Some of the members of Nu occur also in IC with other morphemes besides <pono> nU, and in most of these other constructions they are tactically equivalent to noun roots of other classes. With one exception (see 319f), the forms consisting of a member of Nu followed by <pono> nU occur only in IC with one of the three verbal elements uV (367b).

tohci Nu white

<tohci pono> //tohci taja// U white

<tohci tyh pih> //tohci htyh pih// Nf white rock (311c, 385)

ʔahqa Nu red

<ʔahqa pono> //ʔahqa pana// U red

<ʔahqa h qoʔjo> //ʔahqahqoʔjo// Nf strawberries (335)

<tuhmu> Nu black when followed by <pono> nU, has the allomorph //tuhmu//; when followed by <tyh pih> Nf 'rock' (311c), has the allomorph //tuhu//.

<tuhmu pono> //tuhmu ʔani// U black

<tuhmu tyh pih> //tuhu htyh pih// Nf black rock (385)

puhi Nu,Nbr blue/green the combination <puhi tuwa> Vi (367a) has the portmanteau seme 'to be green' (literally: 'to become blue')

<puhi pono> //puhipono// U blue

<puhi tuwa> //puhituwa// Vi to be green

<pa puhi> //papuhi// Nr(pY) grass (311b)

<puhi qety> //puhiqety// Nf abalone shell (3181)

<puhi nawahku> //puhihnawahku// Nf 'blue-green money (beads cut from abalone shell)'

ʔoha Nu yellow, brownish yellow

<ʔoha pono> //ʔohapana// U yellow, brownish yellow

<ʔoha pata> //ʔohahpahta// U turn yellow, brownish yellow (361b)

ʔahca Nu tan, brown, copper colored

<ʔahca pono> //ʔahcapana// U tan, brown, copper colored

ʔehsi Nu gray

<ʔehsi pono> //ʔehsipana// U gray

<ʔehsi ja> //ʔehsija// Nr(pY) ashes (331d)

ʔahtyh Nu round

<ʔahtyh pono> //ʔahtyhpono// U round

haky Nu foolish, silly

<haky pono> //hakypono// U˜ foolish, silly occurs only with <h..h..ʔ..hka> uV (367b)

toʔoh Nr(P),Nu hole

<toʔoh pono> //toʔoh ˜jawa// U have holes (e.g. a road)

nahqa Nr(P),Nu ear

<nahqa pono> //nahqacaja// U have long ears (e.g. a rabbit)

topo Nu hill

<topo pono> //topocaʔa// U peaked, pointed, having the shape of a hill

313. Nt, Ntn, Nn. Morphemes of class Nt occur with <pY> nNt (332), the "tree suffix". Some of them occur also as free noun stems, and thus belong to both Nt and Nf. One morpheme has been found which occurs only with <'> nNn (332), the "nut suffix". This morpheme (313e) constitutes the class Nn. Several other morphemes occur either with <pY> nNt or with <'> nNn; these are classed as Ntn (313d).

a. The following morphemes, among others, belong to both Nf and Nt:

wijah Nf,Nt (black oak) acorn (This is used as the specific term for black oak acorns, and as

the generic term for any type of acorn.
<wijah pY> Nf functions similarly as the term
for black oak and the generic term for oaks.)

wijahpY Nf (black) oak

ʔahpohsowa Nf,Nt manzanita berries

ʔahpohsowapY Nf manzanita bush

wojoohno Nf,Nt buckeye

wojoohnopY Nf buckeye tree

ʔaahpaʔni Nf,Nt apple

ʔaahpaʔnipY Nf apple tree

ʔahpyhkahci Nf,Nt apricot

ʔahpyhkahcipY Nf apricot tree

piihtihsi Nf,Nt peach

piihtihsipY Nf peach tree

b. The following morphemes, among others, occur only with <pY> nNt, as far as has been determined:

waʔah Nt (incense cedar)

waʔahpY Nf incense cedar

wohqo Nt (ponderosa pine)

wohqopY Nf ponderosa pine

jepih Nt (lodgepole pine)

jepihpY Nf lodgepole pine

kunuki Nt (elder)

kunikipY Nf elder (Its berries are <hupuhja> Nf
in higher altitudes, <seenowa'> Nf in

lower altitudes.)

syhy Nt (willow)

syhypY Nf willow

ʔahmaahca Nt (tarweed)

ʔahmaahcapY Nf tarweed

c. The two morphemes listed below also occur as members of Nt, but each of them occurs also in a limited construction with a morpheme other than <pY> nNt.

wynyh Nt^{r} (tree) occurs also with <ˇ> nVi (367a)

wyhyhpY Nf tree

wynyhˇ Vi (sg.) to stand

sahqwaʔa Nt^{+} (fir tree) occurs also with <hnuh̃> vNr^{+} (319a) (which has the allomorph //hnu// when occurring with it)

sahqwaʔapY Nf fir tree (of any species)

//sahqwaʔa hnu// Nf strainer (made of fir branches, used in leaching acorn flour)

d. The following morphemes, among others, occur with <pY> nNt or <'> nNn:

jaqa Ntn (white oak)

jaqapY Nf white oak

jaqa' Nf white oak acorn

oikinu Ntn (live oak)

oikinupY Nf live oak

oikinu' Nf live oak acorn

soto Ntn (water oak)

sotopY Nf water oak

soto' Nf water oak acorn

<oaha> Ntn (savannah oak) when occurring with <'> nNn, has the allomorph //caha//; when occurring with <pY> nNt, has the allomorph //cahaa//

//cahaapY// Nf savannah oak

//caha'// Nf savannah oak acorn

tapa°ja Ntn (gooseberry)

tapa°japY Nf gooseberry bush

tapa°ja' Nf gooseberry

tunah Ntn (digger pine)

tunahpY Nf digger pine tree

tunah' Nf digger pine nuts (223b)

typah Ntn (piñon)

typahpY Nf piñon pine

typah' piñon nuts (223b)

e. One morpheme has been found which occurs with <'> nNn but not with <pY> nNt.

<qawoqohq(w)a> Nn (nuts...) has freely varying allomorphs //qawoqohqa// ~ //qawoqohqwa//

<qawoqohq(w)a '> Nf nuts of any of the following pine trees: <wohqo pY> Nf 'ponderosa pine' (313b), <kuhsi wohqo pY> Nf 'jeffrey pine' (314a), <jepih pY> Nf 'lodgepole pine' (313b)

314. Described below are two classes containing morphemes of unique distribution.

a. Nc, "cranberry morphemes". Included in this class are a number of morphemes which occur in IC with a following member of Nf. The constitutes are likewise members of Nf. One of the cranberry morphemes occurs with either of two members of Nf; each of the rest is (as far as is known) a unique constituent.

wa?o Nc only with <paqa> Nf 'arrow, bullet':

wa?opaqa Nf headless arrow tipped with four small cross-pieces, tied perpendicularly to the shaft, to prevent penetration, used for small game and birds

sai Nc only with <pa hkwi> Nf,Nbr 'fish, trout':

saipahkwi Nf sp. fish (small, found in Owens Valley)

pahsi Nc only with <toqohqwa> Nf 'rattlesnake, snake', which has the allomorph //qohqwa// when preceded by <pahsi> Nc:

//pahsi qohqwa// Nf gopher snake

pahnee Nc only with <typah '> Nf 'piñon pine nuts' (315d, 332) and <wynyh pY> Nf 'tree' (315c, 332):

pahneetypah' Nf sugar pine nuts (223b)

pahneewynyhpY Nf sugar pine

kuhsi Nc occurs only with <wohqo pY> Nf 'ponderosa pine' (315b, 332):

kuhsiwohqopY Nf jeffrey pine

qacih Nc occurs only with <wono> Nf 'conical burden basket'

qacihwono Nf conical burden basket, not as closely woven as <wono> (213a)

b. Nx. This class contains a single member:

<tohpo> Nx occurs only with <h ci' h ci'> (335); the constitute occurs only with <~ ni> nQl 'like' (355)

<tohpo h ci' h ci'> Nf~

<tohpo h ci' h ci' ~ ni> Ql 'short'

315. Nw. This class comprises those morphemes which occur in IC with <wano> nT, 'time' (358a). The constitutes occur as T or as Vi. Two of them occur also with the absolutive suffix, <pi> nNf (333) which has the allomorph //pe// when occurring with them. These two constitutes participate in a limited way in the distribution of Nf and occur also as a special class Na (457). <wano> nT 'time' has the allomorph //no// when occurring with <jypa> Nw 'autumn'.

too Nw winter, year (occurs also with <no pih> Nf 'house')

toowano T,Vi (to be) winter(time)

<too pi> //toope// Nf⁻,Na a winter, a year

toonopih Nf winter-house

ta Nw spring

tawano T,Vi (to be) spring(time)

taca Nw summer

tacawano T,Vi (to be) summer(time)

jypa Nw autumn

//jypa no// T,Vi (to be) autumn(time)

toqa Nw night

toqawano T,Vi (to be) night(time)

//toqape// Nf⁻,Na a night

316. Nr. This is a very large class, which is made up of morphemes other than those included in Nw (315) which occur in IC with the absolutive suffix <pi> nNf (333), or with Pp (321, 421, 423), or with either. The constitutes are free noun stems Nf, having distribution similar to that of the monomorphemic members of Nf (318). Many members of Nr occur also in one or more of a variety of additional constructions.

The morphemes listed below represent only a small sample of the members of Nr. Following the class symbol Nr in the designations of the morphemes is an indication in parentheses of the allomorph of <pi> nNf which occurs with each of the morphemes occurring with <pi> nNf; for those which occur with

pronominal prefixes, (P) is given after the class symbol Nr; for those which occur with either pronominal prefix or <pi> nNf, both P and the allomorph of <pi> nNf which occurs are given. Except in special cases, namely <paah> Nr(P,pi)^{x} 'blood', <wooh> //wooh// Nr(P,pi)^{x} 'head/hair', pronominal prefix and absolutive suffix do not both occur with a noun stem at the same time.

a. Body Parts.

nahqa Nr(P) ear

wooh Nr(P,pi)^{x} head, head hair occurs with both Pp and <pi> nNf in the meaning 'head hair'

tyhpe Nr(P,pY) mouth

//tyhpepY// Nf a person who talks a lot

ʼeqo Nr(P) tongue

– tawa Nr(P) tooth

qana Nr(P) beard, whiskers

qope Nr(P) face

kuhta Nr(P) neck

y púhta Nr(P) arm

huhka Nr(P) leg

kyhky Nr(P) foot

sono Nr(P) lungs

piwy Nr(P) heart

nywy Nr(P) liver

qohi Nr(P) stomach

pooi Nr(P),nNh navel (335)

sihi Nr(P) guts

peqo Nr(P) penis

tapa Nr(P) testicles

tekwi Nr(P) vagina

ʔoho Nr(P,pY) bone

//ʔohopy// Nf bone; strong person

jūhu Nr(P,pi) fat (231b)

//jūhupi// Nf fat, grease; fat person

paah Nr(P,pi)^{x} blood occurs with <pi> nNf and Pp at the same time; the suffix does not occur, however, in the form <paah ka> Vi 'to bleed' (367a)

pyhy Nr(P) skin, hide, fur, body hair

joqa Nr(P,pY),Nbr nasal mucous

//joqapY// Nf person with runny nose

<pa joqa pY> slime (311b)

kyhna Nr(P),nNh semen (335)

ʔawa Nr(P) horns

qwaci Nr(P) tail

qahsa Nr(P) wing, wing-feathers

b. Relationship terms.

papi' Nr(P) older brother or male cousin (227)

wahma' Nr(P) younger brother or male cousin

hahma' Nr(P) older sister or female cousin

pyhni' Nr(P) younger sister or female cousin

<pohso(')> Nr(P) sibling or cousin of same sex; friend, partner has freely varying allomorphs //pohso// ~ //pohso'//.

sawu Nr(P) sibling or cousin of opposite sex

tuwah Nr^X(P,pi') son, child has allosemes as follows: after Pp and not followed by <my> nNm 'pl.' (336), 'son, son of sibling of same sex, offspring of animal'; after Pp and followed by <my> nNm 'pl.', 'child (of either sex, as kinship term), child of sibling of same sex, offspring of animal'; before <pi> nNf, 'child (not as kinship term)'. <pi> nNf has the allomorph //pi'// only when occurring after <tuwah> Nr^X. When both <my> nNm 'pl.' and <ci'> nNh 'dim.' (335) occur after the combination of <tuwah> Nr^X with a member of Pp, <my> nNm precedes <ci'> nNh instead of following it as in the normal situation (433a).

?i tuwah Nf my son

?ituwahmy Nf my children

?ituwahmyhci' Nf my children-dim.

tuwahpi' Nf child

pety Nr(P) daughter, daughter of sibling of same sex

nawa Nr(P) father, father's brother

pija Nr(P) mother, mother's sister

notyhkwa Nr(P) wife, wife's sister, (man's) brother's wife

kuwa Nr(P) husband, husband's brother, (woman's) sister's husband

ʔihnihpai (P) spouse's sibling of same sex, spouse of sibling of same sex (i.e. one who is called 'wife' or 'husband' but who actually isn't)

<kwyytyñ'> Nr(P) friend has freely varying allomorphs //kwyytyñ//~//kwyyty'// (225, 227)

tyhmu' Nr(P) enemy

tyni' Nr(P) master (of a pet)

ʔaahmu' Nr(P) boss

c. Miscellaneous.

pohina Nr(P,pe) chief (311b)

nyhtena Nr(P,pY) assistant chief, messenger

toja Nr(pi) mountain

kuhtuhsi Nr(pY) dust

jyyh Nr(pY) level ground

ʔohma Nr(pi) salt (<ʔohma pi> Nf occurs also as a masculine name)

nahti Nr(P,pi) belt

qahki Nr(P,pi) beads

317. Nl, place names. Each of the place names generally occurs with a particular member of nL (348a), or with <naň> xL 'on/at' (348c). An indication of which one of those locative morphemes occurs with each is given in parentheses following the class symbol Nl. The following list represents only a small sample of the members of Nl.

hoojowih Nl(weeh) Cascadel

hoojowihweeh L at Cascadel (213a)

qohnihihna Nl(wū) South Fork

moohnih Nl(naň) Finegold

po?ohso?one Nl(wū) Farley's ranch

moinanih Nl(hmaň) sp. mountain

318. Nf, "free noun roots". The free or unrestricted noun roots have, in general, a wider distribution than members of any other classes of nominal elements. Except for those members of Nf which have some special limitation on their distribution (these are marked Nf¯), members of Nf can be distinguished from members of other classes by the following distributional properties (among others): (1) they occur in IC with <Na> nO 'obj.' (337); (2) they occur in IC with nL (348a); (3) they occur with nQ!; (4) they occur preceded and followed by <+> (396c); (5) they occur in IC with <.> (398); (6) they occur in IC with following Vi (364, 460, 470), with intervening <+>. Nf is the largest class of

nominal elements. The examples given below represent only a small sample of the members of the class.

The Northfork Indians have both Indian names and "Whiteman" names; the latter seem to be in more common use.

a. Personal names, feminine, Indian. (For various reasons whose discussion would be out of place in a purely descriptive treatment such as this, certain partial resemblances which exist among some of these names have not led to morphemic segmentation, although some attempt at segmentation would of course be desirable in historical analysis.) Several of these names have freely varying allomorphs differing by the presence or absence of final //'//. In the symbolizations of these morphemes, ' is given in parentheses, e.g. <ʔaqoohsati(')> Nf.

<ʔaqoohsati(')> Nf	hiwaajuni Nf
hypiwyhkywa' Nf	hukaita' Nf
<ʔahsuwajahahti(')> Nf	huuhtuni Nf
ʔaihkuhsu Nf	jukita' Nf
waihmuhsa' Nf	wijuhnu' Nf
tojaty' Nf	waʔnaʔmahxahti Nf
puhujuni Nf	sawahpono Nf
tojakywa Nf	moʔuhkahsi Nf
poowyhnai Nf	sijapi Nf
kiwechnehxe Nf	jyhmahawy Nf
moojahqa Nf	tuhupe' Nf

wa?i' Nf

<jyhmahawy(')> Nf

saju' Nf

<sihsikati(')> Nf

siwahty' Nf

jawaahxati Nf Lucy Kinsman

b. Personal names, feminine, White-man.

xaahnaihni Nf Caroline

suuhsi' Nf Susie

maaki' Nf Maggie

paahci' Nf Patsy

mini' Nf Minnie

cuuni' Nf Julie

heehso' Nf Hazel

niihta' Nf Nita

?ehma' Nf Emma

mooti' Nf Maude

hehnahni Nf Helen (175)

?otoohsi' Nf Rosie

maane' Nf Molly (175)

?enahsi' Nf Elsie (175)

nene' Nf Nellie

?ena' Nf Ella (175)

cini' Nf Jennie

maina' Nf Mina

sipiihni' Nf Sibina

naahnihsi' Nf Nancy

c. Personal names, masculine, Indian. The label Nf applies to each of the following.

tahmaakihsi

ta?ahqai

tahnaani'

toohseehna'

tunani'

<ciwijahnu(')>

cajuhma'

caahtahta

qahtaawahni

qohmeehna'

qahsiihna'

qohojoni

qahcu?wa'

pohpi'

pihkui'

pahnaawu'

pajuuhcu'

poihpoi

paheehti'

patahsihna'

poqehsi

?aahahci

?ohociwi

?awoohsai

sohoky	sehmi	japaa'
sahky?ma'	hihcahci	jycypa'
seehma'	howihno'	wohqo'
sihmohno	jooho'	myta'
	juhsuhma'	

d. Personal names, masculine, White-man. The label Nf applies to each of the following.

caane' Charlie	pita' Peter
pyyhsi' Percy	waane' Wally
pyycu' Virgil	coohno John
coo Joe	maihki Mike
pataihki Frank	cooci George
sihtiipi Steve	piihti Pete

e. Types of people. (A few of the following, as noted, can also be used to refer to animals.)

wowa' Nf Chukchansi Yokuts

qohsoo?moho Nf Southern Sierra Miwok

<caihnihmahni> Nf Chinaman has the freely varying allomorphs //caihnihmahni//~//caikwani'//.

pahnijoohna' Nf Mexican

qanaaqa' Nf Negro

nyyhmy Nf Mono Indian, Indian, person; body

na?a Nf (boy) is always followed by <oi'> nNh 'dim.'

na?ahoi' Nf boy (335, 396a)

syjatyhmy Nf good-looking girl or young woman

sy?a Nf⁻ girl always preceded by <Rh> Pd 'distributive' (382)

Rhsy?a Nf girls

nana Nf man, male animal

hyyhpi' Nf woman, female animal has the allomorph //hypi// when followed by <ci'> nNh 'dim.' (335); the combination <hyyhpi' h ci'> //hypihci'// Nf has the portmanteau seme 'old woman'.

ouku' Nf old man

?owaa' Nf⁻,I,Nbf baby (as I (392), has the alloseme 'sound made by baby when crying') as Nf⁻, is usually or always followed by <?nuku'> nNx (331a) or by <ci'> nNh 'dim.' (335). Occurs as Nbf in:

pa ?owaa' Nf water-baby (a legendary being)

?yny' Nf strange or fearful being (human, animal, or legendary); white man

paatate' Nf preacher, minister

wahqeenu' Nf cowboy

caa?ma' Nf blind person

caahpu' Nf midget

f. Mammals. The label Nf applies to all of the following.

tyhyhta deer

to?ohpi wolf

tonoowi wildcat

wiheehsihti mountain lion

pahtahqai raccoon
myhy porcupine
kity groundhog
teewa cottontail rabbit
mawi grey squirrel
jowa' bunny (young of any rabbit species)
'ihsa' coyote (331)
qohci pig, hog, pork
ho'nopi bat
pohniihka' sheep
qajiihna' chicken
too'no' bull
kitii' cat

pohihta skunk
pacuhku beaver
qahmy jackrabbit
'ehkwy ground squirrel
puweci mouse
qawa woodrat
myjy gopher
puhku dog, pet
myhsa'wota' chipmunk
caqahsi donkey
ciiwu' goat
qawaaju' horse
qahnaahtu' cow, cattle

(Some speakers use the form <qaahtu'>.)

g. Birds. (The label Nf applies to all of the following.)

ciihpa' bird (generic term)
qohcohpahi'na' blue-fronted jay
tahtati' chicken hawk
kwi'naa' eagle
pahnaahtata' California woodpecker
ci'nihsa' Brown towhee
syhywoi' fox sparrow
wiho turkey vulture
suuku robin

<caiqo?no> California (blue-)jay has the freely varying allomorphs //caiqo?no//~//ceeqo?no//

wohpihkuhsu Modoc woodpecker

cihpihta mountain quail

widoici purple finch

qahy sierra grouse

muhu sp. owl; generic term for owls

wohqojaana sp. owl

nooito meadowlark

pyjy duck

h. Animals, other than mammals and birds. (Nf applies to all.)

?ohno?ohnohki' king snake

weehqai mountain garter snake

<toqohqwa> Nf,Nbf rattlesnake; snake (generic term) has the allomorph //qohqwa// when occurring with <pahsi> Nc '(gopher snake)' (314a); has the allomorph //htoqowa// when occurring (as Nbf) with <pa> Pb 'water'; the allomorph //toqohqwa// occurs elsewhere.

//pa htoqowa// Nf water snake

?ohcohqoi' toad

muhkuhta sp. lizard

?owoohti sp. lizard

poqo?ja sp. lizard; generic term for lizards

ʔooqa turtle; clam; padlock; coin purse

ʔahnaahcaahna' salamander

ʔaaqai salmon

ʔeepihsa bass

qoohqonowai' sp. ant

pena yellowjacket

hohpohpo' spider

qopoco sucker

wowa' sp. ant

soo'jape sp. ant

muipi housefly

ny'nyhkwypai' centipede

i. Plants, parts of plants used for food, foods derived from plants. (The label Nf applies to all.) Members of Nf which also belong to Nt are given in 313a.

Keejihsi sp. flower and its seeds (211c)

qawohnohma sp. flower; its seeds

sapaahnu' sp. fern

sapahsipa' sp. fern

sihqoowa' squash

<hihoono'> beans has the freely varying allomorphs //hihoono'//~//pihoono'//

jyhmyhna' acorn soup

qoohpe' coffee

types of mushrooms:

toohpo

tahsihtu'

cajaahki'

cujuu'

qo'noohca'

paaku'

saahsi'

seehxajuu'

jaahpahna'

no'i'

j. Articles of clothing. (Nf applies to all.)

no?mahii' clothing, property

<pihsi?mee'> apron has the allomorph //pihsi?mee// when occurring with <ja> nVi 'to wear/don' (367a); the allomorph //pihsi?mee'// occurs elsewhere.

//pihsi?mee ja// Vi to wear/don an apron

cahqeeta' jacket

soweta' sweater

woohta' boots

mohqo shoes

mahsihkaata' handerchief

sohmehneehna' hat

taahpanu' shawl

k. Tools, equipment, useful objects, etc. (Nf applies to all.)

?ahpo cooking basket; basket (generic term)

wono conical burden basket

cihku seed-beating basket

cahmaaja winnowing basket

jahta twined cooking basket

pooja small coiled basket with neck

?ohsa bottle

kuhsa bag

sahki sack

wahnihni barrel

?owoohno boat

?etyh bow, gun

wopihqoo wooden bowl

kuhsihta?ni sack

qahoo?na box

pioo blanket

wa?naahqa net

pihsihtoona' pistol

paqa arrow, bullet
wihi knife
naahoa' ax, hatchet
haahma' hammer
naahpu' nail
taahpi?ni board, plank
siija' saddle
sihpuweehna' spurs
wynacu brush (made of soaproot)
poto walking stick, digging stick, staff, pole

1. Miscellaneous. (Nf applies to all, unless otherwise noted.)

?oono' gold
jehnihpa' poison
co?ahpe ghost (331b)
pojo road, trail
puha supernatural power
hupija song, music
hupawa meat-juice
tyyhna meat
kuhnahni corral, fenced-in enclosure
qahniwoohsa jail
tyhkwiki Nf⁻ occurs only with <ni> nQl 'like' (355)
tyhkwikinih Ql plentiful, abundant
<nawahku> money has the allomorph //hnawahku// when preceded by <puhi> Nu 'blue/green' (312); the allomorph //nawahku// occurs elsewhere.
//puhi hnawahku// Nf 'blue-green money (beads cut from abalone shell)'
qety Nf⁻ occurs only with preceding <puhi> Nu 'blue/green' (312)
puhiqety Nf abalone shell

kyhma' Nf* other the combination of this morpheme with <Rh> Pd 'distributive' occurs in IC with preceding <Rh na> Pdr 'reciprocal' (see 382); this morpheme and the combination <kyhma' Na> O 'other-obj.' (337a) are commonly followed by <hsu> F 'precisely, still' (395).

319. Nominalizing affixes. The morphemes listed below occur in IC with forms other than N, the constitutes being Nf or Nr. Eight classes are distinguished.

a. vNf, vNr. Occur with verb stems. Constitutes are Nf (for vNf) or Nr (for vNr).

hpY vNf product of the action: 'that which is produced by ...ing'

jaqa Vi to cry

jaqahpY Nf tears; wax in ears

naa Vi to grow

naahpY Nf timber, log

sii Vi to urinate

siihpY Nf urine

kwita Vi to defecate

kwitahpY Nf excrement

tuhi Vi to spit

tuhihpY Nf spittle

<hna> vNr act of ...ing; object of the act of ...ing has the allomorph //h// when occurring before nL; the combination of this morpheme with <Na> nO 'obj.' (337a) has the portmanteau morph //hna//; the allomorph //hna// occurs elsewhere

mija Vi to go

mijahna Nr(P) (...'s) departure; the place to which ... went/is going

<ʔa mija hna Na> //ʔahmijahna// O his departure-obj.; the place to which he went-obj.

pihty Vi to arrive

pihtyhna Nr(P) arrival

cihouka Vt to point at

cihoukahna Nr(P) that which is being pointed at

jatuha Vi to talk

jatuhahna Nr(P) what is being said; language

<hnuñ> vNr^{+} instrument with which the action is performed: that with which one ... has the allomorph //hnu// when occurring before Nr or Nf, and when occurring after <sahqwaʔa> Nt^{+} 'fir' (313c); the allomorph //hnuñ// (225) occurs elsewhere; occurs after two forms which are not verb stems: <sahqwaʔa> Nt^{+} 'fir', and, in a trinary construction, with <pa hkwi> Nf,Nbr 'fish' (311a) and <poto> Nf

'staff' (318k); unlike other members of Nr, some combinations of verb stems plus <hnuñ> occasionally occur in IC with members of nL (348a); they can accordingly be designated as Nr^{+}; one form which contains <hnuñ> as an IC, <cih cuka hnuñ> (see below), occurs as Nbr

//sahqwa?ahnu// Nf strainer (made of fir branches, used in leaching acorn flour)

tyhka Vi,Vt to eat

tyhkahnuñ Nr^{+} instrument for eating; table

wihi Nf knife

//tyhkahnuwihi// Nf table-knife

<cih noo> //cih ?noo// Vt to carry or move with pointed object (223a, 365, 386)

//cih?noohnuñ// Nr^{+} pitchfork (231a, 225b)

//tyhkahnucih?noohnuñ// Nf table-fork

pahkwipotohnuñ Nf fishing-pole (231a, 225b)

tuheñ nL under

tyhkahnuñtuheñ L under the table

cih cuka Vt to point at (386)

cihcukahnuñ Nbr (index finger)

mahcihcukahnuñ Nr(P) index finger

qahty Vi (sg.) to sit

qahtyhnuñ Nr^{+} chair

pa noo Vt to haul (water)

panoohnuñ Nr^{+} bucket (231a, 225b)

pe vNf cognate object: that which is ... differs from <hna> vNr (above) as follows: <hna> is ordinarily used with verb stems which can take a variety of objects, and the constitute with <hna> denotes whichever of the possible objects happens to be concerned in the particular case, or it may denote the action itself; <pe> vNf is used with nouns which by their semantic nature can have only one or a limited number of logical objects

nyka Vi to dance

nykape Nf a dance

ʔehki Vi to eat acorn mush, acorn soup, acorn biscuits.

ʔehkipe Nf acorn mush

' vNf agent: one who ...s

nohqaqa Vtt to steal (366)

nohqaqa' Nf thief

kwica Nr(pi) sp. larvae which grow in Mono Lake

tyhka Vi,Vt to eat

tyhka' Nf eater occurs only as second member of compounds.

kwicatyhka' Nf Mono Lake Paiute: "larvae-eaters"

hty' vNf customary or former agent: one who customarily or habitually ...s; one who used to ...

wyy Vt to catch, capture, take

ty Pt indefinite object (324)

tywyy Vi to catch things/people

tywyyhty' Nf sheriff

poo Vt to cut hair, shear (sheep)

typoohty' Nf barber

ca?ahtini Nl place name

wũ nL̃ at (231b, 248a)

//nyy// Np I (321, 323)

nopih̃ Vi to dwell (367a, 224a)

//ca?ahtiniwũ+nyy+nopih̃hty'// IN I used to live at Ca?ahtini (396c)

pecy vNf excessive agent: one who ... very much, too much (usually is used derogatively)

syjee Vi to be afraid

syjeepecy Nf coward

syhyka Vi to gather sticks (367a)

syhykapecy Nf a real stick-gatherer, one who is going around gathering a great many sticks

tyñ vNf,lN neutral agent: one who is now ...ing, one who has recently ...ed when it follows the immediate future suffix <waih>, the meaning of the composite form is 'one who will soon ..., one who is planning to ...'; corresponds in tense and aspect to the neutral tense

suffix <hti> (379b); see also 318b

miǰa Vi to go

mijatyñ Nf one who is going, one who went

mijawaihtyñ Nf one who intends to go soon

tyhkatyñ Nf one who is eating, one who ate

//ca²ahtiniwū+ngy+nopih˜tyñ// IN I live at Ca²ahtini

hci vNf˜ agent occurs only with <pa hapi> Vi 'to swim', with which it forms a portmanteau seme, and <ty ²ohi> K left (341)

pahapihci Nf bear

ty²ohihci Nf left-handed person

b. IN, qN. The following morphemes occur with members of L, Ql, and Qn.

tyñ lN,vNf that which/one who is (located) ... (225)

(see also 319a)

nopih Nf house (311c, 385)

weeh nL in (348a)

nopih˜weeh L in the house (224a, 396b)

nopih˜weehtyñ Nf he who/that which is in the house

²unañpaah pĽ,L˜ on the other side

²unañpaahtyñ Nf he who/that which is on the other side; Auberry Mono (who live on the other side of the San Joaquin River from North Fork)

<htu> lN,qN that which/one who is ... when followed by nL or nO, has the allomorph //h//; when occurring after Ql or Qn, and not followed by nL or by <Na> nO 'obj.', has the freely varying allomorphs //htu//~//i//; the allomorph //htu// occurs elsewhere; does not occur in IC with <symy> Qn^{x}

cawu Ql well, good

<cawu htu> Nq good (one)

<waha htu> Nq two

<waha htu Na> //waha h ku// O good-obj.

nopih~ni Ql house-like (355, 396b)

<nopih~nihtu> Nq house-like object

<nopih~nihtuweeh> //nopih~nihweeh// L in a/the house-like object (213a)

<puti ʔi> Vi to emerge (362d, 371d)

hti vIN neutral tense (369b)

//poihpoi+nopih~weehhtu+putiʔihti// IN Poipoi came out of the house

//cah puti ʔi// Vt to cause to emerge, to get (someone/something) out

qahniwoohsa Nf jail

//poihpoiNa+nyy+qahniwoohsa~weehhku+ʔacahputiʔihti// IN I got Poipoi out of jail

h..' qN^{-} has been found only in IC with <symy> Qn^{x} 'one', <Rh symy> Qn 'one-distributive', and <Rh waha> Qn 'two-distrib.' (382)

//syhmy'// Nf,Nq one (227)

//Rhsyhmy'// Nf some

cf. <Rh symy htu> Nq one by one, one after another (382)

<Rh waha h..'> //R?wahha'// Nf twins (382, 223a)

cf. <Rh waha htu> Nq two by two

c. qcN. The following morpheme occurs with <cyhkwyta> Qc 'with effort, hard', the only member of class Qc (354c).

hpY qcN

cyhkwytahpY Nf a person with a great deal of stamina or physical endurance

d. iN. Occurs with imitative stems. This class contains but one member.

hna' iN 'that which makes the sound ...'. has the allomorph //?na'// when occurring after <tawaa'> I 'cry of the spotted towhee' and <maa> I 'sound made by mosquitos'; the allomorph //hna'// occurs elsewhere

//tawaa'?na'// Nf spotted towhee (227f)

//maa?na'// Nf mosquito

qopoqopo I cry of the western tanager

qopoqopohna' Nf western tanager

ɔɔohcɔɔohhna' Nf western bluebird

ʔuuʔuihna' Nf roadrunner

pahky+pahky I sound made by the pileated woodpecker (when pecking)

pahky+pahkyhna' Nf pileated woodpecker

e. hNr. Occurs with <ha> H 'indefinite' (327). This class contains a single member.

<iih> hNr

<ha iih> //h iih// Nr(P,pY) what, something

//ʔihiih// Nf my what/something (i.e. what/some relative of mine)

//hiihpY// Nf what, something

f. uN. The following morpheme occurs with one member of class U (312, 361a).

