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INTRODUCIION
Mountains mark the four corners of the territory occupied by the Shasta in aboriginal times. In Northern California, the Marble Mountains are to the west and Mount Shasta is to the southeast. In southern Oregon. there is Red Butte to the northwest and Mount Pitt to the northeast.

The Shasta lived in a considerable number of small villages scattered over a rugged, mountainous region that included, in California, the Scott Valley and the Shasta Valley and the stretch along the Klamath River from Shovel Creek to Seiad Valley. The Shasta domain extended across the Siskiyous into Oregon up to that part of the Rogue River Valley drained by Little Butte Creek and the Stewart River.

The groups living along the Klamath from the mouth of Horse Creek to where the town of Hornbrook is now and in Shasta Valley. Scott Valley, and Oregon constituted four loose governmental divisions that were distinguished from each other by slight differences of language and custom.

There were at least three groups in California which seem to have been dialectally divergent from
the main groups and dependent upon them governmentally. The settlements of one of these divergent groups were scattered along the Klamath from the mouth of Horse Creek to Seiad Valley. Another group occupied the canyon area along the Scott River from the mouth of the river to Scott Valley. A third was located in a region extending up along the Klamath from the area where the town of Hornbrook is now to the mouth of Shovel Creek.

In Oregon, the Shasta were in contact with Penutian and Athabascan speakers. The Takelma were to the north, the Klamath and Modoc to the northeast, and the Applegate Creek Athabascans to the northwest. Penutian and Hokan speakers were neighbors of the Shasta in California: the Wintu to the south, Karok to the west. Achumawi and Okwanuchu to the southeast. and New River Shasta to the southwest.

The Shasta themselves were Hokan speakers. ${ }^{1}$ In 1957, when I began to collect the data for this study, ${ }^{2}$ the Shasta language had been moribund for sixty years or more and there were only known to be six very elderly people who spoke it with any degree of fluency. ${ }^{3}$

My main informant was Sargent Sambo (SS) who is now deceased and who had also been the principal source for ethnographic data collected by R.B. Dixon during the period 1900-1904 (Dixon, 1907) and Catherine Holt in the summer of 1937 (Holt. 1946). SS's paternal grandfather was an Oregon Shasta and his paternal grandmother was a Shasta Valley Shasta. His maternal grandfather was Karok. His maternal grandmother was a ka•mátwa• (the dialectally divergent group located along the Klamath between Horse Creek and Seiad Valley). One of his "aunts", i.e. his mother's co-wife, was a Shasta Valley Shasta.

Although SS's father's original home was on the Rogue River, most of his adult life was spent on the Klamath and SS was born and lived all his life in the region along the Klamath River from Horse Creek to Hornbrook.

My supplementary source of data was Miss Clara Wicks (CW), who lived, at least until her early twenties, in the Scott River Canyon area. Her paternal grandmother was a Scott Valley Indian. Her paternal grandfather was white. Her mother's parents were both Shasta, but it is not clear to
which group(s) they belonged.
The speech of each informint can be described as being the result of dialect mixture. Just what mixture each idiolect represents is difficult to determine. In attempting to pinpoint distinguishing features, it is not possible to do more than make random observations or speak of 'téndencies'. SS was often conscious of dialectal source of a speech form he or CW used; however, CW does not seem to share this awareness of his.

There is no precise information about the degree of divergency that obtained between the Shasta dialects. However, there was no doubt in SS's mind that the "real language" was that variety (or those varieties) spoken by the four main groups of Shasta. SS did not consider the speech of the three dialectally divergent groups mentioned above proper Shasta. For instance, his most frequent term of reference for ka•mátwa• was "half-language". 4 Nevertheless, there are more ka•mátwa forms in his speech than in CW's. On the other hand, in certain vocabulary items, there is a tendency for CW to freely vary $/ \mathrm{n} /$ and $/ \mathrm{r} /$ or substitute $/ \mathrm{n} /$ for $/ \mathrm{r} /$; this tendency, according to $S S$, was prevalent among the Shasta who lived in the Scott River canyon.

Regularly in a few items, and sporadically elsewhere, both speakers freely vary /t/ and /k/, e.g. /tu•čáp/ /ku•čáp/, "what". SS identified the t-variant as indicative of the speech of the Shasta Valley Shasta. There are phonetic differences in the degree of length associated with vowels in SS's speech. In two or more repetitions of a sequence, there will be versions in which the long vowels are extra long and there is concomitant extra heavy stress. When questioned about the significance of such differences, SS would reply either that there was no difference or that the "draggin' way of talkin" " was characteristic of the speech of the Shasta Valley Shasta, particularly that of the people who lived in the area where Yreka is now located.

The obvious difference between the two idio-- lects is the frequency of use of optional morphophonological rules. (See I. 240) having to do with consonant syncope, vocalic contraction, and pitch shift. While these phenomena occur very often in SS's speech, their occurrence is more characteristic of CW's.

Although both informants knew that they
differed from each other in their speech, again it was SS who would most likely be able to say whether the difference was phonological, syntactic or lexical.

This description is of Sargent Sambo's speech; an amalgam of some, but not all, of the dialects of a long inactive speech community. Any structural divergences manifested in CW's will be made note of in the appropriate places in the description. Lexical differences will be accounted for in the dictionary.

The organization of the description stems from the assumption that a grammar is a system of rules which has three components: semantic, syntactic, and phonological. 5

This study provides a description of the phonology and a partial description of the syntax of Shasta. The syntactic statements are concerned with word formation and word classes. There is some nonsystematic comment about phrase and clause formation.

There is no attempt herein to provide rules which specify semantic features and their distributions; instead, each dictionary heading (lexeme)
has associated with it an English gloss and/or pertinent comment that indicates the semantic content represented.

A lexeme (the minimum systematically significant syntactic unit) is represented throughout the description (and in the dictionary) by a morphophonological notation that stands for a
-set of statements which specify the conversion of a lexeme into a phonemic sequence, i.e. the conversion of a minimum systematically significant syntactic unit to a sequence of minimum systematically significant phonological units, i.e. the phonemes. These rules are called morphophonological rules and are one type of phonological rule (cf. I:200.).

The second type of phonological rule assigns phonetic features to phonemes and phoneme sequences. (See I:I00.). These rules cannot be applied until after the morphophonological rules have been applied.

The nature of the data makes even more troublesome the task, difficult under the best of circumstances, of providing an explicit formulation of the intrinsic competence of an ideal speaker-hearer

The present description, therefore, is a non-rigorous one; i.e. where the data do not allow for rigor, I have been content to discuss their limitations in general terms.

In diverse ways, a number of people have given of their time and energies to bring this work to its present form. Inadequacies in this description are my responsibility and do not reflect in any way upon the people mentioned below.

Above all, I am grateful to Sargent Sambo and Clara Wicks, not oniy for the information they so willingly gave, but also for the warmth and friendliness they extended to me. I will always remember them with deep affection.

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and also for her help in my work on Shasta from the beginning.

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I wish here to express my appreciation to my foremost teachers in linguistics: Professor Haas, Professor Whitfield and Professor Murray B. Emeneau. I consider myself fortunate to have studied descriptive and comparative method and theory under their guidance.

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Finally, I must thank John D. Klingensmith for his assistance in the typing of this manuscript.

FOOTNOTES TO THE INTRODUCTION

1. R.B. Dixon (1905-1906) placed Shasta, New River Shasta, Okwanuchu, Konomihu, Achumawi and Astugewi together into one Hokan subgroup. The validity of this subgrouping has yet to be demonstrated. For discussion, see Bright (1954), Haas (1963), Olmsted (1956, 1957, 1959, 1964, 1965) and Silver (1964, in press).
2. The fieldwork was supported by the Survey of California Indian Languages (Department of Linguistics, Berkeley) during the summers of 1967-61. Six weeks in the summer of 1960 and one week in the summer of 1901 were also supported by a Bollingen Foundation grant. During this seven week period I worked with my informants on twentyone texts collected by Jaime de Angulo and I.S. Freelana in the summers of 1927 and 1928. Their informants were Lucinda Snelling and Charlie Wicks. A total of eight months was spent in the fieia gathering data, including texts.
3. It has been estimated that there were not many more than two thousand Shasta at the time of first European contact. The impact of the goldrush produced rapid deterioration of Shasta culture and contributed to the decimation of the population.
(According to Stephen Powsers (1877), the Shasta went into decline with a certain style, "...[They] have dwelt so long amid the mining camps and about Yreka that they have become odiously "fast". They sport the daintiest calf-boots and have an Ethiopian passion for fancy shirt-fronts, breast-pins, rings and the like... . Dapper little fellows, impertinent, dancing, carä-playing, pony-racing, idle, thoroughly worthless -- there is not another tribe in the State going out of existence so rapidly, in such good clothes; and with more elegance... . Taken in all their qualities, apparent and traditional, they are the Athenians of Northern California... .").
4. The linguistic status of ka•mátwa• vis-a-vis Shasta is very unclear. Catherine Holt (1946) has suggested that the ka•mátwa might have been a Konomihu splinter group. If this is true, Sargent Sambo has mixed in his speech remnants of another language, not a dialect, albeit a language closely related to Shasta. He characterized the speech of the Scott River Canyon people (and also the Shovel Creek group) as Shasta but different. The Scott

River Canyon people talked "kinda broken" and the Shovel Creek group talked "sloppy".
5. Although this description is not intended to be a specific example of a particular theoretical orientation, it reflects the influence of current developments in American linguistic theory.

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BAE Bureau of American Ethnology
IJAL International Journal of American
Linguistics
Lg. Language
UCPAAE University of California Publications in American Archaeology and Ethnography

UCPI University of California Publications in Linguistics

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## ABBREVIATIONS AND SPECIAL SYMBOLS

| abl | ablative |
| :---: | :---: |
| addr | addressative |
| coll | collective |
| coll-loc | collective locative |
| cont | continuative |
| decl | declarative |
| dem | demonstrative |
| direct intrans | directional (intransitive) aspect |
| direct trans | directional (transitive) aspect |
| dist, distr | distributive |
| dur | durative |
| fact | factative |
| hort | hortative |
| imper | imperative |
| instr | instrumental |
| Ioc | Iocative |
| moment | momentaneous |
| nt | substantive |
| pauc | paucal |
| perf, perf asp | perfective aspect |
| poss | possessive |
| pot | potential |
| prog, prog asp | progressive aspect |
| ref | referential |


| sp | species |
| :--- | :--- |
| spec | specific |
| var | variety of |
| voc | vocative |
| vol | volitional |
| vt | verb theme |

```
    [X] X is optional
    [X] X is phonetic
    <X> X is morphophonological
    /X/ X is phonemic
{X,Y}, X and Y are mutually exclusive
X = Y X is equivalent to Y
X}\not=Y X is not equivalent to Y
X,Y X or Y
V Vowel
C Consonant
& Consonant cluster
T Apical consonant (cf. 2l2)
P Non-apical consonant (cf. 2l2)
--- 'elsewhere' or 'everywhere'
    specifies the relation of an element to its
    environment; e.g., X: Y/Z_, i.e. X is
    realized as Y when Z is the preceding environ-
    ment.
```

Chapter I
Phonology
100. Phonemics. There are 26 phonemes in the Shasta sound system, exclusive of junctural and anomalous phonemes: 19 consonants, 4 vowels, a length phoneme and two tonal accents.

Because of morphophonological patterning it is convenient to categorize the consonant phonemes (except for length) as apical and non-apical. The apical and non-apical consonants differ morphophonilogically in how they affect vowel assimilation (cf. I.235.2). These are shown below.
Apical Non-apical Iength

## Consonantal

| Obstruents | t | c | č | p | k | $?$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 't | c | $\stackrel{2}{c}$ | p | , |  |
|  |  | s |  |  | x | h |


| Sonorants | n |  | m |
| :--- | :--- | :--- | :--- |
| r | y | w |  |

Vocalic
High
i u
Iow
e a
110. The syllable. The Shasta utterance is bounded by pause or silence (i.e. a pause of indefinite length). An utterance consists of one or more syllables. A syllable occurs with tonal accent and is characterized as heavy or light, open or closed.

Any syllable containing the sequence /V•/ is heavy; all others are light. A heavy syllable is strongly stressed; a light syllable is weakly stressed. While it is possible for one heavy syllable to have less stress than another, and for one light syllable to have more stress than another light syllable, it is always the case that a heavy syllable is more strongly stressed than a light one.

In disyllabic sequences, either light-light or heavy-heavy, both syllables are equally stressed. In a sequence of three or more light syllables, or three or more heavy syllables, the penultimate syllable receives the most stress.

In polysyllabic sequences of light and heavy syllables, if the penultimate syllable is light, the first preceding heavy syllable will be the most strongly stressed.

An open syllable is one ending in $V[\cdot][L]$ (where $L=/ \mathrm{y} /, / \mathrm{w} /$ ) ; ${ }^{1}$ any other syllable is closed. A light open syllable occurring between two heavy syllables is unstressed.
120. Juncture. There are two phonological junctures: expressive $/ \cdot /$ and pause /\#/.
120.1. Expressive juncture. Expressive juncture is phonetically manifested as a fall in pitch from high to low on the preceding vowel, together with extra lengthening of the vowel; e.g., /ma : má• Pin•á? skútay?/ 'No: Don't do that (to someone)!' /na : mí• ma•mú Piskí•k/ 'Well, that's what your life has been like:'
121.2. Pause. Pause is represented in examples by space and in phonological rules by /\#/.

It is only possible to make some general statements about prepausal variations, which are primarily concerned with stress, pitch and vowel length. There are variations in degrees of heavy and light stress which continue through the utterance until the first or second syllable following the preceding, pause. These variations condition variations in height of tonal accent. There is also
a tendency for vowel length to disappear; however, the strong stress concomitant with vowel length remains.

In addition to the above phenomena, after vowels there is aspiration before pause if the vowel is in a high-pitched open syllable.

Although pause juncture rules that will unequivocally predict these variations have not been formulated, there is no evidence that they are systematically distinctive. Nevertheless, pause as used in the phonological rules must be considered phonetically ill-defined. It corresponds, however, to the boundaries of the word as it is defined by the syntactic rules.
(SS was very definite about phonemic sequences permissible between pauses. What he called a 'word' corresponds to the syntactic definition. What he characterized as 'half a word' corresponds to a bound lexeme or lexemic sequence.)
130. Tonal accent. The Shasta tonal system consists of two contrastive level pitches, high (/'/) and low (unmarked). Every syllable occurs with either high or low pitch, ${ }^{2}$ for example,
kwáp•i•ma 'he's throwing (it); you(sg.) threw (it)'
kwap•i•ma 'I threw it'
kipxá• 'You(sg.) put your shoes on!'
kípxa• 'You(sg.) roast (it):'
ča•xnúk 'a mussel'
?á•xnuk 'a mock orange tree'
?áni• 'mother'
?aní• 'mother(vocative)'
Páni•ni 'little'
’áni•nỉ? 'mother(referential)'
In the environments /___\#/ or /__w,y[r]\#/, the high pitch has a slight rise,
?úy 'eye'

Páw 'mouth'
ča•skwáy? 'stellar jay'
There is a tendency, especially in slow speech, for the level pitch on a heavy syllable, or on a light syllable of the shape CVI, to alternate with a falling glide, ${ }^{3}$

?iččway : [?ičway] [?ičway? 'wildcat'

Given a succession of high-pitched syllables, the last high-pitched syllable before pause will be higher than any preceding high pitch, e.g.
mí•yá•war 'a bunch of them'
kás mí•ké• túti•k 'That's what happened!'
In a series of low pitches preceding a high pitch, the immediately preceding low pitch will be higher than any other low pitch in the series,
kwí•ya•c•uká•? 'I was pretty sure'
In a succession of low pitches following a high pitch, and not preceding another high pitch, the last low-pitched syllable is the lowest,
kúxamehempirakmak•ira• 'He's going from chair to chair to see which is the most comfortable.'
140. Consonants. Voice is the phonemic component ${ }^{4}$ that sets off obstruents from sonorants in Shasta. Obstruents are voiceless and lenis, sonorants are voiced and fortis.
141. Obstruents. The following chart shows the phonemic components that distinguish obstruents.


The articulation of the velars, /k/ and /k/, when occurring before back vowels often approaches the post-velar position.

Defore pause the glottal, / //, freely varies with its absence, or is aspirated in the environment / V__\#/ and occurs as glottalization of the preceding segment in the environment //r, $y, w) \ldots \# / .{ }^{5}$ In the environments /(\#, C)__(w,y)/ it occurs as glottalization of the following segment,

| ?a.kwaý? | 'flint' |
| :---: | :---: |
| ?a•ráw? | 'deer' |
| ?ww $\cdot$ wa•wahú | 'everything' |
| kwík? yewik | 'she was weaving' |
| kit•ár? | 'salmon' |

The articulation of the affricated alveolars, $/ c /$ and / $/$ / , is that of an unreleased stop with homorganic sibilant release or prepalatal sibilant release produced with accompanying tongue tip retroflexion. The latter articulation tends to occur before consonants and high vowels, ${ }^{6}$ especially in allegro speech.

The affricated alveolo-palatals, /č/ and /č/, have an articulation consisting of an unreleased
alveolar stop with shibilant release.
Glottalization occurs simultaneously with the stop ariiculation and is normally lenis, although at times it can be quite fortis. With the nonaffricated stops, it is accompanied by weak aspiration. In allegro speech the glottalization is often not perceptible.

Before a consonant, plain stops have a phase release $\left[{ }^{+}\right]$, i.e. all other articulatory activity is discontinued before the release takes place and it is isolated and distinct. (Cf. I.152.2 for examples). Elsewhere the release of plain stops is lenis.
141.2. Spirants. The alveolar /s/ has a phonetic range of alveolar to pre-palatal. It is pre-palatal in the environments /\#__(i,u)/ and /(i,u)__\#/. In the latter environment there is a tendency toward tongue-tip retroflexion. 7

The velar /x/ is slightly fronted before front vowels and approaches the post-velar position before back rowels. It has both fortis and lenis articulation, the fortis articulation occurring most often before consonants. At times, its articulation is so
lenis that it is difficult to distinguish from $/ \mathrm{h} /$.
The glottal /h/ is partially voiced interrocalically. Elsewhere it is voiceless. When /h/ occurs in the environment /(\#, C)__(y,w), the sequence $/ \mathrm{h} /$ is heard as a voiceless high front vowel,
kwíkhyewik
'he heard it'
142. Sonorants. The sonorants include two nasals, a flap, and two semivowels. The nasals are /n/ an alveolar, and /m/a labial.

The alveolar $/ r /$ is a voiceless trill in the environment /__(C,\#) (when $C \neq / r /$ ); elsewhere it is a voiced flap,

| kírkir | 'tinware' |
| :--- | :--- |
| rárača•m•ic•ik | 'He's eating so he can go.' |
| kit-árri•? | 'Let it be the salmon.' |
| The semivowel /y/ is a palatal offglide in the |  | environment / $\mathrm{V}[\cdot] \ldots(\mathrm{C}, \#) /$. When /a/, and sometimes $/ \mathrm{u} /$, occurs in the environment /__[ $[\cdot](y,(\rho, h)[\cdot]) i) /$ it is accompanied by a palatal onglide as the tongue moves from the low central to high front position. This offglide is predictable, e.g.,

```
má•?i?
'you(sg)'
má•hi
'wait'
```

Elsewhere it is a non-syllabic high front vowel,
articulated with slight friction. (See I:I3I. 2
for description of the sequence /hy/).
The semivowel /w/ occurs as a labial offglide
[u], as voiceless labial un-glide [W], labializa- tion of the preceding consonantal segment $\left[{ }^{W}\right]$, a voiced labial on-glide [w], and an unprotruded (almost retracted) voiced bilabial spirant [z]. Distribution of the allophones of /w/ are given below.

| /w/: | Phone | Phonemic Environment |
| :---: | :---: | :---: |
| 1. | [z]~[w] | (i,e) __i |
| 2. | [a] | $\mathrm{V} \cdot \mathrm{]}$ ___ (C,\#) |
| 3. | [W] | $(\#, k, k) h$ |
| 4. | [ ${ }^{\text {w }}$ ] | \#C $\qquad$ $V$ (when $C \neq$ sonorant $\qquad$ x or. glottal) |
|  |  | $V\left(k, \frac{1}{k}[\cdot]\right.$ |
|  |  | $V(C \cdot, C C)$ |
| 5. | $\left[{ }^{W}\right] \sim[w]$ | $V \cdot C \quad V$ (when $C \neq / k, k /)$ |
| 6. | [w] | - - - |

Examples are,

1. 'íwiwí? 'body louse' ?é•čehé•wi 'ten'
2. xáwk̉ 'nutshell'
3. 'íkhwa?. 'hìpbone' hwítahé•思anta•? 'he
lost'
$\begin{array}{cccl}\text { 4. swíc•ik } & \text { 'I'm drinking' } & \text { Píkwikwa•ma } & \text { 'roof' } \\ \text { คík•wa } & \text { 'burrow' } & \text { kwápxwi•ka } & \text { 'he } \\ & & & \text { blacked } \\ & & & \\ & & & \\ & & & \end{array}$
wá-sakwxayxér 'little ground squirrel'
4. ?é•xwa - 'awl'
5. ${ }^{\text {wwi•wa•wahú }}$ 'everything' $\quad$ 'áti táywi 'river'
rwí•ha•pay 'let hin pile
it up.'
In the environment $\left./(u, w)(k, x, h, \rho)([\cdot],[h]) \ldots \quad{ }^{( }\right)$
$\left[{ }^{W}\right]$ and [W] may be present or absent. This variation
is eonsidered phonemically predictable. (In some
forms the labialization is always present),

| xúk•a? | $:\left[k \cdot{ }^{W}\right]$ | 'two' |
| :--- | :--- | :--- |
| čux•ár | $:\left[x \cdot{ }^{W}\right]$ | 'lizard(sp.)' |
| Páć•uk | $:\left[k^{W}\right] \sim[k]$ | 'younger sibling' |
| púruhi? | $:[h W] \sim[h]$ | 'juniper' |
| ma•pú•khay | $:\left[k^{W}\right] \sim[k]$ | 'dove' |
| mí•hú ké• tútik | $:\left[k^{W}\right] \sim[k]$ | 'that's what he did' |

(Cp. mí ké• tútik 'that's what he did')
150. Vowels. The Shasta vowels are front, high and low, and back, high and low. /i/ is fronthigh, /e/ front-low, /u/ back-high, /a/ back-low.