,,˜ uN has been found only with <ʔahɔa pono>

//ʔahɔapana// U tan, brown, copper-colored

//ʔah˜ɔapana// Nf red-shafted flicker (204e, 234a, 251)

320 Pronominal Elements

320. In this section are listed the personal, reflexive, indefinite object, demonstrative, and indefinite pronominal morphemes, together with certain morphemes which occur with

these elements: <ni> pp 'personal pronominal plural', <hkwa'> nNp 'personal pronominal plural', <my> pN 'independent personal pronoun base', <hu> dN 'independent demonstrative base', <qeh̃> hN 'independent indefinite pronoun base', and <hka> o '(obj.)'. The plural morpheme <my> nNm 'animate plural', which occurs with Nf as well as with Nd ("independent demonstratives"), is included in the section on substantival suffixes (336).

321. Pp, Pr. These two classes are similar in distribution in that members of both of them occur in IC with Vt ("transitive verb stems"), Vtt ("double-transitive verb stems"), pN (323), and with <ni> nQl 'like' (355). In other respects they differ in distribution.

a. Pp, "personal pronominal prefixes". These morphemes (aside from the exceptions noted below for <ʔa> Pp^{x} 'third person' and <tyh> Pp^{-} 'subject third person') occur in IC with:

N (303g), where they denote possessor (or similar relationship);

Vt and Vtt, where they denote the object;

nL, pL (348a, 347b), where they denote object;

Vi plus VT (358b, 455d);

<ni> pp 'personal pronominal plural' (322);

nQl (355), except <ke> nQl 'having';

<toki> Ql^{+} 'right' (354b);

<my> pN 'independent personal pronoun base' (323);

Op (independent personal pronominal objects 436b), with intervening <+> (396c, 423a).

All of the above except Op follow the member of Pp with which they are in immediate constituency.

<ny> Pp first person has the allomorph //ni// when occurring before <ni> pp 'personal pronominal plural', and the allomorph //ʔi// when occurring before N', V, and <toki> Ql^{+} 'right'; the allomorph //ny// occurs elsewhere (i.e. before <my> pN 'personal pronoun base', nQl, nL, and pL)

<ʔyh> Pp second person has the allomorph //ʔy// before <my> pN when the latter is not followed by <Na> nO 'obj.' (337a) and before <ni> pp 'pl.' when the latter is followed by nL, nQl, <toki> Ql^{+}, and V; the allomorph //ʔyh// occurs elsewhere, except that the combination of this morpheme with <ni> pp 'plural', when the latter is followed by pN, pL, or N', has the freely varying portmanteau morphs //ʔyhnih// ~ //ʔyih//

<ʔa> Pp^{X} third person does not occur with <my> pN, the function of such a combination being fulfilled by the independent demonstrative

pronouns Nd (326); but, unlike other members of Pp, does occur in constructions 423b-d; 421b, and 481; has the allomorph //ʔah// when occurring before N', pL, and Pr; the allomorph //ʔa// occurs elsewhere

<tyh> Pp⁻ subject third person occurs only with N' and <ni> pp 'plural', and denotes (by itself or in combination with <ni> pp) that the possessor of the noun is the same third person as the subject of the verb; has the allomorph //ty// when occurring before <ni> pp 'plural', and the allomorph //tyh// when occurring before N'

<tyh	puhku	Na + ʔa	puh	~ni	hti>	IN	he saw his (own)
Pp⁻	Nf	nO	Pp^X	Pb	pV	vIN	dog
sub3	dog	obj	3	eye	do	-ed	
		337		385	367d	379b	

ta Pp inclusive person (i.e. first person plus second person) the combination <ta ni> Pp and the single morpheme <ta> Pp both function as first person inclusive plural; (the combination <ny ni> Pp denotes first person plural exclusive)

A summary of the allomorphy of the personal pronominal prefixes is given in the table below. Six sets of morphs

are designated. They occur as follows: set 1, before <my> pN 'independent pronoun base'; set 2, before pL; set 3, before nL, nQl; set 4, before V and <toki> Ql^{+}; set 5, before N'; set 6, before <ni> pp 'personal pronominal plural'.

	<ny>	<ʔyh>	<ʔa>	<tyh>	<ta>
Set:	first	second	third	subj-3	incl
1	ny	ʔy(h)	--	--	ta
2	ny	ʔyh	ʔah	--	ta
3	ny	ʔyh	ʔa	--	ta
4	ʔi	ʔyh	ʔa	--	ta
5	ʔi	ʔyh	ʔah	tyh	ta
6	ni	ʔy(h)	ʔa	ty	ta

Paradigms:

With qwenaʔa pL,L distant, far (from)

//nyqwenaʔa// L far from me

//ʔyhqwenaʔa// L far from thee

//ʔahqwenaʔa// L far from him/her/it

//taqwenaʔa// L far from us (incl.)

With weeh nL in

//nyweeh// L in me

//ʔyhweeh// L in thee (213a)

//ʔaweeh// L in him/her/it

//taweeh// L in us (incl.)

With naki Vt to follow

//ʔinaki// Vi to follow me

//ʔyhnaki// Vi to follow thee

//ʔanaki// Vi to follow him/her/it

//tanaki// Vi to follow us (incl.)

With puhku Nf dog, pet

//ʔipuhku// Nf my dog

//ʔyhpuhku// Nf thy dog

//ʔahpuhku// Nf his/her/its dog

//tyhpuhku// Nf⁻ his/her/its (own) dog

//tapuhku// Nf our (incl.) dog

For examples with <ni> pp 'plural' and <my> pN 'pronoun base', see 322 and 323 respectively.

b. Pr, "reflexive pronoun". This class, whose distributional properties are indicated below, has one member.

<na> Pr 'reflexive' has allomorphs //py//, //na//, //nah//, //naʔ//; the conditions of their occurrence, and the distribution and meaning of the morpheme, are as follows:

(1) Occurs in IC with following <my> pN 'independent personal pronoun base' (323), with the allomorph //py//.

<na my> //pyy// Np⁻ 'oneself (intensive)' does not occur with <Na> nO 'obj.' (337a); this form, and the combination <na my hkwa'> //pyyhkwa'// Np⁻ 'oneselves' are usually (or perhaps

always) followed by <hsu> F 'precisely, still' (395).

(2) Occurs in IC with following Vt, Vtt (365, 366), where it has reflexive or passive meaning, with the allomorph //na//, except before a few verb stems whose morphophonemic representations have an initial resonant, where it has the allomorph //na?//.

<cah puti ?i> Vt to get (smthg.) out (386, 371d)

//nacahputi?i// Vi to be gotten out (e.g. of jail)

//napuhmaaci// Vi to be recognized

//na?mah˜caqa// Vi to wash one's hands

mahqa Vtt to give (smthg.) to (someone) (366)

namahqa Vt,Vi to be given (smthg.)

<wahci ˜a..> //wah˜aci// Vtt˜ to hide (371c, 204e)

//na?wa~aci// Vt,Vi to hide (oneself) (from)

<na my hsu + na jawi hti> //pyyhsu+najawihti// IN he's laughing at himself

(3) Occurs in IC with preceding <Rh> Pd 'distributive' (382), where it has the allomorph //nah// except when followed by N', where it has the allomorph //na//.

<Rh na> //Rhnah//, //Rhna// Pdr 'reciprocal' (241)

Rh pa?añ nL distributively on top

//RhnahRhpa?añ// L on top of one another

//Rhnahna?wa̲ aci// Vi to hide from each other

//Rhnahhawa// Vi to scold each other (223a)

//Rhnahwaqa// Vi to talk to each other (213e)

//Rhnapyhni'// Nf sisters: "each other's younger sister"

//Rhnapety// Nf parent and daughter: "each other's daughter"

//Rhnahmahqa// Vt,Vi to give each other (smthg.)

cahmyhnahky' Vtt to cause to change/turn over (386, 372a, 226)

//Rhnahcahmyhnahky'// Vt to cause to change each other

//?aRhnahcahmyhnahky'// Vi to cause them to change (position with) each other

See also 382.

(4) Occurs in IC with preceding <?a> Pp^{X} 'third person' (321), with the allomorph //nah//. 421b.

(5) Occurs in IC with following <ni> nQl 'like' (which has the allomorph //mahani// when

occurring with it 355), with the allomorph //na?//. Here it has reciprocal meaning.

<na ni> //na?mahani// Ql like each other, alike

(6) Occurs, with the allomorph //nah// and reciprocal meaning, in IC with at least two forms consisting of <Rh> Pd 'distributive' plus nL:

Rhpa?aň nL¯ distributively on top (382)

//nahRhpa?aň// L on top of one another

Rhpihnaň nL¯ distributively after, behind

//nahRhpihnaň// L after one another, behind one another, one after another

(7) Occurs in IC with following <typihi naň> L¯ 'at the middle', with the allomorph //nah//.

//nahtypihinaň// pL¯ occurs only with those members of Pp which contain <ni> pp 'pl.' (322b).

//?aihnahtypihinaň// L between them, in their midst

(8) Occurs in IC with following <symy> Qn^{+} 'one' (which has the allomorph //sy?my// when occurring with it), with the allomorph //nah//.

//nahsy?my// Qn all

322. pp, nNp. These two classes contain one morpheme each. The morphemes both indicate plurality, are both associated with the personal pronominal prefixes Pp, and are mutually exclusive, but they differ in distribution, with respect to both position of occurrence and the distribution class membership of the forms with which they occur in immediate constituency.

a. <hkwa'> nNp 'independent personal pronominal plural' (226) occurs (1) after combinations consisting of a member of Pp followed by <my> pN 'independent personal pronoun base'; the constitutes do not occur with <Na> nO 'obj.' (or <hka> o '(obj.)'); (2) with imperative expressions IM (493b)

<ny my> //nyy// Np 'I'

//nyyhkwa'// Np¯ we (excl.)

Further examples are given in 223, 493b.

b. <ni> pp 'personal pronominal plural' occurs with Pp, under the conditions described below

The combinations of <ni> pp and preceding members of Pp occur before <my> pN 'independent personal pronoun base' only if the latter is followed by <hka> o '(obj.)' (329) and <Na> nO 'obj.' (337a). <ni> pp occurs after <tyh> Pp¯ 'subject third person' only if it is followed by N' (this limitation applies in accordance with the restrictions on the occurrence

of <tyh> Pp⁻ not followed by <ni>). The occurrence of this morpheme with the third person morphemes and the inclusive person morpheme is optional; <ni> pp in general does not occur in referring to plural persons except when the speaker is definitely specifying plurality. There is a tendency for <ta> Pp 'incl.' to be used without <ni> pp when two persons are involved (i.e. one second person), and for <ta ni> Pp to be used when more than two are involved (i.e. more than one second person), but this is only a tendency; <ta> Pp alone frequently occurs with reference to more than two, and the combination <ta ni> Pp occasionally occurs when only one second person is involved. These remarks apply also to <ta my> Np and <ta my hkwa'> Np.

<ni> pp has allomorphs //nih//, //ni//, //ih//, //i//, partly in free variation, partly conditioned. The allomorphs with final //h// occur before <my> pN 'independent personal pronoun base', pL, and N', and the presence or absence of initial //n// is a matter of free variation except after <ny> Pp 'first person', where the //n// never occurs. Thus we have //nih//~//ih// before pN, pL, and N', except after <ny> Pp 'first person'; //ni//~//i// before nL, nQl, <toki> Ql⁺ 'right' (354b), and V, except after <ny> Pp 'first person'; and //ih// and //i//, in the corresponding environments, after <ny> Pp 'first person'. The combinations of <ni> pp with <?yh> Pp 'second person' require special treatment: in the environments in which //nih//~//ih// occur for

<ni> pp, <ʔyh> has allomorphs //ʔyh//~//ʔy//, the former occurring with //nih//, the latter with //ih//. Since all morphs are at the same level of the structural heirarchy, it is not permissible to allow the selection of an allomorph of one morpheme to be conditioned by the occurrence of one of two freely varying allomorphs of another. Therefore, although it is possible to segment each of the two possible morphophonemic sequences into two morphs, freely varying portmanteau morphs must be set up to represent the morphemic sequence <ʔyh ni> Pp '2nd pl.' occurring before pN, pL, N': //ʔyhnih//~//ʔyih//. In each of the environments in which freely varying morphs with and without //n// occur for <ni> pp, the morph without //n// is more frequent. The various morphophonemic representations of the combinations of Pp with <ni> pp are shown in the table below. The morphophonemes included in parentheses are those which vary freely with //Ø//.

	<ny ni>	<ʔyh ni>	<ʔa ni>	<tyh ni>	<ta ni>
	1 pl excl	2 pl	3 pl	3 subj pl	1 pl incl
Before:					
N'	niih	ʔy(hn)ih	ʔa(n)ih	ty(n)ih	ta(n)ih
pN	niih	ʔy(hn)ih	--	--	ta(n)ih
pL	niih	ʔy(hn)ih	ʔa(n)ih	--	ta(n)ih
nL, nQl, V, <toki>	nii	ʔy(n)i	ʔa(n)i	--	ta(n)i

Paradigms:

With <puhku> Nf 'dog, pet'

//niihpuhku// Nf our (excl.) dog

//ʔyihpuhku//~//ʔyhnihpuhku// Nf y'alls dog

//ʔaihpuhku//~//ʔanihpuhku// Nf their dog

//tyihpuhku//~//tyhihpuhku// Nf their (own) dog

//taihpuhku//~//tanihpuhku// Nf our (incl.) dog

With <qwena?a> pL,L 'distant, far (from)'

//niihqwena?a// L far from us (excl.)

//ʔyihqwena?a//~//ʔyhnihqwena?a// L far from y'all

//ʔaihqwena?a//~//ʔanihqwena?a// L far from them

//taihqwena?a//~//tanihqwena?a// L far from us (incl.)

With <weeh> nL 'in'

//niiweeh// L in us (excl.)

//ʔyiweeh//~//ʔyniweeh// L in y'all

//ʔaiweeh//~//ʔaniweeh// L in them

//taiweeh//~//taniweeh// L in us (incl.)

With <naki> Vt 'to follow'

//niinaki// Vi to follow us (excl.)

//ʔyinaki//~//ʔyninaki// Vi to follow y'all

//ʔainaki//~//ʔaninaki// Vi to follow them

//tainaki//~//taninaki// Vi to follow us (incl.)

For examples with <my> pN, see 323.

323. pN, "independent personal pronoun base". This class contains one member, which occurs with the personal pronominal morphemes <ny> Pp 'first person', <ʔyh> Pp 'second person', and <ta> Pp 'inclusive person', with combinations of these morphemes and <ni> pp 'personal pronominal plural', and with <na> Pr 'reflexive'.

<my> pN independent personal pronoun base has the allomorph //my// when followed by <hka> o '(obj.)' (329), and the allomorphs //y// and //a// otherwise, the latter after <ta> Pp 'inclusive person', the former elsewhere; occurs after <ni> pp 'plural' only if followed by <hka> o '(obj.)'; otherwise, the plural function is fulfilled by <hkwa'> nNp 'plural' (322a), which follows <my> pN

In the examples below, * appears after morphophonemic representations which occur (only) if <hka> o '(obj.)' does not follow.

<ny my> //nyy//* Np I

<ny my hka Na> //nymyhkaa// Op me/my (216a, 337a)

<ny my hkwa'> //nyyhkwa'// Np we (excl.) (226)

<ny ni my hka Na> //niihmyhkaa// Op us/our (excl.)

<ʔyh my> //ʔyy//* Np thou

<ʔyh my hka Na> //ʔyhmyhkaa// Op thee/thy

<ʔyh my hkwa'> //ʔyyhkwa'// Np y'all

<?yh ni my hka Na> //?yihmyhkaa//~//?yanihmyhkaa//
Op y'all (obj.)/y'all's

<ta my> //taa//* Np we (incl.) (usually dual)

<ta my hka Na> //tamyhkaa// Op us/our (incl.)
(usually dual) (216a)

<ta my hkwa'> //taahkwa'// Np we (incl.) (usually
more than two)

<ta ni my hka Na> //tainmyhkaa//~//tanihmyhkaa// Op
us/our (incl.) (usually more than two)

<na my hsu> //pyyhsu// Np oneself

<na my hkwa' hsu> //pyyhkwa'hsu// Np oneselves
(226b)

324. Pt, "indefinite object". This class contains one member, which occurs in immediate constituency with following Vt or Vtt.

ty Pt indefinite object

This morpheme denotes indefinite objects (animate or inanimate) as goals of the verbal action, or an indefinite number of items of a goal which is specified by an objective substantive expression (436, 337a), or an indefinite amount of participation as goal of the goal.

poo Vt to cut hair, shear

ty poo hty' Nf barber (319a)

ʔahpo Nf cooking basket; basket

weni Vt to sell

//ʔi ʔahpo Na + ny y + ty weni tyñ// IN I'm selling my baskets (but not all of them at once)

teeqa Vt to paint

tyteeqatyñ Nf painting something; painting things

cf. ʔateeqatyñ Nf painting it

htywy Vtt to ask (somebody) for (smthg.)

tyhtywy Vt to ask (somebody) for smthg./some

325. D, "demonstratives". The three morphemes of this class occur in IC with <hu> dN 'independent demonstrative base' (326). Certain other combinations in which members of D occur are noted below.

<ʔi> D this has the allomorph //ʔih// when occurring before <tukuñ> nL 'to, through'; the allomorph //ʔi// occurs elsewhere.

This morpheme occurs with <tukuñ> nL 'to, through', <nañ> xL 'at, on', <naah> (pK) (344), and <peñ> dL (which occurs only with <ʔi> D), as well as with <hu> dN 'demonstrative base'. The latter has the allomorph //hi// when occurring with <ʔi> D.

<ʔi hu> //ʔihi// Nd this (one)

<ʔi tukuñ> //ʔihtukuñ// L to here, hither

ʔinañ L,(pL) here

ʔipeñ L right back here

ʔinaah pK occurs only with <hnahqweh> KL 'side'

ʔinaahhnahqweh pL on this side of

ʔu D that (nearer) occurs with <nañ> xL 'at, on' and <naah> (pK) as well as with <hu> ŧN

ʔuhu Nd that (one) (nearer)

ʔunañ (pL) occurs only with <paah> nL 'by'

ʔunañpaah pL,L on that side (of), on the other side (of)

ʔunaah pK occurs only with <hnahqweh> kL 'side'

ʔunaahhnahqweh pL on the other side of

<ma> D that (farther) has the allomorph //maa// when followed by <nañ> xL 'at, on' (which has the allomorph //hnoñ// when occurring with <ma>); the allomorph //ma// occurs elsewhere

The difference in meaning between <ʔu> and <ma> is very slight; the two morphemes are practically interchangeable, but have a tendency to be differentiated on the basis of distance from the speaker, and in that <ma> has a somewhat stronger demonstrative force. Very occasionally, <ma> occurs in IC with following Vt, as a third person object (occurring here instead of <ʔa> Pp 'third person'). The use of <ma> rather than <ʔa> in this position gives greater force to the expression.

mahu Nd that (one) (farther)

<ma naañ> //maa hnoñ// L there

326. dN, "independent demonstrative pronoun base". This class contains one member, which occurs in immediate constituency with D (325). The constitutes, Nd, have distribution similar to that of free noun stems Nf.

<hu> dN demonstrative base has the allomorph //hi// when occurring after <ʔi> D 'this', and after <ni> nQl 'like', with or without intervening <'> (=A) (353a); has the allomorph //huñ// when occurring after nL (348a); the allomorph //hu// occurs elsewhere

This morpheme is always preceded by <hka> o (329) when it is followed by <Na> nO 'obj.' (337a). Members of nL (348a) occur between D and <hu> dN.

<ʔi hu> //ʔihi// Nd this (one)

ʔuhu Nd that (one) (nearer)

mahu Nd that (one) (farther)

ʔi hka hu Na Od this one-obj.

ʔuhkahuNa Od that one-obj.

mahkahuNa Od that one-obj. (211a)

<ʔi weeh hu> //ʔiweehhuñ// L in this (one) (223a)

//ʔuweehhuñ// L in that (one)

//maweehhuñ// L in that (one)

//ʔipaʔañhuñ// L on top of this (one) (225k)

//mapaʔañhuñ// L on top of that (one)

//mani'hi// Ql just like that

327. H. This class contains one member, whose unique distributional properties are described below.

<ha> H interrogative-indefinite occurs, with allomorphs //ha// and //h//, as indicated by the examples:

ha qeň Nh who, someone (328)

tu?i ha qeň Nh anyone (393b)

<ha hka Na> //ha hka a// Oh who/someone-obj. (337a, 329, 211a)

//tu?ihahkaa// Oh anyone-obj.

//h eehti// Oh what/something-obj. (as object of verbs of saying) (337b)

//tu?i h eehti// Oh anything-obj. (as object of verbs of saying)

//h ihmaa// Oh what/something-obj. (except as object of verbs of saying) (337b)

//tu?ihihmaa// Oh anything-obj. (except as object of verbs of saying)

//h iih// Nr(P,pY) what, something (319e)

//tu?ihiih// Nr(P,pY) anything

ha wuhta L in what/some direction (348b)

tu?i ha wuhta L in any direction

<ha naň> //ha hno// L where, somewhere (348c)

//tu?ihahno// L anywhere

//h ihno?o// Qn,T as Qn: how many, some; as T: when, sometime (353b)

//tu?ihihno?o// Qn,T as Qn: any amount; as T: anytime

ha hni?i C why, for some reason (393a)

tu?ihahni?i C for any reason

328. hN. This class contains a single member, which occurs only with <ha> H (327) and <tu?i ha> H 'any' (393b).

qeň hN interrogative-indefinite pronoun base

haqeň Nh who, someone

tu?ihaqeň NH anyone

The object forms which correspond to these (see 327) do not contain <qeň> hN, but do contain <hka> o (329), like the object forms corresponding to Np and Nd.

329. o. This class contains a single member, which has no meaning, but whose presence is required in combinations of <Na> nO 'obj.' (337a) with Np, Nd, and H.

<hka> o '(obj.)'

<ny my> Np I (321a, 323)

<ny my hka Na> //nymyhkaa// Op me

<ny ni my hka Na> //ni ih my hka a// Op us

ma hu Nd that (one) (325, 326)

ma hka hu Na Od that-obj. (211a)

<ha hka Na //ha hka a// Oh who/someone-obj. (211a)

For further examples, see 323, 326, 327.

330 Substantival Suffixes

330. The morphemes treated in this section (except those of 337) occur in IC with preceding noun stems, the constitutes likewise being noun stems. Forms containing the morphemes of 337 as ICs are objective substantive expressions.

331. Limited Noun Suffixes. These morphemes are very limited in distribution. One of them occurs with three morphemes; the others occur with a single morpheme each.

a. nNx. The morphemes of this class each occur with a single member of Nf. The constitutes are also Nf.

h.. nNx only with <wynacu> Nf 'brush made of soaproot'

<wynacu h..> //wynahcu// Nf White-man brush, broom, comb

<X> nNx only with <ʔihsa'> nNf 'coyote'; the combination has the portmanteau morph //ʔica'//

<ʔihsa' X> //ʔica'// Nf coyote (obscene term)

ʔnuku' nNx only with <ʔowaa'> Nf⁻,Nbf,I '(baby)' (319e, 311c, 391)

ʔowaa'ʔnuku' Nf baby (227f)

y nNx only with <ʔyny'> Nf 'strange or fearful being; white man'; the constitute is limited in distribution

ʔyny'y Nf⁻ only with <ni> nQl 'like', with intervening <⁻> (396b)

ʔyny'y⁻ni Ql strange, fearful (227h, 251)

b. nN'. This class contains a single morpheme, which occurs in IC with one member of Nf and two members of Nr. Two of the constitutes are Nf, one is Nr⁻.

' nN' only with <pija> Nr(P) 'mother', <nahqa> Nr(P) 'ear', <coʔahpe> Nf 'ghost'

pija' Nr⁻(P) has been found only in the form:

<ʔoono' Na + ʔa pija '> //ʔoono'Na+ʔahpija'//

Nf placer (217a, 337a, 321a, 396c)

nahqa' Nf sp. mushroom (which is ear-shaped)

coʔahpe' Nf crow; daddy long-legs

c. nNc. This class contains a single member, which occurs with one member of Nr. The constitute occurs as either Nf or Nr(pY) with no apparent difference in meaning or use.

hcoʔo nNc only with <nahqa> Nr(P) 'ear'

nahqahcoʔo Nf~Nr(pY) deaf person (or animal)

nahqahcoʔopY Nf deaf person (or animal)

d. nNj. This class contains one morpheme, which occurs with one member of Nu.

ja nNj only with <ʔehsi> Nu 'gray'

ʔehsija Nr(pY) ashes

332. nNt, nNn. These classes contain a single member each. Both morphemes occur with members of Ntn (313d). In addition, nNt occurs with Nt (313a-c) and nNn occurs with Nn (313c).

' nNn nut suffix

typah' Nf piñon nuts (223b)

jaqa' Nf white oak acorns

For further examples, see 313d, e.

pY nNt tree suffix

typahpY Nf piñon pine

jaqapY Nf white oak

wynyhpY Nf tree

wijahpY Nf black oak; oak (generic term)

ʔahpohsowapY Nf manzanita bush

ʔaahpaʔnipY Nf apple tree

For further examples, see 313a-d.

333. nNf. This class contains one member. It occurs with Nr (restricted noun stems), the constitutes being Nf (free noun stems).

<pi> nNf absolutive suffix has allomorphs //pi//, //pY//, //pe//, //pi'//; the last occurs only with <tuwah> Nr^{x}(P,pi') 'son, child' (316b); the occurrence of these allomorphs is defined by the designations in parentheses following

the distribution symbol Nr of forms which occur with this morpheme (305b)

For examples, see 316.

334. nN$_{\wedge}^{!}$ This class contains one member. Forms containing it are Nl (place names), but there are many place names which do not contain this morpheme.

<h..'> nNl place suffix: place where there is/are ...

has the allomorph //h..'// (204e) when occurring after <pY> nNt 'tree suffix'; the allomorph //'// occurs elsewhere

jaqa pY Nf white oak

<jaqapY h..'> //jaqahpY'// Nl(weeh) place where white oaks grow (this is the place where informant Lucy Kinsman lives) (303c)

//jaqahpY'weeh// L at the place where white oaks grow

wojoohno pY Nf buckeye tree

//wojoohnohpY'// Nl(weeh) place where there are buckeye trees

ʔohma pi Nf salt

//ʔohmapi'// Nl(hmañ) place where there is salt (a mountain)

waʔah pY Nf cedar

//waʔahhpY'// Nl(weeh) Cedar Grove (Mono name for North Fork) (223a)

335. nNh, "affective suffixes". The members of this class occur with preceding Nf, the constitutes likewise belonging to class Nf. One of them, <ci'> nNh^{+} 'diminutive', has a wider distribution, and four of them have very limited distribution as members of nNh. Two members of nNh occur also as Nr. Members of nNh (when occurring as nNh rather than Nr) are always preceded by the tactic juncture <h> (396a).

<ci'> nNh^{+} diminutive

This morpheme is used with forms denoting entities held in affectionate regard by the speaker as well as those whose small size the speaker wishes to emphasize. It is very common in the former sense. It occurs with Np, Nd, and Nh as well as with Nf. It can occur twice after certain members of Nf (see below), and it always occurs twice after a few forms which occur only with it, viz. <tohpo> Nx '(short)' (314b), <hyy> Qn- '(few)' (351o), <ʔino> Ql- '(small)' (352), <tapaa> Ql- '(near-by)', <syta> Ql- '(slightly)'. In its second occurrence after Qn- or Ql-, it has the allomorph //ciʔi//; in all other environments, the allomorph //ci'// occurs. (For the circumstances which make necessary the allomorph //ciʔi//, see 227e and <htu> qN 319b.)

puhku h ci' Nf dog/pet-dim.

poihpoi h ci' Nf Poipoi-dim

<ny my h ci'> //nyyhci'// Np I-dim.

ma hu h ci' Nd that-dim.

ha qeň h ci' Nh who/someone-dim.

ma hka hu h ci' Na Od that-dim.-obj. (329, 337a)

tuwah pi' Nf child (316b, 333)

tuwahpi'hci' Nf child-dim.

tuwahpi'hci'hci' Nf child-dim.-dim.

ʔowaa'hci' Nf baby

ʔowaa'hci'hci' Nf baby-dim. this form appears to be interchangeable with:

ʔowaa'ʔnuku'hci' Nf baby-dim. (331a)

<hyyhpi' h ci'> //hypi h ci'// Nf old woman (318f)

<Rh hyyhpi' h ci' h ci'> //Rh,,h hypi h ci' h ci'// Nf old woman-distr.-dim. (382)

//Rh,,h cuku' h ci' h ci'// Nf old man-distr.-dim.

tohpohci'hci' Nf occurs only in:

tohpohci'hci'~ni Ql short (314b, 355, 396b)

<hyyhci'hci'> //hyyhci'hciʔi// Qn few (351c)

//ʔinohci'hciʔi// Ql small (352)

//tapaahci'hciʔi// Ql nearby (352)

kita' nNh mild pejorative does not carry as strong a pejorative sense as <kyhna> nNh,Nr(P) (see below); can be translated by such expressions as 'that old ..., that darn ...'

puhku h kita' Nf darn dog

qahnihpaahna' h kita' Nf darn bell (227e)

kyhna nNh,Nr(P) strong pejorative (as Nr, 'semen')

This morpheme has a stronger pejorative force than <kita'> nNh. As with some English words, its use is not considered very polite in mixed company, although it often is used under these circumstances if the speaker is forgetful, angry, or daring. It can be rendered in English as '(that) damn ...'.

puhku h kyhna Nf that damn dog

'ihsa' h kyhna Nf the damn coyote

The remaining members of nNh have a specialized use as mild pejoratives; each of them occurs in this function with one or a few members of Nf containing the distributive prefix <Rh> Pd (382). Each of the forms in which these morphemes have been found in this function ~~are~~ is given in the examples below. As pejoratives they are about as strong as <kita'> nNh, or perhaps a little stronger, but they also carry a humorous touch, and indicate that the speaker is making fun of the persons denoted by the preceding stem as often as they indicate that he is angry with them. One of these morphemes occurs also with a member of Nu; another occurs also as a member of Nr.

qo'jo nNh^{x} with <Rh hyyhpi' h ci'> //Rh,,h hypi h ci'// Nf 'old woman-distr.' (204e., 318e), <Rh tuwah pi> //Rh tuwah pi'// Nf child-distr. (316b, 333), <Rh tuwah pi h ci > Nf child-distr.-dim.,

<ʔahqa> Nu 'red'

//Rhhyhpihci'hqoʔjo// Nf those darned old women!

//Rhtuwahpi'hqoʔjo// Nf those darned kids!

//Rhtuwahpi'hci'hqoʔjo// Nf those darned kids!

ʔahqahqoʔjo Nf strawberries

poci nN̄h̄,Nr(P) (as Nr, 'navel'); as nN̄h̄, occurs with <Rh syʔa> Nf 'girl-distr.'

Rhsyʔahpoci Nf those darned girls!

paʔwo nN̄h̄ with <Rh cuku'> //Rh,,h cuku'// Nf 'old man-distr.'

//Rhcuhku'hpaʔwo// Nf those darned old men!

//Rhcuhku'hpaʔwohkyhna// Nf those damned old men!

~juhki' nN̄h̄ with <Rh naʔa my> //Rh naʔa a..// Nf 'boys-distr.'

//Rhnaaʔah~juhki'// Nf those darned boys!

336. nNm. This class contains one member, which occurs with Nd and certain members of Nf, the constitutes being Nd or Nf respectively.

<my> nNm animate plural

This morpheme occurs with members of Nf which refer to people, occasionally with members of Nf referring to animals, and with Nd when they refer to people or, less commonly, when they refer to animals. The use

of <my> nNm in speaking of more than one person or animal is optional; it is used very commonly, perhaps usually, with nouns referring to people when more than one is involved, but very rarely with animals where more than one is involved. It is often used together with the distributive prefix <Rh> Pd (382). With certain forms there is a special usage: <tuwah pi> Nf 'child' (316b, 333) rarely if ever occurs with <my> nNm in utterances in which children are referred to, but it does (always or nearly always) occur with <Rh> Pd; <sy?a> Nf^{-} 'girl' (318e) never occurs without <Rh> Pd, and rarely if ever occurs with <my>; <na?a> Nf^{-} 'boy' (which is usually followed by <ci'> nNh^{+} 'dim.') generally occurs with both <my> nNm and <Rh> Pd when boys are referred to; <nana> Nf 'man' always (or nearly always) occurs with <my> nNm when men are referred to, but can occur with the distributive prefix as well; for old men and old women, <cuku'> and <hyyhpi' h ci'> respectively, the distributive prefix and not the plural morpheme is generally used. When occurring in the same form with nNh, the latter precedes <my>, except after <nana> Nf 'man', <na?a> Nf^{-} 'boy', and combinations of Pp and <tuwah> Nr(P,pi') 'child, offspring, son'.

<my> nNm has the allomorph //my// occurring everywhere except with the forms <nana> 'man' and <na?a> 'boy'. With these, it has the allomorph //a..// (204e).

qohsoo?moho my Nf Southern Sierra Miwok-pl. (216a)

sipihtyñmy Nf Northeastern Monos; Mono Lake Paiutes (2251)

qanaaqa'my Nf Negroes (227c)

<Rh na?a my h oi'> //Rhnaa?ahci'// Nf boys

<nana my> //naana// Nf men

//Rhnaana// Nf men

<?a tuwah my h oi'> //?ahtuwahmyhoi'// Nf her children (321a)

337. nO, hO. These two classes occur only as ICs of "objective substantive expressions". Their distribution is more precisely defined below.

a. nO. This class contains one member, which occurs in IC with preceding Nf and Nq; it also occurs in trinary constructions with Np plus o, Nd plus o, and H plus o (329, 436). The constitutes are "objective substantive expressions" Of, Oq, Op, Od, Oh; the cover symbol O is used to include all members of these five classes.

<Na> nO 'obj.' has the allomorph //a// when immediately preceded by <hka> o '(obj.)' (329), and the allomorph //ku// when occurring after <htu> qN (319b); the combination of this morpheme with <hna> vNr 'act/object of ...ing' (319a) has

the portmanteau morph //hna//; the allomorph //Na// (217) occurs elsewhere

<ny my hka Na> //nymyhkaa// Op me (321a, 323)

mahkahuNa Od that-obj. (325, 326, 211a)

mahkahumyNa Od those-obj. (336)

<ha hka Na> //hahkaa// Oh whom, someone-obj. (327)

<cawu htu Na> //cawu h ku// Oq good-obj.

<waha htu Na> //wahahku// Oq two-obj.

<ʔa mija hna Na> //ʔahmijahna// Of his/her/its departure/destination-obj.

wijahpYNa Of (black) oak-obj. (217b)

puhkuNa Of dog/pet-obj.

nopihNa Of house-obj. (224c)

b. nO. This class contains two members, which occur only with <ha> H 'interrogative-indefinite' (327) or with <tuʔi ha> H 'any'. The morpheme <ha> H has the allomorph //h// when followed by hO.

eehti hO occurs in

<ha eehti> //heehti// O what/something (as object of verb of saying)

//tuʔiheehti// O anything (as object of verb of saying)

ihmaa hO occurs in

//hihmaa// O what/something (not as object of verb of saying)

//tu?ihihmaa// O anything (not as object of verb of saying)

340 Locative Elements

340. Members of the class L (locatives) are given in 347. The other morphemes listed in this section, which fall into several classes, occur as constituents of locatives.

341. The three classes listed below contain one member each. The three morphemes involved are of very limited distribution; but they have in common the property of occurrence as constituents of forms belonging to class K. Class K consists of the forms which occur in IC with <hnahqweh> kL (346), the constitutes being locatives.

a. (Kt). This class contains a single morpheme, which occurs in IC with two members of Ql, <cawu> Ql,E 'good' and <?ohi> Ql¯ '(left)' (354b).

tyh (Kt) only in

tyhcawu K only in

tyhcawuhnahqweh L only in

tyhcawuhnahqwehtyn Nr(P) right side, hand (319b)

tyh?ohi K (223a) only in

tyh?ohihnahqweh L^{x} only in

tyh?ohihnahqwehtyñ Nr(P) left side/hand

tyh?ohihci Nf left-handed person (319a)

b. (Kh). The one member of this class occurs only with <pih> $Pb^{\#}$ 'back' (385).

huh (Kh) only in

huhpih K only in

huhpihhnahqweh L^{x} (223a) only in

huhpihhnahqwehtyñ Nr(P) back (as body part) (319b)

c. (Km). The one member of this class occurs only with <ha wuhtah> L 'in what/some direction' (327, 348b).

ma (Km) only in

hawuhtahma K only in

hawuhtahmahnahqweh L from what/some direction

342. K. This class consists of the forms which occur in IC with <hnahqweh> kL, the constitutes being L. There is one monomorphemic member in addition to the four forms given in 341.

sahqwe K only in

sahqwehnahqweh L^{-} only in

sahqwehnahqwehtyñ Nf a side, one side (319b)

343. The three classes listed below contain morphemes which occur as constituents of members of pL. The class pL consists of forms which occur in IC with Pp, the constitutes being locatives.

a. pK. This class contains one morpheme, which occurs only with <hnahqweh> kL 'side' (346) and <tyh> x (343b).

qwaa pK only in

qwaahnahqweh pL beyond

qwaatyh (pL) only in

qwaatyhweeh pL beyond (348a, 213a)

b. x. This class contains one member, which occurs only with <qwaa> pK (343a).

tyh x only in

qwaatyh (pL) (343a)

c. (pL). This class contains three monomorphemic members (listed below) and three combinations of two morphemes: <qwaa tyh> (343a, b), <ʔi nañ> (325, 348c), and <ʔu nañ> (325, 348c). Members of (pL) occur in IC with xL (348c) and/or members of nL (348a), the constitutes occurring as pL.

qope (pL),Nr(P) face as (pL), occurs in

qopenañ pL in front of, ahead of (348c)

qopeweeh pL,L in front (of), ahead (of), before, first (348a)

kwita (pL) only in

kwitanaň pL at the bottom of

kywa (pL) only in

kywapaah pL beside (but not touching) (348a)

kywatuheň pL beside (and touching) (348a)

344. (pK). This class contains one member, which occurs with two members of D (325) and with <paah> nL 'by' (348a).

naah (pK) only in

ʔinaah pK (325) only in

ʔinaahhnahqweh pL on this side of (223a, 346)

ʔunaah pK (325) only in

ʔunaahhnahqweh pL on the other side of

naahpaah nL behind

nopih˜naahpaah L behind the house (396b)

345. (L). This class contains a single member, which occurs only with <naň> xL 'at, on' (348c). The constitute occurs in one construction as a member of L, but occurs also with <na> Pr 'reflexive' (321b).

typihi (L) only in

typihinaň L^{x} only in

typihinaňtyň Nr(P) middle (225l, 319b)

//ʔahtypihinaňtyň// Nf its middle

<na typihi naň> //nahtypihinaň// pL⁻ in the midst of, between occurs only with those members of Pp which contain <ni> pp 'plural' (322b)

//ʔaihnahtypihinaň// L in their midst, between them

346. kL. The one member of this class occurs in IC with preceding K, the constitutes belonging to class L, and with preceding pK, the constitutes belonging to class pL.

hnahqweh kL

The forms in which this morpheme has been found are given in 341-344.

347. L, pL. There are a number of morphemes which either occur alone as locatives (class L) or occur with members of Pp, the constitutes being locatives. These morphemes are labeled L,pL and are given in 347b. In 347a are listed those morphemes which occur as L but not as pL.

a. L. Of the various distributional properties which characterize the class L, perhaps the following is best taken as diagnostic: its members occur in IC with following <tyň> lN,vNf (319b), but not with other morphemes which occur with V (319a, 370, etc.).

sipiñ L on the other side of the Sierra Nevada, far east

sipiñtyñ Nf that which is on the other side of the Sierra Nevada; Northeast Mono, Mono Lake Paiute

kwiwiñ L north

pihtah L in the Kings River drainage basin (or farther south), far south

(For the area between the San Joaquin River and the Kings River drainage basin, the form <ʔu nañ paah> L,pL 'on the other side' (325, 348c, 348a) is used.)

pihtahtyñ Nf that which is in the far south; Kings River Mono (i.e. the Sycamore and Woponoch tribelets)

typewuh L far below, in the San Joaquin Valley

ʔijoñ L here

ʔijañ L there

paʔañ L,nL on top (of)

b. The morphemes listed below occur alone as locatives or occur with members of Pp. The morphemes belonging to Pp have the allomorphs given as set 2 (321a) when followed by pI.; <ni> pp 'plural' (322b) has the freely varying allomorphs //nih//~//ih// when followed by pL.

qwenaʔa L,pL distant, far (from)

nyqwenaʔa L far from me

//nopihNa+ʔahqwenaʔa// L far from the house

wahkihtah L,pL hither

wahkihtahtyň Nf that which is on this side, or fairly close to here (relative to something else being spoken of)

//ʔahwahkihtah// L closer than him/her/it

pahmatyh L,pL uphill, upstream, up above (in the mountains but not in the air), near east

//ʔahpahmatyh// L uphill (or the like) from him/her/it

petawih L,pL downhill, downstream, below (in the foothills but not in the San Joaquin Valley) has the allomorph //petá// when followed by <weeh> nL 'in, at' (348a)

//ʔahpetawi// L downhill/downstream from him/her/it

petawihtyň L that which is downhill/downstream

//petaweehtyň// L (seems to have the same use and meaning as the above form)

348. Locativizing suffixes.

a. nL. Members of this class occur in IC with Nf, Nq, Nd, Nh, Pp, and L, the constitutes being L. The morphemes belonging to Pp have the allomorphs given as set 3 (321a) when followed by nL; <ni> pp 'plural' (322b) has the allomorphs //ni//, //i// when followed by nL. The tactic juncture <~> occurs before nL after Nf, except after those members of

Nf which end in the morphemes <tyñ> vNf,lN (313a, b) and <hna> vNr (313a); the latter has the allomorph //h// when followed by nL. When occurring with Nd, members of nL precede the demonstrative base <hu> dN (326), which has the allomorph //huñ// in this construction.

pa?añ nL,L on top (of)

nypa?añ L on top of me

//?apa?añ// L on top of him/her/it

//mapa?añhuñ// L on top of that (225k)

nopih˜pa?añ L on top of the house (224a)

wahanañpa?añ L one on top of the other (348c)

paah nL^{+} by

This morpheme has the meaning "by" referring to location as well as to agency. In the latter use, it is always followed by <htu> qN (313b). In addition to the distribution which it shares with other members of nL, <paah> occurs with Qn, <?i nañ> (pL),L (325, 348c), <?u nañ> (pL),L, <kywa> (pL) (343c), and <naah> (pK) (344).

nypaah L by me

?ety Nf gun, bow

cah tyhki ?i Vt to fire (gun) (386,362b,371d)

na Pr reflexive

?ety+nypaahhtu+nacahtyhki?ihti IN the gun was fired by me

waha Qn two

wahapaah L in two places, with reference to two places/things

ʔewapaah L in many places, with reference to many places/things

ʔinaǎpaah L,pL on this side (of)

ʔunaǎpaah L,pL on the other side (of); on the other side of the San Joaquin River

ʔunaǎpaahtyǎ Nf that which is on the other side; Auberry Mono (who live on the other side of the San Joaquin River)

kywapaah pL beside

naahpaah nL behind

weeh nL in, at

nyweeh L in me

nopih˜weeh L in the house, at home

mija Vi to go

//h// allomorph of <hna> vNr (319a)

//ʔi// allomorph of <ny> Pp I (321a)

//ʔimijahweeh// L in my going, in/at my destination, because I went (216a, 213a)

nypaʔaǎ L on top of me

nypaʔaǎweeh L in on top of me (i.e. in the space above me) (213a)

nypaʔaǎweeh+johcihti IN flew over me (224b)

wynyhpY Nf tree

ʔahqah nL among

wynyhpYʔahqah L among the trees

wynyhpYʔahqahweeh L in among the trees (i.e. in the area among the trees)

wynyhpYʔahqahweeh+kihmahti IN came through the trees

<hmaň> nL on, by means of has the allomorph //mahmaň// when occurring with morphemes of class Pp except <ʔa> Pp 'third person' and with D except <ma> D 'that', and the allomorph //ahmaň// when occurring with <ʔa> Pp 'third person' or <ma> D 'that'; the allomorph //hmaň// occurs elsewhere

nopih~hmaň L on the house

wihi Nf knife

tohqopa Nt to cut

wihi~hmaň+ʔatohqopa Vi to cut it with a knife

<ny hmaň> //nymahmaň// L on me (216a)

<ʔa hmaň> //ʔaahmaň// L on him/her/it, by means of it

<ma hmaň hu> //maahmaňhuň// L on that, by means of that

tukuň nL to, into, through

nopih+tukuň L to the house

wono~tukuň L into the burden basket (231a)

nąpih˜pa?ąñ L on top of the house

nopih˜pa?ąñtukuñ L to the top of the house

?ahqah nL among, within

wynyhpY˜?ahqah L among the trees

?iwooh˜?ahqah L in my hair

//?ahnyyhny˜?ahqah// L within his body, a part of his body

<tuheñ> nL^{+} under occurs also with <nato?o> Nf 'shirt' and <qahnihsu?ju> Nf 'trousers', with the allomorph //tuhih//, and with <kywa> (pL) (343c); the allomorph //tuheñ// occurs in all environments except the two just mentioned

nopih˜tuheñ L under the house

//tuhihqahnihsu?ju// Nf underpants

//tuhihnato?o// Nf undershirt

kywatuheñ pL beside (and touching), right next to

wūh nL˜ at occurs only in certain place names

ca?ahtiniwū L at Ca?ahtini

b. dL. This subclass contains two members, one of which occurs with two members of D (325) and with H (327), the other with <?i> D only.

<wuhtah> dL in ... direction has the allomorph //uhtah// when occurring after <?u> D 'that'

<?u wuhtah> //?uuhtah// L in that direction

?iuuhtah I in this direction

hawuhtah L in what/some direction

peň dL⁻ occurs only with <ʔi> D 'this'

ʔipeň L right back here

c. xL. This class contains one member, which occurs with members of several different classes, as specified below.

<naň> xL at, on

This morpheme occurs with Nf, Nr, H, (L), (pL), <pih> Pb⁺ 'back, buttocks', D, two members of L, and at least one member of Qn. It has the allomorph //hnoh// when occurring after <ha> H (327), and the allomorph //hnoň// when occurring after <ʔihoň> L 'here' or <ma> D 'that'; the latter has the allomorph //maa// when occurring with <naň> xL.

pojo Nf road

pojo naň L on the road

hsu F staying, still, precisely (395)

pojo naň hsu L along the road (225k)

typih Nr(pY) ground, dirt, land (311b)

typih naň L on the ground

pawaha Nr(pY) meadow (311b)

pawaha naň L in the meadow

ha H what, something (327)

<ha naň> //ha hnoh// L where, somewhere

typihi (L) (middle) (345)

typihi naň L⁻ at the middle occurs only with <na> Pr (which has the allokene //nah// when occurring with it) and <tyň> vNf, lN (319b)

//nah typihi naň// pL⁻ in the middle of (345)

typihi naň tyň Nr(P) middle

<pih> Pb⁺ back, buttocks (385)

pih naň nL,T- behind, after (see also 356c)

<ʔi> D 'this', <ʔu> D 'that'

ʔi naň L,(pL) here, on this

ʔi naň paah L,pL 'on this side (of)

ʔu naň L,(pL) there

ʔu naň paah pL,L on the other side (of)

ʔu naň paah tyň Nf that which is on the other side; Auberry Mono (who live on the other side of the San Joaquin River from North Fork)

<ma> D that

<ma naň> //maa hnoň// L there

ʔijoň L here, ʔijaň L there

//ʔijoň hnoň// L here

ʔijaň naň L there

waha Qn two

waha naň L⁻ has been found only with <paʔaň> L,nL 'on top (of)'

waha naň pa?aň L one on top of the other (as two knots tied in a string)

qope naň pL in front of, before (343c)

kwita naň pL at the bottom of (343c)

350 Miscellaneous Adverbial Elements

350. In this section are listed members of the following classes which, together with L (340) fall under the loose heading of "adverbs": Q (354), T (357), Aq (359a), Am (359b). Included also are a number of morphemes which occur as constituents of Q (351-353, 355) and T (353, 356, 358). The class Q contains the three subclasses Qn "quantitatives", Ql "qualitatives", and Qc <cyhkwyta>; the last has only one member.

351. Constituents of Qn.

a. (Qn). This class contains three morphemes of specialized distribution, each of them occurring with a single member of Qn.

naa (Qn) twice only with <pahi> Qn 'three'

naapahi Qn six

taah (Qn) (seven) only with <symy> Qn^{X} 'one' (which

has the allomorph //oywy// when occurring with it)

//taahoywy// Qn seven

wooh (Qn) (eight) only with <symy> Qn^{x} 'one'

woohsymy Qn eight (216a)

b. qQn. This class contains a single member, which occurs in IC with nine members of Qn, as indicated below.

mano qQn decade

<symy manɔ> //syymano// Qn ten (216a)

<Rh symy mano> //Rh,,ˀ syy mano// Qn ten by ten

wahamano Qn twenty

pahimano Qn thirty

waoymano Qn forty

manykimano Qn fifty

naapahimano Qn sixty (351a)

//taahoywymano// Qn seventy (351a)

//woohsymymano// Qn eighty (351a)

qwanyhkimano Qn ninety

c. Qn-. This class contains one member, which occurs only followed twice by <ci'> nNh^{+} 'diminutive' (335), each time with the tactic juncture <h> (which always precedes members of nNh) intervening. <ci'> has the allomorph //ciˀi// in its second occurrence after this morpheme.

hyy Qn- only in

<hyy h ci' h ci'> //hyyhci'hciˀi// Qn few

352. Ql-. The three members of this class are like <hyy> Qn- (above) in their occurrence with <ci'> nNh^{+}, but the constitutes are Ql rather than Qn.

?ino Ql- only in

<?ino h oi' h ci'> //?inohci'hci?i// Ql small

tapaa Ql- only in

//tapaahci'hci?i// Ql nearby

<syta>\Ql- has the freely varying allomorphs

//syta//~//hyta//

//sytahci'hci?i//~//hytahci'hci?i// Ql slightly, a little bit

353. The classes labeled (-A) and hA contain one member each. The forms in which they occur as ICs belong to more than one class of adverbs.

a. (-A). The one morpheme belonging to this class has been found with Ql and with one member each of the classes pL, L, and T-.

' (-A) emphatic

cawu Ql,E good

cawu' Ql very good

<ma ni hu> //manihi// Ql like that (325, 355, 326)

//mani'hi// Ql just like that

kywapaah pL beside

kywa'paah pL⁻ beside (and very close to) usually occurs with <nohi> Pn 'very' (383)

nohikywa'paah pL next to, very close to

pa?aň L,nL on top (of)

pa?aň' L⁻ only with <hsu> F 'precisely' (395)

pa?aň'hsu L quite on top

?ywi Vi to sleep

pa?aň'hsu+?ywi Vi to doze

pyty T- (after a while) (356a)

pyty' T- (pretty soon)

pyty'hsu T pretty soon (356c)

b. hA. The one member of this class occurs only with H (327). The constitutes belong to both Qn and T.

ihno?o hA only in

<ha ihno?o> //hihno?o// Qn,T as Qn: how many, some; as T: when, sometime

//tu?ihihno?o// Qn,T as Qn: any amount; as T: anytime

354. Q. This class comprises the three subclasses Qn, Ql, and Qc.

a. Qn, quantitatives.

<symy> Qn^x one

Unlike other quantitatives, this morpheme does not

occur in IC with <htu> qN,lN (319b). However, it occurs with several morphemes with which other members of Qn do not occur, viz. <h..'> qN¯ (319b), <na> Pr 'reflexive' (321b), <taah> (Qn) '(seven)' (351a), <wooh> (Qn) '(eight)' (351a), <hkutaa> qT¯ (358c). <symy> has allomorphs as follows: //sy?my// when occurring with <na> Pr (which has the allomorph //nah// in this construction); //syy// when occurring with <mano> qQn 'decade' (351b); //oywy// when occurring with <taah> (Qn) '(seven)'; //symy// elsewhere.

//syhmy'// Nf,Nq one

//nahsy?my// Qn all, entirely

//taahcywy// Qn seven

woohsymy Qn eight

symyhkutaa T always

//syymano// Qn ten

waha Qn two

pahi Qn three

<wacy> Qn four has the allomorph //wahcyhkwi// when occurring with <htu> qN,lN (319b), <paah> nL 'by' (348a), and <nahpy> qT times (358c); the allomorph //wacy// occurs elsewhere

manyki Qn five

qwanyhki Qn nine

?ewa Qn many

qatu?u Qn,Aq,E none, not, no (see also 359a, 392b)

b. Ql, qualitatives.

<cawu> Ql,E good has the allomorph //coo// when immediately followed by V or N'; the allomorph //cawu// occurs elsewhere

?ywi Vi to sleep

//cooh?ywi// Vi to sleep soundly (396a)

pa.hkwi Nf,Nbr fish (311a)

//coohpahkwi// Nf trout

papa Ql large

typici Ql great, important

woqo Ql thick

taki?a?a Ql thin

?yty Ql long, tall

syhta Ql bad

toki Ql^{+},E right, sufficient, appropriate (see also 392b)

This morpheme, unlike the other qualitatives (with the exception of <hohma> Ql^{x}), occurs with Pp (or may occur without Pp). Morphemes of class Pp have allomorphs of set 4 (321a) when occurring with <toki>.

//?itoki// Ql right for me, enough for me

?atoki Ql right for him/her, enough for him/her

hohma Ql^{x} over, above, larger than

This morpheme occurs only in IC with Pp (allomorphs of set 4), the constitutes being Ql. This feature of distribution is shared only with <toki>.

<ny hohma> //ʔihohma// Ql larger than me

//ʔyihohma//_//ʔynihohma// Ql larger than y'all

<ny hohma htu> Nq (319b)

//ʔi hohma h weeh// L in the space abovemme

<oiihpa' + no pih Na + ʔa hohma htu weeh + johoi hti>

//oiihpa'+hpihNa+ʔahohmahweeh+johoihti// IN

the bird flew over the house

<ʔohi> Ql^{-} (left)

This morpheme occurs only in IC with <tyh> (Kt) (341a), which, in turn, occurs only in IC with <ʔohi> Ql and <oawu> Ql,E. Since <ʔohi> shares this feature of distribution with <oawu> Ql, which is more widely distributed as a member of class Ql, it is classed as a limited member of Ql.

<tyh ʔohi> K left only in

<tyh ʔohi hnahqweh> L^{-} (346)

tyhʔohihoi Nf left-handed person (319a)

o. Qo. This class contains a single member.

<oyhkwyta> Qo with effort, hard

This morpheme is similar to Ql in its occurrence in verbal expressions (474a), but is unlike Ql in not

occurring with <htu> qN,lN. Instead, it occurs with <hpY> qcN (319b), (which occurs only with <cyhkwyta> Qc).

<poho ha> Vi to run

cyhkwyta + pojo ha Vi to run hard

cyhkwytahpY Nf a person with a great deal of stamina or physical endurance

355. nQl, qualitativizing suffixes. The three morphemes of this class occur in IC with N' (303g), the constitutes being Ql. Two members of nQl have a somewhat wider distribution, as noted below. The tactic juncture <~> (396b) occurs before nQl after N', except those members of Nf which end in <tyň> vNf,lN (319a, b).

<ni> nQl like

This morpheme occurs in IC with N', Nd, Nh, Pp, and Pr. Morphemes of Pp have the allomorphs of set 3 when occurring with <ni>. <ni> has the allomorph //mahani// when occurring with <na> Pr 'reflexive' (which has the allomorph //na?// when occurring with <ni>), and the allomorph //ma?ani// when occurring with Pp. The allomorph //ni// occurs elsewhere.

nopih~ni Ql house-like

toja~ni Ql like a mountain

<mah pih> //mah ~ja// Nr(P,pi) hand, glove

//mah~ja~ni// Ql like a hand

ʔuhu Nd that

<ʔu ni hu> //ʔunihi// Ql like that

//ʔini'hi// Ql just like this

<ma ni htu Na hu> //ma ni h ku huñ// Oq like that-obj.

haqeñ Nh who/someone (327, 328)

haqeñ˜ni Ql like whom/someone

<ʔa ni> //ʔamaʔani// Ql like him/her/it (216a)

//ʔyhmaʔani// Ql like thee

<na ni> //naʔmahani// Ql like itself, like each other

ho nQl with, accompanied by

This morpheme occurs with N', Nh, and Pp. The constitutes occur only with <htu> qN,lN (319b).

poihpoi Nf masculine name

poihpoi˜ho Ql˜ with Poipoi

poihpoi˜hohtu+kihmahti IN he came with Poipoi

tyyhna˜ho Ql˜ with meat

<tyyhna ˜ ho htu Na + ʔeki h.. tyñ> (371a)

//tyyhna˜hohku+ʔehkityñ// IN eating acorn and meat

haqeñ˜ho Ql˜ with whom/someone

nyhohtu Nq (one who is) with me

ke nQl having

This morpheme has been found only with N'. The constitutes occur only with <htu> qN,lN (319b).

nopih˜ke Ql˜ house-having

<nopih˜kehtu> Nq house-having (one)

qwaci Nr(P) tail

<qwaci˜kehtu> Nq tail-having (one)

<ʔyty htu Na + qwaci ˜ ke htu> Nq having a long tail (454)

356. Constituents of T. This class includes morphemes of specialized distribution which occur as constituents of temporals. One of them occurs also by itself as a temporal.

a. T-. The members of this class occur in IC with <hsu> (T):

japiʔi T- only in

japiʔihsu T immediately, quickly

ʔunoʔoho T- only in

ʔunoʔohohsu T formerly (231a)

pyty T- occurs with <hsu> (T) and with <'> (-A) (353a)

pytyhsu T after a while

pytu' T- only with <hsu> (T)

pyty'hsu T pretty soon

mowahu T-,T as T: now, soon

The constitute of this morpheme with <hsu> (T) has a portmanteau seme (see example). This is the only morpheme occurring with <ʔuhsu> t (356b).

mowahuhsu T tomorrow morning, the next morning; tomorrow, the next day

mowahu?uhsu T- only with <hsu> (T)

mowahu?uhsuhsu T early tomorrow morning, early the next morning

b. t. This class contains a single morpheme, which occurs only with <mowahu> T,T- 'now; (tomorrow morning)'.

?uhsu t only in

mowahu?uhsu T- only in

mowahu?uhsuhsu T early tomorrow morning

c. (T). This class contains a single member, which occurs with T-, the constitutes being members of T.

<hsu> (T) occurs only with <pih naña> nL,T- 'after', (385; 348c), <japi?i> T-, <?uno?oho> T-, <pyty> T-, <pyty '> T-, <mowahu> T-,T, <mowahu ?uhsu> T-

pihnañhsu T again

For examples of the other constitutes, see above.

357. T, temporals. Unlike members of Q and L, the forms belonging to class T (with the exception of <mi?i?i>) do not occur with a following nominalizing suffix (319b).

mowahu T,T- now, soon (see also 356a)

?anihku T now, right now, immediately

<mi?i?i> T nowadays has the allomorph //mi?ih// when followed by <tyñ> lN,vNf (313b); the allomorph //mi?i?i// occurs elsewhere

//mi?ihtyñ// Nf those of nowadays, contemperaries

?apitaa T after a while, presently, later

?ano?oho T no longer

hmuu?ahci T formerly, in the old days (224d)

nohihmuu?ahci T a long time ago (383)

?oohnoho T then

358. Temporalizing suffixes.

a. nT. This class has one member, which occurs in IC with Nw (315). The constitutes occur as T or as Vi.

<wano> nT time has the allomorph //no// when occurring after <jypa> Nw 'autumn'; the allomorph //wano// occurs elsewhere

toowano T,Vi (to be) wintertime

toqawano T,Vi (to be) nighttime

//jypano// T,Vi (to be) autumn

//jypanohpy// IN it has become autumn, autumn has come (373b)

b. vT. This class contains two morphemes, which occur in IC with Vi or in a trinary construction with Pp and Vi. When they occur in IC with Vi alone, the 'actor' for this Vi is the same as that of the predicate with which the constitute

T occurs. When they occur with Pp plus Vi, the member of Pp identifies the 'actor' for this Vi; this construction occurs only when this actor is different from the one involved in the predicate with which the constitute T occurs.

hsi vT after ...ing, having ...ed

pihty Vi to arrive

pihtyhsi T having arrived

ʔapihtyhsi T after he/she/it arrives/arrived

<puh ni> //puh ˜ni// Vt to see

tyhyhta Na Of deer-obj.

tyhyhtaNa+puh˜nihsi T having seen a deer

<ny my> //nyy// Np I

pahca Vt to kill (one being)

//tyhyhtaNa+nyy+puh˜nihsi+ʔapahcahti// IN having seen a deer, I killed it

poihpoi Nf Poipoi (masculine name)

tai C indeed (393b)

<ny ni> //nii// Pp first person pl. excl.

pa hkwi ka kaa Vi to go fishing (367a, 377b)

//poihpoi˜tai+niipahkwikakaahsi+pihtyhti// IN Poipoi arrived after we had gone fishing

<neñ> vT while ...ing has the allomorph //na// when occurring with Pp plus ÿi, and the allomorph //neñ// when occurring in IC with Vi alone

pahkwikaneñ T while fishing

//niipahkwikana// T while we were fishing

c. qT. This class contains three morphemes, which occur in IC with Qn. Two of them occur with a single member of Qn each.

nahpy qT times

symynahpy T once

wahanahpy T twice

ʔewanahpy T many times

kanaa qT⁻ only with <Rh symy> //Rh,,ʔ symy// Qn one by one, some

//Rhsyʔmykanaa// T sometimes, occasionally

hkutaa qT⁻ only with <symy> Qn 'one'

symyhkutaa T always

359. The two classes Aq and Am contain one member each. One of these morphemes occurs in only two constructions (494), while the other has a very wide distribution.

a. Aq. The one member of this class occurs in IC with members of several classes in addition to its occurrence as a member of Qn and E. A complete analysis of its distributional properties has not been made, and its occurrence is not fully accounted for in chaptor four. Some indication of the variety of environments in which it is found is furnished by the examples below.

qatu?u Aq,Qn,E not, none, no (see also 354a, 392b)

qatu?u+cawu Ql not good

//qatu?u+nyy+mijawai// IN I shall not go

//qatu?u+?ahmijahna// Nf his failure to go

qatu?u~tai+mahu+syjeehty' IN he is not a coward

//qatu?u~po?o+nyy+mi?i?i+pahkwikahty'// IN but I do not fish nowadays

qatu?u~po?o+haqeň+?asuhtapyha~ihti IN but nobody understands it

//qatu?u~po?o+nyyhkwa'+?asuhtapyha~ityň// IN but we do not understand it

Hahni?i+qatu?u+haqeň+?ahawatyň IN why doesn't anyone scold him?

qatu?u~tai~po?o+mahu+toqohqwa IN but that isn't a rattlesnake

qatu?u+mahu+toqohqwani+sunawityň IN that doesn't look like a rattlesnake

//qatu?u~po?o+nyyhkwa'+?yihohtu+mijahnaahmatyň// IN but we don't feel like going with you

//qatu?u+niityyhkwiihty'hci'// Nf little one who does not tell us

//qatu?u~tai+?ihimy+tytyyhkwiihty'// IN they do not tell things

b. Am. The one member of this class occurs only with (1) those members of Nf which consist of Vi plus <tyñ> vNf,1N (319a), (2) those members of T which consist of Vi plus <neñ> vT (358b). The constitutes are IM ("imperative expressions").

mino?o Am prohibitive

mino?o+mijatyñ IM don't go!

mino?o+mijaneñ IM don't go!

360 Verbal Elements

360. Included in this section are five classes of morphemes which can be referred to as verb roots (362-366), verbalizing suffixes (367), the one monomorphemic member of class U (361f), and five classes of morphemes which occur as constituents of U (361a-e).

361. The class of forms labeled U consists of those forms which occur in IC with the suffixes uV (367b). The forms occurring with uV are for the most part bimorphemic and, in general, occur only with these suffixes. The morphemes which are constituents of the forms U, except for <puh> Pb 'eyes' (385) and class Nu (312), are listed in 361a-e. One member of U has been found which is not segmentable and so is the only unit morpheme belonging to U. It is given in 361e.

a. nU. This class contains one member, which occurs in IC with preceding Nu (312).

<pono> nU has several allomorphs, as indicated by the following table:

Allomorph	Occurs with
//pono//	puhi Nu blue/green
	ʔahtyh Nu round
	haky Nu foolish
//pana//	ʔahqa Nu red
	ʔoha Nu yellow
	ʔahca Nu brown
	ʔehsi Nu gray
//taja//	tohoi Nu white
//caja//	nahqa Nu,Nr(P) ear
//caʔa//	topo Nu hill
//ʔani//	tuhmu Nu black
//~jawa//	toʔoh Nu,Nr(P) hole

puhipono U blue

puhiponoki Vi (sg.) to be blue (367b)

puhiponowa Vi (pl.) to be blue

ʔahtyhpono U round

hakypono U~ only with h..h..ʔ..hka uV

//hahkyhpoʔnohka// Vi to act foolish

<ʔahqapono> //ʔahqapana// U red

//ʔohapana// U yellow, brownish yellow

//ʔahcapana// U tan, brown, copper-colored

//ʔehsipana// U gray

//tochitaja// U white

//nahqacaja// U having long ears (used to describe rabbits)

//topoca'a// U peaked, pointed, in the shape of a hill

//tuhmu'ani// U black

//to'oh~jawa// U having hole(s) (as a muddy road)

b. (U). This class contains one member, which occurs in IC with -U (351c), U- (351d), and at least one member of Nu (312), the constitutes being U. It precedes -U and follows U- and Nu.

<pata> (U) has the allomorph //hpahta// when occurring with <ʔoha> Nu 'yellow' (and perhaps other members of Nu, if it occurs with them); the allomorph //pata// occurs elsewhere

patakwini U naked

sihkipata U flat

<ʔoha pata> //ʔohahpahta// U turning yellow (like leaves in autumn)

For further examples, see 361c.

c. -U. This class consists of the morphemes, except <ʔoha> Nu 'yellow', which occur in IC with preceding <pata> (U) (361b).

kwini -U only in

patakwini U naked

kwici -U only in

patakwici U shiny

qwaja -U only in

pataqwaja U long and narrow (as a fishing pole)

nuju -U only in

patanuju U straight (of a long object)

d. U-. This class contains one member, which occurs only with following <pata> (U) (361b).

sihki U- only in

sihkipata U flat

ǒ. pU. This class contains a single member, which occurs only with preceding <puh> Pb 'eyes' (385), the constitute being a member of U.