There are two patterns of vowel allophony: positional and assimilatory. The positional pattern has to do with the occurrence of vowels in light or heavy syllables. The assimilatory pattern has to do with the conditioning of the allophony according to preceding or following environment.
151. Positional allophony. The following chart shows the phonetic patterning in light and heavy syllables:

Allophony
Light Heavy

| Phoneme | Open |  | Closed |  |
| :---: | :---: | :---: | :---: | :---: |
| /i/ | [I] [i] |  | [ I] | [i] |
| /a/ | [ $\wedge$ ] [a] |  | [ 1 ] | [a] |
| /u/ | [U] | $\sim$ | [u] | [ U$] \sim[u]$ |
| /e/ |  | [ $\varepsilon$ ] |  | [ $\varepsilon$ ] |

In unstressed syllables or weakly stressed closed syllables; there is a tendency toward centralization. Taking the allophones [I],[J],[E],[A] as
representative of the most frequent station in light syllables, we find the following pattern:

152. Assimilatory Allophony. Shown below is the distribution of allophones before semi-vowels.

Phoneme
Environment

|  | [_[ $\cdot] \mathrm{y} /$ | /__[ ${ }^{\text {] }}$ W/ |
| :---: | :---: | :---: |
| /i/ | [i] | [i] |
| /e/ | [E] | [ $\varepsilon$ ] |
| /a/ | [a] | [a]~[\$] |
| /u/ | [u:] [ $u_{\text {] }}$ ] | [u] |

/a/ also has the quality [ ] in the environment / _ [ $[0](h, r) /$.

When the sequence $/ \mathrm{e} /$ occurs in the environment / ___ $p, x /$ or $/$ ___C[•] $(a, u) /,[\varepsilon]$ very often varies with [æ]. However, there are examples of the variation elsewhere, e.g. /?e•tískihénax/ 'morning star'.
160. Length. // is an anomalous phoneme in that duration is the only phonemic component that all of its allophones share. It represents both vocalic and consonantal length. There is contrast
between $V C, V \cdot C, V C \cdot$, and $V \cdot C \cdot$, for example,

| ?átak•a | 'elk' | kwá•tak | 'coyote' |
| ---: | :--- | :--- | :--- |
| kwát•ak | 'He came | $k i ́ \cdot ? \cdot a k$ | 'You(sg) look |
|  | hither' |  | hither' |

161. Vowel Length. All vowel sounds occur short. All vowel sounds except [I] and [ $\Lambda$ ] occur long. (For statement of vowel allophony see I.140-42). The duration of long vowels is variable and seems to be determined by occurrence in sequences of open and closed syllables. It has not been possible to formulate precise statements about the interaction between syllable sequences, $\quad$ owel length and stress. (See I:llo-120 and Introduction, p. 5 ). Examples of contrasts between long and short vowels are cited below.



The situation with the affricated stops is complex. /c./ is heard as a sequence of unreleased alveolar stop plus a long alveolar or pre-palatal retroflexed sibilant [ $\left.t^{7} s^{\bullet}\right]$ or [ $\left.t^{7} s^{\bullet}\right]$. (There are no examples of /c./.) /č•/ is a long alveolar stop with shibilant release [ $\mathrm{t} \cdot{ }^{\mathrm{s}}$ ]. When / $\mathrm{c} \cdot /$ occurs, the glottalization is simultaneous with the stop element. 162.2 Contrast between $C$. and CC. The nonaffricated stops and the alveolar and velar spirants have contrasts between long consonant and a sequence of two like consonants. 8 For all other consonants, except $/ \mathrm{r}, \mathrm{y}, \mathrm{w} /$, there is only the contrast between $C$ and C. ${ }^{9}$

The following set of forms will serve to demonstrate the problem concerning the stops,

$$
\begin{array}{ll}
\text { 1. ká }[t \cdot] a y a, & \text { 'you(sg) chase him!' } \\
\text { 2. wá }[t \cdot] a . & \text { 'a willow' } \\
\text { 3. 'íčni[ }\left[t^{+} t\right] \text { ák } & \text { 'on the belly' } \\
\text { 4. nampá[ } \mathrm{t} \text { 't]úk } & \text { 'on the acorn' }
\end{array}
$$

In 2 and 3 we find contrast between a long consonant and a sequence of two like consonants, the first with phase release. In 1 and 4 there is contrast between a long consonant and a sequence of like consonants whose first member is weakly
aspirated. Although, in the examples above, the released consonants precede syntactic boundaries, the rule is that in any sequence of stop plus sonsonant, the stop is released,

| Pápsu | 'a pipe' | púkpuk | 'a salamander' |
| :--- | :--- | :--- | :--- |
| ?atká• | 'wild plum' | wítwi•t | 'Wilson snipe' |
| Paxták?am•a• 'a boiling | makmú? | 'bumblebee' |  |
|  | basket' |  |  |

Piti•wákha•? 'Horse Creek'
(In the last two examples $/ \bar{k} /$ and $/ k /$ precede syntactic boundaries). A sequence of released consonant plus consonant is written phonemically as CC; therefore 3 and 4 above are represented as /?íčnittúk/ and /nampáttúk/.

For the spirants /s/ and /x/ there is also a contrast between $C \cdot$ and $C C$; however, unlike the stop situation, the CC is only in positions that coincide with syntactic boundaries. In slow speech, there is variation between long spirant and a sequence of two spirants, the two-member sequence being signaled by rearticulation,

$$
\begin{aligned}
& \text { Pam•á[x]í•yáx } \sim \text { ?am•á[x,x]i•yáx 'close by' } \\
& \text { ká[s•]á• tat•á? } \sim \text { ká[s,s]á• tat•à? 'I'm going } \\
& \text { to go: }
\end{aligned}
$$

In forms like /yé•x•e/ 'we are sick' and /rás•a/ 'rope' such a variation does not occur; here, we find only [C•].

Any sequence where the variation [C•] [CC]
is possible is represented by /CC/; therefore, the examples above can be rewritten as, /Pam•áxxí•yáx/ and /kás sá• tat•áp/.
170. Anomalous Phonemes and Clusters. There are two phonemes and a sequence of phonemes that are obviously anomalous. These anomalies occur in forms borrowed from English. Other English borrowings fit intio the Shasta system; e.g. /číkin/ 'chicken', /hé•kiču/ 'handkerchief'.
170.1 /r/ There is an r-sound which is phonetically equivalent to English post-vocalic r. It is symbolized as /r/ and occurs in /pérs/ 'pear' and /pérshi•hú?/ 'a pear tree'.
170.2 1. There is an anomalous tonal accent which occurs in one form, /ti•/ 'tea'. Phonetically it is characterized by a falling glide accompanied by extra vowel length.
170.3 Lia/. Vowel clusters do not occur in Shasta. There are two forms /rákapía/ 'lager beer'
and /pía/ 'beer', which contain the cluster/ia/. This cluster is phonetically distinct from a sequence /iva/ in that no $y$-sound occurs between /i/ and /a/.
180. Distribution of Phonemes. The syllable canon is $\phi_{1} \bar{V} \phi_{2}$ or $\phi_{1} V \phi_{2}$ (where $\phi_{I}=(C[C][L])$, $(C \cdot[L]) ; V=V[\cdot] ; \phi_{2}=([L][c]),(k w) .^{*}$

As can be seen from the canon, every syllable must begin with a consonant, syllable-final consonants are optional, and there are no vowel clusters (see I.171.3). Other restrictions are as follows, If $\phi_{1}=C \cdot[I], \phi_{1}$ cannot follow $\#$ or $\phi_{2}$ (when $\left.\phi_{2}=c,(k w)\right)$

If $\not \varnothing_{1}=C$ (when $\left.C=w\right), \notin \perp$ cannot precede L
181. Vowel and Tonal Accent Distributions. There are no restrictions on vowel or tonal accent distributions. It is the case, however, that Shasta utterances, whether monosyllabic or polysyllabic,

[^0]do not occur without at least one high pitch. ** 182. Consonant Distributions. All consonants except /c/ and /c/ occur after pause. /h/ does not occur in syllable-final position and $/ \mathrm{F} /$ is extremely rare in that position, except before pause-juncture. /p/ and $/ \frac{2}{c} /$ are also rare in syllable-final position. ${ }^{10}$
182.1 Initial Consonants and Consonant Clusters. Given below are examples of word-initial consonants and consonant clusters. Word-initial clusters consist of Cw, C(t,k,r)[w]. Most of these clusters represent the verbal prefixes. The clusters with /w/ are the result of operation of morphophonological rules (see I.200.) at either the synchronic or diachronic levels.

| /t/ |  | /t/ |  |
| :---: | :---: | :---: | :---: |
| tí• cáw | 'hornet' | tikwá•yax | 'bulb(sp.)' |
| té•cni•k | 'he sang' | te•cní | 'He's going to |
|  |  |  | sing' |
| táka. | 'who' | tárak | 'dirt' |

Except for /pe•x/ 'and expression of disgust'. Here the low pitch is accompanied by extra vowel length and extras heavy stress.

| tú・のi <br> twi ${ }^{\text {púkya }}$ | ＇when＇ <br> ＇Are you（sg） <br> bathing？＇ | $\begin{aligned} & t_{u ́} \cdot k \cdot u \\ & t_{w i} \cdot h a ́ \cdot p a y \end{aligned}$ | ＇pestle＇ <br> ＇He＇s going to pile it |
| :---: | :---: | :---: | :---: |
| ／č／ |  | ／ct | up' |
| čírik | ＇a colt＇ | cík | ＇mud＇ |
| čé•čutứk | ＇hot springs＇ （spec） | cé？${ }^{\text {co？}}$ | ＇one＇ |
| čási•si？ | ＇gravel＇ | čák•i？ | ＇redwinged blackbird＇ |
| čum•ír？ | ＇a board＇ | ¢̛̣́t•a？ | ＇gray squirrel＇ |
| čwín•a． | ＇It made a noise＇ | čwér•i？ | ＇California jay＇ |
| ／s／ |  | ／n／ |  |
| sí•rak | ＇crayfish ${ }^{\text {P }}$ | nis•áwk | ＇You（sg） stay here！＇ |
| sé•wa？ | ＇I see it＇ | nér•akahú | ＇You（pl）keep on going：＇ |
| sámtu？ | ＇a corpse＇ | nah ${ }^{\text {ú }}$ | ＇a cedar＇ |
| súk－ ax | ＇a boy＇ | núk•atay | ＇a deer trail＇ |
| skára•ka？ | ＇You（sg）are lying down＇ | nwi čkúk | ＇You（sg）keep on eating＇ |
| skwé•cni•k | $\begin{aligned} & \text { 'You(sg) are } \\ & \text { singing' } \end{aligned}$ |  |  |



| pé ${ }^{\text {wa }}$ | ＇I saw it＇ | ke•cní＊？ | ＇You（sg）sing：＇ |
| :---: | :---: | :---: | :---: |
| pútik | ＇I did it＇ | káris $=$ áp | ＇You（sg）be |
|  |  |  | good：＇ |
| pát•i•ma | ＇I went．＇ | kurá ${ }^{\text {a }}$ | ＇where＇ |
|  |  | kwác | ＇he＇ |
| ／k／ |  | 12 |  |
| $\underline{k} \underline{l}^{\prime} \cdot \mathrm{u}$ | ＇yellowjacket | PÍpta | ＇powderea |
|  |  |  | snow ${ }^{\prime}$ |
| ke ${ }^{\text {a }}$ pxí ${ }^{\text {－k }}$ | ＇the round | pépu＊mir | ＇stirrup＇ |
|  | dance＇ |  |  |
| káw | ＇snow＇ | Tápka | ＇hand＇ |
| kuré $\operatorname{tat}$ | ＇bird（sp）＇ | Púpsi | ＇flesh＇ |
| kwá•tak | ＇coyote＇ | Pwis•ík | ＇he＇s talking＇ |
| ／h／ |  | ／In／ |  |
| hí•koa． | ＇evil water spirit＇ | míri | ＇snowshoe＇ |
| hé•kiču | ＇handkerchief＇ | má•• | ＇you（sg）＇ |
| há ${ }^{\text {hi }}$ | ＇oak bark＇ | mú•kas | ＇eagle＇s down＇ |
| hwítahá•wanta．？＇He lost＇ |  |  |  |
| xátar |  | ／w／ |  |
|  | ＇moss＇ | wí•twi•t | ＇Wilson snipe＇ |
| xú•tir | ＇sweathouse | we•psír | ＇father－in－law＇ |
|  | center post＇ | wácna？ | ＇storage hole＇ |

### 182.2 Final Consonants and Consonant Clusters.

 $/ \rho /$ is the most frequent word-final consonant.Word-final consonant clusters consist of $/(y, w) C /$, or $/ \mathrm{kw} /$. As is the case with word-initial clusters, these are the output of the optional morphophonological rules.

Examples of the occurrence of final consonants and clusters follow. (/kw/ occurs in only three forms, all of which are cited as examples).

\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{2}{|r|}{Acute Final} \& \multicolumn{2}{|r|}{Non-Acute Final} <br>
\hline  \& 'ant' \& típti ${ }^{\text {P }}$ \& 'sword fern' <br>
\hline ná-t \& 'mushroom(sp) \& ceík \& 'mud' <br>
\hline káka $\cdot \mathrm{c}$ \& - You(sg) stand up!' \& kis•áyk \& 'You(sg) sit down!' <br>
\hline kwác \& 'he' \& Pin•áwk \& 'there' <br>
\hline `áyc \& 'coyote country' \& wá•sakw* \& 'young <br>

\hline \& \& \& | ground |
| :--- |
| squirrel' | <br>


\hline mí ${ }^{\text {ctic }}$ \& 'enough' \& | * Cw has |
| :--- |
| form; (cf | \& wá•suk for this fn. 7). <br>

\hline 2itoír ${ }_{\text {c }}$ \& 'willow(sp)' \& kim•ákw \& 'You(sg) tell some news' <br>
\hline čá•s \& 'salmon trout' \&  \& ' yellow- <br>
\hline
\end{tabular}

| pá•stin | ＇white man＇ | xáw＇̇ | ＇nutshell＇ |
| :---: | :---: | :---: | :---: |
| xá $\cdot r$ | ＇soaproot＇ | kit•ár？ | ＇salmon＇ |
| Pič•i•payr | ＇cradle basket＇ | ta•wáy？ | ＇beaver＇ |
| ？ičáy | ＇bitter＇ | Paráw？ | ＇deer＇ |
|  |  | ª́mpax | ＇father＇s |
|  |  |  | sister＇ |
|  |  | ？epiké•⿴⿱冂一⿰丨丨丁口 | ＇Happy Camp＇ |
|  |  | ？áw | ＇mouth＇ |

182．3 Medial Two－consonant Clusters．The chart below shows the medial two－member clusters that are found in the corpus．While non－occurrence of some clusters may be fortuitous，note should be made of the fact that there is no／yy／cluster．Also，the only examples of $C \cdot C$ are forms containing a velar stop or／h／，e．g．／kwa•h•yú／＇trail crossing＇； ／Pík•wa／＇a burrow＇．

## SECOND MEMBER


182.4 Other Medial Consonant Clusters. Examples of medial three consonant clusters are given below.


CHAPTER I:100
(Footnotes)

1. There are no examples in the corpus of monosyllables ending in a vowel, not followed by /// and / or a consonant.
2. All monosyllabic words in the corpus, except two occur with high pitch. (See I.170. for description of the exceptions.)
3. In the following sequences enclosed by brackets, only the tonal features are phonetic; the segmentals are phonemic. To an English ear, the phonemic pitch on a heavy syllable seems to be phonetically higher than the phonemic pitch on a light syllable; therefore, the impression is that low pitch on a CV: is higher than it is on CV, and in a sequence like /CV•Ot/ one has the impression of two high pitched syllables.
4. I use phonemic component as defined by William Shipley: "...components which occur in all the speech sounds of any allophonic set..."; cf. A Syłlabus for Phonological Analysis, University of California, Berkeley, 1965.
5. There is one item in the corpus that has a
['n] before pause, /'anun'/ 'wild sunflower'. This form is from one of the divergent dialects, though I was not able to ascertain which one.
6. In these environments it is difficult to distinguish/c/ or /c/ and/č/ or /č/. In some forms there is definitely free variation, e.g. /xácki/ /xáčki/ 'three'.
7. There are two forms in which there is a prepalatal retroflexea articulation before /a/; /sastí•ka?/ 'the chief of the Shasta Valley people' and /sákw/ 'a bulb(sp.)'. Both forms, SS would also pronounce with the alveolar articulation. For /sákw/ CW has /súk/.
8. The effect on the ear that the non-affricated stops have is reminiscent of what R-M.S. Heffner calls 'double' consonants; i.e. "a...stop... which serves both to arrest one syllable and release the next...". (General Phonetics, University of Wisconsin Press, 1960, p.176).
9. There are no examples of like affricate clusters; this may well be fortuitous since there are examples of /cč/ clusters. /h/does not occur in syllable final position; however /h•/ does. The occurrence
of / / / before another consonant is rare and in one case the cluster / $\quad \mathrm{C} /$ is in free variation with $/ C \cdot /$, a variation which may be indicative of the dialect mixture.
10. There are also no examples of $/ \mathrm{p} /$ before pause. (The only /p/ in word final position is in /kás•ap/ 'big bend in the Klamath river'; SS said this form is ka•mátwa•.) The rarity of /'p/ before another consonant may be due to mishearing on my part.
11. Morphophonology. Shasta morphophonological rules consist of two subsets: (a) rules that account for systematic alternations occurring in unique environments or in several environments that have no common feature (morpholexical rules), and (b) rules that specify generalized systematic phonological alternations (morphophonemic rules).

An inventory of the lexemes to which morpholexical statements apply is given in I.250. The morpholexical rules are found in Chapter II, accompanying the class-member statements. In the application of morphophonological rules, the morpholexical statements take precedence over the morphophonemic statements.

Assimilation, loss, alternations involving quantity, and tonal alternations are the salient types of phonological modification in Shasta. ${ }^{1}$ These automatic alternations, together with other less easily classified changes, are either optional or obligatory. Consonant syncope and the concomitant vowel contractions are optional changes. All other alternations are obligatory. Morphophonemic rules, then, fall into two sets, ebligatory and optional, with the obligatory set having priority
of application on the morphophonological string.
210. Symbolization. Below is a description of the symbols used in the morphophonology, the syntactic description and the texts.
211. Orthographic symbols. Space in the morphophonological string marks boundaries between lexemes that are constituents of themes, i.e. affixes and radicals; it signals that the morpholexical rule inventory must be checked before applying the morphophonemic rules.

Boundaries between words, i.e. lexemic constructions that are constituents of clauses, are marked by space both in the syntactic description and in the texts, and by "\#" in the morphophonological rules (and, when necessary, in the examples accompanying the rules).

Boundaries between.clauses are marked by " . " in the syntactic description and in the texts. 212. Morphophonological symbols. In addition to the morphophonological symbols charted below, and the cover symbols "C" and "V", "T" and "P" occur in rules. "T" is for any apical consonant, "P" for any nonapical consonant. Both symbols

```
occur in a statement concerning vowel assimilation.
Unless otherwise specified, "V" stands for V or V`,
"C" stands for C or C•.
A chart of the morphophonological symbols follows. Nonalternating symbols are isomorphic with phonemic symbols. Alternating symbols represent alternations between phonemes or alternations between phonemes and their absence.
```



Length N

| Vowels |  | H |
| :---: | :---: | :---: |
|  | i | a u |
|  | i | ə |
|  | $e$ | $\nabla^{*}$ |
| Tones | $\checkmark$ | , |

unmarked

Junctures

```
**<v> is an unknown vowel that is a tone carrier (cf. I. \(232.2,236\) ).
```


## 220. Predictability of phonological alternations.

 The paucity of information about the details of dialect (or even language) coalescence present in the data precludes the formulation of unequivocal statements about the particulars of morphophonological modification.Whenever possible, phonological variations are described in terms of morphophonological rules, even though there are counterexamples. Examples counter to particular morphophonemic or morpholexical rules are discussed in the grammar and/or in the dictionary.

Just how alternations are predictable is sometimes problematical. Some modifications could be described as either morphophonemic or morpholexical, others as morpholexical or lexemic. The following three sets of forms illustrate the proplem. (In these sets the tonal alternations are ignored.)

1. <iNbú> 'reciprocal'
a. /kwá•takwimpá•?/ 'those two are quarrelling'
b. /kwá•takwi•wé•ke?/ 'All of them are quarrelling'

## c. /ká•takyú•?/ 'You(two)quarrel:'

In the above forms, the phonemic sequences /imp/, /iw/, and /yú•/ could be considered morpholexically predictable. Taking this approach, however, would ignore patterning which parallels patterns occurring elsewhere; consequently, the phonemic shape of <iNbú> is.considered predictable by morphophonemic rules;
1.a,b. <b>: /p/, /w/. There are counterexamples to this alternetion: cp. /cérehep•a・ワ/ 'he was asked to go'*, /kwérehepe•ki•ka?/ 'he went to ask them to go', /kwérehewe•ki•ka?/ 'you(pI) were asked to go'.
l.a. <N>: / $/ \mathrm{m} / \mathrm{/} /$. The predictability of this alternation is unique to the distribution of <iNbú>; however, the alternation is parallel to <N>: /m/ ~ / / /, /n/ ~ / / (cf. $2 . b, c, d$, and 3.a,b,d,e below).
l.c. <iNbú>: /yru•/. This alternation is unique to this lexeme, but the pattern of contraction is parallel to patterns of contraction accounted for by optional morphophonemic rules; i.e. <iNbú>: $*_{i} \cdot w \underline{i}: / y r^{\circ} / /$. It is assumed here that the speakers *
This is not a counterexample; it is included to provide contrast within the set; length is accounted for by another morphophonemic rule.
always make use of the optional rule.
2. <a*hàNpi> 'down on'
a. /kičá•ha•?/ IYou(sg) put it down:'
b. /kwíča•hámpik/ 'he put it down'
.. c. /kwíča•hámpe•ke?/'they put it down' d. /kwíča•há•piruk/ 'he put it down' Here the phonemic sequence /a•ha// could be taken as morphophonemically predictable (cf. /'tústehé•?/ 'he's going to dance', /kústehempik/ 'he danced'); however, this would necessitate a proliferation of statements to account for a series of alternations limited to the shapes of two lexemes, and there would have to be an addition to the morphophonological symbol inventory to account for forms such as /ti•pti•p/ 'sword fern', /'iva•pi•?/ 'Karok', /Pis•ámpi?/ 'village name'. As there is no advantage in a morphophonemic statement in this situation, the phonemic shape /a•ha•/ for <a•hàNpi> is considered morpholexically predictable.

The phonemic sequences, $/ a \cdot h a m p /$ and $/ a \cdot h a \cdot p /$ (cf. 2.b,c,d) are considered morphophonemically predictable; i.e. <N>: /m/ ~/ / (note that this
alternation is parallel to the alternation in 3.a,b,d,e).
3. <aNti>, <a・のi> 'transitive marker'
a. /kwá•m•uká•ta・ワ/ ,
/kwá•m•uká•ya•?/
b. /kwáhus•áyanta•?/ 'I talked to him'
c. /kwáhus•aya•yik/ 'He talked to him'
d. /kwáhus•ayanti•ka?/ the talked to me/ you(sg)'
e. /stáhus•á•tay/ 'talk to someone (pot.)'
In the above set, the phonemic sequences $/ a \cdot t /$, /ant/, /a•y/ and/ay/ represent the problem under consideration. /a•t/ and /ant/ seem to be freely varying ( $3 . a, b$ ). /a•y/ and /ay/ seem to be freely varying ( $3 . a, b, c, e$ ). Forms like /kwíti•ma/
 chasing them' support the notion that /a•t/ and /ant/ can be accounted for by the morphophonemic rule that accounts for the alternation $/ \mathrm{m} / \sim / \%$ (cf. 2 above). /a•y/ and /ay/ can be considered part of the contraction patterns mentioned above, Therefore, by means of morphophonemic rules (including the rule for vowel apocgpe, we can
establish two morphophonological shapes <aNti> and <a•• $\boldsymbol{p}_{i}>$.

The question now is whether these forms are morpholexical alternants or different lexemes. They are in free variation (3.a) and also are partially in complementary distribution (3.b,d vs. 3.c,e). Their syntactic patterning parallels that of other lexemes, cp. <ehèmpi> 'iterative' in /kústehémpik/ 'a dance', /kústehémpehémpik/ 'a dance hall'.

It seems best to assume, as has been done, that <aNti> and <a•?i> are different lexemes, i.e. dialectal variants, with equivalent meanings and syntactic distributions and that $S S$ and CW use these forms interchangeably in some syntactic environments, but not in others.

A number of forms in the data presumably are dialectal variants. Such variant representations of radicals are entered in the dictionary. Variant representations of affixes are discussed in appropriate places in the grammar and also are entered in the dietionary.
230. Obligatory morphophonemic rules. In contrast to the optional rules, which describe
phonological modifications that can occur anywhere between word junctures, the obligatory rules, which are given below, describe adaptations that occur at lexeme boundaries.
231. Junctures. There are three morphophonological junctures: glottalic, internal, and expressive.
231.1 Glottalic juncture. The statements about glottalic juncture account for the fact that $/ 2 /$ has a zero representate in some morphophonological environments;

$$
\begin{aligned}
\phi: \quad & \quad / \# \quad[-] V \\
& \dot{\sim} \sim \phi /(r, v, w, V) .
\end{aligned}
$$

$\qquad$ \#

For example,
<apsu>: /甲ápsu/ 'a pipe; <-ečxámpi>: /’ečxámpi/ 'clear, bright'; <-ixíp•i>: /rixíp•i/ 'slippery';
<kwìvim•à $\mathrm{Na} \bullet>: / \mathrm{kwim} \bullet$ á•?/ ~/kwim*á•/ 'I saw it'; <kit•ár>: /kit•ár?/ ~/kit•ár/ 'summer salmon';
<awácay>:/Pawácay?/ ~/’awácay/ 'creek';
<t ička xáw>:/tíčkaxáw?/~/tíčkaxáw/ 'he's going to kill it'.

Cp. forms like <xan•ár>: /xan•ór/ 'leaf';
there are no examples in the data of such forms
occurring with glottalic juncture. Since the morphophonological notation does not distinguish between forms with glottalic juncture and forms without it (there being no evidence that such a distinction is necessary), if a phonemic shape of a lexeme provides evidence for the juncture, that shape will be cited in the dictionary under the appropriate heading.
231.2. Hyphen juncture. This juncture, <->, represents a morphophonological environment in which vowel and consonant loss takes place; its phonemic representation is always zero. See 232.1,2 for examples.
231.3. Expressive juncture. A phonological statement for this juncture, <!>, has not been completely worked out. <!> marks an intonation contour that occurs with clauses; it is manifested by a rearrangement of tones; e.g., <\#kurá•\#sá•\#ké•\#wé•\#t̀̀ uti\#>:/kurá• sá• ké• wé• túti?/ 'What shall I do?'
<\#kurá•\#sá•\#ké•\#wé•\#tiv uti\#!\#>:/kúra• sa•ke• we ${ }^{\text {túti }} /{ }^{\prime}$ What in the world shall I do?' <\#má•\#!\#má•\#in•á\#sk uti a・フi\#>: /ma: má•?in•á? skútay?/ 'No: Don't do that(to someone)!'
232. Loss. Vowel and consonant loss occur; lowever, loss is particularly characteristic of the vowel patterning, since the sequence VV is not permissible phonemically.
232.1. Consonant Loss. The rules for loss of consonants are as follows, Morphophonological

Environment
$\qquad$ : Phoneme /

| 1. | W | $\emptyset$ | $\ldots[v](m, u ; H,-w),-r$ |
| :---: | :---: | :---: | :---: |
| 2. | W | $\phi \sim w$ | \#c[c]__[v]V |
|  |  | $\varnothing \sim$. | $s, c^{\ldots} V$ |
|  |  | $\emptyset$ | - - - |
| 3. | $r$ | $\varnothing$ | $\underline{-r}$ |
| 4. | y | $\varnothing$ | $\underline{[v]}(\mathrm{y},-\mathrm{aHP} \mathrm{i})$ |
| 5. | h | $\varphi$ | $\ldots[v] C$ |
| 6. | $\frac{h}{\square}$ | $\varnothing$ | C |
|  |  | h | - |

Examples are given below,

1. <kwv̀ ikhyawv̀ me•>: /kwíkhyamé•?/ 'I heard it'
<kwv̀ uṭis•í Na•> : /kútis•a•?/ 'I said'
<t ikhyawv̀ Hrakv̀ -ik>: /tíkhya•rakik/ 'he
heard him behind him'
<kw enew -wak a•>: /kwé•waka•?/ 'he was watching (something) in the water'
<kw -wi•hàp a•?i -ik>:/kwíha•payik/ 'he
made a pile'
<t im•akw -rakmak•i e>:/tím•akrakmak•e?/
'he spread the news'
2. <skw ic•i -ik>: /skwíc•ik/ ~/skíc•ik/
'you(sg) are drinking'
<nwò ic•ì e•ki e>:/nwic•é•ke?/ ~/nic•é•ke?/
'You(pl) keep drinking!'
<acwīt>: /Pacwit/ ~ /Pac•it/ 'mother's mother'
<kwv̀ irí asw Na•>:/kwíraswa•?/ ~/kwíras•a•?/
'I quit'
<kv̀ awv̀ aswp: /kawá•s/ 'You(sg) take it off:'
<sw -wi•hà•p a•?i -ik>: /swíha•payik/ 'I'm
making a pile'
3. <t iču -ikarkár -raknak•i e•ki -iru a•>: /tíčukarkárakmak•e•kira•?/ 'they were lifting a light load here and there'
4. <s i•hayv̀ -áH?i>: /si•há?i/ 'if I/we dream'
<makáy ya\# t eoru kar -ik>:/makáya téorukarik/
'Did you(sg) ask him?'

5．＜y antu•hì me•＞：／yántu•me•？／＇we mentioned it＇

6．＜ap•ak hí＞：／Páp•akí／＇mother＇s brother （ref．）＇

232．2 Vowel loss．The rules for loss of vowels are as follows，

Morphophonological Environment
$\qquad$ ：Phoneme
1.
2.

## v

щ．
$\varnothing$
$\qquad$
w $\qquad$
u
3．$V$（when $V \neq u$ $\varnothing$
$\varnothing$ $\qquad$
As can be seen in Rule labove，there is no phonemic representation for＜$v>$ ．The evidence for it consists of contrasting tonal patterns（cf． I． 236 for description of tonal alternations）；cp． the following， ＜kwì ap•主 i•ma＞：／kwap•í•ma／＇I threw it thither＇ ＜kw ap•主i•ma＞：／kwáp•i•ma／＇he＇s throwing it thither；you（sge ） threw it thither＇
<kw a•m?v̀ a・ワi -ik>: /kwá•m?a•?ik/ 'he's fishing with a hook and line'
<kw a•m•ukv́ a•?i -ik>: /kwá•m•uká•?ik/ 'he's counting'
(cp. <kw am•a ka•hú -ik>: /kwám•aka•húk/ 'he's up on a high place watching')
Examples of Rule 2 are given below, <Ǩ̀ ičkụ̆ uhi Hma>:/Kwíčkuhi•ma/ 'he ate after the ceremony' (cp. Kw'e•cnǐ uhi Hma>: /kwe•cnuhi•ma/ 'he sang for the burial service')
<kw ičkụ̀ a•ki e>:/kwíčkwa•ke?/ 'they are eating' <kv̀ ičkù>:/kičkú?/ 'You(sg) eat:' (cp. <kv̀ i•pu>: $/ k i ́ \cdot p u ? /: ~ ' Y o u(s g) ~ b a t h e: ' ~$

Rule 3 accounts for the patterns of apocope and apheresis that occur in Shasta. Apheresis is mariked by <->, the inyphen juncture (cf. 231.2). There are a number of exceptions to the apheresis rule, e.g. <kwv̀ umpí -ehé•wí i•ma>: /kúmpihé•wi•ma/ ~/kúmpehéwi•ma/ 'I swam downsiream', <t iṣ•i• aw -ik>: /tís•awik/ ~/tís•awk/ 'he stayed a short while'. It has not been possible to determine a

# predictable or partially predictable pattern for these exceptions; therefore, they are presumed to be representative of lexemic variants. 

233. Nonloss consonant alternations. The predictable alternations are limited to changes involving the sonorants $/ \mathrm{r} / \mathrm{h} / \mathrm{n} /$ and $/ \mathrm{w} /$. Other consonant alternations are sporadic and are considered indicative of lexemic variants.
233.1. Lexemic variants. The unpredictable changes include alternations between glottalized and unglottalized stops, the affricated stops, the apical and velar stops, the apical sonorants, the apical and labial sonorants, labials and glottals, the velar and glottal spirants, and the glottals. Examples follow.
<at•i> ~ <at•i> as in /rát•aykam•ak/ 'he's hasing me'; /rát-ayka?/ 'he's chasing him' (see also, <ap•a> as in /ráp•aka?/ 'he's carrying an armful' and <ap•i> as in /ráp•a?/ 'let him throw a round object!).
<xacki> ~ <xački> 'three'
<tu•çá> ~ <ku•čá> 'what'; <tura•>~ <kura•>
'where'.
<tuk•urú•ni> ~ <tuk•unú•ni> 'buckskin';
<irike•xá•> ~ <inike•xá•> 'old lady'.
<tuntùn•u> ~ <tamtam> as in /kwán•ituntun•uruk/
~ /kwán•itamtamik/ 'he's drumming' (cp. Atsugewi verb root tom 'to drum'). ${ }^{2}$ <iHwi> ~ <iHhi> 'animal hair' (cf. CW <i•?i> 'fur').
<a•pu> ~ <a•hu> 'older brother'

'he's standing up in something'
<nah•ú> ~ <in•axa•> 'cedar'
<hay> ~ <?ay> as in /'wat•íwakhaywa•?/ ~ /'wat'íwak?aywa•?/ 'he kept on going around the circle'.
233.2. Sonorant alternations. The sonorant alternations are predictable in only one environment, namely before the paucal perfective marker <Na•>. There is a tendency to extend the alternations into other environments; the conditioning factors determining this extension are unknown.
<r> represents the following alternation:
$r: n / \_\quad[u] N a \cdot /$, for example,
<y e•wi e•ki -iru Na•>: /yé•we•kin•a•?/ 'we are swimming around (perf.)'; (cp. <y e•wi e•ki -iru a•>: /yé•we•kira•/ fwe are swimming around (dur.)'
<ネwNे eru ka•r Na•>:/kwéruka•n•a••/ II asked
about it (perf.)'.
The following counterexamples have been taken to be evidence of dialect mixture, ${ }^{3}$
(SS) /ráwaswin•u/ 'let him take away a container having objects distributed in it,
(CW) /kawás•ir/ ~ /kawás•in•u/ 'you(sg)
take away the container having objects distributed in it'
(SS)/kwáwaswe•kira・ッ/ ~/kwáwaswe•kin•a•?/
'he took the container . . . away from them'
It is assumed that there are two representations of the distributive marker, <-iru> and <in•u>.
<b> represents the following alternation:
b: p/ $\qquad$ [u]Na.
w/_ _ _
Examples are: <č erü eheb Na•>: /čérehep•a・ロ/ 'he was asked to go'. <kw am•ar iNbứ Na•>: /kwám•arimpá•?/ 'those two are fighting'.
<t eru eheb -ik>: /térehewik/ 'he asked him to go'. <kw am•ar iNbú e•ki e>:/kwám•ari•wéke?/ 'they are all fighting'.

Again, there are counterexamples:
cp. (SS) /kwérehepe•ki•ka?/ 'he went to ash them to go'; /kwérehewe•ki•ka?/ 'you(pl) were asked to go'; /kwérehepi•ka?/ 'I was asked to go'.

In the first two examples, /p/ and /w/ are in contrasting environments; in the third example we find /p/ instead of the expected /w/. It is concluded from this evidence that there are two lexemes <eheb> and <ehep> with the same meaning and syntactic distribution. This conclusion is supported by the forms /yéhiyawa•?/ (CW) ~ /yéhiyap•a•?/ (SS,CW) 'we are getting dressed' for which it is necessary to set up two radical lexemes <ehiyaw> and <ehiyab>.
<h> represents the following alternation: $h: h \sim w / u \_V$; for example, <kw e•cnì uhi Hma>: /kwé•cnuhi•ma/ ~ /kwé•cnuwi•ma/ 'he was singing for a burial service'; <kì epxù har>: /kepxúhar/ ~ /kepxúwar/ 'You(sg) blow!'.
234. Alternations with length. There are two alternations with length, sporadic and predictable.
234.1. Lexemic variants. There are unpredictable alternations between short vowels and long vowels,
single consonants and consonants plus length and length and consonants. There are also alternations between $/ ? /$ and $/ \%$. Examples follow. /čúpčin•a・ワ/ 'he got elbowed/shouldered'. <Na•> ~ <Na> as in /kupčíp•a?/~/kupcí•a•?/
'I elbowed/shouldered him'.
<ì•ču> ~<iču> as in /čí•ču•ta•ๆ/~/ěíču•ta•?/
'he gave it to him'.
<ikì> ~ <ik•i> ~ <i•ki> as in /kíka•'éik/ 'the way the Shasta use their language', /swíki•wáyayik/ 'I'm teaching her to talk/sing', /kwík•i•waykák/ 'it sounds like (a dog)'.
<a•m?v> ~ <a•m•v> as in /kwá•m?a•kayra•?/~
$/ k w a ́ \cdot m \cdot a \cdot k a y r a \cdot 9 /$ 'they are fishing with hook and line'.
<u•ma> (SS) ~ <upma> (CW) as in /kú•mapnuk•uk/
~/kúpmapnuk•uk/ 'it sticks'
<eher> ~ <ehe> ~ <ehe> as in /kwéhern•ucwik/
(CW) ~/kwéhe•n•ucwik/(SS) 'he jumped up',
/kwéhečuk•u•ma/ 'he jumped from here to there'.
234.2. Predictable alternations. It is possible to predict an alternation between vowel
plus length and vowel plus nasal（＜N＞）． 4 ．There is also a predictable alternation between $V \cdot$ and $C$ ． （＜H＞）．
＜N $>$ represents the following alternations； Morphophonological

## Representation



2．$\quad n \sim$ ．
3．m
Environment
$4 . \quad$－

$\ldots{ }^{t}$
＿b［u］Na．
（ $\mathrm{Vp}, \mathrm{Vb}, \mathrm{r}, \mathrm{h}$ ）［ V$] \ldots ; \ldots \mathrm{b}[\mathrm{u}]$
（when $b[u]$ is not followed by $\mathrm{Na} \cdot$ ．）
5.
$\varnothing$
Examples are，
1．＜kw ip•i iru ti eheNpi enki e＞：kwíp•irutehempe•ke？／
＇They are tying up a bunch（of horses）＇
＜kw̌̀ipi ir ti eheNpi icu $\mathrm{Na} \cdot>$ ：
／kwíp•irutéhe•pin•a•？／＇I tied up a bunch of things＇
2．＜kwv̀ üw－aNti Na＞：／kúwanta•？／＇I bought it＇ ＜č i•ču－aNti Na•＞：／čí•ču•ta・ロ／＇He gave
it to him＇
3．＜sw anu wak•＜narrow＞•i iNbú Na•＞：／swáhuwak•＜narrow＞•impá•？／
＇I＇m opening my mouth＇
4．＜č er ehep $\mathrm{Na} \cdot>$ ：／čèrehep•a•？／＇He was asked to go＇．
<y ari hu•p Na•>: /yárihu•p•a•?/ 'we felt sorry for him'
<kw am•àr iNbú e•ki e>:/kwám•ari•wé•ke?/
'they are all fighting'
<y u•mata•há Na•>: /yú•mata•h•á•?/ 'we got mad'
<č am•àr Na•>: /čám•an•a•?/ 'he got beaten'
<y usti ehèNpi•cw Na•>: /yústehempicwa•?/
'we got through dancing'
<kwì e•cnì•Na•>: /kwe•cná•?/ 'I sang'
<kwì ičku Na>: /kwičkwá•?/ 'I ate'
<H> represents the following alternation (in this rule, $V=$ any short vowel; $V$. any long vowel), $H: \phi / V \cdot,(y, w,[v]-V$ $\qquad$ .