˜cimyty pU only in

puh˜cimyty U having wide-open, sparkling eyes

puh˜cimytyki Vi to have wide-open, sparkling eyes (216a)

puh˜hcihmy²tyhka Vi to have wide-open, sparkling eyes momentaneously (222, 367b)

f. U. One morpheme has been found occurring with uV which is unsegmentable on the basis of the material at hand. It is thus the only member of U which is not bimorphemic.

<jepeqono> U open (of a house or fence with regard to its windows, doors, or gate)

jepeqonoki V|to be open in one place

jepeqonowa V|to be open in more than one place

362c The classes V?a, V?x, Vr, Vr?, V?t comprise those morphemes which occur in IC with one or both of the members of vVr (371d): <Rhi> vVr 'durative', <?i> vVr 'punctual'. Most of these morphemes do not occur except with vVr, but there are a few which have a wider distribution: <myhna> Vr,Vi 'to turn over, change' (362c), <johci> Vr,Vi 'to fly, rise', <qawino> Vr,Vi 'to turn (one's head) back and forth', <qopi> Vr?,Vi 'to break (of supple object)' (362d), <qoti> V?x,Vx 'to break (of brittle object)' (362b), <tapo> V?x,Vx 'to strike'.

a. V?a. This class contains two members, which occur only in IC with <?i> vVr 'punctual', the constitutes occurring as vVa (auxiliaries).

tana V?a only in

tana?i vVa for good (signifies that the action denoted by the preceding stem is done with the intention or supposition that its result will be more or less permanent)

cuhpa Vi to sink, go down into (smthg.)

cuhpahtana?i Vi to sink/go down for good

mijahtana?i Vi to go away for good

kihmahtana?i Vi to come to stay

mūhsu V?a (231b) only in

mūhsu?i vVa almost (signifies that the action denoted by the preceding stem almost took place, but didn't)

cuhpahmūhsu?i Vi to nearly sink

hahkwihsa?i Vi to sneeze

hahkwihsa?ihmūhsu?i Vi to almost sneeze

<kyh noo> //kyh ?noo// Vt to bite

//?akyh?noohmūhsu?i// Vi to almost bite it

b. V?x. The three known members of this class occur in IC with <?i> vVr (but not with <Rhi> vVr), the constitutes being Vx. The class Vx consists of those forms which occur only with Pi (instrumental prefixes 386). Two members of V?x occur also without <?i> vVr.

qohtohtoo V?x only in

qohtohtoo?i Vx only with <cah> Pi 'pulling'

cahqohtohtoo?i Vt to pull (someone's) hair

<qoti> V?x,Vx to break (of brittle object) has the allomorph //qohti// when occurring with <?i> and the allomorph //qoti// when occurring with Pi

//cahqohti?i// Vt to break (one brittle object)

//wyhqohti?i// Vt to break (e.g. a pole) while whipping

//cihqohti?i// Vt to break (e.g. a needle)

caqoti Vt to break (several brittle objects)

<~tapo> V?x,Vx to strike

This morpheme occurs in IC with <?i> and with <wyh> Pi 'with sidewise motion of long object'. The constitute <~tapo ?i> occurs only in IC with <wyh> Pi. <~tapo> has the allomorph //~tahpo// when occurring with <?i>, and the allomorph //~tapo// when occurring with <wyh>.

<wyh~tapo ?i> //wyh~tahpo?i// Vt to strike (one blow, with whip-like motion)

<wyh~tapo> Vt to strike (several blows, with whip-like motion)

c. Vr. The roots labeled Vr occur in IC with <Ṛhi> but not with <?i>. Two members of Vr occur also as Vi (without <Ṛhi> or <?i>).

<johci> Vr,Vi to fly, to rise (from lying position)

This morpheme occurs with and without <Ṛhi> with a subtle difference in meaning which is not clear. <johci Ṛhi> Vi occurs in a text where it refers to a large number of birds flying around, but it seems to be an archaic form, as <johci> not followed by <Ṛhi> is ordinarily used in conversation regardless of the number

of the subject or manner of flying. <johoi> has the allomorph //joci// when occurring with <ɸhi>.

<myhna> Vr⁻,Vi to turn over, change has the allomorph //myhnaa// when not preceded by <cah> Pi and not followed by <ɸhi>, the allomorph //myhna// when preceded by <cah> Pi and not followed by <ɸhi>, and the allomorph //mynu// when followed by <ɸhi>.

//myhnaa// Vi to turn over (intrans.)

//mynu ɸhi// Vi⁻ to turn over and over only with <cah> Pi 'pulling'

//cahmynuɸhi// Vt to turn (something) over and over

//cahmyhna// Vt to turn (something) over (once), to change or exchange (something)

siqo Vr to slide (horizontally)

huju Vr to slide (downhill)

wojo Vr to be lined up (of several objects)

kwinu Vr to swing around, spin around (intrans.)

pyty Vr⁻ has been found only with <cah> Pi 'pulling'

cahpytyɸhi Vt to unravel (rapidly) (as string wrapped around something)

qwahtunu Vr⁻ has been found only with <cah> Pi 'pulling'

cahqwahtunuɸhi Vt to twist, roll (something) around

sutu Vr to spill (out of a container, of several small objects, or a finely divided mass)

kwynu Vr⁻ has been found only with <cah> Pi

cahkwynuR̨hi Vt to turn (something) around and around

tany Vr to ring (of a bell)

nuju Vr to crawl (of a snake)

qawino Vr⁻,Vi⁻ only with <coh> Pb 'head'; as Vi⁻, only with <ʔ..ki> vVp (373a)

cohqawinoR̨hi Vi to turn the head back and forth

//cohqawiʔnoki// Vi to turn the head back and forth jerkily

pata Vr to chatter

kwipi Vr to shake, shiver

kyhmy Vr to move noisily, roar (of an automobile)

typy Vr⁻ only in

typyR̨hi Vi⁻ has been found only in

wyhtypyR̨hi Vt (bird) to flutter (its wings)

typyR̨hi' Nf automobile (319a)

d. Vrʔ. Members of this class occur with both <ʔi> vVr and <R̨hi> vVr. The constitutes are Vi.

<puti> Vrʔ to emerge, go or come out has the allomorph //puhti// varying freely with //puti// when occurring before <ʔi> vVr; the allomorph //puti// occurs with <R̨hi> vVr

<puti ʔi> //putiʔi//~//puhtiʔi// Vi to emerge (once, of single object)

putiR̥hi Vi to emerge (of several subjects one after another)

<qopi> Vrʔ,Vi¯ to break (of supple object) has the allomorph //qohpi// when occurring with <ʔi> and the allomorph //¯qopi// when occurring as Vi¯; the allomorph //qopi// occurs with <R̥hi>

qopiR̥hi Vi to break (intrans. of several supple objects one after another)

<qopi ʔi> //qohpiʔi// Vi¯ to break (one supple object, as a piece of string, in one place) has been found only with Pi:

//cahqohpiʔi// Vt to break (smthg.) by pulling

//wyhqohpiʔi// Vt to break or out with whip-like motion of long object

//tohqohpiʔi// Vt to break with violent motion

//kyhqohpiʔi// Vt to break by biting

//¯qopi// as Vi¯ (not followed by <R̥hi> or <ʔi>) to break (of several supple objects or one supple object in several places) has been found only with Pi

wyh¯qopi Vt to break (several things) with whip-like motion of long object

cah~qopi Vt to break (several things) by pulling (used also for picking berries from a bush)

<qwaca> Vr? to fall has the allomorph //qwahca// occurring with <?i>, and the allomorph //qwaca// when occurring with <ʀhi>

<qwaca ?i> //qwahca?i// Vi to fall (of one object, a short distance)

qwacaʀhi Vi to fall (of several objects, or one object a long distance, as a shooting star)

e. V?t. The members of this subclass occur with <?i> (but not with <ʀhi>). The constitutes are transitive.

qapa?wo V?t~ only in

qapa?wo ?i Vt~ only with <mah> Pb 'with the hand'

mahqapa?wo?i Vt to slap in the face

cohki V?t~ only in

cohki ?i Vt~ only with <mah> Pb 'hand'

mahcohki?i Vt to pounce upon (as a cat)

tyhki V?t~ only in

tyhki?i Vt~ only with <cah> Pi 'by pulling' and <mah> Pb 'hand'

cahtyhki?i Vt to fire (a gun)

mahtyhki?i Vt to fire (a gun)

<wyna> V?t to move or throw (smthg.) (when occurring without Pi, has the meaning 'to throw'; constitutes of Pi with <wyna ?i> have portmanteau semes)

wyna?i Vt to throw (smthg.)

cahwyna?i Vt to knock (smthg.) down (213b)

cihtoowyna?i Vt to push (smthg.) (over)

wyhcihwyna?i Vt to crowd or push against

//tahwyna?i// Vt to throw (a rock)

<tyhty> V?t to tear

363. Vx. The members of this class occur only with Pi and so are indeterminate as to transitive or intransitive property, since all verb stems containing Pi as immediate constituent are transitive, regardless of the class to which the other IC belongs. The list which follows represents only a sample of the members of Vx.

<qoti> Vx,V?x to break (of brittle object) see 362b

<~tapo> Vx,V?x to strike see 362b

~qwapu Vx (to claw) only with <cah> Pi 'by pulling'

cah~qwapu Vt to claw

pakita Vx (to hit with fist) only with <toh> Pi 'with violent motion'

tohpakita Vt to hit with the fist

pahcuki Vx (to switch) only with <wyh> Pi 'with sidewise motion of long object'

wyhpahcuki Vt to switch

caa Vx (to like) only with <suh> Pi 'mentally'

suhcaa Vt to like

siqoota?i Vx (to scrape) only with <wyh> Pi

wyhsiqoota?i Vt to scrape

~wo?i Vx (to scratch) only with <cah> Pi

cah~wo?i Vt to scratch

pityna Vx (to drag) only with <cah> Pi

cahpityna Vt to drag

pihsita?a Vx (to throw away) only with <wyh> Pi

wyhpihsita?a Vt to throw away

too Vx~ only with <cih> Pi 'with point or end of long object'

cihtoo Vt~ only with <na> Pr 'reflexive' or <wyna?i> Vt (see 362e)

nacihtoo Vi to walk with the aid of a cane

qopa Vx (to cut) only with <toh> Pi

tohqopa Vt to cut

taaki Vx (to open) only with <cah> Pi

cahtaaki Vt to open (gate, door, or window)

364. Vi. Intransitive verb roots. This class consists of roots which occur with verbal suffixes (370) but not with

object forms. Some of them occur also as transitive verb stems or as auxiliary verbs (374). Vi is a very large class; the list given below represents only a sample of its members.

a. Types of motion (from one place to another).

mija Vi to go (away)

kihma Vi to come

<pihty> Vi to arrive has the allomorph //pity// when occurring with <hky'> vVt 'causative-benefactive', <hu> vVb 'momentaneously', <no> Pb 'dwelling' (385); the allomorph //pihty// occurs elsewhere; <pihty hky'> Vt has the portmanteau seme 'to fight (trans.)'

<pihty hky> //pityhky// Vt to fight with

<pihty hu> //pityhu// Vi to just arrive (at a given moment)

<no pihty> //nopity// Vi to arrive home

qooni Vi to return

nywi Vi,vVa (sg. subj.) to go/walk/move around (to no particular place), wander/roam around (see also 374b)

moo Vi (pl. subj.) to go/walk/move around, wander/roam around (see also 374b)

maapa Vi to go/come uphill

waawi Vi to go/come downhill

we'ni Vi to descend/get down (from an elevation)

cipuhi Vi to climb (up or out), ascend

munaa Vi to go/come to the top of a hill

kwyhmaa Vi to go over the top of a hill

<ʔika> Vi to enter has the allomorph //˜nika// when occurring with Pi except <cih> Pi 'point'; the allomorph //ʔnika// occurs with <cih> Pi, and the allomorph //ʔika// occurs elsewhere

<cah ʔika> //cah˜nika// Vt to make (smthg.) enter, put (smthg.) inside (224a, 251)

<cih ʔika> //cihʔnika// Vt to put inside, insert (with a pointed object) (223a)

<ma ʔika> //ma˜nika// Vt to corner (one's prey)

cuhpa Vi to go/sink out of sight, to sink

johci Vi,Vr to fly, rise, get up (from bed) (see also 362c)

b. Position and change of position (in one place).

<qahty> Vi,vVa (sg. subj.) to sit down, to be in sitting position, to stay has the allomorph //qaty// when occurring with <tyh> Pb 'rock', with //qahty// occurring elsewhere

<tyh kahty> Vi (rocks) to be in a row

jyhkwi Vi,vVa (pl. subj.) to sit down, to be in sitting position

<hapi> Vi (sg. subj.) to lie down, to be in lying position has the allomorph //tapi// when

occurring in compounds, with //hapi// occurring elsewhere

qwapi Vi (pl. subj.) to lie down, be in lying position

qohno Vi (pl. subj.) to stand up, to be in standing position (cf. <wynyh˜>, 367a)

myta Vi to straighten/stretch out one's legs, to have one's legs straightened/stretched out

c. Types of activity.

nyha Vi to make coiled basketry

ty?na Vi to winnow

<pota> //pota//~//pohta// Vi to pound acorns

nyka Vi to dance

?ooki Vi to celebrate, to take part in fiesta/fandango

tyhka Vi,Vt to eat

hipi Vi,Vt to drink

jaqa Vi to cry/weep, utter sounds of lamentation; to give forth characteristic vocal sounds or calls (of animals)

?ohi Vi to cough

?ine Vi,Vt to talk, say

mihee Vi,Vt to say/assert/maintain

jatuha Vi to talk, converse

d. States, conditions.

syjee Vi,Vt to be afraid (of)

tyyja Vi,Vt to be terrified (of)

qahma Vi to be sick, to ache; to taste occurs very commonly as second member of compounds:

<cawu> Ql good

cawuhqahma Vi to taste good (396a)

qohi Nr(P) stomach

qohiqahma Vi to have stomachache

nahqa Nr(P),Nu ear

nahqaqahma Vi to have earache

naa?mihoi Vi to be tired, weary

?ywi Vi to be asleep, to sleep

<wahci> Vi to be lost, hidden has the allomorph //wacih// when occurring in compounds; //wahci// occurs elsewhere

<wahci ~a..> //wah~aci// Vtt~ to hide (oneself) (371c) occurs only with <na> Pr 'reflexive' (321b), which has the allomorph //na?// occurring with <wahci>

//na?wah~aci// Vt,Vi to hide oneself (from)

<hky'> vVt causative-benefactive

wahcihky' Vt to lose

tyky Vt to put, place

<wahci tyky> //wacihtyky// Vt to hide (smthg.)

jatuha Vi to talk

//wacihjatuha// Vi to whisper (214a)

6. Qualities.

ʔytyʔy Vi to be hot

qwahsy Vi to be ripe

tujuha Vi to be full (of a container)

haʔwyhka Vi to be light (in weight)

nyʔnyhkwy Vi to be heavy

kutupa Vi to be smooth, slippery

f. Miscellaneous.

<mai> Vi,vVa to become, be, do (see also 374b) has the allomorphs //mai//, //mane//, partly in free variation, partly conditioned; the exact conditions have not been worked out

coqa Vi⁻,Vt⁻ only with <mah> Pb 'hand'

mahooqa Vi,Vt as Vi: to put or have (one's) hand doubled up in a fist; as Vt: to hold tightly in the hand

naahma Vi,vVa to feel, feel like

sunami Vi to appear

naa Vi to grow, to stick out

<qopi> Vi⁻,Vrʔ to break (of supple object) occurs only with <ꞓhi> vVr, <ʔi> vVr (371d), <toh> Pi, or <cah> Pi (385) (see 362d)

<myhna> Vi,Vr to turn over, to change occurs as Vi with the allomorph //myhnaa// when not preceded by <cah> Pi or followed by <ꞓhi> vVr (see 362c)

pyha Vi⁻ only with <ta> Pb 'sun, day, heavenly body'

tapyha Vi to get light (of the sky at dawn)

nopoto Vi⁻,Nbr only with <tah> //toh// Pb 'foot'

//tohnopoto// Vi,Nr(P) as Vi: to have legs curled up; as Nr: knee

ty Vi⁻ only with <pytyh> Pa (384b)

pytyhty Vi⁻ only with <hpy> vN 'product' (319a)

pytyhtyhpy Nf new, young

365. Vt. Transitive verb roots. This class consists of morphemes which occur in IC with preceding Pp, O, Pr, Pt, the constitutes being Vi, plus a number of morphemes of limited distribution whose distribution, such as it is, is like that of other members of Vt. Some members of Vt occur also as Vi or as vVa (auxiliary verbs) (374b). Vt is a very large class; the list which follows represents only a sample of its members.

a. Physical activities performed upon objects concerned primarily with changing their condition.

coqo Vt⁻ to smash only with <tyh> Pb 'rock' (385)

<tyh coqo> //tahcoqo// Vt to smash with a rock

ˉcaqa Vt⁻ only with <tyh> Pb 'rock'

//tahˉcaqa// Vt to hit with rock (or other missile)

qwahti Vt to shoot (with gun or bow and arrow), to spear (salmon)

tona Vt to punch, pound, hammer

tana Vt to sting (of stinging insect)

pahca Vt to kill (one being)

qoi Vt to kill (more than one being)

puuhi Vt to blow upon (with mouth)

poo Vt to cut (someone's) hair, to shear (sheep)

sono Vt to tan (hide)

teeqa Vt to paint

jyhkwy Vt to swallow

kuu Vt to bury

b. Movements, activities, or states concerned primarily with relationships between subject and object.

ʔeki Vt to serve acorn (mush, soup, or biscuits) to

capita Vt to be angry with

hawa Vt to scold

tyyhkwii Vt to tell (somebody), say something to

jaa Vt to fail to encounter (someone) (at his house or other place where he was expected to be)

wekija Vt to meet

naki Vt to follow

kwihtaa Vt to go around, surround

maahta Vt to abandon, leave behind

nuʔa Vt⁻,Vi⁻ only with <tah> Pb 'feet' (385)

tahnuʔa Vt,Vi to hunt small game

syjee Vt,Vi to fear, be afraid (of)

tyyja Vt,Vi to be terrified (of)

kyywi Vt⁻ (to throw at) only with <tyh> Pb 'rock'

//tahkyywi// Vt to throw at (with rock or other missile)

howai Vt to miss, fail to hit (something shot at or thrown at)

wyy Vt to catch, to hold in the hand, to get

cee Vt to hold (something) still in a place the constitute <tah cee> of <cee> with <tah> Pb 'feet' has the portmanteau seme 'to overtake, catch up with '

hita Vt to hold or carry in the aarms

c. Activities concerned primarily with changes in the position or status of the object:

tyky Vt,vVa to put, place (see also 374b)

<noo> Vt,vVa to carry (from one place to another) on the back, to haul; (other allosemes when occurring with Pi, Pb as indicated in the examples)
has the allomorph //ʔnoo// when occurring after <pih> Pb⁺, <kyh> Pi, <toh> Pi, <cah> Pi, <cih> Pi; the allomorph //noo// occurs elsewhere

<pih> Pb⁺ back, buttocks

<pih noo> //pihʔnoo// Vt to have (e.g. child) riding behind one on a horse

pa Pb water

panoo Vt to haul water

<kuh> Pb wood (allomorph //qoh//)

//qohnoo// Vt to haul wood

<toh> Pi with violent movement

//toh?noo// Vt to hit (with arrow, bullet, or other missile)

<kyh> Pi by biting

//kyh?noo// Vt to bite, to carry in mouth

<cah> Pi by pulling

//cah?noo// Vt to catch (fish); to pull up or out

cawa Vt- only with <pa> Pb 'water, liquid'

pacawa Vt to pour (liquid)

tuhta Vt to fasten/wrap (baby) in basket cradle

maa Vt to get/obtain, to ask for

This morpheme occurs very often as second member of compounds of which first member is N':

?etyh Nf bow, gun

?etyhmaa Vi,Vt to ask for/get a gun (from)

tyyhna Nf meat

tyyhnamaa Vi,Vt to get/ask for meat (216a)

naho?mi Vt to buy

weni Vt to sell; the constitute of <weni> with <wyh> Pi 'with sidewise motion of long object' has a portmanteau seme:

wyhweni Vt to hang up (213a)

d. Perception and activities concerned with perception.

maaci Vt⁻ only with <puh> Pb 'eyes'

puhmaaci Vt to recognize

hai Vt⁻ only with <puh> Pb 'eyes'

puhhai Vt to look for (223a)

wa?i Vt to find

nahqa Vt,Nr(P) to hear (occurs as Nr with the meaning 'ear')

e. Miscellaneous.

majaa Vt to make, fix, prepare

matyhka Vt,vVa to finish

manahqa Vt,vVa to try

waqa Vt to say (smthg.), to talk to (somebody)

<?ine> Vt,Vi to say (smthg.) has the allomorph //?inee// when occurring after <na> Pr 'reflexive'; the allomorph //?ine// occurs elsewhere

//na?inee// Vt,Vi to say to oneself

366. Vtt. Double-transitive verb roots. The verb rppts of this class occur with two objects.

tywy Vtt to ask (someone) for (smthg.)

kija Vtt to give (someone) (smthg. other than food or drink)

<mahqa> Vtt to give (someone) (smthg. to eat or drink)

This morpheme occurs very commonly in compounds with preceding N', the constitutes being Vt. It has the allomorph //ʔmaqa// when occurring with <pa> Pb 'water', and the freely varying allomorphs //˜wahqa//~//hmahqa// when occurring after N'; the allomorph //mahqa// occurs elsewhere.

//paʔmaqa// Vtt to give (someone) (something to drink)

//tyyhna˜wahqa//~//tyyhnahmahqa// Vt to give meat to

//wijah˜wahqa//~//wijahhmahqa// Vt to give acorns to

nohqaqa Vtt to steal (smthg.) from (someone)

367. Verbalizing suffixes. (See also <wano> nT 358a.)

a. nVi, nVt. These morphemes occur with N'.

tu nVi,nVt to make (one item of what the preceding stem denotes)

papotu Vi,Vt to make a braid, to braid (231a)

<no pih> Nf house (311c)

nopihtu Vi to build a house

hupija Nf music, song

hupijatu Vi to sing, play music

nawi nVi,nVt to make (several items of what is denoted by the preceding stem)

nopihnawi Vi to build several houses

ka nVi to gather, get

wijah Nf acorns, black oak acorns

wijahka Vi to gather acorns (21la)

toohpo Nf sp. mushroom

toohpoka Vi to gather sp. mushrooms

jee nVi to be or play the role of (the type of being denoted by the preceding noun stem)

wahqeehnu' Nf cowboy

wahqeehnu'jee Vi to be a cowboy

?a?neehca' Nf insane person

?a?neehca'jee Vi to be insane

?yny' Nf fearful/strange being; white man

?yny'jee Vi to have a venereal disease

<ja> nVi to put on, to wear (the article of clothing denoted by the preceding noun stem) has the allomorph //a// when occurring with <tah pihsona> Nf 'socks', with //ja// occurring elsewhere

//tahpihsona// Vi to put/have socks on

mohqo Nf shoes

mohqoja Vi to put/have shoes on

cahqeeta' Nf jacket

cahqeeta?Eja Vi to have/put jacket on

tuwa nVi to become, to become like (what is denoted by preceding noun stem)

nyyhmy Nf Mono, Indian, human being, body

nyyhmytuwa Vi to become human

<kuh ˜nah> Nf wood (3llc)

kuh˜nahtuwa Vi to become stiff (of a corpse)

˜a nVi˜,nVt˜ to engage in the type of activity appropriate to or characteristic of (what is denoted by preceding stem) has very limited distribution:

puha Nf supernatural power

puha˜a Vt to bewitch

mana Nr(P) fuzz (of peaches, hazel nuts)

mana˜a Vt (fuzz) to irritate (the skin)

nypa Nr(pi) snow

nypa˜a Vi,Vt to snow (on)

pakynah˜a Vi to be foggy

ki nVt˜ only in

sihi Nr(P) intestines

sihiki Vt to remove intestines of (animal)

ʔi nVi to perform the activity appropriate to (what is denoted by the preceding stem)

typyyhsi Nf fish-fly

typyyhsiʔi Vi to fly-fish

paatate' Nf preacher, minister, devout person

paatate'ʔi Vi to go to church, worship God

na nVt¯ only with <jehnihpa'> Nf 'poison'

jehnehpa'na Vt to poison

wi nVi¯ only with <tyja> Nf 'grave'

tyjawi Vi to die

ha nVi¯,nVt¯ only with <pojo> Nf 'road' and <no pih> Nf 'house'

pojoha Vi to run

nopihha Vt to pack (articles of one's belongings, preparatory to moving)

¯ nVi¯,nVt¯ only with <no pih> Nf 'house', <wynyh> Nt 'tree', and <hyhkweh> Nr(pe) 'wind'

nopih¯ Vi to dwell, to camp

wynyh¯ Vi to stand (of sg. subj.)

hyhkwah¯ Vi,Vt (wind) to blow (on)

b. uV. This class contains three morphemes, which occur only with U (361). The constitutes are Vi.

ki uV to be ... in one place, or of one subject

puhipono U blue

puhiponoki Vi (sg. subj.) to be blue

jepeqono U open (of house or fence with regard to its windows, doors, or gate)

jepeqonoki Vi to be open in one place (i.e. with regard to one window, door, or gate)

wa uV to be ... in several places, or of several subjects

puhiponowa Vi (pl. subj.) to be blue

jepeqonowa Vi to be open (in several places)

h..h..ʔ..hka uV to be ... momentaneously or in one small or isolated spot has another alloseme occurring with <haky pono> U, which occurs only with this suffix:

//hahkyhpoʔnohka// Vi to be foolish, silly (211a)

patakwici U shiny

//pahtahkwiʔcihka// Vi to flash (222)

//pahtahkwiʔcihʔkaki// Vi to flash off and on (373a)

puhhihpoʔnohka Vi to be blue in one spot (223a)

puhhihpoʔnohʔkaki Vi to be blue in isolated spots here and there (as a field with some blue flowers scattered here and there)

c. iV. This class contains one member, occurring with imitative stems I (391) (cf. 319d). The constitutes are Vi.

ʔi iV to make the sound represented by the preceding imitative stem

qopoqopo I cry of the Western Tanager

qopoqopoʔi Vi to make the sound /qopoqopo/

pahky+pahky I sound made by the pileated woodpecker

pahky+pahkyʔi Vi to make the sound /pahky+pahky/

kyywo I sound made by the sun (in a myth)

kyywo?i Vi to make the sound /kyywo/

d. pV. This class contains one member, which occurs only with <puh> Pb 'eyes', <ma> Pi 'pursuing', <kyh> Pi 'biting', and <wyh> Pi 'with whipping motion'. The constituees are Vt.

<ni> pV has allomorphs //˜ni//, //hi//, //˜jy//, //qa//, occurring as indicated by the examples

//puh ˜ni// Vt to see

//ma hi// Vt to pursue

//kyh j̃jy// Vt to bite

//wyh qa// Vt to whip

370 Verbal Suffixes

370. The verbal suffixes are grouped into several classes, on the basis of position (from root outward), and the order (from innermost layer outward) in terms of immediate constituents. The determination of this order is in a few instances hypothetical, because of the rarity of occurrence of some combinations of suffixes. The suffixes listed in 371 are limited in distribution, those of 372-9 (except as noted) productive. The suffixes of 376 and 379 are predicative (ile. occur as ICs of forms which occur as IN or IM).

Those of 374-379 (except vv 377a) do not occur in IC with Vt or Vtt, but do occur in IC with Vi, including those members of Vi which contain members of Vt and Vtt as constituents (see 471).

371. Limited verbal suffixes. These morphemes occur with a limited number of verb stems.

a. vVi. The two suffixes of this class occur with a single verb root each. The roots involved are Vt, and the constitutes are Vi.

i vVi only with <nahqa> Vt,Mr(P),Nu 'to hear, ear'
nahqai Vi to make a sound/noise

h.. vVi only with <ʔeki> Vt 'to serve acorn to'
<ʔeki h..> //ʔehki// Vi to eat acorn (mush, soup, or biscuits)

b. vV˜. This class consists of one suffix which occurs with three members of Vi. The constitutes are Vt.

˜i vV˜ only with <jatuha> Vi 'to talk', <jaqa> Vi 'to cry', <tapyha> Vi 'to get light'
jatuha˜i Vt to talk to (235, 251)
jaqa˜i Vt to cry at/to (211d)
tapyha˜i Vt˜ only with <suh> Pi 'mentally' and <puh> Pb 'eyes'
suhtapyha˜i Vt to know, understand
puhtapyha˜i Vt to be able to see

c. vVtt. This class contains one member, which occurs only with <wahci> Vi 'to be lost, hidden'. The constitute is Vtt˜.

˜a.. vVtt only in

//wah˜aci// Vtt˜ to hide only with <na> //na?//

Pr 'reflexive'

//na?wah˜aci// Vt to hide oneself (from)

d. vVr. This class consists of the two mutually exclusive suffixes which occur with verb roots of the classes listed in 362.

?i vVr punctual aspect (used in referring to a single action involving motion which is completed in a brief passage of time)

<qwaca ?i> //qwahca?i// Vi to fall (of a single object, a short distance)

<puti ?i> //puti?i//~//puhti?i// Vi to emerge, go or come out (once, of single object)

For further examples, see 362.

<Ṛhi> vVr durative aspect (used generally in referring to an action involving continued motion, or for a series of actions of short duration following upon one another in rapid succession) has the allomorph //Ṛ// when followed by <?..ki> or <hpa?i>; the allomorph //Ṛhi// occurs elsewhere

qwacaR̥hi Vi to fall (of several objects in rapid succession or one object a long distance, as a shooting star)

putiR̥hi Vi to go/come out (of several objects in rapid succession)

tanyR̥hi Vi to keep ringing (of bell)

<tany R̥hi ?..ki> //tanyhR̥ki// Vi to ring intermittently (373a)

<qwaca R̥hi hpa?i> //qwacaR̥hpa?i// Vi to fall repeatedly

372. The two classes given below contain one morpheme each. These two morphemes are related semantically, but differ in distributional properties.

a₂ vVt. The one member of this class occurs with Vi, the constitutes being Vt, and with Vt, the constitutes being Vtt.

hky' vVt causative-benefactive; (portmanteau seme for the combination with <pihty> Vi 'to arrive', as indicated below)

<pihty hky'> //pityhky'// Vt to fight with

<joqa hsiti> Vi to blow the nose

joqahsitihky' Vt to make (a child) blow his/her nose

<wahci> Vi to be lost, hidden

wahcihky' Vt to lose

papo tu Vi to braid (231a)

papotuhky' Vt to braid (someone's hair for her)

pani Vt to haul

panihky' Vtt to haul (smthg.) for (someone); to make (someone) haul (something)

<puh ˜ni> Vt to see

puh˜nihky' Vtt to show (smthg.) to (someone); to see (smthg.) for (someone)

b. vVw. The one member of this class has been found, in the modern colloquial language, only with <puha a> Vt 'to bewitch' (367a). The constitute is transitive. The suffix occurs in one or two places in texts as an archaic benefactive suffix, its use in those contexts having been replaced by that of <hky> vVt (372a) in the modern language.

<wi> vVw benefactive only in

puhaawi Vt to doctor (someone)

373. vVp, vtV. These two classes comprise three morphemes, which follow those of 371-373 and precede those of 374-379, if occurring in the same form with any of these. If vVp and vtV occur in the same form, vtV follows the former.

a. vVp. This class consists of two morphemes, which occur in IC with preceding Vi, Vt, or Vtt, the constitutes being Vi, Vt, or Vtt respectively (466a-c).

<?..ki> vVp intermittently, hesitantly, off and on

has allomorphs as follows:

(1) When preceded by <Rhi> (which has the allomorph //R// when occurring before <?..ki>), has the allomorph //h..ki// except that occasionally //?..ki// occurs instead when the preceding sequence is such that the /C/ represented by the //R// of <Rhi> is /m n/ (//?// and //h// cannot contrast before obstruents -- 222).

(2) Elsewhere, the allomorphs //?..ki// and //?..hki// occur, depending on the length of the other IC: //?..hki// when the other IC is such that its phonemic representation contains two vowels, //?..ki// when the other IC is such that its phonemic representation contains more than two vowels. (The forms occurring in IC with <?..ki> consist of the preceding sequences up to and including Pb and Pi, but excluding other prefixes; except in the one form in which <?..ki> has been found as a constituent of vVa (472b). For details, see 460, 470.)