- $\ell_{\text {_ }}$

Examples are:
<aní• -áHtu>: /Paní•tư/ 'mother's'; <ičway -áHtu>:
/คíčwáytu?/ 'wildcat's'; <sr i•hayv̀ -ih̊i>: /sri•há?i/ 'if he dreams'; <ča•ráw -əHtuhú>: /ča•ráwtuhú?/ 'at the head end of the body'; /sr ikhyawv̀ -iHPi>: /srikhyáw?i/ 'if he hears it'; <t ikhyawv̀ Hrakì -ik>: /tíkhya•rakik/ 'he heard him behind him'; nwv̀ iด•i cw -ákHa>: /níp•icwík•a?/ 'You(sg.) pick it up!!
235. Nonloss vowel alternations. The sporadic alternations in the data seem to be due in part to assimilation and in part (possibly) to remnants of an ablaut pattern that played a derivational role.

The predictable alternations are of two types, (l) a partly predictable alternation between /a/ and /i/, and (2) an assimilatory pattern for vowels in which the set of apical consonants and the set of nonapical consonants contrast as conditioning environments.
235.1. Lexemic variants. Examples of lexemic variation are given below. Group 1 is made up of examples of variations thought to be due to assimilation. The forms in group 2 are thought due to ablaut. Group 1.

| > ~ <e> | ahaNpi ~ eheNpi | 'down on' |
| :---: | :---: | :---: |
|  |  | 'one' |
| $\sim$ <i> | takas(CW) ~ tikis(SS, | 'motion in- |

CW) volved in sticking something in/on something'

$$
\begin{aligned}
<a>\sim<u> & u k \cdot a r i ́(S S) \sim a k \cdot w a r a ́(C W) ~ ' a ~ l o t ~ o f ' ~
\end{aligned}
$$

in drumming'
<i> ~ <u> <-iču•kiní> ~ <-či•kiní> 'slender'
See also <inaku•na> ~:<iniku•na•> ~ <inuku•na> 'buzzard', <ipsíra> ~ <ipsú•na•> 'arrowwood berry'. Group 2.
u.pči ~ upči 'with elbow/shoulder' (cf. 210.4.1 for <u•pčì>)
<ehena>(nt.), <eheni>(vt.) 'tongue'; [ac:a](ac:a) 'water', <ic•i> 'drink'(cp. <uč•i> 'precipitate as rain does'; <a'ka> (vt) 'carry on back (e.g. a deer)', <i•ki>(vt.) 'carry on back (e.g. packbasket)' (cp. <uxu> (vt.) 'carry on back (e.g. sack)', <ehe• ${ }^{\prime} \mathrm{i}>\left(v t_{\text {. }}\right)$ 'carry on back by means of a packstrap').
235.2. Predictable alternations. The alternation between /a/ and /i/ represents a partially predictable pattern and is symbolized by <i>. The pattern is as follows,

$$
\begin{gathered}
\dot{i}: \mathrm{a} / \ldots \ldots \\
i / \ldots-- \\
\text { Take the following sets, for example, }
\end{gathered}
$$

```
    <i?|i> as in: /kír•a?/ 'You(sg) take it!'
    /kí?•ičax/ 'You(sg) put it out
        into it!'
    /kíp•ika•hu?/ 'You(sg) take it
        inside!'
    <at•\dot{i}> as in:/kat•á?/ 'You(sg) go:'
    /kát•íc•ay/ 'You(sg) go after him!'
    /kát•ika`húv/ 'You(sg) go up the
                                    creek!'
<im`主> as in: /rím`a?/ 'Let him see it!'
    /kwím`ik/ 'He sees it'
<umpì> as in: /kumpá?/ 'You(sg) swim!'
    /rúmpikwaya`ka?/ 'he's swimming
                                    upstream'
            /kúmpihéwi•ma/ 'I swam down the
                                    creek'
    Although the above examples demonstrate the
regularity of the pattern, there are numerous
counterexamples,
    <iri> as in: /kíra?/ 'You(sg) reach!'
    /kíričaxir/ !You(sg) put it out
        into it:'
    /kírakasac/ 'You(sg) toss it up
        overhead!'
```

> <ča*m•主> as in: /ká•?a•ča•m•a/ ~/ká•’a•ča•mi/ 'You(sg) hold on tight:' (In the data, the most frequent sequence found before juncture is /ča•m•i/)
> <iraxì> as in: /kíraxačúm•u/ 'greyheaded' /kwíraxiwakirik/ 'he washed /kwíraxapuk•ucwik/ 'he pushed it his hair' up with the top of his head'

In spite of the number of counterexamples, it is assumed that the alternation as stated is the underlying patterm; therefore, lexemes whose representations give evidence for the alternation are marked by <i>. If there are exceptions to the rule, statements about the irregularities accompany the dictionary entry.
< $>$ s symbolizes an assimilatory alternation,

$$
\begin{aligned}
& \text { ə: } i /(e[\cdot] c), T+\quad V_{1} / V_{1} P \quad\left(\text { when } V_{1} \neq e\right)
\end{aligned}
$$

Examples are,

$$
\begin{aligned}
&<e \cdot x \text {-ácHu> :/Pe•xíc•u?/ 'a village at the } \\
& \text { mouth of Canyon } \\
& \text { Creek' }
\end{aligned}
$$

<kwać -ákHa> : /kwacík•a?/ '3rd pers. sg.
pron.(dem.)
<yah•ar -áHtu> : /yáh•arí•tu?/ 'the child's'
<kwas -óHta> : /kwasí•ta?/ 'digging stick
(instr.)

There is one counterexample to the above rule, /yá•kamí•ta?/ 'cloth(instr.); <ya•kam> is a borrowing from Chinook jargon.
236. Tonal alternations. There are two types of tonal pattern in Shasta, junctural and lexical. These patterns are manifested through the behavior of four tonal morphophonemes, <'>, <'>, <">, and unmarked (represented in the rules by the breve, ").

The junctural pattern, so-called because the
tonal alternation is associated with the first vowel following word juncture (when $\mathrm{V} \neq\langle\mathrm{v}\rangle$ ), is a 'regularizing' tendency in Shasta for the first syllable of the phonemic shapes of all words to occur with high tone (except when the second syllable has a high tone). There are counterexamples to this pattern; for example, /Pán•ití/ ~/Pan•ití/ 'aunt(voc.)', /kári•wáp/ ~ /kari•wá?/ 'brother', /’áp•akík•a?/ ~/’ap•akík•a?/ 'uncle(ref. -dem.), /stíkhyewé•ki?/~/stikhyewé•ki?/
 /skikhyewe•kí•?i/ 'if you(pl) hear it'. In forms such as these, the tone on the first syllable freely varies between high and low if the third or fourth syllable occurs with high tone; ${ }^{6}$ if there is no high tone on the third or fourth syllable, the tone on the first syllable will always be the high tone.

It has been assumed for forms like the ones above, that the first vowel occurs morphophonemically with the unmarked tone and that the phonemic representation, with high tone ~ low tone, is predictable.

The lexical pattern is made up of tonal alternations that occur when lexemes are juxtaposed between word boundaries. The following "principal parts" presentaition of a set of verb forms will afford the reader a cursory impression of the complexities of the patterning. (The examples are phonemic and are organized by verbal prefix; the symbols accompanying the prefixes are: $D \neq d e c l a r a t i v e ~ m o ́ d e, ~ H=h o r t a t i v e ~ m o d e, ~$ l=first person, $2=s e c o n d$ person, $3=$ third person, s=singular, p=plural, Pa=past tense.)

| Prefix | Code | 'kill' | 'dream' | 'bathe: |
| :---: | :---: | :---: | :---: | :---: |
| <kw> | D3Pa | kwíčkaxá•wik | kwí ${ }^{\text {hayk }}$. | kwí•puk |
|  | DlsPa | kwíčkaxá•wa•为 | kwí•haymé•? | kwí•pa•? |
| < y > | DIpPa | yíčkaxá•wa•? | yí-hayme-? | yí•pa•? |
| <kì> | H2 | kíčkaxáw? | ki•háy | kípu? | In all the examples, the occurrence of high tone on the first syllable is predictable in terms of the junctural pattern rules. In the forms for 'kill', the regularity of the high tone on the third syllable is due to the fact that the syllable happens to coincide with the lexeme <xá*w>, and the conditions under which <'> may

be low tone or zero are not present. In the forms for 'dream', the seeming "displacement" is due, primarily, to (1) the junctural pattern rules and (2) the rules for the phonemic representations of <'>, which occurs in the morphophonological shapes <kwì̀>, <kì>, and <i•hay 'dream'. In the forms for 'bathe', the regularity is the result of the junctural pattern rules and the rules for <'> and unmarked tone.

The merging of junctural and lexical patterns, especially in the verb system, produces a regularity of phonemic tonal configurations that suggests the possibility of a classification of verbs according to tonal configuration types. To quote deAngulo and Freeland (page 91), "Shasta verbs might well be divided into two groups, according to whether or not they are subject to tone-displacement". However, in the preceding paragraph they comment that although 'in a large number of verbs, this tonic accent li.e. high tone] on the initial syllable seems to be an essential semantic characteristic of the radical, and is never lost in any of the forms of the verb
[;] in the rest of the verbs, the shifting of the accent away from the first syllable is a very characteristic factor in the formation of certain of the modes and tenses [and] just what syllable will then receive the accent must be ascertained separately for every verb." In other words, the association of a phonemic tone pattern with a subset of verb constructions is a fortuitous byproduct of the juxtaposition of lexemes participating in the verb constructions. It is not just the case that this 'regularity' is only apparent; it is also the case that classes based upon such a regularity would be nonsignificant, both syntactically and semantically.

The nonverbal system in Shasta does not display such regularity of phonemic tone configurations. There are partial patterns that are characteristic of constructions if those constructions contain particular lexemes. Again, however, the patterns are fortuitous. Let us take, for example, the noun themes <umé•> 'child' and <e•xa•> 'bear', and the suffixes <əpsi> 'pitiful', <xa•yxér> 'paucal diminutive', <yä•war> 'collective',



As can be seen from the above examples，it is the morphophenological shapes of particular lexemes and the junctural pattern rules that determine the tonal pattern for any one phonemic representation of a construction．In the rules that follow，the junctural pattern rules cannot be applied until after the lexical rules．

For purposes of making the tonal alternation statements，it is necessary to introduce the following symbols：${ }^{\wedge}=$＇，${ }^{\prime} \overline{\bar{V}}=$ locus of tone in relation to conditioning environment；．．．$\overline{\mathrm{V}} . . . \#$ stands for＂anywhere $\overline{\mathrm{V}}$ occurs before \＃＂； $\mathcal{\&}=$ consonant，consonant cluster．

236．1．Lexical pattern rules．Again，as with the vowel，consonant，and length alternations，it is necessary to point out exceptions to the statements accounting for tonal modifications， e．g．＜？wv̀ a•Pa•？•i－ik＞：／？wa•？á•？•ik／～ ／？wá•？a•？•ik／＇she pulled at．it＇，＜？w⿳亠口了寸 is•主－k＞：
/'wis•ík/ ~ /'wís•ik/ 'he said', <t ehìyab e•ki e>: /téhiyawe•ke?/ ~ /tehíyawe•ke?/ 'they got dressed'. As is the case with the junctural pattern (cf. discussion in 210.6 and fin.6), it is not known whether these exceptions are evidence of dialect variation or evidence of an ongoing change that affects the whole language.

The rules are presented below in tabular form. Examples follow the presentation. The numbers associated with an example corresponds to rule numbers.

Morphophonological
Environment

| No. | Symbol | Phoneme/Preceding | ocus Following |
| :---: | :---: | :---: | :---: |
| la | $\wedge$ | $\emptyset \quad \hat{\mathrm{v}}$ - | $\overline{\mathrm{V}}$ |
| Ib |  | $\emptyset$ | $\overline{\mathrm{V}} \mathrm{V}$,me:, Na. |
| 2a | , | $\emptyset$ | ज \# |
| 2b |  | ( $\mathrm{w}, \underline{\mathrm{w}}$ ) $\mathrm{v}^{\text {r }}$ | . $\overline{\mathrm{V}} . . . \#$ |
| 2c |  | $\checkmark$ | $\overline{\mathrm{V}}$ ¢V |
| 3 | , | $\checkmark$ - | $\nabla ¢[\mathrm{~V}]-\mathrm{V}$ |
| 4 a | $\checkmark$ | $(\stackrel{\rightharpoonup}{V}, \dot{V}) \mathrm{N}, \dot{\mathrm{V}}$ | $\overline{\mathrm{V}}$ |
| 4 b |  | $(\stackrel{\rightharpoonup}{\mathrm{V}}, \dot{\mathrm{V}})_{\mathrm{m}}$ | V \# |
| 4 c |  | , | $\overline{\mathrm{V}} \quad 申 \mathrm{v} \#,[-] \mathrm{v}$, (w,y[v]- $\dot{\mathrm{v}}$ |
| 5 a | " | $\checkmark$ | $\overline{\mathrm{V}} \quad \boldsymbol{\sim}$ |
| 5b |  | , | -- |


syllable of a word, ${ }^{7} \mathrm{cp} .<i$ čway>: / 1 íčway/ 'wildcat'; <ičway ya•war>: / 1 ícwayá•war/ 'wildcats'; /ičway -áHtu>:/ /ičwáytu?/ 'wildcat(poss.)';

240. Optional morphophonemic rules. The optional morphophonemic rules account for consonant syncope and vowel contraction which can occur anywhere between word junctures. 8
241. Consonant syncope. Optional syncope affects the nonapical consonants $\langle ?, h, h, b, w, k, x\rangle$ when they are intervocalic. ${ }^{9}$ Syncope of $\langle k, x>$, which is sporadic, has been accounted for in terms of Fexemic variation, e.g. <a•ykàk> ~ <e•yà•k> as in /kúwata•ykák/ ~/kúwate•yá•k/ 'I wanted to...', <xa•yxér> ~/xé•r> as in /’é•xa•xa•yxér/ ~/Pé•xa•xé•r/ 'bearcubs'. The rules for syncope of <l, $h, h, b, w>$ are given below ( $G=9, h, h ; W=b, w ;$ vowel length (i.e. <•, N> is irrelevant).
Morphophonclogical Environment
Symbol Phoneme
$G$
$: G \sim \varnothing$
$v_{1}$ __ $V_{1}$; i__(e,a,u);
$(e, u) \ldots i$
$W \quad: \quad W \sim \varnothing \quad a \_\_$; $i+u$

For examples see below (242.)
242. Vowel contraction. Once the syncope takes place, there is vowel contraction ( $C=$ syncopating consonant),

| $\mathrm{V}_{1}[\cdot]$ | : | $\emptyset$ | $\ldots \mathrm{CV}_{1}$ |
| :---: | :---: | :---: | :---: |
|  |  | $\nabla_{1}$ | $\mathrm{V}_{1}[\cdot]$ ¢ |
| $i[\cdot]$ | : | 7 | $\underline{C}$ |
| u[•] | : | w | _Ci, |

For example, $/ k a t \cdot i \cdot \rho_{i} /$ ~ $/ k a t \cdot i \cdot / \quad$ You(pl) go downstream!'
/kwére•kik/ ~ /kwé•kik/ 'it's cooked'
/ká•?a•kakiru?/~/kákakiru?/ 'You(sg) drag it away!'
/kú•?uta•s/ ~/'kú•ta•s/ 'a skillet' /kwíhi•yi•ka?/ ~/kwí•yi•ka?/ 'he came to visit me'
/kwát•ehé•ha•ma/ ~/kwat•é•ha•ma/ 'he went across' /rikahakwaya;'/ ~ /ríka•kwaya・ワ/ 'he is dressed up' /káp•uhú?/ ~/kap•ú・ワ/ 'You(sg) leach acorns:'
<acmu hí>: /Pácmuhí/ ~/’acmwí/ 'grandfather(ref.)' /yú•hikwaya•?/~/ywíkwaya•?/ 'he walked up the hill'
/Pahúčuč•u?/~/?áwčuč•u?/ 'beard' (cp./Dáw/ 'mouth')

When the morphophonological sequence <ul•]Cli> occurs, there are two types of contraction possible; e.g., /kwípxuPi•k/~/kwípxuyk/ ~ $/ k w i ́ p x w i \cdot k /$ 'he's smoking something out of a hole' (cp. <uy> ? <wi> 'eye').

There are exceptions to the above rules in some environments, i.e. when the morphophonological sequence is $\langle V\rangle(i, u) V\rangle,\langle V P(i, u-V\rangle$, or $<\mathrm{VO}(\mathrm{i}, \mathrm{u}) \mathrm{Na} \cdot>$. Further study is needed before a definite statement can be made about these exceptions. 10
250. Morpholexical Rule Inventory. The lexemes to which morpholexical rules apply are listed below, accompanied by cross references to the sections in the description where discussion appropriate to the morpholexical rules is found.

| ahá•w | 412.2.2.2 | CW. | 412.2.2.2. |
| :---: | :---: | :---: | :---: |
| aka | 412.3.2.1.2 | ča-ká | 422.3 |
| aNti | 412.2.3 | če.?a | 422.4 |
| asw | 412.2.2.2 | hi | 422.1.2. |
| awa ${ }^{\text {a }}$ | 412.3.2.1.2 | kwac | 422.3 |
| a・フi | 412.2 .3 | kwa.ká | 422.3 |
| ehé•ha-w | 412.2.2.2 | kwa•?i | 412.2.4 |
| ehéNpi | 412.2 .6 | ma•k̇á | 422.3 |
| i* | p. 171 fn. | ma•?i | 422.3 |
| ika• | 412.3.2.1.2 | wáha - w | 412.2.2.2 |
| ipsiru | 412.2.2.2 | wa ${ }^{\text {cte }}$ 'há | 422.4 |
| -ik | 412.3.2.1.1. | xuk.a | 422.4 |
| -óHtu | 421.4 | ya•? ${ }^{\text {a }}$ | 422.3 |
| iru | 412.3. | yí• | 412.2.4. |
|  |  | PiNbu | 412.2.2.2. |
|  |  | Pi•rú | 422.4 |

## Morphophonology <br> (Footnotes)

1. It is interesting from the comparative point of view to note that there is no morphophonemic alternation between glottalized and unglottalized consonants. Glottalization Vrs. nonglottalization falls into the category of unpredictable alternations (cf. I.210.3.1.). 2. The Atsugewi form is from data collected by Leonard Talmy, who worked with an Atsugewi speaker during the summers of 1964-65 under the auspices of the Survey of California Indian Languages. The form is in morphophonemic transcription. 3. deAngulo and Freeland, in their unpublished description of Shasta (p. 98) give the form yitsura as the first person plural in the paradigm for the verb 'to dry' in the declarative mode. According to my alalysis, the paradym they give is for the perfective aspect in the declarative mode; the morphophonological shape of yitsura would be <yic•urNa•>. There is a form /yíc•un•a・の/ 'we're drying(something)' (CW)
in my data. It would seem that there may have been different dialect forms for the paucal perfective or that in my data the occurrence of $<\mathrm{Na} \cdot>$ in the perfective paradigm may be due to analogical change.
2. There are variant forms which cannot be predicted by this rule; e.g. <a•tax> ~ <amtax> 'salt' (<amtax> was identified by $S S$ as ka•mátwa•).
3. A frequent variant of this form is /?wíta?/.
4. It is not known whether this variation is evidence of dialect difference or is indicative of an historical change in process that affects the whole language; the speech of both $S S$ and $C W$ contains the variation.
5. The possibility of predicting tonal alternations (and other alternations) in term of a morphophonological syllabic canon was considered; however, all attempts proved fruitless.
6. To quote Sargent Sambo, "?in•áyá•war is the word; Pin•áyá•r is the way of talk." This succinct description of the consonant syncope and vowel contraction in Shasta leaves out crucial information; i.e. in many cases "the way of talk" has
become the morphophonological shape of a lexeme and it is no ionger possible to account for the phonemic representation in terms of optional morphophonemic rules. For example, <wi•hà•p> as in /ywíha•panta・の/ 'we piled it up' is the only first position radical lexeme that begins in a consonant; all others begin in a vowel. It is highly likely that the sequence /wi•/ is the result of consonant syncope and vowel contraction; however, as there is no evidence for which consonant underwent syncope, there is nothing to do but assume the aberrant shape <wi•hà•p>.
7. Presumably <k> undergoes syncope too; however, there are no examples in the data. It is not possible to state the condifions under which the speakers employ the syncope rules. One obvious difference between the speech of CW and that of SS is due to the fact that CW uses the syncope rules (and the concomitant vowel contraction rules) more often than SS does. Because of this use, CW's speech has an extra vowel phoneme / / / e.g. <ahu>, <aワu> : /aw/ (SS), /o/ (CW). It may also be the case that it is necessary to set
up an extra mid front vowel phoneme for her speech, i.e. <a?i, ahi> : [E•], which would only occur with length; however, as yet this problem is unsolved.
8. The tonal changes resulting from the syncope and contraction are also as yet unaccounted for.