<tany Ẓhi> Vi to keep ringing (of bell)

<tany Ẓhi ʔ..ki> //tanyhẒki// Vi to ring intermittently

<wyh kwinu Ẓhi> Vt to swing (smthg.) around and around

<wyh kwinu Ẓhi ʔ..ki> //wyhkwinuhẒki//-//wyhkwinuʔẒki// Vt to swing (smthg.) around and around hesitantly/intermittently

mija Vi to go

mija ʔ..ki> //miʔjahki// Vi to go hesitantly/intermittently

kihma Vi to come

<kihma ʔ..ki> //kihʔmahki// Vi to come hesitantly (223a)

ʔine Vi,Vt to say

<ʔine ʔ..ki> //ʔiʔnehki// Vi,Vt to say hesitantly

nywi Vi (one being) to walk/go/wander around

<nywi ʔ..ki> //nyʔwihki// Vi to go around hesitantly

toja Nr(pi) mountain

tojanywi Vi to hunt (big game)

<toja nywi ʔ..ki> //tojanyʔwiki// Vi to hunt hesitantly/intermittently

wyy Vt to catch, take, hold in hand

<wyy ʔ..ki> //wyʔyhki// Vt to catch/take/hold hesitantly

mihee Vi,Vt to say, assert, maintain

<mihee ?..ki> //mihe?eki// Vt,Vi to assert hesitantly

<cah myhna> Vt to turn over, change

<cah myhna ?..ki> //cahmyh?naki// Vt to turn over/change hesitantly/intermittently

joqa Nr nasal mucous

joqahsiti Vi to blow the nose

<joqa hsiti ?..ki> //joqahsi?tiki// Vi to blow the nose hesitantly/intermittently (222)

<hpa?i* vVp repeatedly

<cih cuka> Vt to point at

cihcukahpa?i Vt to point at repeatedly

cihcukahkyhpa?i Vtt to point (smthg.) out to (someone) repeatedly

mija Vi to go

mijahpa?i Vi to go repeatedly

b. vtV. The one member of this class occurs only with Vt, and probably also with Vtt, but examples of occurrence with the latter have not been found.

ta vtV pl. object occurs only occasionally, even when there is a plural number of objects as goal of the action

tohmohapy Vt to crane one's neck to see (smthg.)

ʔo vVd pl. subject

tohmohapyta?o Vt to crane their necks to see (pl. object)

cuhpa Vi to sink, go down into smthg.

cuhpahky Vt to cause to sink, to put down into smthg.

mahcuhpahkyta Vt to cause (several things) to sink/go down with the hand

374. vVa. Auxiliaries. The auxiliaries are verb stems (Vi or Vt) which occur also as verbal suffixes, following those of 371-373 and preceding those of 375-379 when occurring in forms containing other verbal suffixes. Most members of vVa are monomorphemic, but there are three bimorphemic members and one member consisting of three morphemes: <tana ʔi> vVa 'for good' (362a), <mūhsu ʔi> vVa 'almost' (362a), <mija poto> vVa,Vi 'to go back and forth' (472b), <mija ʔ..ki poto> vVa,Vi 'to go back and forth hesitantly' (472b). The tactic juncture <h> (396a) occurs between Vi and vVa.

qahty vVa,Vi (sg. subject) continually, (as Vi: '(sg.) to sit')

As vVa, signifies that the action, condition, or quality denoted by the preceding stem continues to take place or be in effect for an extended period of time. Does not occur with <qahty> or <hapi> Vi '(sg.) to lie' (see <tyky> below).

<tany ʔhi> Vi (bell) to ring (durative)

tanyʔhiqahty Vi to keep ringing

hahkwihsaʔihqahty Vi to keep sneezing

tyhkahqahty Vi to keep eating

ʔatyhkahqahty Vi to keep eating it

jyhkwi vVa,Vi (pl. subject) continually, (as Vi: '(pl.) to sit')

Corresponds to <qahty> (above); does not occur with <jyhkwi> or <qwapi> Vi '(pl.) to lie' (see <tyky> below).

tyky vVa¯,Vt continually, (as Vt: to put, place)

Corresponds to <qahty> and <jyhkwi> in their function as auxiliaries, and occurs after <qahty> Vi '(sg.) to sit', <jyhkwi> Vi '(pl.) to sit', <hapi> Vi '(sg.) to lie', and <qwapi> Vi '(pl.) to lie'.

qahtyhtyky Vi (sg.) to keep sitting, be sitting for a while

jyhkwihtyky Vi (pl.) to keep sitting

hapihtyky Vi (sg.) to keep lying

qwapihtyky Vi (pl.) to keep lying

<mai> vVa,Vi to be in the process of ..., (as Vi: 'to be, become, do')

As vVa, signifies that the action denoted by the preceding stem has been taking place for a while, without completion, and is expected to continue.

Has the allomorphs //m_i// and //mane//, partly in free variation, partly conditioned. The exact conditions have not been worked out.

mijahmai Vi to be in the process of going

tyhkahmai Vi to be in the process of eating

matyhka vVa,Vt to finish ...ing, (as Vt: 'to finish')

tyhkahmatyhka Vi to finish eating

hupijatuhmatyhka Vi to finish singing

manahqa vVa,Vt to try to ..., (as Vt: 'to try')

hupijatuhmanahqa Vi to try to sing

johoihmanahqa Vi to try to fly

naahma vVa,Vi to feel like ...ing, to want to ..., (as Vi: 'to feel')

tyhkahnaahma Vi to want to eat, feel like eating

hupijatuhnaahma Vi to want to sing, feel like singing

noo vVa,Vt (while moving) along, (as Vt: 'to haul, carry')

hupijatuhnoo Vi to sing (while moving) along

hahkwihsa?ihnoo Vi to sneeze while going along

?acihoukahpa?ihnoo Vi to point at it repeatedly while moving along

nywi vVa,Vi (sg. subj.) around, here and there, (as Vi: '(sg.) to walk/go/wander (around)')

hupijatuhnywi Vi (sg. subj) to sing here and there, in different places

nywihnywi Vi (sg. subj.) to wander around

tyhkahnywi Vi (sg. subj.) to eat in different places, to eat here and there

moo vVa,Vi (pl. subj.) around, here and there, (as Vi: '(pl. subj.) to walk/go/wander (around)' corresponds to <nywi>, for pl. subj.

moohmoo Vi (pl. subj.) to wander around

tyhkahmoo Vi (pl.) to eat here and there

375. The eight suffixes listed below follow suffixes of 371-4, and precede those of 376-9, when occurring in combinations with them. Combinations of these morphemes also occur, the relative order corresponding to that in which the classes are listed. All of these morphemes are productive.

a. vVb. This class contains a single member.

hu vVb momentaneously

Signifies that the action or condition denoted by the preceding verb stem took place (or is taking place or will take place) or was (or is or will be) in effect for a very short period of time, or suddenly, or within a very short period of time from the time-point of reference indicated by the following tense suffix or other context.

<mija> Vi to go

<hti> vIN neutral tense (379b)

<waih> vIW near future (379a)

mijahuhti IN went/left suddenly; just went/left

mijahuwaih IN,Vi~ will go suddenly; will go immediately (379a)

tyhkahuhti IN just ate; ate for a short while; ate suddenly

tyhkahuwaih IN,Vi~ will eat immediately; will eat for a short while

b. vVc. This class contains three morphemes, which are concerned primarily with locational relationships.

poto vVc back and forth

mijapoto Vi,vVa to go back and forth

<nywi> Vi (sg. subj.) to walk around, wander

<?..ki> vVp hesitantly/intermittently

//ny?wihkipoto// Vi to wander back and forth hesitantly

ja?wi vVc separately

Signifies an action as taking place in several places or at several times, usually with plural subject, where the various individual subjects are acting separately (rather than together, as for <qoi> vVd).

mijaja?wi Vi to go separately (i.e. in different directions or at different times)

<pihty> Vi to arrive

<hu> vVb momentaneously

pihtyhuja?wihti IN several just/suddenly arrived (having come from separate directions)

pihtyja?wiqoihti IN several arrived together (having come from separate directions) (375c)

nawi vVc distributively (of place)

Signifies the action or condition denoted by the preceding stem as taking place or being in effect in several places (usually at the same time, with plural subject).

tyhkanawi Vi to eat in several places

hupijatunawi Vi to sing in several places

c. vVd. This class contains two suffixes having to do primarily with plurality of subject.

<qoi> vVd collectively

Signifies plural subject, with its various members acting together, or a singular subject acting in behalf of a group. Has the allomorph //hqoi// when occurring after <jaqa> Vi 'to cry'; the allomorph //qoi// occurs elsewhere.

//jaqahqoi// Vi (several) to cry together

mijaqoi Vi (several) to go together

pihtyqoi Vi to arrive together

hupijatuqoi Vi to sing together

ʔacihcukahpaʔiqoi Vi (several) to point at it repeatedly together; (one) to repeatedly point at it on behalf of a unified group

ʔo vVd plural subject

Signifies plurality of subject, but sometimes seems also to carry an idea of collective action of the subject, like <qoi> vVd; it is practically interchangeable with the latter, which occurs with greater frequency.

mijaʔo Vi (several) to go (together)

tyhkaʔo Vi (several) to eat (together)

d. vVe. This class contains two suffixes having to do primarily with the speaker's evaluation of the subject. They are classed together primarily on semantic grounds, since there are insufficient occurrences of <ʔawi> to definitely determine its position relative to other suffixes.

ʔi vVe diminutive

Signifies that the subject (sg. or pl.) is viewed by the speaker as small, or that it is held in affectionate regard by the speaker.

mijaʔi Vi (dim.) to go

hupijatuqoiʔi (several dim.) to sing together

ʔawi vVe pejorative

Signifies that the speaker dislikes or disapproves of the subject, or disapproves of the fact that the subject is doing what is denoted by the preceding stem.

mijaʔawi Vi (pej.) to go

tyhkaʔawi Vi (pej.) to eat

376. vWk. This class contains one suffix of unique distribution. Like the suffixes of 379a, b, it occurs as an IC of indicative expressions. It also occurs, however, before vVf, vVg, and vWw, as well as before vT (358b) and some nominalizing suffixes (319a), and in these constructions it is not predicative.

hku vWk perfective

Signifies completion of an action, and carries also the idea that the entire action has taken place (or, when followed by <waih> vWw, will take place) within a short period of time. When occurring as a predicative suffix (i.e. as IC of IN), it signifies also recent past time.

pihtyhku IN,Vi˜ as IN: has arrived, just arrived;

as Vi˜, in (e.g.)

pihtyhkuhsi T having arrived

mijahku IN,Vi¯ as IN: has gone, just went; as Vi¯, in (e.g.)

//ʔahmijahkuhpY// Nf his tracks (of an animal) (i.e. the product of his having gone) (319a)

cipuhi Vi to climb, rise

<hna> vNr act/object of ...ing

//ʔahcipuhihkuhna// Nf his having climbed

tyȟ vNf,lN neutral agent

hupijatuhkutyȟ Nf one who has just/recently sung

hki vVf before coming

//neȟ// allomorph of <hti> vIN neutral tense (379b)

//ʔapuh¯nihkuhkineȟ// IN just saw it before coming

377. vVf,vv. The suffixes vVf follow those of 371-6 and precede those of 378 and 379, when accompanying them. They have to do with location or direction with respect to the action or condition denoted by the preceding stem; in addition, <kaa> vVf has an alloseme having to do with time. Morphemes belonging to vVf are given in 377b; in 377a is given a morpheme which occurs only as a constituent of vVf.

a. vv. The one member of this class occurs only with <kna> vVf and <ki'> vVf, the constitutes being vVf.

h vv only in

hkaa vVf before going; immediate past

?apuh~nihkaa Vi to see it before going, see it and then go; to just now have seen it

pahkwika Vi to fish

pahkwikahkaa Vi to fish and then go on (211a)

hki' vVf before coming (226)

?apuh~nihki' Vi to see it before coming

pahkwikahuhki' Vi to fish for a while before coming

b. vVf. Directionals.

kaa vVf to go and ..., to go in order to ...; to be on the point of ...ing

?apuhĩnikaa Vi to go to see it; to be about to see it

?apuh~nikaawaih IN,Vi~ will go and see it

?apuh~nikaahpy IN has gone to see it

pahkwikakaa Vi to go fishing (211a)

//pahkwikakaaeh// IN went fishing; is about to fish (379b, 234b)

pahkwikakaahpy IN has gone fishing

//?ywikaaeh// IN is going (somewhere) to sleep; is about to fall asleep

ki' vVf to come and ..., to come in order to ... (for <h ki> vVf, see 367a)

//ʔapuh˜niki'neň// IN came to see it, is coming to see it

pahkwikaki'waih IN,Vi˜ will come to fish, will come and fish

hmi' vVf while going

//ʔapuh˜nihmi'neň// IN saw it while going, saw it on the way (thither) (379b)

//pahkwikahmi'waih// IN,Vi˜ will fish while going (along the stream)

hti' vVf while coming

//ʔapuh˜nihti'neň// IN saw it while coming

nyka Vi to dance

//ʔanykahti'// IM dance (toward) this way!

htuha vVf elsewhere

//ʔapuh˜nihtuhaeň// IN saw it somewhere else (234a)

pahkwikahtuhatyň Nf one who has been fishing (somewhere else).

htee vVf while staying in the same place; for a while

//ʔapuh˜nihteeeň// IN saw it while staying (234c)

//pahkwikahteetyň// Nf one who is/has been fishing while staying in one place

378. vVg. The three members of this class follow suffixes of 371-377 when occurring in combinations with them. Forms containing members of vVg as ICs are Vi¯, with limitations on their occurrence as indicated below.

<hkwa> vVg distant future

This morpheme has always been found followed by <hti> vIN (379b), <tyh̃> vNf,1N (319a), or <hsi> vT (358b); there is reason to believe that it could also be followed by <hna> vNr (319a) and <neh̃> vT (358b). It has the allomorphs//hku// when occurring before <tyh̃> vNf,1N and <hsi> vT; the allomorph //hkwa// occurs before <hti> vIN.

ʔapuh¯nihkwahti IN will see it in distant future (i.e. after several days or longer)

//ʔapuh¯nihkutyh̃// Nf one who will see it in distant future

//ʔapuh¯nihkuhsi// T after seeing it in distant future

hmaa vVg already

This morpheme is apparently always followed by <hpy> vIN (379b), <hna> vNr (319a), or <hsi> vT (358b).

ʔapuh¯nihmaahpy IN already saw it, has already seen it

//ʔahtyhkahmaahna// Nf his having already eaten

tyhkahmaahsi T having already eaten

tuwa vVg could, would

This morpheme is apparently always followed by one of the following: <hpy> vIN (379b), <waih> vWw (379a), <hna> vNr (319a), <tyñ> vNf,lN (319a), vT (358b).

tyhkatuwahpy IN could eat, would eat

tyhkatuwawaih IN,Vi⁻ will be able to eat

tyhkatuwatyñ Nf one who is able to eat

//ʔahtyhkatuwahna// Nf his being able to eat

tyhkatuwaneñ T being able to eat, while able to eat

379. vWw, vIN, vIM. The morphemes of these classes occur only with Vi and are never followed by any of the verbal suffixes.

a. vWw. This class contains one member which, like vIN (379b), occurs as an IC of indicative expressions, but which, unlike them, can be followed by vT, <tyñ> vNf,lN, or <hna> vNr. (Cf. vWk, 376.)

waih vWw near future (up to several days)

tyhkawaih IN,Vi⁻ will eat

tyhkawaihtyñ Nf one who will eat (in near future)

//ʔahtyhkawaihhna// Nf his future eating, what he will eat (in near future)

tyhkawaihhsi T after eating (in near future)

b. vIN. The two suffixes of this class, with a single exception (483) in the case of <hpy>, are never followed by any other suffix, and always occur as ICs of indicative expressions.

<hti> vIN neutral tense

Indicates present or near past time except when following <hkwa> vVg 'distant future', where its function is simply predicative. Has the allomorph //eň// when occurring after <kaa> vVf, <htuha> vVf, and <htee> vVf; and the allomorph //neň// when occurring after <hmiˀ> vVf, <kiˀ> vVf, and <htiˀ> vVf; the allomorph //hti// occurs elsewhere. <hti> vIN is the most frequently occurring predicative suffix.

ʔapuh˜nihti IN sees/saw it

tyhkahti IN is eating, ate

For examples with vVf, see 377b.

<hpy> vIN perfect tense

Signifies that an action or process has reached completion in the present or immediate past, with its result still in effect; after <tuwa> vVf, its function is simply predicative. See also 483.

tyhkahpy IN has eaten

pahkwikakaahpy IN has gone fishing (211a)

qwahsy Vi to get ripe, to be ripe

qwahsyhpy IN has become ripe

c. vIM. This class contains a single suffix, which occurs only in IM (imperative expressions).

<hna?i> vIM emphatic imperative

Is mutually exclusive with predicative suffixes (vWk, vWw, vIN), vNr, vNf, and vT. Imperative forms of verbs (491-495) consist of verb stems usually with <?a> Pp 'third person' (even with Vi) with or without <hna?i> vIM. When <hna?i> is present, the request or command carries greater force. <hna?i> has the freely varying allomorphs //hna?i//~//hna?iñ//.

//mijahna?iñ//~//mijahna?i// IM go (emphatic)!

//?apahkwikakaahna?iñ//~//?apahkwikakaahna?i// IM go fishing (emphatic)!

380 Prefixes

380. In this section are treated the "prefixes", other than "pronominal prefixes" (which are given in 320). They are divided into several classes, on the basis of distributional properties.

381. Pq. This class consists of a single morpheme, which has been found with certain members of Nr which denote

body parts and with one member of Vi. The constitutes are Nf~ (usually or always preceded by <nohi> Pn 'very') or Vi, respectively.

qaha Pq

<mah pih> //mah ~ja// Nr(P,pi) hand (311b)

//qahamah~ja// Nf~ found only with <nohi> Pn

//nohiqahamah~ja// Nf one who has very large hands

nohiqahawooh Nf one who has a very large head

suwahqa Vi to breathe

qahasuwahqa Vi to pant (221a)

382. Pd. This class contains one morpheme. It occurs with Nf, Qn, Pr, pL, nL, and one member of Vi.

<Rh> Pd distributive occurs, with several allomorphs, as follows:

With Nf: //R// before <pohina pi> //pohinape// Nf 'chief' (333), //Rh,,h// before <cuku'> Nf 'old man' and <hyyhpi'> Nf 'woman', //Rh// otherwise.

<Rh pohina pi> //Rpohinape// Nf chiefs

(This is the usual plural form. <pohina pi> has not been found with <my> nNm 'animate plural'.)

<Rh,,h cuku'> //Rhcuhku'// Nf old men

//Rhhyyhhpi'// Nf women (223a)

//Rhhyhpihoi'// Nf old women (318e)

<pa ʔooh pY> Nf pebbles, smooth rocks

Rhpaʔoohpy Nf pebbles here and there

With Vi: has been found with only one verb stem, <pojo ha> Vi 'to run' (367a), where it has the allomorph //R//. May occur also with other V, but the occurrence with <pojoha> appears to be a special usage; generally, the suffixes <jaʔwi> vVc, <nawi> vVc (375b) serve instead to convey distributive meaning.

//Rpojoha// Vi to run (of two or more beings, in different places or directions)

With Qn: //Rh,,ʔ// before <symy> Qn^{X} 'one', //Rʔ// otherwise.

//Rhsyʔmy// Qn ones, one by one

//RʔwahaR// Qn twos, two by two

//RʔpahiR// Qn threes, three by three (222)

//Rhsyyʔmano// Qn tens, ten by ten

With Pr (321b): //Rh//.

<Rh na> Pdr reciprocal occurs as //Rhnah// before pL, nL, Vt, and <Rh kyhma'> Nf^{X} 'other' (3181), and as //Rhna// before Nr

qopenaň pL before, in front of (343c)

//RhnahRhqopenaň// L in front of each other

pa?añ nL,L on top (of)

//RhnahRhpa?añ// L on top of each other

waqa Vt,Vi to talk (to), to say

//Rhnahwaqa// Vi to talk to each other

(213e)

mohqoja Vi to put/have shoes on

(367a)

//RhnahRhkyhma'Na+mohqojahti// IN has his/her shoes on the wrong feet

pyhni' Nr(P) younger sister

Rhnapyhni' Nf sisters: "each other's younger sister"

With pL, nL: //Rh//. Occurs with pL, nL only when preceded by <na> Pr 'reflexive'. The forms involved designate locative relationships among members of a group of objects, one to another. In the designations of such relationships, <Rh> may precede the locative form (pL or nL) only, or Pr only, or it may occur twice, before the locative form and <na> Pr. The alternative sequences are facultative for some of the locative forms involved, while for others apparently only one of the possibilities occurs. (The corpus is undoubtedly incomplete with regard to such combinations;

the examples below represent the possibilities which have been found.)

kywatuheň pL contiguous to

//RhnahRhkywatuheň//~//Rhnahkywatuheň// L contiguous to one another

qopenaň pL in front of, before

//RhnahRhqopenaň// L in front of one another

ʔinahpaah pL on this side (of)

//Rhnahʔinahpaah// L on either side

paʔaň nL,L on top (of)

//nahRhpaʔaň//~//RhnahRhpaʔaň//~//Rhnahpaʔaň// L on top of one another

pihnaň nL after

hsu F still, precisely (395)

//nahRhpihnaňhsu// L after one another, one after the other

tuheň nL under

//RhnahRhtuheň// L under one another, shorter than one another (i.e. of different lengths)

383. Pn. This class consists of one prefix, which occurs widely with stems of several classes, wherever their meanings are such as to render occurrence with it semantically appropriate.

<nohi> Pn very, very much, too, too much has been found with members of Nf, V, Q, I, Aq; has the allomorph //nohe// when occurring with <?ewa> Qn 'many, much' and <qwena?a> L 'far'; //nohi// occurs elsewhere

juhu Nr(P,pi) fat, grease

juhupi Nf fat, grease, fat person (or animal)

nohijuhupi Nf one who is very fat, too fat

kywaa Nr(pY) sharp-edged object

//nohikywaapy// Nf very sharp object

naa?mihoi Vi to be tired

nohinaa?mihoi Vi to be very tired, too tired

kwyyhi Vi to be drunk

nohikwyyhi Vi to be very drunk, too drunk

maapa Vi to go uphill

//nanohimaapatyñ// Nf very steep one (216a, 321b, 319a)

tyyhmoo Vi,Vt to be amazed (at)

//?anohityyhmoohti// IN is/was very amazed at it

tyyhkwii Vt to tell, say smthg. to

hky' vVt causative-benefactive (372a)

tyyhkwiihky' Vtt to tell (someone) for (someone); to make (someone) tell (someone)

//poihpoiNa+?inohityyhkwiihky'hti// IN told Poipoi quite a bit for me

ʔewa Qn much, many

//nohe?ewa// Qn very much, very many, too much, too many

cawu Ql good

nohicawu Ql very good

typici Ql great, important

nohitypici Ql very great/important

oyhkwyta Qc with effort, hard (354o)

nohicyhkwyta Qc with a great deal of effort, very hard, too hard

qwena?a L,pI far (away), distant (from)

//noheqwena?a// L,pL very far, very distant, too far/distant

pa?aň ňL,L on top (of)

nohipa?aň L very much on top, quite on top

384. Pa, pPa. The morphemes belonging to class Pa, "adverbial prefixes", are given in 384b. There is one member of Pa which is bimorphemic; one of its constituents occurs also as Pb, the other is labeled pPa and given in 384a.

a. pPa. This class consists of one morpheme which occurs only as a constituent of Pa.

mi pPa only with preceding <pih> Pb 'back, buttocks'

pihmi Pa back only with <qooni> Vi 'to return'

pihmiqooni Vi to return back again

b. Pa. This class consists of prefixes which occur with verb stems only, and which precede Pt, Pb, and Pi if occurring in combination with them. The constitutes are Vi, Vt, or Vtt depending upon whether the other IC is Vi, Vt, or Vtt. One of these prefixes, like <pih mi> Pa¯ 'back' (384a), occurs with only one verb stem; two others are very limited in their occurrence.

nahah Pa¯ only with <jykwi> Vt 'to treat (smthg. in some way); (other allosemes in certain constructions)'

nahahjykwi Vt to waste (214a)

h Pa¯

Signifies force, violence, or the expenditure of great effort in the action denoted by the following stem. Has been found only with a few members of Vt which begin with Pb or Pi; is apparently always preceded by <ʔa> Pp '3rd person' or <na> Pr 'refl.'.

<wyh¯tapo> Vt to strike (several blows, with whip-like motion)

ʔawyh¯tapohti IN struck it (with several blows)

ʔahwyh¯tapohti IN struck it hard (with several blows)

<cah qoti ʔi> Vt to break (one brittle object)

//ʔacahqohtiʔihti// IN broke it

//ʔahcahqohtiʔihti// IN broke it (smthg. hard to break)

<mah oetee h noo> Vt¯ only with <h> Pa¯ and <na> Pr 'reflexive'

nahmahoeteehnoohti IN held/is holding on hard (while moving along)

<tah mihna> Vt¯ only with <h> Pa¯ and <na> Pr

nahtahmihnahti IN sprained his/her ankle

nahwyh¯caqahti IN fell down (hard)

nah Pa¯ almost, as it were

Has been found with two verb stems, where the constitute signifies an event something like, or approaching, the type of event denoted by the verb stem.

qoi Vt to kill (more than one)

nahqoi Vt to injure (one or more than one)

//puh¯ni// Vt to see (357d)

//ʔahkyhkyNa// Of its/his/her foot/feet obj.

pahapihoi Nf bear

//nyy// Np I

//ʔahkyhkyNa+nyy+ʔanahpuh¯nihti// IN I saw its tracks

//pahapihciNa+nyy+ʔapuh¯nihti// IN I saw the bear

//pahapihciNa+nyy+ʔanahpuh¯nihti// IN I saw the bear's tracks, I saw bear tracks.

//pahapihciNa+nyy+ʔahkyhkyNa+ʔanahpuh¯nihti// IN I saw the bear's tracks, I saw bear tracks

,,h Pa⁻ only with <ʔyty ʔy> Vi 'to be hot'

//ʔyhty ʔy// Vi to be quite hot (differs very slightly in meaning from <ʔyty ʔy>; the two forms are practically interchangeable)

pytyh Pa just beginning to; just recently

naa Vi to grow, stick out

pytyhnaa Vi to start to grow, (of plants) to sprout

hupijatu Vi to sing

pytyhhupijatu Vi to start to sing (223a)

mohqo Nf shoes

maa Vt to obtain, ask for, buy

//ʔi// allomorph of <ny> Pp 'first person'

<hna> vN action or object (319a)

//ʔipytyhmohqomaahna// Nf the shoes which I just bought

suh Pa

Signifies disapproval with the action or condition denoted by the following stem, either because of its tardy occurrence, or its failure to occur (when the predicate contains <qatuʔu> Aq 'not'), or for some other reason.

kihma Vi to come

suhkihmahti IN finally came/is coming; unfortunately, came/is coming

//ca$^{k}_{\wedge}$ʔnoo// Vt to catch (fish)

ty Pt indefinite object (324)

//qatuʔu+suhtycahʔnoohti// IN unfortunately, didn't catch any (fish)

385. Pb. Nominal prefixes. The members of this class occur with Nbb, Nbr, Nbf (311), and with Vi and Vt. In verb forms they precede Pi (386) and follow any other prefixes, if other prefixes occur. Constitutes of Pb with verb stems are Vi or Vt according to whether the other IC is Vi or Vt. Details of the occurrence of members of Pb in noun stems are given in 311. The examples given below illustrate their occurrence with Vi and Vt.

coh Pb head

wyhnaki Vi⁻ only with <coh> Pb

cohwyhnaki Vi to nod (213b)

qawinoP̣hi Vi⁻ (371d) only with <coh> Pb

cohqawinoP̣hi Vi to shake the head back and forth

puh Pb eyes

<tapyha˜i> Vt⁻ (371b) only with <puh> Pb, <suh> Pi

puhtapyha˜i Vt to be able to see

maaci Vt⁻ only with <puh> Pb

puhmaaci Vt to recognize

~tama Vt~ (216a) only with <puh> Pb

puh~tama Vt to look at

<puh ~tama °..ki> //puh~ta°maki// Vt to look at off and on

hai Vt~ only with <puh> Pb

puhhai Vt to look for (223a)

mu Pb nose, snout, mouth

hsyhta°i Vi to freeze

muhsyhta°i Vi to have one's nose frostbitten or very cold

//°noo// allomorph of <noo> Vt 'to carry'

mu°noo Vt to kiss

nih Pb voice, speech

sunawi Vt to bother, annoy

nihsunawi Vt to annoy by chattering, talking

kihma Vi to come

nihkihma Vi to ask permission to come, to express desire to come

mah Pb hands, front paws

cohki°i Vt~ (371d) only with <mah> Pb

mahcohki°i Vt to pounce upon (like a cat)

tyhki°i Vt (371d) only with <mah> Pb or <cah> Pi

mahtyhki°i Vt to fire (gun)

qapa°wo°i Vt~ (371d) only with <mah> Pb

mahqapa°wo°i Vt to slap in the face

<tah> Pb feet has the allomorph //toh// when occurring with <nopoto> Vi⁻,Nbr (311b, 364); the allomorph //tah// occurs elsewhere

cee Vt to hold; (constitute with <tah> Pb has portmanteau seme)

tahcee Vt to overtake, catch up with

topa Vt⁻ has been found only with <tah> Pb

tahtopa Vt to take off one's shoes

mihna Vt⁻ only with <tah> Pb

tahmina Vt⁻ only with <h> Pa (384b)

pih Pb⁺ back, buttocks in addition to its occurrence as a member of Pb, has a few specialized uses, as indicated by the examples

naň xL at, on (348c)

pihnaň nL,T- after, behind

pihnaňsu T again

huh (Kh) (341b) only with <pih> Pb⁺

huhpih (K) only with <nahqweh> KL (see 341b)

mi pPa (384a) only with <pih> Pb

pihmi Pa⁻ back again only with <qooni> Vi 'to return'

kututuu?i Vi⁻ only with <pih> Pb

pihkututuu?i Vi to slide downhill on one's buttocks

tataa Vi⁻ only with <pih> Pb

pihtataa Vi to squat

ta Pb sun, heavenly body

This morpheme has a special use with <ta pe> Nr 'sun, day' and <ta my?a> Nr 'moon, month' (311b), with which it occurs (rather than <pi> nNf 'absolutive suffix') to give constitutes which are Nf (416b).

tatape Nf sun, day

tatamy?a Nf moon, month

pyha Vi⁻ only with <ta> Pb

tapyha Vi to get light (of the sky at dawn) (See also 371b.)

<kuh> Pb fire, heat has the allomorph //qoh// when followed by <noo> Vt,vVa 'to carry, haul' pr <pih> Nbf,Nbr 'empty noun root' (311c); the allomorph //kuh// occurs elsewhere

//qohnoo// Vt to haul (wood)

<kuh pih> //qohso// Nf fire

<tyja wi> Vi to die (367a)

kuhtyjawi Vi to be burned to death

majaa Vt to make, fix, prepare

kuhmajaa Vt to cook

ita Vt⁻ only with <kuh> Pb

kuhita Vt to smoke out (bees)

qwahsy Vi to become/be ripe

kuhqwahsy Vi to become/be ripe from heat

<tyh> Pb rock, missile has the allomorphs //tyh// and //htyh// (the latter when preceded by Nf, Nr, or Nu, the former otherwise) when occurring with <pih> Nbr,Nbf 'empty noun root' (311c), <hanii> Nbr (311b), <paha> Nbr 'pestle, mortar', and <qahty> Vi,vVa 'to sit'; the allomorph //tah// occurs elsewhere

<tyh qahty> //tyhqaty// Vi (rocks) to be lined up in a row

kyywi Vt⁻ only with <tyh> Pb

//tahkyywi// Vt to throw at

wyna?i Vt to move, throw (371d)

//tahwyna?i// Vt to throw (rock or other missile)

coqo Vt⁻ only with <tyh> Pb

//tahcoqo// Vt to smash with a rock

ty Pb⁻ earth has been found only with Nbr (311b)

<pa> Pb water, moisture has the allomorph //pah// when occurring with <kywa tuheň> pL 'beside' (343c) (which has not been found with other members of Pb); the allomorph //pa// occurs elsewhere

//pahkywatuheň// L at the edge of the water

//pahkywatuheňhsu// L along the edge of the water/river

tyky Vt to put, place

patyky Vt to put in water

hsa Vi⁻ only with <pa> Pb

pahsa Vi to be/become dry

oawa Vt⁻ only with <pa> Pb

pacawa Vt to pour

noo Vt to carry, haul

panoo Vt to haul water

no Pb dwelling/camping

mija Vi to go

nomija Vi to go camping (216a)

//pity// allomorph of <pihty> Vi to arrive

//nopity// Vi to arrive home

qooni Vi to return

noqooni Vi to return home

386. Pi. Instrumental prefixes. The members of this class occur only with Vi, Vx, Vt; the constitutes are always Vt. Pi generally follow prefixes of any other class, when occurring in combinations with them.

oah Pi by pulling; (various other allosemes)

pityna Vx only with <oah> Pi

oahpityna Vt to drag (along), pull (along)

pihka?na Vx only with <oah> Pi

oahpihka?na Vt to tighten (e.g. string) by pulling

<qopi ?i> //qohpi?i// Vi to break (of supple object) (371d)

//oahqohpi?i// Vt to break (one supple object)

<myhna> Vi,Vr~ to turn over, change (362c)

cahmyhna Vt to turn over, change

tyhki?i Vt~ only with <cah> Pi or <mah> Pb

cahtyhki?i Vt to fire gun

tyky Vt to put, place

cahtyky Vt to put down (heavy object)

kyhna Vx only with <cah> Pi

cahkyhna Vt to fasten by tying

wyna?i Vt to move, throw (371d)

cahwyna?i Vt to knock down (213b)

//~nika// allomorph of <?ika> Vi to enter

//cah~nika// Vt to put inside an enclosure, to imprison

~qwapu Vx only with <cah> Pi

cah~qwapu Vt to claw

//?noo// allomorph of <noo> Vt 'to carry'

//cah?noo// Vt to haul; to catch (fish)

wyh Pi with sidewise motion (of long object), with whipping motion, with long object

//~tapo// Vx,V?x to strike (362b)

wyh~tapo Vt to beat/strike several blows with whipping motion (of club or stick)

//wyh~tahpo?i// Vt to strike (one blow) with whipping motion

pohnaa Vt to surpass, to win

wyhpohnaa Vt to overtake (while running), to run past (In this case, the long object is the subject's body.)

pahcuki Vx only with <wyh> Pi

wyhpahcuki Vt to switch

siqoota?i Vx only with <wyh> Pi

wyhsiqoota?i Vt to scrape

pihsita?a Vx only with <wyh> Pi

wyhpihsita?a Vt to throw away

kwinuRhi Vi to swing/spin around (371d)

//wyhkwinuRhi// Vt to swing around (smthg. tied to a string)

toh Pi (meaning unclear; sometimes seems to indicate violent motion)

//?noo// allomorph of <noo> Vt 'to haul/carry

//toh?noo// Vt to hit (smthg. thrown or shot at)

qopa Vx only with <toh> Pi

tohqopa Vt to cut

pakita Vx only with <toh> Pi

tohpakita Vt to hit with fist

//~qopi//, //qohpi// allomorphs of <qopi> Vi, Vr? 'to break (of supple object) (362d)

//toh~qopi// Vt to cut (timber)

//tohqohpi?i// Vt to break with violent motion (371d)

cih Pi with point, end of long object

too Vx only in the following forms:

nacihtoo Vi to walk with aid of cane/staff (321b)

cihtoowyna?i Vt to push

//?nika// allomorph of <?ika> Vi 'to enter'

//cih?nika// Vt to insert with pointed object (223a)

?witu Vx only with <cih> Pi

cih?witu Vt to stir

cɨka Vx only with <cih> Pi

cihcɨka Vt to point at (see also 411a)

saja Vt to cut (skin of sick person, to cause bleeding)

//cihsa?jaki// Vt to pierce (patient's skin) with sharp point several times (to cause bleeding) (373a)

kyh Pi by biting

//~jy// allomorph of <ni> Vt 'empty verb root' (367d)

//kyh~jy// Vt to bite

coho Vx only with <kyh> Pi

kyhcoho Vt to chew

//?noo// allomorph of <noo> Vt 'to carry'

//kyh?noo// Vt to bite (223a)

//qohpi// allomorph of <qopi> Vi~,Vr? 'to break (of supple object)'

//kyhqohpi?i// Vt to bite off a piece of (371d)

suh Pi with the mind, mentally

mija Vi to go

suhmija Vt to think about

tapyha˜i Vt (371b) only with <puh> Pb, <suh> Pi

suhtapyha˜i Vt to know, understand

caa Vx only with <suh> Pi

suhcaa Vt to like

si?jee Vx only with <suh> Pi

suhsi?jee Vt to dislike

ma Pi pursuing

//hi// allomorph of <ni> Vt 'empty verb root' (367d)

//mahi// Vt to pursue

nywi Vt (one) to go/walk/wander (around)

manywi Vt to chase, pursue

kihma Vi to come

makihma Vt to come after, in pursuit

mija Vi to go

mamija Vt to go after, in pursuit (216a)

//˜nika// allomorph of <?ika> Vi 'to enter'

//ma˜nika// Vt (dog) to corner (small game) (in a crevice or tree)

390 Minor Classes

390. In this section are given the remaining morpheme classes. All of them except the imitatives (391) contain a very limited number of members.

391. Imitatives. The class I, "imitative stems" consists of forms which occur with either or both of the suffixes <hna'> iN (310d), <ʔi> iV (367c). Members of I also occur as frustums (i.e. in IC with <.> 398), where they are often accompanied by special intonation patterns and/or voice modifiers. Many members of I are monomorphemic (391c). Others consist of a morpheme repeated by itself, with (class Ia) or without (class Ib) intervening <+> (396c). Only a sample of the imitative morphemes is given below.

a. Ia. Members of this class occur with themselves, with intervening <+>, the constitutes being I.

pahky Ia only in

pahky+pahky I sound made by the pileated woodpecker when pecking

pahky+pahkyhna' Nf pileated woodpecker

pahky+pahky?i Vi to make the sound /pahky+pahky/

pyhmy Ia only in

pyhmy+pyhmy I sound made by deer trampling through the forest

b. Ib. Members of this class occur with themselves, without intervening <+>, the constitutes belonging to class I.

qopo Ib only in

qopoqopo I cry of the western tanager

qopoqopohnaʼ Nf western tanager

qopoqopoʔi Vi to make the sound /qopoqopo/

ʔoto Ib only in

ʔotoʔoto I cry of the turkey

ʔotoʔotohnaʼ Nf turkey

hawy Ib only in

hawyhawy I cry of the wild goose

hawyhawyhnaʼ Nf wild goose

cooh Ib only in

coohcooh I cry of the western bluebird

coohcoohhnaʔ Nf western bluebird (223a)

c. I. Some of the monomorphemic members of I are listed below.

hahkwihsa I sound of sneeze has been found only in

hahkwihsaʔi Vi to sneeze

kyywo I sound made by the sun (in a myth)

kyywoʔi Vi to make the sound /kyywo/

maa I sound made by mosquitoes

<tawaaʼ> I cry of the spotted towhee, has the freely varying allomorphs //tawaaʼ//~//tawaaʔna// when occurring as frustum; and the allomorph

//tawaa'// when occurring with <hna'> iN (which has the allomorph //ʔna'// when occurring with <tawaa'>)

//tawaaʔʔna'// Nf spotted towhee (227f)

ʔuuʔui I cry of the roadrunner

ʔuuʔuihna' Nf roadrunner

392. E, (E). Interjections. Most of the interjections are monomorphemic (morpheme class E, 383b); there are three, however, which are bimorphemic, the second morpheme in each being the same, and occurring only in these three forms. This morpheme is labeled (E) and is given in 383a.

a. (E). This class contains one morpheme, which occurs in IC with three morphemes, of two different classes, the constitutes being interjections.

~~ai (E) only with <ʔyny'> Nf 'strange or terrible being; white man', <ʔyty'y> Vi 'to be hot', <ʔycy'y> Vi 'to be cold'

ʔyny'~~ai E exclamation of fear, or of wonder at something strange or fearful (236b)

//ʔyty'y~~ai// E exclamation of pain resulting from burning or extreme heat (236a)

//ʔycy'y~~ai// E exclamation of pain resulting from extreme cold

b. E. The interjections occur predominantly or always as frustums (except for <qatu?u> E,Qn,Aq, which occurs also as Qn and Aq).

manahuñ E hello

tijaha E okay (in response to a suggestion or request)

haaha?a E okay (in response to a suggestion or request; connotes somewhat less enthusiasm or willingness than the above form)

hyyhy?y E yes

qatu?u E,Qn,Aq no (see also 354a, 359a)

?ea?a E exclamation of disgust or strong disapproval

(The sequence /ea/ occurs only in representations of this morpheme. It is a rising diphthong.)

toki E,Ql^{+} enough, right (as Ql^{+}: 'right, sufficient, appropriate')

cawu E,Ql good

393. Conjunctions. The morphemes which occur as conjunctions (classes C and Ce) are given in 393b. One morpheme which has been found only as a constituent of C is given in 393a.

a. hC. The one member of this class occurs only with <ha> H 'interrogative-indefinite' (327) and <tu?i ha> H 'any', the constitutes being conjunctions.

hni?i hC only in

hahni?i C,Ce why, for some reason

tu?ihahni?i C for any reason

b. C, Ce. Members of the two classes of conjunctions occur in IC with IN (indicative expressions - 490), the constitutes also being IN. The two classes differ in their position of occurrence. The "independent conjunctions" (class C) precede the forms with which they occur, while the "enclitic conjunctions" (class Ce) occur either immediately preceding the first occurrence of <+> in the other IC, or, if the other IC contains no <+>, following the other IC; in either case, the enclitic conjunction is preceded by the tactic juncture <~> (336b). Several of the conjunctions occur both independently and as enclitics. These are labeled C,Ce. Examples of the occurrence of conjunctions are given in 489.

jaihsi C,Ce and (connects the frustum with which it occurs to the preceding)

po?o Ce but (connects frustum with which it occurs to the preceding, with a sense of contrast)

tii Ce indeed (often indicates surprise, amusement, or approval)

tai Ce indeed (often indicates surprise and/or disapproval)

py?y Ce interrogative

hsa?a Ce interrogative

wa?a Ce interrogative

(The difference in meaning between the three interrogative morphemes is not clear.)

hnape Ce^{-} perhaps, apparently

This morpheme occurs following <jaqaň> C, but occasionally occurs followed by <jaqaň ~ hnape>, the sequence occurring as an independent conjunction (459).

jaqaň~hnape Ce perhaps, apparently

hnape~jaqaň~hnape C perhaps, apparently (224d)

jaqaň C,Ce perhaps, apparently (usually followed by <hnape> C, see above)

ja Ce quotative

Indicates that the event or condition described by the expression with which it occurs has been reported to the speaker to have taken place or to be in effect, but that the speaker has not verified it by his own observation.

hsapyhti Ce or

<tu?i> Ce^{+} anyway, anyhow

This morpheme occurs also with <ha> H 'interrogative-indefinite' (327), the constitutes being members of class H with a general meaning 'any', and with itself, the constitute being an independent conjunction. Except when in these constructions, <tu?i> has the freely varying allomorphs //tu?i//~//tu?iň//.

tu?iha H any

tu?ihaqeň Nh anyone (328)

//tu?ihahno// L anywhere (348c)

For further examples, see 327.

tu?itu?i C although (459)

?ipehu C maybe

naahmaty C apparently

394. op. This class consists of one morpheme, which has been found preceded by N (303h), and followed by N or Vi, with intervening <+>. The constitutes are OP (optative expressions).

hsahqwa op optative

Examples are given in 496.

395. F, "postfixes". The postfixes occur after members of several classes; the constitutes are tactically equivalent to the same forms occurring without F.

hsu F precisely (what the preceding form says), still (where time is involved) (Has a specialized use after locatives ending in <naň> xL (348b), the combination <naň hsu> being equivalent in translation to English 'along'.)

pojonaň L on the road

pojonaňhsu L along the road

//pahkywatuheñ// L at the edge of the water (385, 343c)

//pahkywatuheñhsu// L along the edge of the water

//nyyhsu// Np I myself

nopih˜weeh L at home, in the house (348a)

nopih˜weehhsu L right at home, in the house (and nowhere else)

tapewano T,Vi (to be) daytime (358a)

tapewanohsu T still daytime (231a)

hsy°yñ F only

//nyyhsy°yñ// Np only I

˜tijañ F also

//nyy˜tijañ// Np I also

nopih˜weehtyñ˜tijañ Nf also that which is in the house (319b)

396. Tactic junctures. The tactic junctures are morphemes which have no meaning other than that their presence is determined by the occurrence of certain constructions.

a. <h> occurs between the ICs of certain constructions as follows:

(1) after Ql or Qn before N' (415h).

(2) after Ql before Vi or Vt (467).

(3) before vVa (374, 472) except where the auxiliary is <nywi> '(sg.) around' or <moo> '(pl.) around'

and the preceding Vi ends in <naki> Vt 'to follow' or <ʔ..ki> vVp 'hesitantly, intermittently'.

ʔanakinywi Vt (sg.) to follow him/her around

ʔanakimoo Vi (pl.) to follow him/her around

nywihnywi Vi (sg.) to wander around

//nyʔwihkinywi// Vi (sg.) to wander around hesitantly

moohmoo Vi (pl.) to wander around

//moʔohkimoo// Vi (pl.) to wander around hesitantly

(4) before nN̄h (335, 432, 417b, 451d, 452a).

b. <˜> occurs in two types of constructions, as follows:

(1) after N' (303g) or N̄h (424d) before nL or nQl (446g, j; 452c, g), except:

(a) after stems ending in <hnuñ> vNr^{+} 'instrument for ...ing' (319a) before <tuheñ> nL 'under' (348a):

tyhkahnuñtuheñ L under the table

(b) after stems ending in <tyñ> vNf,lN (319a,b):

mijatyñni Ql like one who is/was going

(c) after stems ending in <hna> vNr 'act/object of ...ing' (319a) (which has the allomorph //h// when followed by nL, and does not occur before nQl):

//ʔylmijahweeh// L in your going, because you went (213d)

(2) before Ce (393b, 489b).

c. <+> occurs in several constructions. See 423, 434, 435, 437, 449, 453, 457, 458a, 471g, 474, 479, 484-489, 493, 494, 496.

397. X. This class contains a single member.

• X (152)

This morpheme occurs only after <+> (396c), where it indicates that the speaker is hesitating as to how to proceed with the utterance. It may not be present, or may be present in different places, in repetitions of the utterance. (The morphophoneme //•// occurs only as the representation of this morpheme.) The occurrence of this morpheme is not considered in Chapter Four.

398. Z. This class contains one member, which occurs in IC with members of various classes, the constitutes being sentences.

. Z (154)

This morpheme has been found with members of the following classes: IN (indicative expressions), IM (imperative expressions), OP (optative expressions), E (interjections), I (imitatives), N (nominals),

O (objective expressions), Ql (qualitatives), Qc (354c), L (locatives), T (temporals), C (conjunctions). The term <u>frustum</u> is used to refer to forms occurring in IC with <.>.

CHAPTER FOUR

MORPHEME ARRANGEMENTS

401. This chapter gives a description of the most commonly occurring patterns of arrangement of the morphemes of Northfork Mono. The description is based on analysis according to immediate constituents, and is presented by means of a list of constructions, with accompanying examples or references to examples contained in chapter three.

The description is by no means intended to be complete. It attempts to cover the most commonly occurring patterns, and those which appear to be most basic and standard, including those which serve as the basis for the distributional classification of morphemes, but it does not go into a number of variations from what appears to be the norm, which occur with more or less frequency. Such variations seem to be of the greatest frequency in spontaneous, unpremeditated texts and conversation, especially under circumstances in which it is apparent that the speaker is not fully cognizant, at the beginning of a sentence, of how the sentence will end. This is often demonstrated by hesitations, false starts, new beginnings, and by words or phrases given as afterthoughts,

constituting sentences which follow. This characteristic of Northfork Mono is undoubtedly not an unusual one; it is probably the case that most languages, if not all, offer similar obstacles to the theoretically ideal goal of a complete description of morpheme arrangements.

The description here presented is not only insufficient to make possible the synthesis of any more than the simplest utterances with assurance of correctness; it is also insufficient, in itself, to account for all of the patterns of arrangement which have been found in the corpus.

402. The terms construction and frustum are used as indicated below.

a. A construction is described by specification of: (1) the distribution classes of forms which enter into it (i.e. the ICs), (2) the order in which these ICs occur, (3) the tactic juncture(s) (396) present (if any), and (4) the distribution class(es) to which the constitutes belong. The analysis of arrangements is carried out in such a way that the total number of constructions used for the description is as small as possible. (This is the basic criterion used for determination of immediate constituency.)

The symbolic devices used to describe constructions are given in 404.

b. The outer limit of the description of arrangements is the sentence. A sentence (on the morphemic level) is a constitute containing <.> Z (398) as an IC. The other IC (which always precedes <.> Z) may be called a frustum. The class of frustums (which has, of course, a transfinite number of members) is made up of members of the following classes:

Group One

IN	Indicative expressions	(480)
IM	Imperative expressions	(491-495)
OP	Optative expressions	(496)
E	Interjections	(392b, 497)
I	Imitatives	(391c, 458)

Group Two

N	Nominals
O	Objective expressions
Ql	Qualitatives
Qc	<cyhkwyta> Qc 'with effort, hard' (354c)
L	Locatives
T	Temporals
C	Conjunctions

Group one includes those forms which occur predominantly or very commonly as frustums. The forms of group two occur more commonly as constituents of frustums, but they can occur as frustums under somewhat special conditions, such as (1) in answers to questions, (2) in the amplification of an idea

contained in a preceding sentence, (3) in response to various types of elicitation used by the linguistic field worker. A few other classes could be added as marginally qualifying for inclusion in group two, viz. Vi, Vt, (possibly Vtt), and Am.

c. The main body of this chapter (410-430) is devoted to constructions whose constitutes are frustums or constituents of frustums. Many of these constructions are already described and illustrated in chapter three. (These are listed in the present chapter for the sake of providing a complete and orderly list of all the constructions which have been analyzed.) In the listing of such constructions, references are given by number to the place(s) in chapter three where examples and further details may be found. In some cases, reference is made to examples given in chapter three, but additional ones are provided under the statement of the construction. References of the type indicated above are given without enclosure in parentheses. Other kinds of cross-references are distinguished from these by enclosure in parentheses, following the practice of previous chapters.

403. Distribution classes may consist of unit morphemes only, of composite forms only, or of both. Those which contain unit morphemes are designated by the labels listed in 303. Those which contain composite forms only are defined by the constructions in which they are involved, and are

labeled as indicated in the statements of these constructions. Three cover symbols used for larger groupings of nominal forms are:

N - Nf plus Nq plus Nd plus Np plus Nh.

N' - Nr plus those members of Nf which are not constitutes of the constructions of 416.

N_d^p - Np plus Nd.

404. The notational devices used to describe the constructions are as follows:

a. In the symbolic representation of constructions, the labels representing the classes of I6s are given, in the order in which the ICs occur, with an intervening tactic juncture where one occurs, at the left of the symbol /. At the right of the / is given the label representing the class to which the constitutes belong. If the constitutes comprise a subclass of the class represented which has definite limitations on its distribution relative to other members of that class, the symbol is accompanied by ¯, and a special statement is made concerning the distribution of the constitutes (cf. 303e).

b. The symbol ˇ, used with distribution-class symbols representing IC classes, signifies that the forms covered by the construction may be members of the class designated which are constitutes of some or all of the constructions listed in

preceding articles of the chapter (in addition to unit morphemes, if any), but not constitutes of constructions listed in following articles, nor (unless there is an accompanying statement to the contrary) constitutes of the construction itself in which the symbol occurs. (For purposes of implementing this definition, an article of the chapter may be defined as any portion of it headed by a numeral which is not underlined (e.g. 412). Subdivisions of articles are headed by letters of the alphabet; and the coverage of symbols accompanied by ˇ does not extend to preceding constructions of such subdivisions unless statement is made to the contrary in particular instances.)

c. An asterisk * accompanying a distribution-class symbol in the statement of a construction signifies that the members of the class designated which occur in the construction constitute a definable subclass of that class; the conditions of limitation are given in a statement immediately following the symbolic characterization of the construction (e.g. 411a).

An asterisk accompanying the symbol for a tactic juncture indicates that this juncture is not present when certain specific morphemes are involved as constituents. The details are given in a following statement (e.g. 472c).

d. Where neither ˇ nor * is used accompanying a distribution-class label, there may nevertheless be (and usually there are) restrictions on the extent to which forms belonging to the class designated occur in the construction; but the restrictions are not of such a nature as to be readily statable or discoverable. They usually involve possibilities of semantic combination. Such restrictions are for the most part not described, but it may be taken as implied that limitations exist, except where both of the IC classes contain only one or a very few members. It can be said, however, that, unless a statement is made to the contrary, a constitute of a construction does not occur as a constituent in the same construction.

e. Two commas preceding a class symbol signify that members of that class, when occurring in that construction, occur after the first word of the other IC. In each of the constructions of this type in Northfork, a tactic juncture intervenes between this "enclitic" and the first word of the other IC. Thus the symbol for the tactic juncture involved is given between the ,, and the class symbol of the "enclitic" IC, e.g.

,, ˜ Ce INˇ / IN (489b)

That is, the enclitic conjunction (class Ce) occurs after the first word of the indicative expression (class IN), with

intervening <~>. (If the indicative expression contains only one word, the enclitic conjunction follows it.)

(A word, on the morphemic level, is a sequence of morphemes occurring between two occurrences of any of the following: <+> <·> <,> <.> #, except <+> when it occurs as tactic juncture in construction 458a.)

f. In the citing of examples, ICs are separated by spaces, and tactic junctures, where they occur, are separated by spaces from each of the ICs. (This is in contrast to the practice of chapter three, in which spaces separate morphemes, without regard to immediate constituency.)

410 Noun Stems

410. Constitutes of constructions of this section occur as ICs in one or more of the constructions of: 410, 430, 446, 452, 457, 463, 464, 484, 486, 487, 494, 496.

The symbol N' is used to represent the class consisting of Nr (restricted noun stems) plus those members of Nf which are not constitutes of any of the constructions of 416.

411. a. Vt* vNr* / Nbr where Vt* includes only <cih cuka> 'to point at' (465e), vNr* includes only <hnuñ> 'instrument for ...ing' (310a).

<cihcuka hnuñ> Nbr 'pointer' has been found only in

<mah cihcukahnuñ> Nr(P) index finger (411c)

<tah cihcukahnuñ> Nr(P) big toe

b. Pb* Nbb / Nf,Nbr where Pb* includes only <pa> 'water, liquid'. Nbb contains only one member, <hkwi> 'fish'. 311a.

c. Pb* Nbr* / Nr where only certain combinations of these forms occur, as described in 311b.

d. Pb* Nbf* / Nf where only certain combinations of these morphemes occur, as described in 311c.

412. a. Nu* nNj / Nr(pY) where Nu* includes only <ʔehsi> 'gray'. 331d.

b. Nf* nNx* / Nf where only certain combinations occur, as described in 331a. One of the constitutes, <ʔyny' y> Nf¯, occurs only with <ni> nQl 'like' (355).

c. Nr* nN' / Nr(P)¯ where Nr* includes only <pija> 'mother'. 331b.

d. Nr* nN' / Nf where Nr* includes only <nahqa> 'ear'. 331b.

e. Nf* nN' / Nf where Nf* includes only <coʔahpe> 'ghost'. 331b.

f. Nr* nNc / Nf-Nr(pY) where Nr* includes only <nahqa> 'ear'. 331c.

413. a. Nt nNt / Nf 313a-c, 332.

b. Ntn nNt / Nf 313d, 332.

c. Ntn nNn / Nf 313d, 332.

d. Nn nNn / Nf 313e, 332.

414. a. Nf* Nf* vNr* / Nf where the first Nf* includes only <pa hkwi> 'fish' (411b), the second Nf* includes only <poto> 'staff, pole, digging stick', vNr* includes only <hnuň> 'instrument for ...ing'.

<pahkwi poto hnuň> Nf fishing pole (231a)

b. Nt* vNr* / Nf where Nt* includes only <sahqwa?a> '(fir tree)', vNr* includes only <hnuň> 'instrument for ...ing' (which has the allomorph //hnu// when occurring in this construction). 313c.

c. Vi* vNr / Nr+ where Vi* includes unit morphemes and constitutes of some constructions of 462-465, vNr* includes only <hnuň> 'instrument for ...ing'. 319a.

d. Vt* vNr* / Nr+ where Vt* includes unit morphemes and constitutes of some constructions of 462-465, vNr* includes only <hnuň> 'instrument for ...ing'. 319a.

e. Vi^{*} vNf^{*} / Nf where Vi^{*} includes unit morphemes and constitutes of some constructions of 462-465, vNf^{*} includes <pe> 'that which is ...ed', <'> 'one who ...s', <pecy> 'one who ...s excessively'. 319a.

f. Vt^{*} vNf^{*} / Nf where Vt^{*} includes unit morphemes and constitutes of some constructions of 462-465, vNf^{*} includes <'> 'one who ...s', and probably <pecy> 'one who ...s excessively' (examples of the latter have not been found, but are believed possible). 319a.

g. Vtt^{*} vNf^{*} / Nf where Vtt^{*} apparently includes only unit morphemes, vNf^{*} includes <'> 'one who ...s' and probably <pecy> 'one who ...s excessively' (examples of the latter have not been found, but are believed possible). 319a.

h. Vi^{*} vNf^{*} / Nf where Vi^{*} includes only <pa hapi> 'to swim' (465g), vNf^{*} includes only <hoi> (319a). 319a.

i. K^{*} vNf^{*} / Nf w where K^{*} includes only <tyh ʔohi> '(left)' (441a), vNf^{*} includes only <hoi> (319a). 319a.

j. H hNr / Nr(P,pY) 319e, 327.

k. uN U^{*} / Nf where U^{*} includes only <ʔahoa pono> 'tan, brown, copper-colored' (461a). 419f.

415. Compounds.

a. N'ˇ N'ˇ / Nf

<pa hkwi> Nf,Nbr fish, trout (411b)

//htyh pih// <tyh pih> Nf rock (411d)

//pahkwi htyhpih// Nf sinker (on fish-line)

<wihtuwa> Nf bowl

<tyhpih wihtuwa> Nf stone bowl

<wihsi> Nr(P,pi) string

<pahkwi wihsi> Nf fish-line

<tyhka '> Nf⁻ eater (414f) occurs only in 415a

<pahkwi tyhka'> Nf crane: "fish-eater"

<kwica> Nr(pi) sp. larvae (which grow in Mono Lake)

<kwica tyhka'> Nf Mono Lake Paviotso: "larvae-eaters"

<tyhka hnuň> Nr⁺ table; instrument for eating (414c)

<wihi> Nf 'knife'

<tyhkahnuň wihi> Nf knife (of the type used in eating)

//oih?noo hnuň// <oihnoo hnuň> Nr⁺ instrument for carrying with pointed object (414d)

<tyhkahnuň oihnoohnuň> Nf fork

b. Nu Nf / Nf (312)

<tohoi> Nu white

//htyh pih// <tyh pih> Nf rock (411d)

//tohoi htyhpih// Nf white rock

<puhi> Nu blue/green

<hnawahku> Nf money

<puhi hnawahku> Nf blue-green money (beads cut from abalone shell)

<qety> Nf^{-} occurs only in

<puhi qety> Nf abalone shell

c. Nu* h nNh* / Nf where Nu* includes only <ʔahqa> 'red', nNh* includes only <qoʔjo> nNh^{-} (335). 335.

d. No* Nf* / Nf where only certain combinations of these forms occur, as described in 314a.

e. Nw* Nf* / Nf where Nw* includes only <too> 'winter, year' (319), and Nf* includes only <no pih> 'house' (411d).

<too nopih> Nf winter-house

f. Vi* N'$^{\vee}$/ Nf where Vi* apparently includes only unit morphemes. This is not a commonly occurring construction; only a few members of Vi and N' occur in it.

tyyja Vi to be afraid

<no pih> Nf house, home (411d)

<tyyja nopih> Nf dwelling-place which offers protection from attackers: "afraid-home"

//jaqah// <jaqa> Vi to cry

<pu pih> //puhsi// Nr(P) eye (411c)

//jakah puhsi// Nf crybaby

g. Vt^{*} $N'^{\sim}$ / Nf where Vt^{*} apparently includes only unit morphemes. This is a rarely occurring construction, in which only a few members of Vt and N' are involved.

//qoih// <qoi> Vt to kill several

<nana> Nf man, male

//qoih nana// Nf hunter

h. Q^{*} h $N'^{\sim}$ / Nf where Q^{*} includes a few members of Ql and Qn (but not Qc). Only a few members of N' occur in this construction.

//coo// <cawu> Ql good, well

<pa hkwi> Nf,Nbr fish, trout (411b)

//coo h pahkwi// Nf trout; native trout (as opposed to those brought in by white men)

<nyyhmy> Nf person, Indian, Mono

<cawu> Ql good, well

<cawu h nyyhmy> Nf full-blooded Mono/Indian

<waha> Qn two

<ta pe> Nr(ta) sun, day (411c)

<waha htape> Nf 'two days'

<typici> Ql important, great

<huu '> Nf^{-} flower, river (414e)

<typici h huu'> Nf San Joaquin River

i. nL^{*} Nf^{*} / Nf where nL^{*} includes only <tuheN> 'under' and Nf^{*} includes only <nato'o> 'shirt', <qahnihau'ju>

'trousers'; <tuheñ> has the allomorph //tuhih// when occurring in this construction.

//tuhih nato?o// Nf undershirt

//tuhih qahnihsu?ju// Nf underpants

416. a. Nr nNf / Nf The members of Nr occurring in this construction are cited with indication of the respective allomorphs of <pi> nNf 'absolutive' with which they occur, in parentheses following the distribution-class label. 333, 316.

b. Pb* Nr* / Nf where Pb* includes only <ta> 'sun, heavenly body', and Nr* includes only <ta pe> 'sun, day' and <ta my?a> 'moon, month' (411c). 311b, 385.

c. Nw* nNf / Na,Nf⁻ where Nw* includes only <too> 'winter, year', <toqa> 'night'. 315. (The constitutes occur as Na in 457.)

417. a. Nf˘ nNl / Nl Only a few members of Nf occur in this construction. 334.

b. Nx h nNh* h nNh* / Nf⁻ where nNh* includes only <ci'> 'diminutive'. The constitute occurs only with <ni> nQl 'like' (355, 452c). 314b.

c. Pq Nr* / Nf⁻ where Nr* includes the names of some body parts. The constitutes usually or always occur with <nohi> Pn 'very' (383, 418b). 381.

418. a. Pd Nfˇ / Nf 382.

b. Pn Nfˇ / Nf 383.

419. a. Vi vNr* / Nr(P) where vNr* includes only <hna> 'act/object of ...ing'. 319a.

b. Vi* vNf* / Nf where vNf* includes <tyñ> 'neutral agent', <hpy> 'product of the action', <hty'> 'customary/former agent'. Vi* includes unit morphemes, constitutes of constructions of 460, and those of certain constructions of 470, depending on the suffix involved: for <hpy>, 473, 475; for <hty'>, 471-474; for <tyñ>, all constructions with Vi constitutes except 477 where vVg is <hmaa> 'already'. 319a.

c. Q* qN / Nq where Q* includes Ql and Qn, but not Qc (354c). 319b.

d. Qn* qN* / Nf where Qn* includes <symy> 'one', <Rh symy> 'one-distributive', <Rh waha> 'two distributive'; qN* includes <h..'> qN⁻ (319b). 319b.

e. L lN / Nf 319b.

f. T^{*} lN^{*} / Nf where T^{*} apparently includes only <mi?i?i> 'nowadays'; lN^{*} includes only <tyň> lN,vNf 'neutral agent'. <mi?i?i> has the allomorph //mi?ih// when occurring in this construction.

//mi?ih tyň// Nf those of nowadays, contemporaries

g. Qc qcN / Nf 319c.

h. I iN / Nf 319d.

420 Pronominal Forms

420. In this section are listed constructions in which members of the classes given in 320 appear as ICs, and whose constitutes are either Pp (421-423), N (424-425), or H (426). The class N is made up of Nf, Np, Nd, Nh, and Nq.

421. a. Pp˘ pp / Pp¯ constitutes occur in construction 424a (i.e. with <my> $_{p}N$) only if the constitutes of that construction occur in construction 436b. 322b.

b. Pp^{*} Pr / Pp¯ where Pp^{*} includes only <?a> 'third person'. The constitute indicates zero possessor and occurs only with Nr which are constitutes of 414c, d and 419a (i.e. 'verbal nouns' in <hnuň> vNr* 'instrument for ...ing' and <hna> vNr 'act/object of ...ing' 319a).

<qahty> Vi,vVa to sit, stay

<qahty hnuñ> Nr+ chair (414c)

<ʔyh qahtyhnuñ> Nf thy chair (431a)

<ʔa qahtyhnuñ> //ʔah qahtyhnuñ// Nf his/her chair

<ʔana qahtyhnuñ> //ʔahna qahtyhnuñ// Nf a/the chair

<ceehpahnihi> Nf magician

<ceehpahnihi jee> Vi to be/act like a magician (463a, 367a)

<ceehpahnihijee hna> Nr(P) act/object of being (like) a magician; magic; cinema, television

<ʔyh ceehpahnihijeehna> Nf thy magic; thy television set (431a)

//ʔahnaceehpahnihijeehna// Nf magic; cinema, television

422. Pd Pr / Pdr

<Rh> Pd distributive (382)

<na> Pr reflexive (321b)

<Rh na> Pdr reciprocal (382)

423. a. Op* + Pp* / Pp where only certain combinations of Op (436b) and Pp occur. The conditions of this limitation are that the same person morpheme (321) be contained in both members, and that if <ni> pp 'plural' (322b, 421a) occurs in one member, it occur also in the other. The occurrence of a constitute of this construction is associated

with greater emphasis upon the person signified than in the case of the Pp morphemes or the constitutes of 421a occurring without Op. (For Op forms, see 323.)

<ny puhku> //ʔi puhku// Nf my dog (431a)

<nymyhkaNa+ny puhku> //nymyhkaaʔʔi puhku// Nf my dog

b. Od + Pp* / Pp where Pp* includes only <ʔa> 'third person' and <ʔa ni> 'third person plural' (421a), the latter occurring if <my> nNm 'animate plural' is present in the member of Od (436c) with which it occurs.

//mahkahuNa+ʔah puhku// Nf that one's dog (431a)

//mahkahumyNa+ʔaih puhku// those people's dog

c. Oh + Pp* / Pp where Pp* includes only <ʔa> 'third person'.