## Chapter II

## Syntax

300. Introduction to the syntax. The description of syntactic classes and word formation is found in II. 400 .

Presented here is an overview of Shasta granmatical structure and discussion of quasiproductive derivational patterns.
310. General remarks on structure. The most widely used techniques for expressing relations between grammatical elements are affixation and
compounding. The most important grammatical structures are the clause and the theme.
311. Affixation. Affixation is used in theme formation and in the establishment of relations between the VERB and its satellites.

There are two types of affixation: prefixation and suffixation. All affixes except the verbal prefixes are optional.

The VERB is defined by means of prefixation. Prefixation also has a limited use in the formation of satellite themes.

Suffixation is used in substantive theme formation.

The members of the class ENCLITIC are suffixes that differ from others in that they play no role in theme formation or in the establishment of classes.

Enclitics mark word boundaries, i.e. an enclitic can only be followed by another enclitic (or the clitic) or juncture.
312. Compounding. Compounding is used in the formation of verb radicals and substantive phrases. A compound verb radical can consist of two or
three members. substantive compounds consist of two or more members. The verb radical compounds are endocentric and coordinate. The noun compounds are endocentric and both coordinate and attributive.
313. The clause. The clause is the most important structure that results from syntactic combination. There are two types of clause, the MINOR and the MAJOR.

A minor clause is verbless. A major clause must contain a verb.

Major clauses are categorized as equational and nonequational. The equational clause must contain a satellite, or another verb. In the nonequational clause all constituents are optional except the verb; therefore, an unexpanded nonequational clause consists of verb, e.g. /kúwa•tika•/ 'He went(somewhere) to buy(something).' In addition to the verb (and optional elements such as the clause marker), an expanded nonequational clause contains satellites that reiterate relationships explicitly or implicitly, expressed within the verb,
> /táka•kúwa•tika•/ 'Someone went(somewhere) to buy(something).'
> /sápirí táka• kúwa•tika•/ 'Someone went(somewhere) to buy bread.'
> /sápirí táka• kúwa•tika• stúwatúk/ 'Someone went to the store to buy bread.'

> The ordering of clause elements is more or less free; however, there are preferred orders, given the presence of certain constructions in a clause.

A clause or a combination of two or more clauses can be a sentence; however, the sentence is insignificant syntactically (it is yet to be determined if the concept of sentence is useful in a description of Shasta narrative style).
314. The theme. The theme is the cornerstone of the syntax. It is any monolexemic or polylexemic sequence that can occur as a word, i.e. that can occur with an enclitic or the clitic.

A theme may consist of a single lexeme or two or more lexemes whose order of occurrence is fixed. A polylexemic theme contains a simple
radical with one or more affixes or a compound radical with or without affixes．The following examples are all themes which share the lexeme ＜ahu＞＇mouth＇：＜ahu＞＇mouth＇（simple substantive／ verb radical）；＜ahu－is•i＞＇talk＇（compound verb radical）；＜ahu－is•主 ri・のi＞＇talk right＇（compound
 ＇plainspoken＇（deverbative nominalizing prefix
 ＇among the Shasta（i．e．the plainspoken）＇．

315．Number．In Shasta，number is a lexical phenomenon expressed in the noun substantive and in the verb．

Except for forms discussed in 323．and ：．．3 the pronouns，noun themes are undifferentiated for number．The pronouns are inherently singular or plural．Other noun themes can be optionally marked for non－singularity；take，for an instance， the collective marker＜ya•war＞as in ／＇ísyá•war kwehétap•e•ke？／：＇The Indiaus（coll．） are gambling．＇It is also possible to say ／Pís kwehétap•e•ke？／，since the verb is marked for collectiveness by the suffix＜e•ki＞．Lack of
differentiation for number is shown by the occurrence of <is> in /iís kwehétap•ik/ 'An Indian is gambling.' ws. /?ís kwehétap•e•ke?/
'The Indians are gambling.'
Verbal number consists of singularity, plurality, paucality (i.e. a few), collectiveness (i.e. an unindividuated group), and distributiveness (i.e. an individuated group).

The following paradigm shows some of the kinds of number and how they are expressed. (The forms are phonemic; the paradigm is in the perfective aspect of the declarative mode.) In addition there is marking in the verbs for reciprocalness, which often is used to express the concept of dualness.

First Person
kwic•á•? 'I drank' kwíc•ik 'you(sg)
drank'
kwic•a•? 'we arank' kwíc•e•ke? 'you(coll.)
drank'
kwíc•e•ke? 'we(coll.) drank'

## Third Person

$$
\begin{array}{ll}
\text { kwíc‘ik } & \text { 'he drank' } \\
\text { kwíc•e•ke? } & \text { 'they(coll.) drank' }
\end{array}
$$

As can be seen from the paradigm, the first person prefixes are inherently singular or plural and number is unspecified in the second and third person prefixes.

The first person forms show a differentiation between singular, paucal and collective; i.e., the first person singular prefix and a theme that is unmarked for collectiveness (or distributiveness) forms a construction that is singular, the first person plural prefix and a theme unmarked for collectiveness (or distributiveness) forms a paucal construction. This distinction between paucality and collectiveness (or distributiveness) is unique to the first person verb formation. (Cp.
/yumpihé wi•ma/ 'we(pauc.) swam downstream'; /yumpihé*wiru•ma/ 'we(dist.) swam downstream').

The marker for distributiveness is <iru>, e.g., /kwá•yakniruk/ 'they(dist.) passed by (something)',
/kwá•yakniruk/ 'you(dist.) passed by(something)', /yá•yaknin•a•?/ 'we(dist.) passed by(something)'.

It is appropriate at this point to note complex semantic relationships that are not within the scope of this descriptive study.

In the preceding examples, the concepts of collectiveness and distributiweness were associated with the subject of the verb, which is marked by the verbal prefixes. In motion verbs, these concepts can be associated with verb subject, object or action. All the logical combinatory possibilities are not expressed, e.g. there are no examples of a verb which simultaneously differentiates distributive subject, distributive object and distributive action. However, it is possible to get such combinations as collective subject, collective object and collective action; or, collective subject, collective object, distributive action. Examples are,

```
    /kwí`pirute•ke•ke?/ 'they(coll.) led them(coll.)
    around(coll.)'
    /kwípirute*kira•?/ 'they(coll.) led them(coll.)
                        around(dist.)'
```

In these examples, collective object is marised
by <i•p•主> (cp. kwi•p•irute•ke? 'He is leading them around'), collectiveness associated with the subject (or verb action, in the first example) is marked by <e•ki>, and distributiveness associated with verb action (in the second example) is marked by <iru> (the <iru> following <i•p•i> is the radical 'action involving hand/ arm') 。
320. Quasiproductive features. There are patterns of derivation whose description cannot be generalized. These quasiproductive patterns involve syntactic ambivalence: the petrification of lexemic sequences, suppletion and reduplication.
321. Syntactic ambivalence. It is a general pattern of derivation in Shasta that themes beginning ina vowel can be verb, substantive, or adverb themes. Themes that begin in a consonant can be either substantive themes or adverb themes. The restrictions are semantic. It is also the case that verb thernes can be nominalized or adverbialized.

There are analogous patterns of derivation in which some verb suffixes can also occur as adverbs, enclitics, or substantive themes. For
example:
(1) <si•way> occurs as an attributive verb suffix in <t e•xi si•way -iru Hma>: /té•xisi•wayru•ma/ 'It is said that she got sick from worrying.', and as an adverb in /si•way ta•yé•ki?/ 'They might cry.'.
(2) <ča•m•i> occurs as an enclitic in such as <ičkákča•m•i> 'too heavy' and as an attributive verb suffix in the verb <kw á•?a•ča•m•i -ik>: /kwá・ワa•ča•m•ik/ IIt is storming hard'. (3) <Hma> 'continuative aspect' occurs as a verb suffix in <t e•xi si•way -iru Hma>:/té•xisi•wayru•ma/ 'it is said she got sick from worrying' and as a locative substantive thematic suffix in <a•yax•í Hma> 'again tomorrow'.
(4) <čik> 'mud' occurs as radical in nominal substantive /kíčikícwiruk/ 'a chimney flue' ana as the noun, /čik/ 'mud'.
(5) <ka•hú> occurs as a directional verb sufiix in
/yúmpikahu•ma/ 'we swam upstream' and as an enclitic in /Pawáčayka•húp/ 'up the creek'.

In the case of $1,2,4$ there is generality in the patterning in that any perception attributive suffix is syntactically ambivalent but it is impossible to predict what the overlapping classes will be.
(3) and (5) are examples of sporadic syntactic ambivalence that is an even less predictable phenomenon than that of the attributive suffixes.

As it is not possible to describe the situation exemplified above with rules of sufficient generality, in the dictionary such syntactically ambivalent lexemes will be accompanied by the class symbols necessary to account for their unique distributions.
322. Petrification. There are sequences that are historically analyzable, but synchronically opaque; in other words, they are petrified combinations of lexemes. <si•way> 'possible' is an example of such a phenomenon. It can be analyzed as <s> 'adverbializing prefix', <i•way> a radical meaning 'perceive' (which in turn could be
analyzed into the verb radical <i•w> and the transitive marker <a••i>). However, it is not possible, descriptively, to economically account for the embedding of such a construction as prefix plus verb radical within the verb theme; therefore, <si•way> is considered monolexemic.

There is another type of petrified combination, for examples
/tíčkaxáracwik/ 'She bound up the hair on top of the head'
/tíčkapárahampik/ 'She bound up the hair in back of the head'
/tičkahárahampik/ 'She undid the hair' In these examples the sequences <xára>, <pára>, and <hára> are being considered. Here we find the recurrent partial <ára> and the unique elements $\langle x\rangle,\langle p\rangle$, and $<h\rangle$. It is not possible, however, to account for these segments synchronically, therefore they are treated as single lexemes.
323. Suppletion. Suppletion is associated with the concept of number discussed in 315. . There aretimee examples of suppletion which are not associated with number; these are the verb radicals
＜is’⿳亠口子阝，＜ik•is＞＇sound＇，＜utis•i＞，＜utik•is＞＇speak＇ and＜i•＞，＜ik•i＞，＇be（momentaneous）＇．The alterna－ tion between＜i•＞and＜ik•i＞is morpholexical． The other two alternations are lexemic variants． Suppletion occurs as a nonproductive pattern in the verb theme formation．The only examples of suppletion occurring elsewhere in the corpus are two examples among the noun themes：
／súk•ax／＇boy＇；／súk•axyá•war／＇boys＇； ／＂é•warár／＇boys（paucal）＇ ／kíyaxá？／＇girl＇；／kíyaxáyá•war／＇girls＇； ／yač•ápxa＊／＇girls（paucal）＇

The suppletion in the verb theme formation involves both monolexemic and dilexemic radicals． For instance the radical in／kwícmasa•ka？／＇He＇s sleeping＇is analyzable into＜icma si•＞whereas the radical in／kwi•wan•aka？／＇They are sleeping is＜i•wan•i＞．On the other hand the radical in ／kučंí•ka？／＇He fell．＇is＜uč•i＞whereas the radical in／kwárakwi•ka？／＇They fell．＇is＜ara kw＞＇linear movement in a vertical manner＇．

There is also＜i•？•主之 in／kwi•？aka？／He loọked＇and＜ip•i＞in／kwíp•aka？／＇They looked＇． Here the suppletion is monolexemic．

With the verbs that supplete for non-singular it is possible to get both collective and paucal formations in the lst plural of the verb, e.g. /yí•?•a•?/ 'we(paucal) looked' and/yíp•a•?/ 'we (coll.) looked'.

The exact nature of this suppletive patterning is difficult to determine. The only thing that can be said is that suppletion of monolexemic or dilexemic verb radicals marks nonsingularity of subject, object or verb action.

This suppletion does not always occur, e.g. /Kwá•?ača•m•ik/ 'He held on tight' /kwá•piča•m•e•ke?/ 'They held on tight.' /kwá•?a•kaka•ma/ 'He dragged it away' /kwá•pikaka•ma/ 'He dragged them away' but:
/kwá•?a•čikwá•ka?/ 'He pumped' /kwá•?a•čikwá•kika?/ 'They pumped'

It is assumed that the seeming suppletion is semantically conditioned. Therefore, such semantic information must accompany the dictionary entries.

Given below is a list of the suppletive or


| <uç.i> | 'fall' | /kučeícka? / 'He fell' |
| :---: | :---: | :---: |
| <arakw> | 'fall(coll.)' | /kwárakwí•ka?/ 'They |
|  |  | fell' |
| <itikw> | 'fall(coll.)' | /kwítikwí*ka?/ 'They |
|  |  | fell' |
| <iri> | 'run' | /kwíritip•İ•kahuk/ |
|  |  | 'He ran and fell' |
| <u•mpi> | 'run(coll.)' | / túmpitip•í•kahuk/ |
|  |  | 'They ran and fell' |
| <epxù> | 'go out to | /kwépxu•ma/ 'He went |
|  | camp ${ }^{\text {' }}$ | out to camp' |
| <axisu> | 'go out to | /kwáxisa•ki•ma/ ' 'They |
|  | camp(coll.)' | (the family) went out |
|  |  | to camp' |
| <is•a*> | 'sit' | /kwís•a•kni•wá?/ 'He |
|  |  | was sitting op on top of it' |
| <ará•> | 'sit(coll.)' | /kwára•kni•wá•?/ 'They |
|  |  | were sitting up on top of it' |


| <umpix | 'swim' | $\begin{array}{ll} \text { /kúmpe•ke?/ } & \text { 'He } \\ \text { swam around' } \end{array}$ |
| :---: | :---: | :---: |
| <e ${ }^{\text {w }}$ > | 'swim(coll.) | /kwé•we•kira•?/ 'They (coll.) swam around (dist.)' |
| <i•in•a> | 'hunt/dig/mine' | /kwí•m•a•ke?/ 'He hunted' |
| <ayk> | $\begin{aligned} & \text { 'hunt/dig/mine } \\ & \text { (coll.)' } \end{aligned}$ | $\begin{aligned} & \text { /kwáyke?/ 'They } \\ & \text { hunted' } \end{aligned}$ |
| <a?u> | 'mouth' | /kwá?uxáwik/ 'He bit once' |
| <e•p> | 'mouth(coll.)' | /kwe•pxáw?•ik/ 'He bit every once in a while' |
| <a. $\mathrm{ma}^{\text {a }}$ > | 'with hand/arm' | /kwá•?a•ča•m•ik/ 'He held on tight' |
| <a $\cdot \mathrm{p}_{\mathrm{i}}>$ | 'with hand/arm (coll.)' | /kwá•piča•m•e•ke?/ 'They held on tight' |
| <ehe> | 'jump' | /kwéhečuk•u•ma/ 'He jumped from one place to another' |
| <é:pxa•> | 'jump(coll.)' | /kwé•pxa•čuk•a•ki•ma, <br> 'They jumped from one <br> place to another' |


| <ehe•ti> | 'run' | /kwéhe•ta•ka?/ 'He ran' |
| :---: | :---: | :---: |
| <aska> | 'run(coll.)' | /kwáskaka?/ 'They ran' |
| <itantu> | 'sudden movement | /kwítantuk/ 'It jumped and ran' |
| *atkara> | 'sudden | /kwátkarahampik/ 'They |
|  | movement | jumped and |
|  | (coll.)' | ran' |

324. Reduplication. The reduplication that occurs is not associated with particular syntactic or semantic patterns. There is a partial pattern of reduplication that.is associated with the phonological representation of the referential <hí>. This has been accounted for by morpholexical rules (II.422.1.2.). Elsewhere reduplication is distributed randomly throughout the lexicon, e.g. <parpar> 'skunk cabbage', <pukpuk> 'salamander', <ehikhik•> 'to pant'.
325. Syntactic classes. The discussion in this section is organized according to the syntactic classes that provide the basis for clause formation. The major syntactic classes include the VERB and its satellites, ADVERB, SUBSTANTIVE (including nouns, locatives, pronouns, numerals, and deverbatives), and DEMONSTRATIVE. Included in the discussion of the VERB and satellites is the description of associated affix and theme classes. The minor classes include CONJUNCTIVE PARTICLE, CLAUSE MARKER, ENCIITIC, CLITIC and INTERJECTION.
326. The verb. The verb consists of verb prefix plus verb theme, and is the most complex part of Shasta structure, encapsulating much of the syntactic and semantic information present in a clause.
327. The verb prefixes. The verb prefixes are represented by a number of morphophonological sequences having the following canonical shapes:
 below, are representations of syncretisms of grammatical categories of mode, subject-person, number, and tense.

| $\underline{\otimes}$ | $\not \subset \mathrm{v}$ | ¢ w | ¢ W\% | $\underline{\text { c }}$ | \&wī̀ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| p |  |  |  |  |  |
| p | pı | .-8.... |  |  |  |
| $t$ | tvi |  |  | tw | twì |
| t | tıv |  |  | tw |  |
| č | čv̀ |  |  |  |  |
| s |  | Sw |  |  |  |
| sk |  | skut: |  |  |  |
| sr | stì |  | sṫw |  |  |
| $r$ |  |  | nwv̀ |  |  |
| y | Kı̀ |  |  | kw | kw |
|  |  |  | hwiv | kw | ?wทे |

Each of the grammatical categories associated with the prefixes is defined by a set of grammatical properties:*

Category symbol
Mi mode

S subject-person
*The
The properties, of negation andinterrogation discussed in 4ll.6.7. should be included in the set of properties discussed here.


In the sections that follow, the discussion consists of a paradigmatic presentation, organized by mode and containing the prefixes representing each combination of grammatical categories and phonemic examples of occurrence of the prefixes with verb themes. The verb radical as a paradigmatic example used is <ahu -is•i> 'talk'. In the paradigmatic examples for all modes except the declarative, <ahu -is•i> occurs in a neutral theme, the theme type most common with the prefixes of the non-declarative mode. In the examples for the declarative mode, <ahu -is•i> occurs in a perfective theme. When necessary, the presentation is accompanied by explication of grammatical restrictions, semantic content and usage.
411.1. The hortative. The hortative is used to urge or tell someone to do something. It differs from the imperative in that there is no implication that the action must always be done or continue to be done.

| M | $\underline{S}$ | N | $\underline{T}$ | Prefix | Example |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H | 1 | S | U | <tv> | táhu* sá? | 'Let me talk!' |
| H | 1 | P | U | <č̀* | čáhus•á? | 'Let us talk!' |
| H | 2 u | U | U | <kì> | káhus*á? | 'You(sg.) talk!' |
|  |  |  |  |  | káhus•á•ki? | $\begin{aligned} & \text { 'You(coll.) } \\ & \text { talk!' } \end{aligned}$ |
| H | 3 u | U | U | <r> | ráhus ${ }^{\text {a }}$ | 'Let him talk!' |
|  |  |  |  |  | ráhus*a*ki? | 'Let them(coll.) talk!' |

The examples above are formed with the neutral theme; however, the hortative prefixes, particularly <kì and <r>, often occur with the perfective theme, e.g. <káhus•i•k>, <ráhus•i•k>. Such forms are then translated '...keep...ing'.

Examples of uses of the hortative:
/kis•áy ?in•á? ráhus•a?/ 'Tell him; let him talk (i.e. You(sg.) tell him to talk!)'
/skwís•anti•ka? wé• kútik•is/ 'He's telling you(sg.): you(sg.) say this: (i.e. He says that you are to say this)'.

4ll.2. The imperative. The imperative occurs
only in the second person. There is a prohibitory and a mandatory imperative. The prohibitory form of a verb always occurs with the adverb <ma•> 'not'.

| M | $\underline{S}$ | N | $\underline{\underline{T}}$ | Prefix |  |  | Example |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | 2p | U | U | <y> | má. | yáhus*a? ' | 'You(sg.) don't |
|  |  |  |  |  |  |  | ever talk!' |
|  |  |  |  |  | má | yáhus•a•ki? | i? 'You(coll.) |
|  |  |  |  |  |  |  | don't ever |
|  |  |  |  |  |  |  | talk:' |


| I | 2m U | U | <nwwì> | náhus•1•k | 'You(sg.) always talk!' |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | náhus:a•ke? | 'You(coll.) <br> always talk!' |
|  |  |  |  |  |  |

As in the examples above, the mandatory hortative is most often used with a perfective theme. Such use is not obligatory. The mandatory hortative is primarily used when instructing someone in how to do something or how to act or behave.