<hahkaNa + ʔa> //hahkaa + ʔah// Pp whose, someone's; whom, someone (obj.) (424d, 436d)

//hahkaa+ʔah puhku// Nf whose/someone's dog (431a)

d. On + Pp* / Pp where Pp* generally includes only <ʔa> 'third person' and <ʔa ni> 'third person plural' (421a); one example has been found, however, of <ʔyh ni> Pp 'second person plural' occurring in this construction.

<poihpoiNa + ʔa> Pp Poipoi's; Poipoi (obj.)

//poihpoiNa+ʔah puhku// Nf Poipoi's dog (431a)

//poihpoiNa+ʔahpuhkuNa+ʔah qwaci// Nf Poipoi's dog's tail

<tyyhna> Nf meat, food

<ʔyny' Na> Of white man (obj.)

//ʔyny'Na+ʔyih tyyhna// Nf you white men's food

e. Oq^{*} + Pp^{*} / Pp where Oq^{*} includes at least <nasymyhtu Na> //nahsyʔmyh ku// 'all-obj.' (436f), and Pp^{*} includes only <ʔa> 'third person'.

<nasymyhtuNa + ʔa> Pp everyone's; everyone (obj.)

//nahsyʔmyhku+ʔah puhku// Nf everyone's dog (431a)

424. a. Pp^{*} pN / Np where Pp^{*} includes unit morphemes (321a) and constitutes of 421a. 323.

b. Pr pN / Np^{-} constitute has been found only with <hsu> F 'precisely, still' (395, 438), <hkwa'> nNp 'plural' (322a, 425); the constitute <namy hkwa'> Np^{-} (425) has been found only with <hsu> F.

<na my> //pyy// Np^{-} (321b, 323)

c. D dN / Nd 326.

d. H hN / Nh 3281

425. $Np^{\vee}$ nNp / Np^{-} constitutes doenot occur in 436b.

426. Ce^{*} H / H where Ce^{*} includes only <tuʔi> 'anyway' (393b). 327, 393b.

430 Substantive Expressions

430. Constitutes of constructions of 431-435 and 438 occur as ICs in one or more of the constructions of: 438, 446, 452, 484, 486, 487, 496. Constitutes of 436, 437, and 439 occur as ICs in one or more of the constructions of: 434, 437, 439, 423, 471g, 485.

N' is used as a cover symbol for the class consisting of Nr plus those members of Nf which are not constitutes of 416. The class N includes Nf plus Np plus Nd plus Nh plus Nq. Similarly, the class O includes Of plus Op plus Od plus Oh plus Oq.

431. a. Pp N'$^{\vee}$ / Nf (321, 421, 423, 316, 318, 410) Note that Np, Nh, Nd, Nq differ from Nr and Nf in that they do not occur in this construction. 321, 322, 423.

b. Pdr Nr* / Nf where Nr* includes terms of relationship.

<Rh na> Pdr reciprocal (422)

<pyhni'> Nr(P) younger sister

<Rhna pyhni'> Nf sisters; sister and brother (where the sister is the younger)

<nawa> Nr(P) father

<Rhna nawa> Nf father and child

<petʸ> Nr(P) daughter

<Rhna petʸ> Nf parent and daughter

<pohso'> Nr(P) friend, partner, cousin of same sex

<Rhna pohso'> Nf friends, partners, cousins of same sex

432. a. Nf$^{\vee}$ h nNh / Nf (335). Limitations on the occurrence of four members of nNh (those marked nNh^{-}) are described in 335. A very few forms (as noted in 335) which are constitutes of this construction occur as constituents in it, e.g.

<tuwahpi' h ci'> Nf child-dim.

<tuwahpi'hci' h ci'> Nf child-dim.

<Rhcuku' h ci'> Nf little old men

<Rhcuku'hci' h pa?wo> Nf darn little old men

b. Np h nNh* / Np where nNh* includes only <ci> 'dim.'.

<ny my> //ny y// Np I

//nyy h ci'// Np little old me

c. Nd h nNh* / Nd where nNh* includes only <ci> 'dim.' (335).

<mahu h ci'> Nd that-dim.

d. Nh h nNh* / Nh where nNh* includes only <ci> 'dim.'.

<haqeñ h ci'> Nh who/someone-dim.

433. a. Nf^{v*} nNm / Nf where Nf^{v*} includes names of animate beings, as described in 336. <my> nNm precedes nNh (335, 432a) when both suffixes occur with <nana> Nf 'man, male', <na?a> Nf˜ 'boy', or combinations of Pp and <tuwah> Nr(P,pi') 'child, son' (431a). 336.

b. Nd nNm / Nd 336.

434. Oq + Nq* / Nq where Nq* includes only those constitutes of 419c in which <ke> nQl 'having' (355) is an I6 of the constituent Ql.

<nopih ˜ ke> Ql house-having (452c)

<nopih˜ke htu> Nq one who has a house (419c)

<cawu htu> Nq good (one) (419c)

<cawuhtu Na> //cawuhku// Oq good one-obj. (436f)

<wahahtu Na> //wahahku// Oq two-obj. (436f)

//cawuhku + nopih˜kei// Nq one who has a good house

//wahahku + nopih˜kei// Nq one who has two houses

//qatu?uhku + nopih˜kei// Nq one who has no house

435. a. Nd + Nf^{v} / Nf

<ma hu> Nd that (424c)

<no pih> Nf house (411d)

<mahu + nopih> Nf that house

b. Nq + Nf^{v} / Nf

<cawu htu> Nq good (one) (419c)

<cawuhtu + nopih> Nf good house

<wahahtu + nopih> Nf two houses.

436. The class O includes Of, Op, Od, Oh, Oq.

a. Nf^{v} nO / Of 337a.

b. Np o nO / Op 323, 329, 337a.

c. Nd o nO / Od where the position of <hka> o is immediately following the constituent D (325) of Nd (326). 326, 329, 337a.

d. H o nO / Oh 327, 329, 337a.

e. H hO / Oh 327, 337b.

f. Nq nO / Oq 319b, 337a.

437. a. Od + Of / Of

//ma hka hu Na// Od that-obj. (436c)

<nopih Na> Of house-obj. (436a)

//mahkahuNa + nopihNa// Of that house-obj.

b. Oq + Of / Of

<cawuhtu Na> //cawuhku// Oq good-obj.

//cawuhku + nopihNa// Of good house-obj.

//wahɔhku + nopihÑa// Of two houses-obj.

438. N F / N* where the constitutes are of the same class (Nf, Np, Nd, etc.) as the N constituent. 395.

<nohi ʔyny'> Nf very much a white man (418b)

<nohiʔyny' hsyʔyÑ> Nf entirely a white man, nothing but a white man (said of an Indian who has entirely given up his native culture for that of the white man)

440 Locative Expressions

440. Constitutes of the constructions listed in this section are L (locatives) or constituents of L. Forms belonging to class L occur in one or more of the constructions of: 419e, 441c, 445d, 446n, 446v, 447-449, 474b, 487.

441. a. (Kt) Ql* / K where Ql* includes only <cawu> 'good, well' and <ʔohi> '(left)'. 341a.

b. (Kh) Pb* / K where Pb* includes only <pih> 'buttocks, back'. 341b.

c. L* (Km) / K where L* includes only <ha wuhta> 'in what/some direction'. 341c.

d. D^{*} (pK) / pK where D^{*} includes <ʔi> 'this', <ʔu> 'that'. 344. (The class pK consists of these two constitutes plus <qwaa> '(beyond)' (343a). Members of pK occur only in 442a and/or 443a.)

442. a. pK^{*} x / (pL) where pK^{*} includes only <qwaa> '(beyond)'. 343a.

b. D^{*} xL / (pL) where D^{*} includes <ʔi> 'this' and <ʔu> 'that'. The constitutes occur as (pL) in 443b, 445b (the same construction, with regard to these two forms). (Cf. 446u.) 325, 348c.

443. a. pK kL / pL (346) (The class pK consists of <qwaa> '(beyond)' (343a) and the two constitutes of 441d.)

<ʔinaah hnahqweh> pL on this side of

<ʔunaah hnahqweh> pL on the other side of

<qwaa hnahqweh> pL beyond

b. $(pL)^{*}$ nL^{*} / pL where $(pL)^{*}$ includes <qope> 'front' (343c), <kywa> 'side' (343c), <qwaa tyh> '(beyond)' (442a), <ʔi naȟ> 'here' (442b), <ʔu naȟ> 'there' (442b); and where nL^{*} includes <weeh> 'in, at', <paahə 'by', <tuheȟ> 'under'; with only the following combinations occurring:

<qope weeh> pL,L in front (of), before (445b)

<kywa paah> pL beside, near

<kywa tuheñ> pL contiguous to

<qwaatyh weeh> pL beyond

<ʔinañ paah> pL,L on this side (of)

<ʔunañ paah> pL,L on the other side (of)

c. (pL)* xL / pL where (pL)* includes <qope> 'front' and <kwita> 'bottom' (343c).

<qope nañ> pL in front of

<kwita nañ> pL at the bottom of

d. pL* (-A) / pL where pL* includes <kywa paah> 'beside, near' (443b), and possibly one or more other forms; (-A) occurs between the two ICs of pL*. (353a).

<kywa ' paah> pL beside (and very close to)

e. Pr L* / pL⁻ where L* includes only <typihi nañ> 'at the middle' (445c); the constitute apparently occurs only with those members of Pp which contain <ni> pp 'plural' (322b, 421a). 345, 348c.

<ʔani natypihinañ> //ʔaihnahtypihinañ// L between them, in their midst (446a)

444. a. Pb* xL / nL,T- where Pb* includes only <pih> 'buttocks, back' (385).

<pih nañ> nL,T- behind, after

b. (pK) nL* / nL where nL* includes only <paah> 'by'.

<naah paah> nL behind

c. Pd pL* / pL⁻ where pL* includes <kywa tuheñ> 'contiguous to' (443b), <qope nañ> 'in front of' (443c), and possibly others. The constitutes occur only with Pdr (442, 446b) (and possibly also with Pr). 382.

d. Pd nL* / nL⁻ where nL* includes <pa?añ> 'on top of', <pih nañ> 'behind, after' (444a), <tuheñ> 'under', and possibly others. The constitutes occur only with Pr and/or Pdr (446e, f). 382.

445. a. K kL / L (441a-c, 342, 346.) 341, 342.

b. (pL)* nL* / L,pL where (pL)* includes <qope> 'front' (343c), <?i nañ> 'here' (442b), and <?u nañ> 'there' (442b); and where nL* includes <weeh> 'in, at' and <paah> 'by'; with only the following combinations occurring (all of them occur also as pL, cf. 443b):

<qope weeha L,pL in front (of), before
<?inañ paah> L,pL on this side (of)
<?unañ paah> L,pL on the other side (of)

c. (L) xL / L⁻ (The two IC classes contain a single member each: <typihi> (L) 'middle' (345), <nañ> xL 'at, on'. The constitute occurs only with <na> Pr 'reflexive' (in 443e) and with <tyñ> lN,vNf (319b) (in 419e).

typihi nañ> L⁻ at the middle

d. L^{*} (-A) / L^{-} where L^{*} includes <pa?añ> 'on top', and possibly other forms. The constitute usually or always occurs with <hsu> F 'precisely, still' (395, 448). 353a.

446. a. Pp pL / L (321, 421a, 423; 347b, 443). 347b.

b. Pdr pL^{*} / L where pL^{*} includes <kywa tuheñ> 'contiguous to' (443b), <Rh kywatuheñ> 'distributively contiguous to' (444c), <Rh qopenañ> 'distributively in front of' (444c), <?inañ paah> 'on this side of' (443b), and possibly other forms. 382.

c. Pb^{*} pL^{*} / L where Pb^{*} includes only <pa> 'water' (which has the allomorph //pah// when occurring in this construction), and pL^{*} includes only <kywa tuheñ> 'contiguous to' (443b).

//pah kywatuheñ// L at the edge of the water

//pahkywatuheñ hsu// L along the edge of the water, along the river bank (448)

d. Pp nL / L (321, 421a, 423; 348a, 444a, b). 348a.

e. Pr nL^{*} / L where nL^{*} includes <Rh pa?añ> 'distributively on top of' (444d), <Rh pinnañ> 'distributively behind, after' (444d), and possibly others. 382.

f. Pdr nL* / L where nL* includes <paʔañ> 'on top of' (348a), <Rh paʔañ> 'distributively on top of' (444d), <Rh tuheñ> 'distributively under' (444d), and probably others. 382.

g. Nf ~* nL / L <~> is not present after those members of Nf which end in <tyñ> vNf,lN (319a, b; 419b, e, f) or <hna> vNr 'act/object of ...ing' (419a, 431a); nor after members of Nf which end in <hnuñ> vNr+ 'instrument for ...ing' (414a-d) if the member of nL which follows is <tuheñ> 'under'. 348a, 396b.

h. Nl* nL* / L where each member of Nl occurs with one specific member of nL. Members of Nl (317) are cited with an indication in parentheses of which member of nL each occurs with. 317.

i. D nL dN / L 326.

j. Nh ~ nL* / L where nL* includes <paah> 'by' and possibly other forms.

<haqeñ ~ paah> L by whom/someone

k. Nq* nL / L where Nq* includes those constitutes of 419c in which members of Ql (but not Qn) are ICs.

<cawuhtu weeh> //cawuh weeh// L in a good (one)

//papah weeh// L in a big (one)

l. Qn nL* / L where nL* includes only <paah> 'by'. 348a.

m. nL* nL* / L where only the following has been found:

<tukuň> nL to, through, into

<paah> nL by

<tukuň paah> L straight (up)

n. L nL / L

<typewuh> L (way) down below; in the San Joaquin Valley

<tukuň> nL to, through

<typewuh tukuň> L down to the Valley

<nopih ~ paʔaň> L on top of the house (446g)

<nopih~paʔaň tukuň> L to the top of the house

<wynyhpY ~ ʔahqah> L among the trees

<wynyhpy~ʔahqah weeh> L in (the area) among the trees

o. D* dL / L where D* includes <ʔi> 'this' and <ʔu> 'that', of which only the former has been found with one of the members of dL (namely <peň>). 348b.

p. H dL* / L where dL* includes only <wuhtah> 'in ... direction'. 348b.

q. Nr* xL / L where Nr* includes <ty pih> 'earth' (411c), <pa waha> 'meadow' (411c), and perhaps a few other forms. 348c.

r. Nf* xL / L where Nf* includes <pojo> 'road' and perhaps a few other forms. 348c.

s. Nl* xL / L where Nl* includes a few morphemes; these are listed in the lexicon as Nl(naň).

<moonih> Nl(naň) Finegold

<moonih naň> L at Finegold

<moonihnaň tyň> Nf (that which is at) Finegold (413e)

t. H xL / L 348c.

u. D* xL / L where D* includes <ʔi> 'this' and <ma> 'that' (which has the allomorph //maa// when occurring in this construction). 325, 348c.

v. L* xL / L where L* includes <ʔijoň> 'here' and <ʔijaň> 'there'. 348c.

w. Qn* xL / L where Qn* includes <waha> 'two' and perhaps others. The constitute has been found only with <paʔaň> nL,L 'on top of' (446n). 348c.

447. Pn L* / L where L* includes a few members of L.

<nohi qwenaʔa> L very distant

<nohi paʔaň> L very much on top

448. L˘ F / L 395.

449. $L^{*} + L^{*} / L$ where the first L^{*} includes constitutes of 446i,k, (i.e. those in which D or Nq occur as ICs), and the second L^{*} includes constitutes of 446g (i.e. those in which Nf is an IC); with the combinations subject to the condition that the same member of nL occur as an IC of each of the ICs.

<ma weeh hu> //maweehhuň// L in that (446i)

<nopih ˜ weeh> L in the house (446g)

//maweehhuň + nopih˜weeh// L in that house

<papahtu weeh> L in the big (one) (446k)

<papahtuweeh + nopih˜weeh> L in the big house

450 Miscellaneous Forms

4500 The constructions listed in this section involve several types of classes. Constitutes of the constructions of 451-454 are members of the class Q (which has the three subclasses Ql, Qn, Qc). Constitutes of the constructions of 454 are T- (occurring as ICs in 455a). Those of the constructions of 454-457 are T (temporals). Constitutes of 458 are I (imitatives), while those of 459 are C (independent conjunctions).

Forms of class Q occur in one or more constructions of: 415h, 419, 441a, 446, 451-453, 455f, 457, 467, 474a. Members of class T occur in one or more constructions of: 419f, 456,

479a, 488a, 494b. The occurrence of I and C is described in 391 and 393b, respectively.

451. a. (Qn) Qn* / Qn where Qn* includes <pahi> 'three' (occurring with one member of (Qn), <naa>) and <symy> 'one' (occurring with the other two members of (Qn), <taah>, <wooh>). 351a.

b. Pr Qn* / Qn where Qn* includes only <symy> (which has the allomorph //sy?my// when occurring in this construction). 321b(8), 354a.

c. Qn* qQn / Qn where Qn* includes <symy> 'one', <waha> 'two', <pahi> 'three', <wacy> 'four', <manyki> 'five', <naa pahi> 'six' (451a), <taah symy> 'seven' (451a), <wooh symy> 'eight' (451a), <qwanyhki> 'nine'. 351b.

d. Qn- h nNh* h nNh* / Qn where nNh* includes only <ci'> 'diminutive'. 351c.

e. Pn Qn* / Qn where Qn* includes <?ewa> 'much, many' and <na symy> //nahsy?my// 'all, altogether' (451b).

<nohi ?ewa> //nohe?ewa// Qn very much / many

//nohi nahsy?my// Qn all (without exception), entirely

f. H hA / Qn,T 327, 353b.

452. a. Ql- h nNh* h nNh* / Ql where nNh* includes only <ci'> 'diminutive'. 352.

b. Pp Ql* / Ql where Ql* includes <toki> 'right' and <hohma> 'above'. 354b.

c. N' ~* nQl / Ql <~> is not present after members of Nf which end in <tyh̃> vNf,lN (319a, b; 419b, e, f). 355.

d. Nd nQl* */ Ql where nQl* includes only <ni> 'like'. nQl immediately follows the constituent D of Nd (424c) in these forms. When the constitutes occur in 453a or 419c, the morpheme <hu> dN (326) occurs after the other suffixes.

<ma hu> Nd that (one) (424c)

<ma ni hu> Ql like that

<ma ni ' hu> //mani'hi// Ql just like that (453a)

<ma ni htu Na hu> //manihkuhuh̃// Oq like that-obj. (436f)

e. Pp* nQl* / Ql where Pp* includes unit morphemes except <tyh> 'subj. third pers.', and constitutes of 421a; and where nQl* includes <ni> 'like' and <ho> 'with'. 355.

f. Pr nQl* / Ql where nQl* includes only <ni> 'like' (which has the allomorph //mahani// when occurring with <na> Pr 'reflexive'). 355.

g. Nh ~ nQl* / Ql where nQl* includes <ho> 'with' and <ni> 'like'. 355.

453. In this article, the coverage of Q1˘ extends to constitutes of preceding constructions of this article as well as to unit morphemes and constitutes of constructions of 452 (the only preceding article listing constructions whose constitutes are Q1).

a. Q1˘ (-A) / Q1 353a.

b. Pn Q1˘ / Q1 383.

c. Pn Qc / Qc 383.

d. Aq + Q1˘ / Q1 359a.
<qatu?u + nohicawu> Q1 not very good

e. Aq + Qc˘ / Qc
<qatu?u + cyhkwyta> Qc not hard
<qatu?u + nohicyhkwyta> Qc not very hard

f. Aq + Qn* / Qn where Qn* includes at least <ha ihno?o> 'how many, some' (451f), <?ewa> 'many, much', <hohi ?ewa> 'very many/much' (451e).
<qatu?u + haihno?o> //qatu?u + hihno?o// Qn no plural amount, not several
<qatu?u + ?ewa> Qn not many/much
<qatu?u + nohi?ewa> Qn not very many/much

454. a. T-* t / T- where T-* includes only <mowahu> 'now, soon'. 356b.

b. T-* (-A) / T- where T-* includes only <pyty> '(after a while)'. 353a, 356a.

455. See also 451f.

a. T- (T) / T 356.

b. Nw nT / T,Vi 315, 358a.

c. Vi vT / T 358b.

d. Pp Vi vT / T 358b.

e. Qn qT / T For limitations on the occurrence of two of the members of qT, see 358c. 358c.

456. T˘ F / T 395.

<symy nahpy> T once (455e)

<hsy°yȟ> F only (395)

<symynahpy hsy°yȟ> T only once

457. Nq + Na / T

<too pi> //too pe// Na,Nf¯ a year, a winter (416c)

//syhmy' + toope// T for one year, for one winter

cf. //syhmy' + toope// Nf¯ one year, one winter (435b)

//wahinhtu + toqape// T for two nights

458. a. Ia* + Ia* / I where the two Ia constituents are morphemically identical. 391a.

b. Ib* Ib* / I where the two Ib constituents are morphemically identical. 392b.

459. Ce* Ce* / C where only the two combinations given below occur. (Other sequences of members of Ce are treated as repeated occurrences of construction 489b.)

<tu?i tu?i> C although

<hnape jaqañ~hnape> C perhaps, apparently

460 Verb Stems

460. Constitutes of the constructions of 461 occur only in construction 463d (with one exception, see 414k); they are labeled U. Constitutes of the other constructions of this section are Vi, Vt, Vtt, or Vx; they occur as constituents in one or more of the constructions of: 414, 415, 419, 455, 460, 470, 480, 490.

461. a. Nu nU / U 312, 361a.

b. (U) -U / U 361b, c.

c. U- (U) / U 361b, d.

d. Nu* (U) / U where Nu* includes <ʔoha> 'yellow' (312) and possibly others. 361b.

e. Pb* pU / U where Pb* includes only <puh> 'eyes' (385). 361c.

462. a. Pi* pV / Vt where Pi* includes <kyh> 'biting', <wyh> 'whipping;' and <ma> 'pursuing' (386). 367d.

b. Pb* pV / Vt where Pb* includes only <puh> 'eyes' (385).

<puh ni> //puh ˜ni// Vt to see (367d)

c. Vt* vVi* / Vi where Vt* and vVi* each include two morphemes, each occurring with one of the others, as follows (371a):

<nahqa i> Vi to make a sound

<ʔeki h..> //ʔehki// Vi to eat acorn

d. Vi* vV˜ / Vt where Vi* includes <jatuha> 'to talk', <ta pyha> 'to get light', and <jaqa> 'to cry'. 371b.

e. Vi* vVtt / Vtt˜ where Vi* includes only <waci> 'to be lost/hidden'. The constitute occurs only with <na> Pr 'reflexive' (321b, 471b). 371c.

f. VʔX vVr* / Vx where vVr* includes only <ʔi> 'punctual' (371d). 362b, 371d.

g. Vr vVr* / Vi where vVr* includes only <ʁhi> 'durative' (371d). 362c, 371d.

h. Vr? vVr / Vi 362d, 371d.

i. V?t vVr* / Vt where vVr* includes only <?i> 'punctual' (371d). 362e.

463. a. NI* nVi / Vi where N'* includes unit morphemes and constitutes of constructions of 411-414. 367a.

b. Nu* nVi* / Vi where Nu* includes only <puhi> 'blue/green' (312) and nVi* includes only <tuwa> 'to become (like)'.

<puhi tuwa> Vi to be green

c. N'* nVt / Vt where N'* includes unit morphemes and constitutes of some constructions of 411-414. 367a.

d. U uV / Vi (461, 361, 367b). 367b.

e. I iV / Vi (391, 458, 367c). 391, 367c.

464. This article treats compounds of verb stems with preceding noun or verb stems. In the constructions of 464a-g (noun plus verb compounds), the symbols Vi and Vt represent roots (i.e. monomorphemic members of Vi and Vt) and, in addition, a few bimorphemic verb stems. The occurrence of bimorphemic verb stems in these constructions is mentioned for

those in which they have been found; it is probable that there are others in addition to those mentioned, and that bimorphemic verb stems occur in other constructions than the three mentioned below in which they have been found. The noun stems involved are either roots or constitutes of 411b-d; this statement is to be taken as defining the limitation of occurrence of noun stems in these constructions, in lieu of asterisks accompanying the symbols Nr and Nf with separate explanations for each construction.

In verb plus verb compounds (464h-n), the members are usually monomorphemic. There are, however, a few cases in which the first member is a constitute of 462a, b, or 465e; and a few in which the second member is a constitute of 462a, b, f-i. These statements are to be taken as explanations of the asterisked symbols of 464h-n, with the further qualification that only a small number of verb stems occur in each of the constructions listed. A few verb roots (e.g. <pihty> Vi 'to arrive', <kija> Vtt 'to give') have allomorphs with initial //h// when occurring in these constructions (//hpihty//, //hkija//); <wahci> Vi 'to be lost/hidden' has the allomorph //wacih// when followed by Vi or Vt.

a. Nr Vi* / Vi where Vi* includes a few verb roots.

<nahqa> Nr(P),Vt,Nu ear; to hear

<qahma> Vi to ache; to taste

<nahqa qahma> Vi to have an earache

<ta pe> Nr(ta) sun, day (411c)

<cipuhi> Vi to climb

<tape cipuhi> Vi sun to rise

<toja> Nr(pi) mountain

<nywi> Vi (one) to wander

<toja nywi> Vi to hunt, go hunting

<kuh tuhsi> Nr(pY) dust (411c)

<huu> Vi (water) to flow

<kuhtuhsi huu> Vi (flowing water) to be muddy

b. Nf Vi* / Vi where Vi* includes a few roots and at least one bimorphemic stem: <nopih ~> Vi 'to dwell' (463a).

<wijah> Nf black oak acorns; acorns

<wijah nopih~> Vi to go camping for acorns

<pa hsaky> Nf bridge (411d)

<mija> Vi to go

<pahsaky mija> Vi to go on/over a bridge

c. Nr Vt* / Vi where Vt* includes a few roots.

<pa hsiwah> Nr(pY) sand (411c)

<noo> Vt to haul

<pahsiwah noo> Vi to haul sand

<mah pih> //mah ~ja// Nr(P,pi) hand, glove (411c)

<maa> Vt to obtain, to buy

//mah~ja maa// Vi to buy gloves

d. Nf Vt* / Vi where Vt* includes a few roots and at least one bimorphemic stem: <ma ni> //mahi// Vt 'to pursue' (462a).

<ʔahpohsowa> Nf,Nt manzanita berries

//ʔahpohsowa mahi// Vi to go to get manzanita berries

//wijah mahi// Vi to go to get acorns

<tyyhna> Nf meat, food

<tyyhna maa> Vi to buy/obtain meat

e. Nr Vt* / Vt where Vt* includes a few verb roots and at least one bimorphemic stem: <cih saja> Vt 'to prick (the skin) in order to cause bleeding' (465e).

<mu pih> Nr(P) nose (411c)

<mupih cihsaja> Vt* to prick the nasal septum of (someone) to cause nosebleed (apparently always occurs with <ʔ..ki> vVp 'intermittently' (373a))

<nahqa> Nr(P),Nu,Vt ear; to hear

<tona> Vt to pierce

<nahqa tona> Vt to pierce the earlobes of (someone)

f. Nf Vt* / Vt where Vt* includes a few verb roots.

<pa hkwi> Nf,Nbr fish (411b)

<tyky> Vt to put, place

<pahkwi tyky> Vt* to put fish (in spring) (apparently always occurs with <ty> Pt 'indefinite object')

<?etyh> Nf bow, gun

<?etyh maa> Vt,Vi to get a gun (from)

g. Nf* Vtt* / Vt where Vtt* includes only <mahqa> 'to give', and Nf* includes the names of items of food or drink.

<wijah mahqa> Vt to give acorns to

h. Vi* Vi* / Vi

<?ooki> Vi to celebrate

<mija> Vi to go

<?ooki mija> Vi to go somewhere to celebrate, to go to celebration

<munaa> Vi to go/come to the top of a hill

<pihty> //hpihty// Vi to arrive

<munaa hpihty// Vi to arrive at top of hill

<waawi> Vi to go/come downhill

//waawi hpihty// Vi to arrive at bottom of hill

<wahci> //wacih// Vi to be lost/hidden

<jatuha> Vi to talk

//wacih jatuha// Vi to whisper

i. Vi* Vt* / Vi

<ma ni> //mahi// Vt to pursue (462a)

//?ooki mahi// Vi to go eagerly to a celebration

j. Vi* Vt* / Vt

<pee> Vt to call (someonetto one's presence)

//wacih pee// Vt to beckon to

<tyky> Vt to put, place

//wacih tyky// Vt to place in hiding, to hide

<tyhka> Vi,Vt to eat

<puh ni> //puh ˜ni// Vt to see

//tyhka puh˜ni// Vt to serve food to

k. Vt* Vi* / Vt

<tyyja> Vt to be afraid of

<tyyja mija> Vt to go away from in fear

<cipuhi> Vt to climb

<tyyja cipuhi> Vt to climb something or to run away to escape from (feared being)

//puh˜ni hpihty// Vt to see (someone) arrive

l. Vt* Vt* / Vt

<cih too> Vt˜ (465e) has been found only with <na> Pr 'reflexive' (321, 471a) and with <wyna ʔi> Vt 'to throw' (462i)

<cihtoo wynaʔi> Vt to push

m. Vi* Vtt* / Vt

<johci> Vi to fly, to rise/arise

<tywy> //htywy// Vtt to ask (someone) for (smthg.)

//johci htywy// Vt to ask (someone) to get up

n. Vt* Vtt* / Vtt

<hita> Vt to carry/hold in arms

<kija> //hkija// Vtt to give (someone something)

//hita hkija// Vtt to carry (smthg.) to (someone)

465. a. Vi* vVt / Vt where Vi* includes roots, constitutes of 462-464, and a few constitutes of 465g. (There are, on the other hand, a few examples of constitutes of 465a occurring as constituents in 465h, q.v.) 372a.

<wojo Ẓhi> Vi (several objects) to be lined up (462g)

<wojoẒhi hky'> Vt to line up (several objects)

<hupija tu> Vi to sing, make music (463a)

<hupijatu hky'> Vt to cause to sing; to sing for

<puhipono ki> Vi (one) to be blue (463d)

<puhiponoki hky'> Vt to cause to be/get blue

<tah topa> Vi to remove (one's own) shoes (465g)

<tahtopa hky'> Vt to cause (someone) to take off (his) shoes, to take off (someone else's) shoes

b. Vt* vVt / Vtt where Vt* includes roots, constitutes of some constructions of 462-464, and a few constitutes of 465d-f, h. (But there are also a few cases in which constitutes of this construction occur as ICs in 465f, h.) 372a.

<kyh ni> //kyh ˜jy// Vt to bite (462a)

//kyh˜jy hky'// Vtt to cause to bite

<wyha ʔi> Vt to throw (462i)

//wyna?i hky'// Vtt to cause to throw

<cihtoo wyna?i> Vt to push (4641)

<cihtoowyna?i hky'> Vtt to cause to push

<cah myhna> Vt to change, turn over (465d)

<cahmyhna hky'> Vtt to cause to change, turn over

<pa tyky> Vt to put in water (465h)

<patyky hky'> Vtt to put in water for (someone); to cause (someone) to put (smthg.) in water

c. Vt* vVw / Vt where Vt* includes only <puha ˜a> Vt 'to cast a spell upon, to bewitch' (463o).

<puha˜a wi> Vt to doctor, heal, cure

d. Pi Vi* / Vt where Vi* includes roots and constitutes of 462g, h. 386.

e. Pi Vx / Vt (363, 462f). 386.

f. Pi Vt* / Vt where Vt* includes roots and constitutes of 462d, i; 4641 (and possibly 464j, k); and 465a; in addition, one example has been found (see below) in which a constitute of 465e occurs as a constituent in this construction, and it appears possible that other such cases exist. 386.

<cihtoo wyna?i> Vt to push (4641)

<wyh cihtoowyna?i> Vt to push with sidewise motion; to crowd against

<qahty hky'> //qaty hky'// Vt⁻ has been found only in:

//wyh qatyhky'// Vt⁻ to stack (wood) always preceded by <ty> Pt 'indefinite object' (324, 468)

<mija hky'> Vt⁻ to cause to go (465a) has been found only with <oah> Pi 'by pulling'

<oah mijahky'> Vt to drive (horse or car)

<tohi> Vx only with <oih> Pi 'with point'

<oih tohi> Vt⁻ (465e) has been found only with <wyh> Pi 'with sidewise motion'

<wyh oihtohi> Vt to strike (a match)

g. Pb Vi* / Vi where Vi* includes a few roots, and at least one constitute of each of the constructions of 462g and 463a (and possibly also with constitutes of 462h). 385.

<qawino Rhi> Vi⁻ (462g) only with <ooh> Pb 'head'

<ooh qawinoRhi> Vi to shake the head back and forth

<tyja wi> Vi to die (463a)

<kuh tyjawi> Vi to be burned to death

h. Pb Vt* / Vt where Vt* includes a few roots and a few constitutes of 462d, i, 465a. 385.

<ouhpa hky'> Vt to cause to sink/go down (465a)

<mah ouhpahky'> Vt to push down with the hand

466. a. Viˇ vVp / Vi 373a.

b. Vt˘ vVp / Vt 373a.

c. Vtt˘ vVp / Vtt 373a.

d. Vt* vtV / Vt where Vt* includes a few roots, and a few constitutes of some of the preceding articles, as well as constitutes of 467b. This construction occurs only occasionally. 373b.

e. Vtt* vtV / Vtt Examples of this construction have not been found, presumably because of the infrequent occurrence of <ta> vtV; but the construction is listed because it is believed that a larger corpus would show examples, since there are no apparent restrictions on the possibility of their occurrence.