Examples of usage follow:
/má•ka? yáxiẃsni?/ 'You(sg.) mustn!t get scared!' /Kiké•kim•u stá•? má•'ká? yikehé?/ Carry him constantly; don't set him down!'
/má• yári•tay/
'Don't ever bother him:'
(cp. /má• skarí•tay / 'Don't bother him (just for now):')
/nipxúye•kík•a? mí•čax ničkwá•ki?/ 'You(coll.)
go and smoke it
out; then you(pl.)
can eat it!'
/nwi•púk/ 'You(sg.) keep on bathing (i.e. bathe repeatedly, every once in a while)!'
411.3. The volitional. The volitional implies intention to do something. It is most often translated by '...will...' or '...going to...'. The first person volitional form of a verb most often occurs with the adverb <sa•> 'lst person volitional marker'; however, the occurrence of <sa•> is not obligatory.


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problems concerning the passive prefixes, cf.
417.6.)
411.4. The potential. The potential implies the ability to do something or the possibility of the occurrence of certain actions or conditions. Potential verb forms enter into the substantive system as deverbative when occurring with the temporal locative substantive suffix <-óHPi>.
\begin{tabular}{lllllll}
\(M\) & \(\underline{S}\) & \(\underline{N}\) & \(\underline{T}\) & Prefix & & Example \\
\(P\) & \(I\) & \(U\) & U & <s> sáhus•a? & 'I might talk.' \\
& & & & sáhus•a•ki’ 'We might talk.'
\end{tabular}
\(P \quad 2 u \mathrm{U} U \quad\) <sk> skáhus•a' 'You(sg.) might talk.'
skáhus•a•ki’ 'You(coll.) might talk.'
\(P\) 3u \(U \quad \mathrm{U}\) <sr> sráhus•a? 'He might talk.' sráhus•a•ki? 'They might talk.'
P \(3 p \quad U \quad\) <č> čáhus•antay 'They/he might talk to him.' čáhus•aya•kay 'They/he might talk to them.'
```

Examples of usage are:

'What are we going to eat
if we don't have any money?'
/ma•hưka mí• sríp•ehe?/ 'He hasn't made retribution yet.'
/skáwe•čí•?i ?in•á? kimpí? ?in•á? stik•í?/ 'If
you( sg.) eat it all up,
you'll get big.'
/ma•húka mí•sirip•ehempe•ki?/ 'They haven't been paid retribution yet.'
411.5. The subjunctive. The subjunctive expresses an action or a state that is contingent and dependent. It of ten translates with an optative ('might', 'may') or an obligative ('must', 'have to') force. A subjunctive verb can occur as the main verb in a clause or as a dependent verb in a verb phrase.


> stáhus•á? rú•wataykak
> 'He wants to talk.' stáhus•á•ki’ rú•wata•kaykak 'They want to talk.'

Examples of usage are:
/yap•ú? ?in•á? stíwa•?i kwá•?/ 'I was going to start a fire.' /makáy čí•mi stiwat•é•ke?/ 'You(sg.) come around here again!'
/?is•ík síway stik•í?/ 'you(sg.) might get cold.' /stáhur•uhúm•u mí• kwá•/ 'He was just about to say something.'
411.6. The declarative. The declarative mode denotes actions or states a: fact. The declarative prefixes mark not only mode, subject-person and number, but also tense. A proliferation of third person prefixes differentiate other semantic and grammatical notions. The prefixes that require little or no special comment are presented first.
411.6.1. Present tense. The present tense describes an action or state of being at the time of speech. It is also used when talking about immediately past actions or states if the context for them is still in force at the time of speech.

| $M$ | $\underline{S}$ | $\underline{N}$ | $\underline{T}$ | Prefix | Example |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $D$ | $I$ | $S$ | Fr | <SW> | swáhus•i•k | II'm talking.' |
| $D$ | $2 u$ | $U$ | $\operatorname{Pr}$ | <Skw> | skwáhus•i•k 'You(sg.) |  |
|  |  |  |  |  | are talking.' |  |

D 3i U Pr <kw> Kkwáhus•i•k 'He is talking.'
kwáhus•a•ke? 'They are talking.'
$D$ 3d $U$ $\operatorname{Pr}<r>$ rári•čaça•? 'He's look-
ing (at him).'
rári•čača•ke? 'They are
looking (at him).'
The use of <kw> and <r> needs comment. <kw> 'inferential' is more frequently used than <r> 'direct evidential'. Its meaning roughly translates 'on the basis of what $I$ have perceived, either directly or indirectly, I have inferred that a third person is...'.
<r>, used with a durative perfective theme
in the paradigm above, is semantically complex. <r> is used when the speaker knows of what he speaks from immediate direct (usually visual) evidence; e.g. /rát•aka?/ 'he's going along on foot(prog.)', /rúč•akak/ 'a storm is coming(prog.)'.

It is also often used when the subject is indefinite, e.g. /ráhutiskicwa ?ácnak/ 'everything's quiet outside(dur.)'. The use of $\langle r>$ is most frequent with themes that have an imperfective, continuous, durative or progressive aspect as an element of semantic content.
411.6.2. Near past tense. The near past is used in conversation and anecdote to describe events relatively recent in time from the speaker's point of view; for example, in an anecdote involving himself, $S S$ might use the near past to refer to an event that happened any time from the day before to fifty or sixty years ago.

| M | S | N | T | Prefix |  | Example |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | 1 | S | Pn | <kwì> | kwáhus•á•? | 'I talked.' |
| D | $2 u$ | U | Pn | <kw> | kwáhus ${ }^{\text {- }}$ •k | 'You(sg.) |
|  |  |  |  |  |  | talked.' |
|  |  |  |  |  | kwáhus•a•ke | ? 'You(coll.) |

D 3i U Pn <kw> kwáhus•i•k 'He talked.' kwáhus•a•ke? 'They(coll.) talked.'

D $3 r$ U Pn <t> táhus•i•k 'it is said that he talked.'


4ll.6.3. Distant past tense. The distant past prefixes are usitative or simply markers of distant past time.


> that they used to
> talk.'
<p> is distant past inferential. <'tw>, which has a variant <tw>, is distant past reportative. <tw> and <t> (cf. 4ll.6.2.) are used in the narration of myths. They are also used in conversation and anecdote, along with the other near past and distant past forms.
411.6.4. $\langle y>$ first person plural. <y> represents a syncretism of the following: $\mathbb{M}=D, S=1, N=P, T=U$; thus /yáhus*a•/ translates as 'we are talking (or) we talked (near past/distant past)'. An example of usage is:
/kí•su yíwan•aka? k̉á•?uči • yíwan•aka?/ 'Yesterday we slept; nowagain we are sleeping.'
If it is necessary to overtly mark tense, the demonstratives (cf. 440.) are used:
/yáhus•a•wé•/ 'we-are-talking right-now.' /yáhus*a• ’in•á?/ 'We-were-talking a-while-ago.' /yáhus•a•mí•/ 'We-were-talking some-time-ago.'
411.6.5. The passive prefixes. There are three third person prefixes in the declarative mode which are considered passive markers:

| M | $\underline{S}$ | $\underline{N}$ | $\underline{T}$ | Prefix |
| :---: | :---: | :---: | :---: | :---: |
| D | $3 p$ | U | $?$ | <č> |
| $D$ | $3 p$ | $U$ | $?$ | <y> |
| $D$ | $3 p$ | $U$ | $P d$ | <hwiv> |

Verb forms occurring with these prefixes are translated either as passive or transitive:
/čis•anta•?/ 'He was told (or) he/they told him.'
/yís•anta•?/ 'He was told (or) he/they told him.'
/hís•anta•?/ 'He was told (or); he/they told him.'
/čís•a•kenta・の/ 'They were told (or) he/they told them.'

The implication is that action is being done to the subject by a third person agent: /čápuxáwa•?/ as in /?a•psúk•a? čápuxáwa•?/ 'The dog-demons bit him.' ( For discussion of the demonstrative enclitic, see 452.1.)
/číri•n•a•?/ as in /Pic•áta? ?in•á? číri•n•a•?/
'He got hit with a rock.' (cp. /’á•psu kwíri•••ik sic•á•ta?/ 'he hit the dog with a rock(perf.asp.)' which is not structurally different from /táka•kwát•aka? ?ič•á•ta?/
'somebody was going along a trail on fooz(prog. asp.)'.
<č> and <y> are problematical in that there is no way to know whether the difference between them marks a difference in tense or in type of evidential; also, <č> is the third person passive m marker in the potential mode, and $\langle y\rangle$ has the same function in the volitional mode (cf. 4li.3,4.).
<hw $\mathrm{v}>$ marks not only third person passive but also distant past. Its use is restricted to narration, usually of myths.
411.6.6. <?wì> gerundial. Forms marked by this prefix function either as verbs or as substantive themes. (Cf. 422.7. for a description of the substantival function). <?w w > does nót mark number or tense and is never used with a neutral theme.

Although gerundial verbs are used primarily in the narration of myths, they also occur in anecdotal narration.

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A gerundial verb never occurs in clause which opens narration. It always has reference to a verb that is marked for third person declarative, e.g.,
/twé•we?e ?i•s•i• kwač•ú? ?ap•akí•par
'He lived Panther his uncle-alongwith
čá•xari•ná•・ヤi•/
Mud Turtle.'
```



```
'He(Turtle) pounded acorns. Panther
?Wi•m•á•ke? ?aráwpaw./
hunted deer-nothing but'.
```


## 4ll.6.7. Negative/interrogative prefixes. The

 following analysis is tentative as it is not known whether the variation described in this section is due to dialect difference or to failure in eliciting forms which would throw into contrast differences that are structurally significant.A subset of declarative prefixes that represent a syncretism of mode, number, person, negation and interrogation is presented below, arranged in a paradigm according to subjectperson and number:

| 1S,2S,3U | <t> ~ <tvे> |
| :---: | :---: |
| 25 | <tw> ~ <twiे> |
| 2P | <st> ~ <stì> |
| $1 P$ | <č> ~ <č̀े> |

The above paradigm shows an overall variation that seems to be free; take, for instance, the verb radical <i•haỳे> 'dream' in a perfective theme:

$$
\begin{array}{ll}
\text { /tí•haykya/ ~ /ti•háykya/ } & \text { 'Did he dream?' } \\
\text { /má• tí•hayk/ } \sim / \text { má• ti•háyk/ } & \text { 'He didn't dream.' }
\end{array}
$$ This is presumably a lexemic variation that is explained by dialect mixture.

There is also a seemingly nondistinctive variation involving the markers for second person singular: (<t> ~ <til>) ~ (<Lw> ~ <twì>); for example,
/má• twíkhyewik/ 'You(sg.) didn't hear it(perf.).'
/má• táwtiske?/ 'You(sg.) didn't sit still(perf.).'
/twíkhyewikya/ 'Did you(sg.) hear it?(perf.)'
/táwtiskeya/ 'Did you(sg.) sit still?(perf.)'
A verb marked by a negation/interrugation
prefix occurs with the adverb <mae> 'not' and/or
(1) the enclitic <ya> 'question marker'
(2) a satellite construction of which <ya> is a constituent
(3) a satellite that has the property
'interrogation' as one of its semantic components.

Such verb forms are translated into English in either the present or past tenses.

Examples of usage follow.
/mi•čí má pya twim•í•k/ 'There, cant you(sg.) see it?'
/kú•čá ké• ?in•á? twári•čača•m•ak/ 'Why do you look at me?'

| $\begin{aligned} & \text { /ku•čá ké• tí•k/ } \\ & \text { /makáya tá•?a•či yaxe?/ } \end{aligned}$ | 'What's he doing?' |
| :---: | :---: |
|  | 'Areryou(sg.) hold- |
|  | ing on carefully?' |
|  | 'What time did he |
|  | go?' |
| /kú•pičite•kika? ste wá•ya?/ 'He winked at |  |
|  | you(coll.) ; did |
|  | you(pl.) see him?' |
|  | 'We didn't saw |
|  | that.' |

412. The verb theme. The verb theme (VT) consists of a radical plus one or more optional suffixes that are organized into ten position classes.

Given below is a list of the functional/ semantic categories associated with the theme classes:

## Category <br> Class symbol

radical
suffix categories:
attributive sVI
lecation/direction sV2
transitive sV3
benefactive sV4
reflexive sV4
reciprocal sV5
punctual aspects sV6
collective $\mathrm{sV7}$
distributive sV8
characteristic sV8
nonpunctual aspects sV9,sVIO
A neutral theme (NVT) is a theme that is unmarked for nonpunctual aspect (i.e. a theme that does not include sV9 or sVIO; an aspectual
theme (AVT) is a theme that is marked by one or more of the nonpunctual aspects: imperfective, perfectives, continuative, progressive, ambulative, directional (intransitive), or directional (transitive). The structure of the verb theme can be summarized as follows (... = any one or any selected group of specified classes):

VT : AVT, NVT
AVT : NVT sV9...IO
NVT : rV [sVI...8]
The suffix classes are divided into two groups: inner and outer. Classes sVl...7 are inner thematic classes. Classes sV8... 10 are outer thematic classes. This division is based upon the fact that it is possible, before the addition of an outer thematic suffix, to extend the theme through reiteration of the radical and/or one or more of the inner classes. (Theme extension is described in 413.).

There are no formal restrictions on the cooccurrence of theme classes or members of theme classes. However, expansion of the theme by filling all the suffixal positions, or extension of the theme by reiteration of the radical and all inner
thematic classes，is only hypothetical．
412．1．The radical（rV）．The verb radical differs from the suffixes in the morphophonolog－ ical restriction that a radical must begin with a vowel．＊The common canonical shapes of radical lexemes are VC（V）and VCCV．Lexemes of the other shapes，e．g．＜utik•is＞＇speak＇，＜ehi•či＞＇rest＇， although synchronically unsegmentable，most like－ ly represent historical sequences of more than one lexeme．

It is possible to have compound radicals of two members．For example，＜ahu＞＇mouth＇and ＜is‘主＞＇say＇occur as a compound radical in ＜kw ahu－is•̀ $\mathbf{I} \mathrm{Na} \cdot>$ ：／kwáhus•á・ワ／＇I talked＇． ＜ahu＞occurs as a single radical in ＜skw ahu hí•？i hamp ak＞：／skáhuhí•hámpak／＇he will suck you（as a shaman does）＇．（＜hí•？i＞is a location／direction suffix）；＜－is•主＞occurs as ＊The exception to this restriction is＜wi•hà•p＞ ＇pile up＇as in／ywi•ha•panta•？／＇we piled it up！＇． There are no restrictions on the canonical shapes of suffixes．
a single radical in <kw is•主 Na•> : /kwis•á•?/
'I said'.
Except for the phonological restriction that a radical must begin with a vowel, the combinatory possibilities for compounding are lexically conditioned. The occurrence of a lexeme in the data only as first member of a compound is considered fortuitous.
412.2. Inner thematic suffixes. Suffixes that are members of classes sVI...7, the inner thematic classes, are described in this section. In the discussion of $s V 1$ (attributives) and sV2 (location/direction suffixes), classes with a membership of more than fifteen suffixes, only suffixes that need special comment will be discussed; however, sample lists will be given.
412.2.1. Attributives (sVI). Attributive suffixes do not participate in the extension of the theme (cf. 413.). The attributives fall into two semantic categories, perception and motion.
412.2.1.1. Perception attributives. The semantic range of perception attributives mostly involves sensory perception; however, there are a few lexemes whose meinings involve contingency.

Some of the perception attributes oscur not only as verb thematic suffixes but also as either noun substantives, adverbs, or enclitics; e.g. <ča•m•i> 'intensifier' as in /kwé•kača•m•e•ke?/ 'They are talking loudly.' also occurs as an enclitic in /Pá•taxára•ča•m•i/ 'too salty'.
<kirkir> 'a sharp, quick sound' as in /ke•tikírkire•ke?/ 'You(coll.) break the ice:' occurs as the noun substantive /kírkir/ 'tinware'. <si•way> 'it is possible that...' as in /twé•xisi•wayru•ma/ 'It is said that she got sick from worrying.'

Other examples of perception attributes are:

| <-iksùmpi> | 'rigid' |
| :--- | :--- |
| <rí•?i> | 'good, correct:' |
| <c̆ik> | 'mud' (also occurs as a |
| <c̆́is•í> | noun substantive) |
| <u•tki> | 'lacking motion or sound' |
| <taraki> | 'unexpectedly, accidentally' |
| <či•yaxi> | 'black' |
| <-e•čàk•a> | 'careful' |
| <-ičumpaxi> | 'bright' |
| <-itiski> | 'yellow, green' |


| <-ičum•u> | 'roan-colored' |
| :---: | :---: |
| <-ikhwip•i> | 'stiff' |
| <'kisni> | 'sharp, prickly' |
| <kat•i> ? as in /kwícmakat•i•ma/ 'He went sound |  |
|  | asleep'. |

4I2.2.1.2. Motion attributives. Unlike the perception attributives, motion attributives only occur as verb thematic suffixes.* A motion attributive specifies the kind of motion involved in the performance of an action. A partial listing, with examples, follows.

|  | Meaning |
| :---: | :---: |
| <čak•à> | ' jerking motion |
| <čuk•u> | 'movement from |
|  | one place to another' |

$$
\begin{aligned}
& \text { Example } \\
& \text { /kwán•ičak•acwik/ } \\
& \text { 'He jerked him } \\
& \text { up.' } \\
& \text { /kwéhečuk•u•ma/ } \\
& \text { 'He jumped from } \\
& \text { one place to } \\
& \text { another.' } \\
& \text { /kwá•?a•čuk•u•ma/ } \\
& \text { 'He pulled it out } \\
& \text { (e.g. sliver, nail).' }
\end{aligned}
$$

They differ also in that all the examples in the corpus begin in a consonant.


| <IIPi> | 'motion involving <br> steady pressure of arm' | /kwícmam•i•k/ <br> 'He pushed on it to see if it were solid.' |
| :---: | :---: | :---: |
| <puk•u> | 'motion involving projection forward' | /kúkapuk•ucieik/ 'He pushed it up with his forehead.' |
| <ruxis | 'motion involving <br> extension of arm/leg' | /kwákaruxik/ 'He kicked it out of the way.' |
| <ti> | 'iterative motion' | /kwán•itik/ 'He was chopping(wood).' |
| <tir> | 'motion involved in breaking a surface' | /kúpitirik/ 'He punched a hole through a thin shell' |
| <xi> | 'splitting motion' | $\begin{aligned} & \text { /kú•pixi•k/ 'He } \\ & \text { was splitting(wood).' } \end{aligned}$ |

### 412.2.2 ... Location/direction suffixes (sV2).

 Restrictions on the occurrence of location/direction suffixes with particular sequences of $r V[s V I]$ are semantic.The suffixes discussed here manifest one or more of the following features: (1) Iexemic variation presumed to be due to dialect difference (cf. I.220. for discussion of predictability of phonological alternations), (2) morpholexical alternation (cf. I.220.)., (3) coocurrence possibilities, (4) occurrence as an enclitic (cf. 451.), (5) role in the extension of the verb theme (cf. 413.).
412.2.2.1. Lexemic variants. The variations described below are thought to represent dialect variatioń.

Meaning Variation 'ablative' <cw> ~ <cwì> /'tat•íc•a/ 'I'm going to go(vol.).' /kap•ácwi/ 'You(sg.) go get an armload(hort.)!' /čé?•a•?a•c/ lWe're
going to go out hunting(vol.).'

| Meaning | Variation | Example |
| :---: | :---: | :---: |
| 'across' | <ehé ${ }^{\text {d }}$ haw> ~ <ehá•haw> | /tíyur*ehéhé•ha•na/ |
|  |  | 'It's frozen over (cont.).' |
|  |  | /kwehehá•ha•ma/ |
|  |  | 'I covered it |
|  |  | (wit a lid) |
|  |  | (cont.).' |

Cf. 412.3.2. for discussion of morpholexical variations.
'downstream' <ehé•wì> ~ <hé•wì> /rúmpehé•waka?/
'He's swimming
downstream
(prog.).'
$\quad /$ kúmpihé•wi•ma/
'I swam down-
stream(cont.).'
'out of a <ehé•w> ~ <ahé•w> ~/kwéhe•nahá•wik•a?/ container' <ahá•w>
'He jumped out of (a corral).'
/kwírakwehé•wik•a?/
'He dipped (dry
stuff) out of a
container.'

| Meaning | < Variation | Example |
| :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { /kúč:ahé wik•a?/ 'He } \\ & \text { fell out of (a boat).' } \end{aligned}$ |
| 'into a circumscribed area' | <aha-b> ~ <aha•?> | /kwá ya•r•aha•?ik/ |
|  |  | 'He gathered it |
|  |  | together with his |
|  |  | hands(perf.).' |
|  |  | /kwá•ya•rcaha•wak/ ~ |
|  |  | /kwá ya - ? $\cdot \mathrm{aha}$ - pi •ka/ |
|  |  | 'With his hand, he scraped in the |
|  |  | winnings that he won from me.' |
|  |  | /kwán•isaha•?iruk/ ~ |
|  |  | /kwán•isaha•piruk/ |
|  |  | 'He herded them |
|  |  | all together into |
|  |  | one place(perf.).' |
| 'in liquid' | <-wa•k> ~ <-opá•k> | /kač•ipáck/ 'Put |
|  |  | it to soak!' |
|  |  | /túç•iwa•kik/ 'He |
|  |  | fell in the water.' |
|  |  | /rí?•iwaka•/ 'It's |
|  |  | put to soak.' |

The <-pá•k> variant only occurs in final position in the verb theme. <-wa•k> has the variants /wa•k/ and /wak/.

The following suffixes have the meaning 'downward' or 'outward'. The morphophonological shapes are presumed to be <a"háNpi>, <haNpi> and <ehéNpi> with the morpholexically conditioned variants /a•ha./, /ehá•/ and/ehé $/$ /, which occur when these suffixes are in final position in a theme.* The following examples demonstrate the complications.
/kwíča"hámpik/ 'he put /kičá•ha•/ 'You(sg.) it down' put it down(hort.)'
/rí•kiwakhampa•/ 'He's placed /kí•kiwake•ha•/ with his 'place yourself so back to the that your back is outside(dur.)'to the outside (hort.)'
/kúkawehémpik/ 'He bowed his head' /kúkawehá•/ 'Hold your head down (hort.)'

| /kwíkehémpik/ | 'She put /kikehé•?/ 'You(sg.) |
| :--- | :--- |
|  | her pack put your pack |
|  | down(from down(hort.)' |
|  | off her back)' |

[^1]See also /tírikwaxehe•piruk/ 'Something smashed the fence down'.
/kwáwakha•piruk/ 'He took it outside.'. The tonal irregularities are unexplained. 412.2.2.2. Morpholexical variants. The location/direction suffixes that show morpholexícal variation are presented in the following table. Those forms that have similar patterning are grouped together. Discussion and examples follow the table.




The following is an example of optional syncope of <w> (cf. I.241.): /ké•?iwáha•ki/ 'You (sg.) crawl(coll.) along the edge: (i.e. crawl back and forth); the expected shape should be
/kwé•?iwáha•wa•ki?/.
6. <?iNbú> 'through a circular/tubular space'. The morpholexical variants PiNpú and ${ }^{2}$ eNpú occur when the suffix is in final position
 ’eNpú occurs as /?e•pú/; e.g. /ké•yehé?i•pú/ ~ /ké•yehépe•pú/ 'You(sg.) crawl through (a hollow log)(hort.)!'. siNbú occurs as morphophonologically predicted, before <Na•> 'paucal perfective'; e.g. /kwé•yehé?impá•?/ 'I crawled through.'. ?iNbú and ?eNpu vary elsewhere; e.g. /ríp•ehé?empá・ワ/~ /ríp•ehé?i•wá・の/ 'They(coll.) are looking through (a hole in the wall)(dur.).'

The above analysis is tentative. A paucity of distributional evidence and semantic opaqueness leaves open the possibility that <?iNbú> is identifiable with <iNbú> 'reciprocal' (cf. 4l2.2.5.). If such is the case, a form like /ripehé?empáo?/ may contain such a sequence as <ehe e?e iNbú>. 7. <ipsiru> 'down into'. The variant<ipsir>occurs when the suffix is in final position in the theme;*e.g.,

[^2]| /kaxí•ya•psir/ | You(sg.) fill it up |
| :--- | :--- |
|  | (e.g., a hole in the |
|  | ground)' |
| /kwím•apsiruk/ | 'He went down into the |
|  | hole to hunt for it.' |

This suffix is a petrified form which contains <iru> 'distribut̄ive' (cf. 412.3.1.).

4l2.2.2.3. Cooccurrence possibilities. A sampling of the location/direction suffixes found to cooccur are listed below. In none of the examples. is cooccurrence formally obligatory. The combinatory possibilities are semantically restricted.

The examples are ordered according to first member in a sequence. The individual forms are first listed with glosses. This listing is followed by the sequences and examples.

First members of a sequence.
<-wak> $\quad$ located in relation to a circum-
scribed area'
<uhi> 'along with; after'
<è?e> '?'
<hí•?i> 'into'
<tac•á> 'allative'

| <kni> | 'up over' |
| :--- | :--- |
| <ehéNpi> | 'downward; outward' |

Second members of a sequence.
<haNpi>,<a'haNpi>,<ehéNpi> 'downward; outward'
<hay> ~ <'ay> ~ <e’> '?'
<kway> 'up along'
<í••i> 'down along'
<awhi> 'straight ahead into a circular/ tubular space'
<wa•k> 'in liquid'
<ak•i> 'encircling a long object'
<ahá•w>. 'along in space'
<ka•hú> 'upstream from the mouth of a stream'
<rakmaki> 'here and there'
Examples of sequences.
<-wak haNpi> as in /kwáwakha•piruk/ 'He took it outside.'
<-wak ?ay> as in /réhe•tiwak?aywa•?/ 'He's running around a circle.'
<-wak e•> as in /ríriwake•ka/ 'He's got his arm around something.'
<uhi kway> as in /kwíruhikwaya•ka?/ 'He walked along the river upstream.'
<uhi í•號 as in /kwíruhí•ka?/ 'He went downstream.' <è’e awhi> as in /rí・ク・e?awhi?/ 'Let him look straight ahead into the hole.'
<è?e ehéNpi> as in /kan•ité?ehá•?/ 'Take off your shirt!'
 mouth on body and sucks.'
 into the water.'
<ehéNpi rakmak•i> as in /kúxam•ehempirakmak•ira•?/
'He's going from chair to chair (to see which is the most comfortable).'
<tac•á ka•hú> as in /kwí•ritac•áka•húru•ma/ 'He took it(distr.) straight up the creek.'
<tac•á ahá•w> as in /kwí•ritac•ahá•wiru•ma/ 'He took it(distr.) straight up the creek.'
<tac•á $a \cdot h a N p i>$ as in /rán•itac•áhampa•o/ 'the
middle of the day.'
<kníi••?i> as in /?wap•akní•ka?/ 'a river bankdownstream direction'
<kni kway> as in /'wap•áknikwaya•ka?/ 'a river bank-upstream direction:
<kní ak•i> as in /kíraknak•aŋ/ 'You(sg.) hang it up!'
412.2.2.4. Occurrence as enclitics. A few of the location/direction suffixes are found functioning as postpositions, a subclass of enclitics (cf. 451.). These suffixes are:
<tac•á> 'allative'
<ka•hú> 'upstream from the mouth of a stream'
<-pá•k> 'in liquid'
<awhi> 'straight ahead into a circular/ tubular space'.
412.2.2.5. Role in expansion of verb theme. There is sparse evidence that it is possible for location/ direction suffixes to participate in extension of the verb theme. (Cf. 413.); the suffixes that do so are <rakmak•i> 'here and there' and <e•rak> 'all day long'.

```
412.2.3. Transitive marker (sV3). The transitive marker is represented by <aNti> and <a•?i>, dialect variants. These forms are both in free variation and in partial complementary distribution (cf. discussion in I.220.). The predominant pattern of occurrence is as follows: <aNti> occurs before the paucal perfective marker \(\langle\mathrm{Na} \cdot\rangle\) and the directional transitive marker <i•ka>; <a••? \({ }_{i}\) occurs elsewhere. However, there are rare examples of <a•汸> occurring before <Na•>, e.g. /kwám•uká•ya•?/~ /kwá"血•uká•ta•?/ 'I counted' anã many examples of <aNti> occurring in environments other than those given above.
<aNti> and <a•?i> show morpholexical variation:
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concerning syncope of <n> and resulting vowel contraction, the fhonemic representations of <a••i> are usually /ay/, /ey/ and/a•y/.

The transitive marker is a highly productive suffix. There are no grammatical restrictions on its occurrence. Its semantic function is not completely understood; one of its meaning components is 'causative'. The following examples give an idea of the range of meanings (forms unmarked for transitive are contrasted with those marked for transitive):

Nontransitive
/réhe•nuka?/ 'He's running /réhe•nayka?/ 'He's
along on foot going along on (prog.)'
/rát•aka?/ 'He's going along /rát•ayka?/ 'He's on foot(prog.)! chasing him.'
/kwáskakak/ 'They ran hither(prog.)' 'They came run-
/kawá•s/ 'You(sg.) take it /kawásway/ 'You(sg.) off(hort.)'
ning hither (direct.intrans.)'
Transitive horseback(prog.)' /kwáska•yik•a?/ make him take it off:(hort.)'

$$
\begin{array}{ll}
\text { /tírikni•ma/ 'She put her } & \text { /tíriknayma/ 'He } \\
\text { arm over } & \text { took her arm } \\
\text { something } & \text { and put it over } \\
& \text { (direct.intrans.)' } \\
& \\
& \text { something(direct. } \\
& \text { intrans.)' }
\end{array}
$$

/kwís•ik/ 'He said(perf.)' /kwís•ayik/ 'He told something to someone(perf.)'
/kwáhus•i•k/ 'He talked(perf.)' /kwáhus•aya•yik/ 'He talked to him(perf.)'
/sú•mata•hík/ 'I'm angry /sú•mata•há•ykak/ (perf)' 'I'm making you angry(prog.)'

In the following examples, there is no difference in meaning, according to the informants:
/kwá•tem•i•ka?/
/kwá•tem•anti•ka?/ 'He swore at me(direct.trans.)'
<aNti> and <a•?i> frequently participate in extension of the verb theme, i.e. one or the other can occur after any one of the inner group position classes (sVl-7) and before the addition of one of the outer group classes (sV8-10). The examples be-: low, marked by the outer thematic suffix <-ik> ~ <-i•k> 'perfective', demonstrate the situation:

| (1) $/ k w a ́ h u s \cdot i \cdot k /$ | 'He's talking' |
| :--- | :--- |
| (2) $/ k w a ́ h u s \cdot a y a \cdot k e y i k / ~$ | 'He's talking to |
|  | them' |
| (3) /kwáhus•aya•yik/ | 'He's talking to |
|  | him' |

In (1) the transitive marker does not occur. In (2) we find the sequence <a•>i $a \cdot k i \quad a \cdot ?_{i}>$ in which <a•?i> follows <a•ki> 'collective' which belongs to sV7, the final position class in the inner group; this occurrence of <a•?i> is an example of extension of the verb theme by reiteration. In (3), in the sequence <a•?i a•?i>, the same phenomenon occurs.
412.2.4. Benefactive and reflexive (sV4). The members of $s V 4$ are <yí> 'benefactive' and <kwa•?i> 'reflexive'. These lexemes have the following morpholexical variants:

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| Shape | Variant | Environment |
| :---: | :---: | :---: |
| < yif •> | yint | /__Na:, I•ka |
|  | yí. | 1 |
| <kwa.?i> | kwant | $1 / \mathrm{Na}$. |
|  | kwa•?i | / |

The morpholexical variants <yínt> and <kwant> are petrified combinations which contain <aNti> 'transitive'. The lexemes providing the conditioning environments for these variants are the paucal perfective <Na•> and the directional transitive <i•ka>.
412.2.4.1. The benefactive. Themes containing the benefactive marker do not occur with passive verb prefixes (cf. 4ll.6.5.). Examples of usage follow.
/kwátituyínta•?/ 'I worked for him(perf.).'
/kwátituyí•k/ 'He worked for him(perf.).'
/kwírahampiyínti•ka?/ 'He brought me (a bucket
of water)(i.e., reached
down for me)(direct.
trans.).'

In the following examples <yí•> occurs after the transitive marker <a•?i>:
/kwírirakmak•eyínta•?/ II did the work for her (i.e., reached here and there for her)(perf.).'

$$
\begin{array}{ll}
\text { /kúwa•kayí•kak/ } \quad & \text { 'I bought it for you(coll.)'ás } \\
& \text { (prog.)' } \\
/ \text { kúwa•kayínti•ka?/ } \quad & \text { He bought it for you(coll.) } \\
& \text { (direct.trans.)' }
\end{array}
$$

412.2.4.2. The reflexive. There are no examples of the reflexive preceded by the transitive marker. <kwa••方 is tentatively assigned to $s$ V4 because it is not followed by the benefactive and it is followed by the reciprocal (sV5). It is possible that <kwa・ワi> could be identified with <kway> 'up along' (sV3); however, there are no examples in the data of <kway> having a morpholexical variant.

Examples follow:
/kwíru•tkikwanta•/ 'I unexpectedly ran up against something(perf.)' /ráx•akwaya•ka?/ 'He's got something in his mouth(prog.).'
/'tíkaha•kwayik/ 'He got dressed up(perf.).' /túhucíkwa•?impá•?/ 'They were fighting because they were jealous(perf.).'
The above examples shovs <kwa•?i> followed by <iNbú> 'reciprocal'.
412.2.5. Reciprocal (sV5). <iNbú> 'reciprocal'
does not occur after the benefactive．For dis－ cussion of the phonological alternations involved in the phonemic representation of＜iNbú＞cf．I． 220 ．

## Examples are：

／kwíčiknimpá・の／＇He＇s getting up on（something） （perf．）．＇
／kwíkatikimpá•？／＇They were having an argu－ ment（perf．）．＇
／tá・ァa•kwitimpá・ク／＇He broke the stick in two （perf．）．＇
$/$ kéhe•kni•wír／＇You（sg．）（a container with something in it）up on top of something！（hort．）＇
／ká• $\mathrm{a}_{\mathrm{a} \cdot \mathrm{kwit} \cdot \mathrm{yu} / \quad \text {＇You（sg．）break a stick in }}$ two（hort．）：＇
For discussion of possible identification with ＜？iNbú＞＇through a circular／tubular space；cf． 412．2．2．2．

412．2．6．Punctual Aspects（sV6）．The punctual aspects are＜－icw＞＇completive＇and＜ehéNpi＞～ ＜a：háNpi＞＇iterative＇．＜ehéNpi＞has the morpho－ lexical variants＜ehé•＞and＜e•há•＞when occurr－ ing in final position in a theme；＊elsewhere the variant＜ehéNpi＞occurs．＜a•háNpi＞has the morpho－ lexical variart＜a•há•＞when occurring in final i．e．before juncture．
position in a theme; elsewhere the morpholexical variant <a"háNpi> occurs.*

The completive and the iterative occur after the transitive marker (sV3) and the benefactive (sV4), and before the collective marker (sV7). Although there are no examples of occurrence before or after the reflexive (sV4) or the reciprocal ( $\mathrm{s} V 5$ ), it is assumed the completive and iterative could occur after the reciprocal (sV5). The punctual aspects are considered to be in a different class from the reciprocal primarily for semantic reasons; therefore, the establishment of sV6 must be considered tentative.

The iterative often has a habitual meaning. Examples of use of the punctual aspects are: /'tikwáyac/ 'He's going to finish building (something) (vol.).'
/riwa'yehémpa•?/ 'The fire was started and is burning(dur.).'
/kwírukasehempik/ 'He tied a bandage on his

* The shapes of the markers for completive and iterative aspect are similar to or identical with the shape of the direction/location suffixes <cw> 'up', <cwi> 'ablative' and <a háNpi> ~ <haNpi> ~ <ehéNpi> 'downward; outward'.

> wrist(perf.).'
> /kwirakaká•?ac•e•ke?/ 'They are all done scraping out the container(perf.).' /ki? ehempe•ki•ma/ 'You(sg.) take them whereever they want to go(ambul.).'
> /kwérapsiraha•piruk/ 'He's coming back from putting water in a hole:.(perf.)'
> /rehiyawac•a•/ 'He's dressed and ready to go (dur.).'
> /te'ma•há•/ 'He's going to stay up all night (perf.).,
> /kustehé"? 'You(sg.) dance!(hort.)'
> /kwéma•hámpe•ke?/ They stayed up all night (perf.).'
> In some of the examples above, the iterative unaccountably occurs without expected high tone.
> 412.2.7. The collective markers (SV7). There are two collective markers, <e•ki> and <a•ki>. These lexemes occur in the final position class in the inner group of thematic suffixes. There are no grammatical restrictions on their occurrence in themes. Both have the meaning 'an individuated group'. In addition, <e•ki> has the semantic component 'momentaneous/inceptive' and <a•ki> has the
semantic component 'durative/stative'; e.g.
/kwéhiyawacwe•ke?/ 'they are getting ready to move',
/kwéhiyawacwa•ke?/ 'they are all ready to move'. In theme extensions <e•ki> and <a•ki> can cooccur, e.g.,
/kwíč•apura•ke•ke?/ 'They are all hunched over.'. Semantically, the collective markers are used in reference to the subject, object or action of a verb (cf. discussion in 315.). In the examples below, noncollective themes are contrasted with collective themes in order to demonstrate the situation: /kwím•ákwa•yanta•?/ 'I told him' /kwim•ákwaya•kenta•?
'I told them'
/kwím•akwik/ 'He told it' /kwím•akwe•ke?/
/kwíricwe•ke?/ 'He worked' /kwíricwe'ke•ke?/ (i.e., 'They worked' reached (i.e., they(coll.) upward reached up(coll.) (coll.)
/kwam•arimpá••/ 'They(2) /kwám•ariwe•ke/ people are 'They(two groups) having a were all fightfight' ing'
412.3. Outer thematic suffixes. Suffixes that are members of classes sV8...l0, the outer thematic classes, are described in this section. These classes include the distributive marker and the characteristic marker, both of which belong to sV8, and the nonpunctual aspect markers (sV9...IO). Extension of the verb theme can take place before sV8...l0are added to a theme, i.e. reiteration of ( $V R$ sVl...7) is hypothetically possible. sV8 marks the final position class in the neutral theme, whether or not the theme is extended. Any theme containing a member of classes sV9.. ..10, nonpunctual aspects, is an aspectual theme.
412.3.1. The distributive and the characteristic (sV8). The distributive marker <iru> and the characteristic marker <-ir> are the members of $s$ V8. These suffixes are described below.
412.3.1.1. The distributive. <iru> 'distributive' has the following morpholexical variants:
<i•ru> ~ <i•r>, <iru> ~ <ir>,<-iru> ~ <-ir> occur before juncture.
<-iru>,<-ir> occur after forms that end morphophonologically in $\langle w, u, u\rangle$.
<i•ru> ~ <iru> occur elsewhere.

There is also a dialect variant <in•u> (cf. 233.2.).
<iru> has the meaning 'an individuated group'. It can refer to the subject, object, or actor of a verb (cf. discussion in 315.).

Examples are:

$$
\begin{array}{r}
\text { /kirayú•wiru?/ ~/kirayú•wi•rụ/ 'You(sg.) cover } \\
\text { the coals(hort.).' }
\end{array}
$$

/kwíčkuruk/ 'He's eating something(perf.).'
/'ípsisurur/ 'He's going to be buried(vol.).' /kéraxip•ir/ 'You(sg.) pull it(e.g. a spring or trigger)(hort.):'
/kwát•icwayruk/ 'He chased them(perf.).'
/kwat•ic•a•kayra•?/ 'They chased them(dur.).' /ráwra•ka?/ 'He's carrying a bundle.' /kwéhe•nuka•huru•ma/. 'I jumped in the house with

$$
\begin{aligned}
& \text { it(i.e. a con- } \\
& \text { tainer of individ- } \\
& \text { uable objects).' }
\end{aligned}
$$

412.3:1.2. The characteristic. <-ir> the characteristic' is found in final position in a neutral theme and before the nonpunctual aspect marker for durative <a•>(sVg). The only examples of themes containing the characteristic marker
occur with <k̀v>> and <iरे>, the deverbative substantivizing prefixes which form substantive themes (cf. 422.6.).

The meaning of <ir> is "characteristic of what the verb theme describes", e.g.,
/kán•itaraxir/ 'a negro(i.e. characteristic of a black face).'
/Pičutatac•ir/ 'an umbrella(i.e. characteristic of pushing up and spreading out).'
 stinger.'
412.3.2. Nonpunctual aspects(sV9...10). The suffixes that mark the nonpunctual aspects fall into two position classes, sV9 and sVlo. There are markers for eight aspects in SV 9 and markers for three aspects in sVlo.
412.3.2.1. sV9 aspects. The aspects in this class are as follows (the alternate forms are lexemic variants):

Aspect
Perfective:

| momentaneous | $<-i k>$ |
| :--- | :--- |
| momentaneous paucal | $<\mathrm{Na} \cdot>\sim$ <me•> |
| durative | <a•> |
| collective | <e> |

Nonperfective:

| continuative | <Hma> |
| :--- | :--- |
| imperfective | <awa•> |
| progressive | $<a k a>$ |
| ambulative | $(<a \cdot \operatorname{mi}>\sim<i \cdot \operatorname{ma>})$ |
|  | $\sim<i k a \cdot>$ |

412.3.2.1.1. Perfective aspects. The collective perfective aspect marker, <e>, only occurs after the collective markers (sV7), which include in their semantic content the concepts 'momentaneous/inceptive' (<e•ki>) and 'durative/stative' (<a•ki>). The momentaneous paucal aspectual suffixes (<Na•> ~<me•>), the momentaneous (<-ik>), and the durative aspect marker ( $\langle a \cdot\rangle$ ) never occur after the collective suiffixes; however, there are no formal restrictions on their occurrence with other position classes in the nonpanctaciletheme.

Semantic components. The collective perfective aspect has reference to an activity or state that takes place within a span of time that has definite limits. The momentaneous, momentaneous paucal, and durative distinguish semantic concepts which are neutralized in the perfective marker when it occurs affer the collective markers; e.g.,
/kwíruhutá•nik/ 'He touched it.' (moment.)
/kwíruhutå•na•?/ 'He rubbed it.' (dur.)
/yíruhutá•na•?/ 'We(pauc.) touched/rubbed it'
/yíruhutá•na•ke?/ 'We(coll.)rubbed it.'
/yíruhutá•ne•ker/ 'We (coll.) touched it.'

The momentaneous expresses momentary occurrence, including the notion of transition into states and states of activity; e.g.,
/wa•psahú kwi•k/*'She's starting to menstruate.'
The momentaneous paucal has the semantic component of 'a few' (cf. discussion in 315).

The durative expresses a continued state or activity, e.g.,
/séhiyawac•a•?/ 'I'm dressed.'
Morpholexical and lexemic variants. <-ik> 'momentaneous' has the morpholexical variants <-ik> ~ <-iHk> after forms ending morphophonologically in <i, i>.
<me•> is a lexemic variant oí <ĩa•> 'momentaneous paucal'. This variation is assumed to be dialectal. Limitations on distribution. Momentaneous paucel themes only occur with the prefixes of the declarative

[^3]mode; themes marked by other perfective suffixes most frequently occur with the declarative, hortative, and subjunctive modal prefixes. <e> is the only perfective member that is followed by a sVlO suffix; i.e., it can be followed by <m•ak> 'directional transitive', e.g. /ne•wá•kem•ak/ 'You(coll.) watch over us!'(imper.) 412.3.2.1.2. Nonperfective aspects. The nonperfective aspects are <Hma> 'continuative', <awa•> 'imperfective', <aka> 'progressive', and (<i•ma>~<a•mi>) ~<ika•> 'ambulative'; examples are:
/kwí•?i•wáha•ma/ 'He's sighting along(a gun).'
/réhi•čawa•?/ 'He's rēsting.'
/rátoaèérkirakam•ak/ 'It's tight on me.'
The ambulative translates as 'go and....':
/'te•wáka•mi/ 'He's going to go and look in the water.'
/čim•á•ki•ma/ 'Let's go and see them!' /kwípa•kika•?/ 'They went to bathe.'
< Morpholexical and lexemic variation. <aka>
and <iha•> have the morpholexical variants <-aka>
and <ika•> after forms ending morphophonologically in <u>; e.g. /kwípuka•?/ 'He went and bathed.'
<-aka> also occurs after forms ending morphophonologic-
ally in <y> ; cf./rehé•naykak/'He's coming hither on horseback.'

Elsewhere, <aka> has the variants <aka> ~ <a•ka> and <i•ka> has the variants <ika•> ~<i•ka•>, e.g. /rúra•ka?/ ~/rúraka?/ 'He's carrying a torchisight.' /kwîrirakmak•ika•?/ 'He went to work.' /hwérehepe•ki•ka?/ 'He went to ask them to go.'
<awa•> 'imperfective' has the variation <awa•> ~ <-awa•>. <-awa•> occurs after the collective markers <e•ki> and <a•ki>; <awe•> occurs elsewhere, e.g. <réhi•ča•kiwa•?/ 'They are resting.'

The ambulative markers (<a•mi>,<i•ma>)
and <ika•> occur in the same environments; however, the themes that <ika•> occurs in enter into construction with the prefixes of the declarative mode; wherease, <a•mi> and <i•ma> vary unpredictably in themes entering into construction with the prefixes marking the volitional and hortative modes. These two suffixes are in partial complementary distribution; i.e., <i•ma> occurs after the collective markers <e•ki> and <a•ki> and <a•mi> does not.

Limitations on distribution. <Hma> 'continuative', <awa•>'imperfective', and the ambulative markers never occur before the suffixes in sVIO. The progressive marker <aka> can occur before <m•ak> 'directional transitive' and <ak> 'directional intransitive(hither)', both of which belong to sVIO.
412.3.2.2. SVIO aspects. The suffixes which belong to the final position class in the verb theme, i.e. sVIO, are as follows:

Aspect
Directional(transitive)
Direetional (intransitivehither)

Directional (intransitive- <-iHma> thither)

The above set of forms are problematical. There are questions as to position class assignment and the number of lexemes represented. <-
<-Hma> 'directional(intransitivéthither)is assigned to sVlO on the basis of semantic parallelism to <-ik•a>. <-ik.a> is assigned to sVlo because it has the same meaning as, and has similarity in distribution with, <ak> 'directional(intransitive) (hither). The two suffixes differ in that $\leq a k \gg$ can
occur after the progressive marker (sVg) and $<-i k \cdot a>$ cannot; also <-ik'a> only occurs in themes that are in construction with the prefixes of the declarative mode, while there are no prefixal restrictions on the themes <ak> occurs in.
<ak> 'directional(intransitive-hither)'is phonologically identical with <ak> 'directional transitive' and could be considered to have a meaning similar to that of the directional transitive makers.
<m•ak> is a directional(transitive) marker that often occurs in verb themes that are semantically directional; however, it can also occur with other verbsthemes, e.g. /kútayaym•ak/ 'Let me alone!' Both <m•ak> and <ak> (directional transitive) occur after the progressive marker; it is these two forms that establish the position class.

The directional transitives <ak> and <i•ka> are in partial complementary distribution; i.e. <i•ka> occurs after <aNti> (sV3) and <ak> doesn't; however, both suffixes occur after <a•? ${ }_{i}>(s V 3)$, whech is in more or less free variation with <aNti>.

The directional transitives translate as marking first singular and second person object; e.g.,
/kúwa•kayínti•ka?/ 'He bought it for you(coll.)'
/kwáwì•ka?/ 'They gave it to me.'
/rát•aykam•ak/ 'He's chasing me.'
/skahuhíhampayak/ 'You(ss) go get doctored!'
/'ípxan•áswayaǩ/ 'I'm going to wash your(sg)
'face:'

Since these suffixes do not mark other objects, it is possible that the function of the directional transitive markers is equivalent to that of the passive prefixes (cf. discussion in 411.6).
413. Extension of the verb theme. The neutral verb theme (cf. 4l2.) is extended by the reiteration of position class $r V$ and/or one or more of the position classes making up the inner group of thematic suffixes, i.e. NVT : rV[sVI...8] can be expanded to read NVT : $\mathrm{rV}[\mathrm{sVI} . . .7[\mathrm{rV} \mathrm{sVI} . . .7] \mathrm{sV} 8]$. Such an expansion, which allows for maximal extension, is hypothetical only.

Reiteration does not imply reduplication; also, it is not necessary for a position class to have been filled in the nonextended theme in order for reiteration to take place, e.g., in the form /'kwi•pa•ke•ráki•ma/ 'They swam all day' the location/direction suffix <e'ráki> 'all day long' occurs only in the extension of the theme.

There are no examples in the data of sVI (attributives) or sV5 (reciprocal) occurring in reiterated positions of the members of sV4 (benefactive and reflexive) only the benefactive is found in a reiterated position. There are infrequent examples of reiteration of sV2 (direction/location suffixes) and of $v R$ (verb radicals). The benefactive, the transitive marker, the collective markers and the nonpunctual aspects occur most aften in