467. a. Ql* h Vi˘ / Vi where Ql* includes <cawu> //cawu//, //coo// 'good, well', <syhta> 'bad', <toki> 'right' (which has the alloseme 'right now, right in the act of ...ing' when occurring in this construction), and those constitutes of 452c of which <ni> nQl 'like' is an I6.

<qahma> Vi to taste; to ache

<cawu h qahma> Vi to taste good

<syhta h qahma> Vi to taste bad

<naahma> Vi to feel

<cawu h naahma> Vi to feel good

<tyhka> Vi,Vt to eat

<toki h tyhka> Vi,Vt to be right in the act of eating (right now, or at the time established by the context)

<wynyhpYNa + cihcuka> Vi to point at a tree (471g)

<wynyhpYNa+cihcuka tyň> Nf one who is/was pointing at a tree (419b)

<wynyhpYNa+cihcukatyň ni> Ql like one who is/was pointing at a tree (432c)

<wynyhpYNa+cihcukatyňni h mane> Vi to be like one who is/was pointing at a tree, to act as if pointing at a tree, to seem to be pointing at a tree

b. Ql* h Vt˘ / Vt where Ql* includes <cawu> //cawu//, //coo// 'good, well' and <toki> 'right' (see above, 467a).

<cih kypana> Vt to look (465e)

//coo h cihkypana// Vt to look well

<tyhka> Vt,Vi to eat

<toki h tyhka> Vt,Vi to be right in the act of eating

468. a. Pt Vt˘ / Vi 324.

b. Pt Vtt˘ / Vt 324.

469. a. Pd Vi* / Vi where Vi* includes at least <pojo ha> 'to run' (463a) (no other verbal form has been found as an IC of this construction).

//R pojoha// Vi (several) to run (in different places or directions) (382)

b. Pq Vi* / Vi where Vi* includes at least <suwahqa> 'to breathe' (no other verbal form has been found as an IC of this construction). 381.

c. Pb* pPa / Pa¯ where Pb* includes only <pih> 'buttocks, back'. The constitute has been found only with <qooni> Vi 'to return' (469d). 384a.

d. Pa Vi˘ / Vi For limitations on the distribution of some of the members of Pa (namely those labeled Pa¯), see 384. 384b.

e. Pa Vt˘ / Vt For limitations on the distribution of some of the members of Pa, see 384b. 384b.

f. Pa Vtt˘ / Vtt For limitations on the distribution of some of the members of Pa, see 384b. 384b.

g. Pn Vi˘ / Vi 383.

h. Pn Vt˘ / Vt 383.

i. Pn Vtt˘ / Vtt 383.

470. Constitutes of the constructions of this section occur as ICs in one or more constructions of 470, 480, and 490. In addition, some of them occur as ICs in 419a, b, and 455c, d.

471. In this article, the symbol Vt˘ is used to designate classes including not only constitutes of preceding articles (i.e. of 460) but also constitutes of preceding constructions of 461 itself.

a. Pr Vt˘ / Vi 321b.

b. Pr Vtt˘ / Vt,Vi The constitutes generally occur as Vt (as constituents in one of the following constructions), but can occur as Vi (i.e. without a second object). 321b.

c. Pdr Vt˘ / Vi 321b.

d. Pdr Vtt˘ / Vt,Vi (Cf. 471b, f.) 321b.

<cah myhna> Vt to turn over, change (465d)

<cahmyhna hky'> Vtt to cause to change/turn over (465b)

<Rhna cahmyhnahky'> Vt to cause to change each other

e. Pp Vt˘ / Vi 321a, 322.

<ʔa Rhnacahmyhnahky'> Vi to cause them to change (position with) each other

<qahoo?na> Nf box

<qahoo?naNa + ?a> Pp box (obj.) (423d)

<qahoo?naNa+?a cahmyhna> Vi to turn over the box

<qahoo?naNa+?a Rhnacahmyhnahky!> Vi to cause the boxes to change (position with) each other, i.e. to interchange the positions of the boxes

Further examples are given in 471g.

f. Pp Vtt˘ / Vt,Vi The constitutes occur either as Vt in 471g, or as Vi. (This it is possible for Vtt to occur with only one object. There are never two occurrences of Pp in a single verb form.)

<nohqaqa> Vtt to steal (smthg.) from (someone) (366)

<ny nohqaqa> //?i nohqaqa// Vt,Vi to steal (smthg.) from me

<pani hky!> Vtt to haul (smthg.) for (someone); to cause (someone) to haul smthg.) (465b)

//?i panihky!// Vt,Vi to haul (smthg.) for me

<kija> Vtt to give (smthg.) to (someone)

//?i kija// Vt,Vi to give (smthg.) to me

g. O + Vt˘ / Vi The occurrence of O (436) as object of Vt (except those members of Vt which are constitutes of 471f, for which no choice is possible), as apposed to O+Pp/Pp (423) is related to a subtle difference in meaning, which can

roughly be described as follows: where O+Pp/Pp occurs (471e), there is a more definite or complete participation of the entity designated as object; the occurrence of O alone (471g) is related to partial or limited participation as goal of the action. In translation into English, O+Pp/Pp can usually be rendered as "the ...", while O can be rendered "a ..." or "some ...".

<pa pih> //pa˜ja// Nf water (411d)

<hipi> Vt,Vi to drink

//pajaNa + hipi// Vi to drink some water

//pajaNa+ʔa hipi// Vi to drink the water (e.g. all of the water in the cup) (471e)

<puhku Na> Of dog (obj.) (436a)

<puh ni> //puh ˜ni// Vt to see (462b)

//puhkuNa + puh˜ni// Vi to see a dog

//puhkuNa+ʔa puh˜ni// Vi to see the dog (471e)

<pahsiwahpY Na> Of sand (obj.) (436a)

<puh hai> Vt to look for (465h)

<pahsiwahpYNa + puhhai> Vi to look for sand

<nywihi Na> //ʔiwihi Na// Of my knife (obj.)

<waʔi> Vt to find

//ʔiwihiNa+ʔa waʔi> Vt to find my knife (471e)

//ʔiwihiNa + ʔinohqaqa// Vi to steal my knife from me (cf. 471f)

//pahsiwahpYNa + ʔipanihky'// Vi to haul sand for me

//puhkuNa + ʔikija// Vi to give me a/the dog (cf. 471f)

472. a. V?a vVr* / vVa where vVr* includes only <?i> 'punctual'. 362a.

b. Vi* vVc* / vVa where Vi* includes only <mija> 'to go' and <mija ?..ki> 'to go hesitantly' (466a); and where vVc* includes only <poto> 'back and forth'. (<mija> does not occur by itself as an auxiliary.)

mijapoto vVa,Vi to go back and forth (473b)

//mi?jahki poto// vVa,Vi to go back and forth hesitantly

c. Vi˘ h* vVa / Vi <h> is not present when the auxiliary is <nywi> '(sg.) around' or <moo> '(pl.) around' if the preceding Vi ends in <naki> Vt 'to follow' or <?..ki> vVp 'hesitantly, intermittently'. 374, 362a, 396a.

<hahkwihsa?i h mijapoto> Vi to go back and forth sneezing (463e)

<qooni h mijapoto> Vi to keep going away and returning

<?aoahqoonihky' h mijappto> Vi to cause it to go back and forth (hither and thither) (471e)

<pohpi> Vi to go across

//pohpi h mi?jahkipoto// Vi to keep crossing back and forth

d. Vi* h vVa* / Vi where Vi* includes constitutes of 472c not containing <qahty> vVa,Vi 'to sit, stay' as the auxiliary; and where vVa* includes only <qahty> (which is used in this situation for both singular and plural subjects).

<qwapi h tyky> Vi (several) to be lying (472c)

<qwapihtyky h qahty> Vi (several) to keep on lying

<qahtyhtyky h qahty> Vi (one) to keep on sitting

473. In this article, Vi˘ includes constitutes of constructions listed above in 473 itself, as well as constitutes of constructions listed in preceding articles.

a. Vi˘ vVb / Vi 375a.

b. Vi˘ vVc / Vi 375b.

c. Vi˘ vVd / Vi 375c.

d. Vi˘ vVe / Vi 375d.

474. In 474b, Vi˘ includes some constitutes of 474a, as well as constitutes of preceding articles.

a. Q + Vi˘ / Vi The class Q includes Qn (354a, 451, 453f), Ql (354b, 452, 453), and Qc (354c, 453). Of the members of Qn, only <ʔewa> 'much, many' and <na symy> 'all' (451b) have been found in this construction.

<cyhkwyta> Qc with effort, hard

<tawano hu> Vi to get to be spring (473a)

<cyhkwyta + tawanohu> Vi to get to be late in spring

<nohi cawu> Ql very good/well (453b)

<tyhka h mai> Vi to be (in process of) eating (472c)

<nohicawu + tyhkahmai> Vi to be eating very well

<?ihsa' ~ ni> Cl coyote-like (452c)

<sunawi> Vt to appear, look

<?ihsa'~ni + sunawi> Vi to look like a coyote

<?ewa> Qn much, many

<tyhoi> Vi,Vt to dig

<?ewa + tyhoi> Vi to dig a lot

<na symy> Qn all, altogether, entirely (451b)

<mija qoi> Vi to go collectively (473c)

//nahsy?my + mijaqoi// Vi all to go together

b. L + Vi˜ / Vi

<?ijaň naň> L there (446v)

<nohicawu + tyhkahmai> Vi to be eating very well (474a)

<?ijaňnaň + nohicawu+tyhkahmai> Vi to be eating very well there

<hanaň tukuň> //hahnoh tukuň// L to where/somewhere (446n)

<mija h mai> Vi to be (in process of) going, to have gone ... so far (and be continuing to go)

//hahnohtukuň + mijahmai// Vi to have gone to where/somewhere so far

<?anaqahtyhnuň ~ weeh> //?ahnaqahtyhnuň ~ weeh// L in a/the chair (446g)

<qahty h tyky> Vi to be sitting (472c)

//ʔahmaqahtyhnuñ˜weeh + qahtyhtyky// Vi to be sitting in a/the chair

<ʔa wyhpaaʔwi> Vi to split it (471e)

<wihi ˜ hmañ> L with a/the knife (446g)

<wihi˜hmañ + ʔawyhpaaʔwi> Vi to split it with a/the knife

475. Vi˘ vWk / Vi¯,IN The constitutes occur as Vi in 476-478, 455c-d, and 419a-b, but not in 479, 481-482, 491, 496. When not occurring as Vi, they occur as IN (480). 376.

476. a. vv vVf* / vVf where vVf* includes <ki'> 'come' and <kaa> 'go'. 377a.

b. Vi˘ vVf / Vi 377.

477. Vi˘ vVg / Vi¯ The constitutes are limited in their occurrence in following constructions as follows: where vVg is <hkwa> 'distant future', the constitutes do not occur with <waih> vWw 'near future' (478), <hpy> vIN 'perfect tense' (482), or <hnaʔi> vIM 'emphatic imperative' (492); where vVg is <hmaa> 'already', the constitutes do not occur with <waih> vWw (473), <hti> vIN 'neutral tense' (482), or <hnaʔi> vIM (492); where vVg is <tuwa> 'could, would', the constitutes do not occur with <hti> vIN (482) or <hnaʔi> vIM (492). 378.

478. Vi˘ vWw / IN,Vi¯ The constitutes occur as Vi in 455c-d and 419a-b (but not in 479, 480). When not occurring in 419a-b, 446c-d they are IN. 379a.

479. a. T + Vi˘ / Vi

<ºa tokihtapenañkaa neñ> //ºa tohkihtapenakaana// T as it was/is going on towards noon, shortly before noon (455d)

<johoi> Vi to fly, to arise (from bed)

//ºatohkihtapenakaana + johoi// Vi to get up shortly before noon

cf. //ºatohkihtapenakaana+johoi hsi// T having gotten up shortly before noon (455c)

<ny muhsinahti neñ> //ºimuhsinahtina// T while I am/was stooping and dodging while going along (455d)

<ny cihpahtiºi> //ºicihpahtiºi// Vi to poke me in the eye with pointed object (471e)

//ºimuhsinahtina + ºicihpahtiºi// Vi to poke me in the eye with pointed object (e.g. twig) while I am/was going along stooping and dodging (e.g. through the brush)

<mowahu> T now, soon

<tawuhna¯weeh + mija> Vi to go to town (474b)

<mowahu + tawuhna¯weeh+mija> Vi to go to town now/soon

<pohta waih> Vi to be going to pound acorns (in near future) (478) (as IN: 'will pound acorns in near future')

<mowahu + pohtawaih> Vi to be going to pound acorns now

b. Aq + Vi^{v} / Vi

<qatu?u + mija> Vi not to go

cf. <qatu?u+mija hna> Nr(P) act of not going (419a)

<qatu?u+ ?a mijahna> //qatu?u+?ahmijahna// Nf his failure to go, the fact that he is/did not going/go (431a)

480 Indicative Expressions.

480. Constitutes of the constructions of this section are members of the class IN. Some members of IN occur as constituents in constructions of 480. All of them occur in immediate constituency with <.> Z (398), the constitutes being sentences.

481. a. Vi* vWk / IN,Vi^{-} where Vi* includes roots and constitutes of 460 and 471-474. (This is the same construction as 475, q.v.) 376.

b. Vi* vNw / IN,Vi~ where Vi* includes roots and constitutes of 460 and 471-477. (This is the same construction as 478, q.v.) 379a.

482. Vi vIN / IN (As stated in 475, 478, Vi of this construction does not include constitutes of those articles.) For limitations on the occurrence of constitutes of 477 in this construction, see 477. 377, 378.

<qahoo?naNa+?a Rhnacahmyhnahky'> Vi to interchange the positions of the boxes (471e)

<qahoo?naNa+?aRhnacahmyhnahky' hti> IN interchanged the positions of the boxes

<ny nohqaqa> //?i nohqaqa// Vi,Vt to steal (smthg.) from me (471f)

//?inohqaqa hpy// IN has stolen (it) from me

//pajaNa + hipi// Vi to drink some water (471g)

//pajaNa+hipi hti// IN drank some water

<qwapihtyky h qahty> Vi (several) to keep on lying (472d)

<qwapihtykyhqahty hti> IN (several) keep/kept on lying

<?ihsa'~ni + sunawi> Vi to look like a coyote (474a)

<?ihsa'~ni+sunawi hti> IN looks/looked like a coyote

//?ahnaqahtyhnuñ~weeh + qahtyhtyky// Vi to be sitting in a/the chair (474b)

//ʔahnaqahtyhnuñ˜weeh+qahtyhtyky hti// IN is/was sitting in a/the chair

//ʔatohkihtapenakaana + johci// Vi to get up shortly before noon (479a)

//ʔatohkihtapenakaana+johci hti// IN got up shortly before noon

<qatuʔu + mija> Vi not to go (479b)

<qatuʔu+mija hti> IN didn't go, is not going

483. IN* nQl* qN / IN where IN* includes only those constitutes of 482 of which the vIN constituent is <hpy> 'perfect tense' (379b), and nQl* includes only <ke> 'having' (355). The sequence <hpy> vIN followed by <ke> nQl followed by <htu> qN (which occurs only in constitutes of this construction) indicates distant past time.

//ʔinohqaqa hpy// IN has stolen it from me (482)

//ʔinohqaqahpy ke htu// IN stole it from me a long time ago

<mijahpy ke htu> IN went a long time ago

//ʔapuh˜nihpy ke htu// IN saw it a long time ago

484. a. N* + IN˘ / IN where N* includes Nf, Nh, Nq but not Np, Nd.

<qahooʔnaNa+ʔaRhnacahmyhnahky' hti> IN interchanged the positions of the boxes (482)

<poihpoi + qahoo?naNa+?aKhnacahmyhnahky'hti> IN Poipoi interchanged the positions of the boxes

//?inohqaqahpy ke htu// IN stole it from me a long time ago (483)

//poihpoi + ?inohqaqahpykehtu// IN Poipoi stole it from me a long time ago

<waha htu> Nq two (419c)

<kihma hti> IN came/is coming (482)

<wahahtu + kihmahti> IN two (e.g. people) came, two are coming

<haqeñ + kihmahti> IN who/someone came/is coming

b. N^{p}_{d} + IN$^{\vee}$ / IN$^{\sim}$ (403) The constitutes generally occur only in 488 or 489. Some occurrences have been found of constitutes of this construction occurring in IC with <.> Z, but the order of 484c is preferred under these circumstances.

//mahu + ?inohqaqahpy// IN$^{\sim}$ that one has stolen it from me (489a)

//?ipehu + mahu+?inohqaqahpy// IN maybe that one has stolen it from me (489a)

//mahu ~ tai +?inohqaqahpy// IN that one has stolen it from me! (489b)

//qatu?u + mahu+?inohqaqahti// IN that one didn't steal it from me (488b)

c. ,, +* N_d^p IN˘ / IN¯ (404c) If the N_d^p constituent is <ta my> //taa// Np 'we (incl.)' (424a) or <tamy hkwa'> //taa hkwa'// Np 'we (incl.)' (425), <¯> appears as tactic juncture instead of <+>. The constitutes of this construction do not occur in 488 or 489.

//qahoo?naNa + nyy +?aRhnacahmyhnahky'hti// IN¯ I interchanged the positions of the boxes

//?inohqaqahpy + mahu// IN¯ that one has stolen it from me

//?ahnaqahtyhnuñ¯weeh+qahty waih// IN¯ will sit in a/the chair (472)

//?ahnaqahtyhnuñ¯weeh + nyy +qahtywaih// IN¯ I'm going to sit in the chair

//nopih¯weeh+mija waih// IN will go home (482)

//nopih¯weeh ¯ taa +mijawaih// IN¯ we shall go home, let's go home

//nopih¯weeh + nyy +mijawaih// IN¯ I shall go home

485. Of* + Np* / IN where Of* includes at least <haiihpY Na> //hiihpYNa// 'what/something-obj.' (436a); and where Np* includes at least <?yh my> //?yy// 'thou' (424a) and <?yhmy hkwa'> //?yyhkwa'// 'y'all' (425).

//hiihpYNa + ?yy// IN what art thou (doing)?

//hiihpYNa + ?yyhkwa'// IN what are y'all (doing)?

486. "Noun plus Noun Predications". The constructions of this article are of the general type N + N / IN. One of the ICs (referred to as N_1 in what follows) designates a particular entity, while the other (referred to as N_2) designates either a class of entities of which N_1 is asserted to be a member, or an entity (often of temporary existence) which is equated to N_1. In translation into English, these expressions can usually be rendered: "'N_1' is a/the 'N_2'" (although such translations are often not as effective as other possible ones in particular cases). In 486b, the Nq constituent has the meaning N_2. In the other constructions, the constituent represented by the second N of the formula is N_2.

a. Nf + Nf / IN

<nohi tyhpepi> //nohi tyhpepY// Nf one who talks too much (418b)

//poihpoi + nohityhpepY// IN Poipoi talks too much

//pa˜jaNa + hipi// Vi to drink some water (471g)

//pa˜jaNa+hipi tyñ// Nf one who is drinking water (419b)

//poihpoi + pa˜jaNa+hipityñ// IN Poipoi is drinking water

<syjee hty'> Nf coward (419b)

<ny puhku> //ʔi puhku// Nf my dog (431a)

//ʔipuhku + syjeehty'// IN my dog is a coward, my dog is cowardly

//ʔipuhku ~ poʔo +syjeehty'// IN but my dog is a coward (489b)

//ʔi nopih// Nf my house (431a)

//ʔinopih Na// Of my house-obj. (436a)

<nynopihNa + ʔa> Pp my house (obj.) (423d)

<qwaatyh weeh> pL beyond (443b)

//ʔinopihNa+ʔah qwaatyhweeh// L beyond my house (446a)

//ʔinopihNa+ʔahqwaatyhweeh tyñ// Nf that which is beyond my house (419e)

<tahqaahti'> Nf sourberries

//ʔinopihNa+ʔahqwaatyhweehtyñ + tahqaahti'> IN beyond my house are (some) sourberries

b. Nq + Nf / IN

<ʔyny' y> Nf (412b)

<ʔyny'y ~ ni> Ql strange, fearful (452c)

<ʔyny'y~ni htu> Nq strange/fearful one (419c)

<qahma hna> Nr(P) illness (419a)

//ʔah qahmahna// Nf his/her illness (431a)

//ʔyny'y~nihtu + ʔahqahmahna// IN his/her illness is strange

<qatu?u hty> [illegible]

//niihkaewaiku [illegible] (coll.) money-dim.

(433c)

//qatu?uhtɨ + niihkaewaiku [illegible] money (dim.)

is none/non-existent; i.e. we have no money

c. Nh + N / IN

// haqeñ + ?yy// IN occurs in

//haqeñ ~ wa?a +?yy// IN who art thou? (480b)

//haqeñ + kihmatyñ// IN who/a person is coming

//haqeñ ~ wa?a +kihmatyñ// who is coming?

//haqeñ ~ wa?a +mihu// IN who is that?

d. Constructions 486d and 486e are alternants whose occurrence is determined by the same conditions as those which are involved in the occurrence of 484b, c.

N^{D}_{d} + N^{*} / IN~ where N^{*} includes Nf, Nq. The constitutes generally occur only in 488 or 489.

//pa~jaNa+hipi tyñ// Nf one who is drinking water

(419b)

//nyy + pa~jaNa+hipityñ// IN~ I am drinking water

//nyy ~ po?o +pa~jaNa+hipityñ// IN but I am

drinking water (480b)

//mahu + syjeehty'// IN~ that one is a coward

//mahu ~ po?o +syjeehty'// IN but that one is a

coward

e. ,, $+^{*}$ N^{p}_{d} N^{*} / IN~ where N^{*} includes Nf, Nq. The constitutes do not occur in 488 or 489. <~> occurs as tactic juncture instead of <+> if the N^{p}_{d} constituent is <ta ny> //taa// Np 'we (incl.)' or <tany hkwa'> //taa hkwa'// Np 'we (incl.)'.

//pa~jaÑa + nyy +hipityñ// IN~ I am drinking water

//pa~jaÑa ~ taa +hipityñ// IN~ we are drinking water

<nopih ~ weeh> L in the house, at home (446g)

<qahty h tyky> Vi to be sitting/staying (472c)

<qahtyhtyky ?i> Vi (dim. subj.) to be sitting/staying (473d)

<nopih~weeh + qahtyhtyky?i> Vi (dim.) to be sitting/staying at home (474b)

<nopih~weeh+qahtyhtyky?i tyñ> Nf one who is sitting/staying at home (dim.) (419b)

//nopih~weeh ~ taa +qahtyhtyky?ityñ// IN~ we are staying at home

//nopih~weeh + nyy +qahtyhtyky?ityñ// IN~ I am staying at home

//nopih~weeh + mahu +qahtyhtyky?ityñ// IN~ that one is staying at home

<syjeehty' + mahu> IN~ that one is a coward

487. a. L + N^{*} // IN where N^{*} includes Nf, Nq. Occasionally, the order of the ICs is reversed; i.e. we have

N + L / IN. The occurrence of this order seems to be related to emphasis upon what is referred to by the N constituent. (See the last example below.)

//ʔiwooh ˜ weeh// L in my head (446g)

//ʔicohpiki// Nf my brains (431a)

//ʔiwooh˜weeh + ʔicohpiki// IN my brains are in my head

//ʔahnatyhkahnuñNa+ʔa tuheň// L under the table

//ʔimohqo// Nf my shoe(s) (431a)

//ʔahnatyhkahnuñNa+ʔatuheň + ʔimohqo// IN my shoe(s) is/are under the table

//nopih˜nihweeh + nanootyñweeh> L in the house-trailer; "in the house-like thing-which-is-being-hauled"

//nopih˜nihweeh+nanootyñweeh + ʔyny'// IN a white man is in the house-trailer

<typicihhuu'Na+ʔa ʔunañpaah> L on the other side of the San Joaquin River (446a)

<typicihhuu'Na+ʔaʔunañpaah + poihpoi> IN Poipoi is on the other side of the San Joaquin River

<ʔinañpaah hsu> L on this side (and nowhere else) (448)

//ʔah puhku// Nf his/her dog (431a)

//typicihhuu'Na+ʔahʔunañpaah+poihpoi. ʔahpuhku˜poʔo+ʔinañpaahhsu.// Poipoi is on the other side of the San Joaquin River. But his dog is on this side (and nowhere else).

b. N_d^p + L / IN˜ The constitutes generally occur only in 488 or 489. Cf. 484b-c, 486d-e.

<mahu + nopih˜weeh> IN˜ that one is in the house

<mahu ˜ tai +nopih˜weeh> IN that one is in the house! (489b)

<ʔipehu + mahu+nopih˜weeh> IN maybe that one is in the house (489a)

<qatuʔu + mahu+nopih˜weeh> IN that one is not in the house (488b)

c. ,, +* N_d^p L / IN˜ The constitutes do not occur in 488 or 489. If the N_d^p constituent is <ta my> //taa// Np 'we (incl.)' or <tamy hkwa'> //taa hkwa'// Np 'we (incl.)', <˜> appears as tactic juncture instead of <+>.

<nopih˜weeh + mahu> IN˜ that one is in the house

//poihpoiNa+ʔahnopih ˜ weeh// L in Poipoi's house

//poihpoiNa ˜ taahkwa' +ʔahnopih˜weeh// IN˜ we are in Poipoi's house

//ʔahnopih˜weeh ˜ taahkwa'// IN˜ we are in his house

488. In both constructions of this article and in 489a, the tactic juncture <+> is present except when the initial morpheme of the IN constituent is <ta> Pp 'inclusive person' (321a), in which case <˜> appears instead as tactic juncture (cf. 484c, 486e, 487c). This statement is to be taken as

explaining the symbol +* in those constructions.

a. T +* IN˘ / IN The analysis of the occurrence of members of T is not complete. Some occurrences have been found of T occurring in IC with Vi (479a), others of T occurring in IC with IN. It is possible that there are actually two classes to be distinguished among the forms classed as T in this description.

//nyy + pahkwikahty'// IN˜ I am one who is accustomed to fishing (486d)

<ʔunoʔoho hsu> T formerly (455a)

//ʔunoʔohohsu + nyy+pahkwikahty'// IN formerly I used to go fishing

b. Aq +* IN˘ / IN 359a.

<mahu + ʔyny'> IN that one is a white man (486d)

<qatuʔu + mahu+ʔyny'> IN that one is not a white man

//nyy + pa˜jaNa+hipityň// IN I am (one who is) drinking water (486d)

//qatuʔu + nyy+pa˜jaNa+hipityň// IN I'm not drinking water

489. a. C +* IN˘ / IN +*: see 488. (393b)

//ʔipehu + mahu+ʔinohqaqahpy// IN maybe that one has stolen it from me (484b)

<ʔipehu + mahu+nyyhmy> IN maybe that's an Indian (486d)

b. ,, ~ Ce IN˘ / IN Subject to certain limitations which have not been analyzed, constitutes of this construction and of 489a may occur as constituents in this construction.

//ʔinohqaqa hpy// IN has stolen it from me (482)

//ʔinohqaqahpy ~ tai// IN has stolen it from me!

//poihpoi ~ tai +ʔinohqaqahpy// IN Poipoi has stolen it from me! (484a)

//ʔyny'y˜nihtu + ʔahqahmahna// IN his/her illness is strange (486b)

//ʔyny'y˜nihtu,˜ tii +ʔahqahmahna// IN his/her illness is strange!

//qatuʔuhtu + niihhnawahkuhci'// IN our (excl.) money (dim.) is non-existent (486b)

//qatuʔuhtu ~ tijañ +niihhnawahkuhci'// IN also, our money (dim.) is non-existent

//qatuʔuhtu˜tijañ ~ jaihsi +niihhnawahkuhci'// IN and also, our money (dim.) is non-existent

//ʔahnatyhkahnuñNa+ʔatuheñ + ʔimohqo// IN my shoes are under the table (487a)

//ʔahnatyhkahnuñNa ~ pyʔy +ʔatuheñ+ʔimohqo// IN are my shoes under the table?

//ʔunoʔohohsu + nyy+pahkwikahty'// IN formerly I used to go fishing (488a)

//ʔunoʔohohsu ~ poʔo +nyy+pahkwikahty'// IN but formerly I used to go fishing

<ʔipehu + mahu+nyyhmy> IN maybe that's an Indian (489a)

<ʔipehu ~ poʔo +mahu+nyyhmy> IN but maybe that's an Indian

490 Non-indicative Frustums

490. Constitutes of the constructions of this section occur in IC with <.> Z (398), the constitutes being sentences. (They share this feature of distribution with members of IN (480) and members of the classes listed in 402b.)

491. Pp* Vi* / IM where Pp* includes only <ʔa> 'third person', and where Vi* includes unit morphemes and constitutes of 460 and 470 except the following: 471b-g, 475, 477, 478, 479b. When occurring with constitutes of 474, 479a, <ʔa> Pp 'third person' immediately precedes the verb stem.

<mija h noo> Vi to go along (472c)

<ʔa mijahnoo> IM go along!; goodbye! (said to person departing)

<qahty h tyky> Vi to be sitting, staying (472c)

<ʔa qahtyhtyky> IM sit/stay!; goodbye! (said by person departing)

<nopih˜weeh + ʔika> Vi to enter the/a house

(474b, 446g, 411d)

<nopih˜weeh+ ʔa ʔika> IM go into the house!

492. The class IM includes, besides the constitutes of 491-495, members of Vi except constitutes of 475, 477, 478, and 479b; the remaining members of Vi (except constitutes of 471b-g, which are excluded from the possibility of occurring in 491) occur in 491 or occur alone as IM (or either) depending upon specific usages for individual cases or some general conditioning factors which have not been determined (if they exist), or both. In the constructions of this article and the following ones, IM˘ is to be taken as including members of Vi (except those excluded explicitly or by conjecture in the foregoing remarks) as well as IM constitutes of preceding articles. The morpheme <hna?i> vIM 'emphatic imperative' (379c) appears not to be obligatory in any of its occurrences (i.e. any form with which it occurs may occur alone as a member of IM).

IM˘ vIM / IM

<nopih˜weeh+ ʔa ʔika> IM go into the house! (491)

<nopih˜weeh+ʔaʔika hna?i> IM go into the house!

(emphatic)

<ʔamaahtahkaahsi + mija> Vi,IM as Vi: to go after having abandoned it; as IM: having

abandoned it, go! (470a, 455c, 476, 471e)

<ʔamaahtahkaahsi+mija hnaʔi> IM having abandoned it, go! (emphatic)

493. Np* + IM˘ / IM where Np* includes <ʔyh my> //ʔyy// 'thou', //ʔyyhkwa'// 'y'all', <na my> //pyy// 'oneself', //pyyhkwa'// 'oneselves', and combinations of these forms with <hsu> F 'precisely' (438, 395).

//ʔyy + ʔahipi// IM you drink it!

//pyyhsu + ʔahipi// IM drink it yourself!

494. a. Am + Nf* / IM where Nf* includes only those constitutes of 419b which contain <tyň> vNf,lN 'one who is/ was ...ing' (319a) as an IC. 359b.

//mino?o + hahkyhpoʔnohʔkakityň// IM don't fool around! (419b, 466a, 463d, 451a)

b. Am + T* / IM where T* includes only those constitutes of 455c which contain <neň> vT 'while ...ing' (358b) as an IC. 359b.

<mino?o + hahkyhpoʔnohʔkakineň> IM don't fool around! (cf. 494a)

<mino?o + nopih˜weeh+ʔikaneň> IM don't go into the house! (cf. 491, 492)

495. ,, nNp IM^{v*} / IM where IM^{v*} does not include constitutes of 493. (322).

<nopih˜weeh hkwa' +ʔaʔika> IM go ye into the house!

<minoʔo hkwa' +nopih˜weeh+ʔikaneñ> IM go ye not into the house!

<mija hnaʔi> IM go! (492)

<mijahnaʔi hkwa'> IM go ye!

496. a. N op + Vi* / OP where Vi* includes unit morphemes and constitutes of 460 and 470 except 475, 477, 478. The class op contains one member, <hsahqwa> (394).

//ʔyy hsahqwa + nopih˜weeh+ʔika// OP you ought to go into the house (474b, 446g, 411d)

//poihpoi hsahqwa + ʔikija// OP Poipoi ought to give it to me, would that Poipoi would give it to me

b. N op + N / OP This construction occurs very rarely in the corpus which has been analyzed, although there are no apparent restrictions on the occurrence of members of N in it. Presumably, its rarity is due to the infrequency with which situations appropriate for its use occurred during the linguistic investigation and in the texts collected.

<tawahahni?i> Vi to work

<tawahahni?i ?i> Vi (dim.) to work (473d)

<tawahahni?i?i waih> Vi¯,IN as Vi: (dim.) to be going to work (in near future) (478)

<tawahahni?i?iwaih hna> Nr(P) object of future work (by dim. subj.) (413a)

//taih tawahahni?i?iwaihhna// Nf our future work (431a)

//mahu hsahqwa + taihtawahahni?i?iwaihhna// OP that ought to be our future work, i.e. would that we were going to work at that (in near future)

497. a. Nf* (E) / E where Nf* includes only <?yny'> 'strange/terrible being, white man'. 392a.

b. Vi* (E) / E where Vi* includes only <?yty?y> 'to be hot' and <?ycy?y> 'to be cold'. 392a.