```
    reiterated positions; of these the transitive
maricer occurs the most frequently.
    Examples of extended themes are:
<k`̀े usti ehempi ehempi -ik> : /kústehémpehémpik/
    rV sV6 sV6 'a dance hall'
<kw usti ehempi e•ki cw -ik> :/Kústehémpe•kic`ik/
    rV sV6 sV7 sV6 'They got tinrough
                                    dancing'.
<ỉw at•í cwí a•ki a•?i iru a•> : /kwát•ic`a|kayra•?/
    rV sV2 sV7 sV3 sV8 TThey chased
                                    them.'
<t i̛̛u xixí cw़ e•ki -rakmak•i iru a•> :
    rV sVl sV2 sV7 sV2 sV8
                                    /tíčuxixíc•e•kirakmak•ira•?/
                                    'They(coll.) were
                                    barely lifting
                                    it(distr.) up here
                                    and there.'
<t iču karkar -rakmak\cdoti e•ki iru a.?>:
    rV sVl sV2 sV7 sV8
        /tíčkarkarakmak•è:kira*?/
                                    'They were lifting
                                    it here and there.'
```

420. The substantive. Substantives are verb satellite expressions that can occur unmarked or with one or more substantival suffixes. Substantives are divided into themes called NOUNS, LOCATIVES, NUNERALS, PRONOUNS, and DEVERBATIVE (NOMINAL, GERUNDIAL, TEVPORAL).
421. The substantival suffixes. The substantival suffixes are as follows:

| <-áH> | $(\mathrm{V})$ | 'vocative' |
| :--- | :--- | :--- |
| <-óHpar> | (C) | 'comitative' |
| <-óHta> | (I) | 'instrumental' |
| <-óHtu> | (P) | 'possessive' |
| <-óHtuhú> | (Dt) | 'directional(thither)' |
| <-óHtuhúk> | (Dh) | 'directional(hither)' |
| <-ócHu> | (A) | 'ablative' |
| <-óH?i> | (Lt) | 'locative(temporal)' |
| <tuk> | (Ls) | 'locative(spatial)' |

These suffixes fall into sets depending upon patterns of occurrence with substantive themes. A schematic presentation of themesuffix occurrence is given below.

| Theme | Suffix Pattern |
| :---: | :---: |
| $\mathrm{NOUN}_{1}$ (cf. 422.1.) | $\left[V, C, I, D h,\left\{\begin{array}{c} {[P][I s]} \\ {[D t]} \end{array}\right\} A\right]$ |
| $\mathrm{NOUN}_{2}$ (cf. 422.1.) | $\left[C, I, D h,\left\{\begin{array}{c} {[P][I s]} \\ {[D t]} \end{array}\right\} A\right]$ |
| LOCATIVE | [ [Ls, Dt ] $\mathrm{A}, \mathrm{Dh}, \mathrm{It}]$ |
| NUMERAL | [ [ITs, Dt ] $\mathrm{A}, \mathrm{Dh}$ |
| PRONOUN | [C],[P[Is A]] |
| NOMINAL GERUNDIAI | $[C, I, \operatorname{Dh},[\{[P][I s]\} A], I t]$ |
| TEMPORAL | [ It ] |
| 421.2. <-óH> Vocative. The vocative does not |  |
| occur with other substantival suffixes and there |  |
| expressions. The use of this suffix is usually |  |
| limited to kinship terms and the lexeme <yah•ar> |  |
| as an epithet for Coyote, occurs with vocative. |  |
| Occasionally, in stories, the vocative is also |  |
| found with animal names and terms for inanimate objects. |  |
| When occurring in conjunction with the cliti |  |
| <na•> 'addressative' (cf. II.480.), the vocative |  |
| s used as a form of | $t$ |

Examples follow.
<ač•uk -áH> as in /Páč•ukú• Pí•s•i• Pin•áp
'wis•ík/ 'isister, this is Panther,' (the elder sister) said.'
<umé• -əpsi ya•war áH> as in /yo: ?umé•psiyáwarí•/
'Oh, you poor children!'
<ic•a -ə́H !> as in /Píc•a: kitíyaḱ/ 'Rock, come near!'
<ac•it -óH na•> as in /Pác•iti•na•/ 'Grandmother...'
421.2. -áEpar Comitative. The comitative does not occur with other substantival suffixes. It coordinates substantive expressions. A comitative substantive occurs as unexpanded or expanded. When it occurs as the satellite of two verbs, the result is a compound clause.

Unexpanded comitative expression.
<an•it -áHpar> as in /?án•ití•par kwíru•ki•wá•?/ '(She and her) aunt went together.'
Expanded comitative expression.
The following are examples of expanded comitative expressions as satellites of one verb: <ap•ak hí -óHpar> as in /twé•wer•e? ァí•s•i.
 lived with his uncle, Mud Turtle'

In this example＜－óHpar＞occurs after＜hí＞＇refer－ ential＇．
＜ukhí－óHpar＞as in／má・ワi？Pin•á？？ukhí•par ${ }^{\text {i }}$ •sax ské•huya•ka？／＇You（sg．）own a cane and a pole．＇

An example of a comitative expression occur－ ring as the satellite of two verbs： ＜i•čisírak－óHpar＞as in／kwá•tak té•？i•ma té•pxiya•kika ？í•čisí•raká•par／＇Coyote and

Raccoon set out on foot；
they were going to a dance．＇
421．3．＜－óHta＞Instrumental．The instrumental does not occur with other substantival markers． For the most part it has the meaning＇by means of＇． Instrumental expressions can be expanded． Unexpanded instrumental expressions． ＜pu・ワas－óHta＞as in／＇akíra• tumpíçahak•ira• pú•？así•ta／＇Serviceberries were set up along the wall in sacks．＇
＜k̀̀̀ u•p a•？i－ik－óHta＞as in／karis•áčuhú ？wí•k yáx•axé•r kú•pa•yikí•ta／＇The children became pretty indeed by means of the painting．
＜um•aká・のi－óHta＞as in／kí•？učú ti•m•á•kira•ka pum•akáyta／＇The yellowjackets carried the pack upward．

Expanded instrumental expressions．
＜＇k̀v•e•mà－óHta＞as in／kásčú čúwa•te•há•？ ke•má•ta yúkma•？kwač•ú？kari•wák•a？／＇On
the sixth day his brother
found him．＇
＜k̇⿺̀ $\mathrm{e} \cdot \mathrm{hù} \mathrm{\bullet t} \mathrm{-ik} \mathrm{-óHta>} \mathrm{as} \mathrm{in} \mathrm{/má} \mathrm{\cdot} \mathrm{Pin} \mathrm{\cdot á?} \mathrm{Pisí} \mathrm{\cdot tu?}$ ke•hú•tikíta skúwain•ay／＇You can＇t buy that with Indian money．＇

421．4．＜－óHtu＞Possessive．＜－óttu＞has an irregular phonemic shape in the environment of pronouns，i．e． －óHtu ：ú／ya•・ァa，ma•••i，kwac，ča•ká，ma•ká，kwa•ká

The possessive can form a theme which can occur with the substantive suffixes＜tuk＞＇locative （spatial）＇and＜－ácFiu＞＇ablative＇．Its occurrence is obligatory in order for pronouns to occur with these suffixes，e．g．，
＜ya．？？a－óHtu tuk＞：／yap•útúk／＇at my place＇
＜ma•？i－óHtu－ócHu＞：／ma•múc•u？／＇from yours＇
＜ča•k̇á－óntu tuik－ácHu＞：／ča•kútukúc•ů／＇from our place＇

A possessive expression occurs as the expansion
of any substantive expression except the vocative, locative(temporal), and the directional(hither). It is not known whether the exceptions are fortuitous or not.

Examples follow.
<pá•stin ə́Htu> as in /pá•stiní•tư káhus•ik/
'English(i.e. white man's talk)!
<?arapxa äHtu> as in /?uswé•?e ?árapxá•tu?
?ám•a•/ 'a brothel (i.e. devil woman's house)' <is -óHtu> as in/má• ?in•á ?isí•tu? ke‘húti•kí•ta skúwam•ay/ 'You(sg.) can't buy that with Indian money.'
<tarí•či -áHtu> as in /tári•čí•tu? ?úk•axá•tuhú kúč•ir Pak•ír/ The arrow fell on the other side of the woman.'
<kwać -óHtu> as in/yawwé•ne té•we•?e kwač•ú wa•ti•par/ 'Yawwé•ne and his father were living together (someplace).'
421.5. <-óHtuhú> Directional(thither). The meaning of <-óHtuhú> is unclear. It is presumed to involve the concept of direction thither.

The directional(thither) suffix can form a theme to which the ablative suffix is added, e.g.
<uwá• -áHtuhú -ácHu> as in /kwá takěi $\cdot$
?uwá•tunúc•u tíri`awhik•a?/ 'Coyote, too, stuck his hand in the hole from this side.' Directional(thither) substantive expressions can be expanded, e.g.,
<k̀v̀ is•a• aw ehempi -ik -óHtuhú> as in $/$ Pwíčkarí•?ic•e•ke? kwač•ú kís•awehempikí•tuhú?/
'He cleaned up everything on the side where he always stays.'
421.6. <-ə́Htuhúk> Directional(hither). This suffix is a petrified form of <-óHtuhú> (cf. 421.5) and the verb suffix <-ak> ~ <-ak> 'hither'. It's distribu= tion is similar to that of <-óHtuhú>, with the restriction that it cannot occur with <-ácHu> 'ablative'.

There are very few examples of this suffix in the corpus. One such example is <am•í -áHtuhúk>: /Pam•ítuhuk/ 'on this side'.
421.7 <-ác耳u> Ablative. The ablative marks the origin of an entity, e.g. <ač•áy -ácHu\#ču’uar>: /?ač•áyc•u cैú•war/ 'luminary from the day (i.e. the sun'), or it denotes 'motion away from', e.g.

> <tú•rus tuk -áchu> :/tú•rustukúc•u?/ 'from inside the basket'.

The ablative expression, like the possessive, occurs as the expansion of any substantive expression except the vocative, locative(temporal), and the directional(hither).
(See II.421.4,5 for examples of cooccurrence of the ablative with other substantival suffixes).
421.8. <-ə̈H?i> Locative(temporal). The temporal locative occurs in constituency with locative themes, the derived themes, nominal and ger-undial, and with clauses containing verbs in the potential or declarative mode. When it is in constituency with a clause, it is suffixed to the verb.

Examples of its usage follow.
with locative theme:

$$
\begin{array}{ll}
\text { /kwísmisí•?i/ } & \text { 'at Christmas time' } \\
\text { /kurá•tičí•?i ?i•tná?/ } & \text { 'until spring' }
\end{array}
$$

with clauses:

'What are we going to eat if we haven't any money?'
$/$ Pu•?ik•ačí• yi•pá•?i/ 'when we were swimming'

```
421.9. <tuck> Locative(spatial). <tük> is a marker of location in space. The best translation for it is "...is the place"; e.g.,
<e•čá ehé•wi tuck> as in /?é•čehé•witúk xúk•a kehe•há•?/ 'ten is the place two lying across
(ie. twelve)'.
<ak a•ha• tuck> as in /ráka•ha•túk >i n•á刀 tárakwi•ka/
'They fell out of the
tree.'
<awáčay tuck> as in /Pawáçaytúk/ 'down to the creek'
<ipxa•n•a•tưkk> as in /Pípxa•n•a•túk/ 'in the lake'
<is tưk> as in /Pístúk rú•wayaka?/ 'He is among those people.'
<tuck> cooccurs with <-óHtu> 'possessive' and <-ácHu> 'ablative'. For examples, cf. 421.4,7. The locative suffix can form a theme to which the ablative suffix is added:
\[
\begin{array}{r}
\text { <tu•rus tuck -ácHu> :/tú•rustukúc•up/ 'from } \\
\text { inside the basket'. }
\end{array}
\]
Locative expressions occur expanded and unexpanded. An example of an expanded locative is
```

> /yap•úo čikiman kúkmi•ruktúk/ 'my gold finding place' (i.e. where I found gold)'.
422. The substantive theme. Deverbative themes are based upon verb themes or verbs. The other substantive themes are subclassed on the basis of patterns of thematic suffixes, whose occurrence is optional. A nondeverbative theme $\mathrm{coqu}^{\text {- }}$ sists of a radical with or without thematic suffix(es). There are only semantic restrictions against a substantive radical being a member of more than one theme class. Many radicals rarely occur with thematic suffixes or with substantival markers.
422.1. The noun thematic suffixes. There are eleven noun thematic suffixes that are synchronically isolable. Some of them are only marginally productive. These suffixes are discussed in the following sections.
422.1.1. <-əHná•㩆•> definitive. This suffix, and also <hí> 'referential' with which it can cooccur (cf. 422.1.2.), forms noun themes that occur with all substantival markers except the vocative and the locative(temporal). There are no
examples in the corpus of its occurrence with them－ atic suffixes other than＜hí＞．Examples of its usage follow．

＇He slept only with the big one（i．e．elder one），not the small one（i．e．younger one）＇
／čá•xari•na・フí•tu’ クám•a•／＇Turtle＇s house＇ 422．1．2．Shí＞referential．All examples in the data have＜kí＞occurring with kinship terms．In the environment of＜aní•＞＇mother＇，＜atá•＞＇father＇ and＜á•pu•＞＇older brother＇，＜hí＞has the follow－ ing phonemic shapes，

$$
\begin{aligned}
& \text { <aní• hí> }: \text { /Páni•ní?/ } \\
& \text { <atá• hí> }: \text { /Páta•tá?/ } \\
& \text { <a•pu• hí> }: \text { /Pá•pu•pú?/ }
\end{aligned}
$$

This suffix，like＜－əHná•？i•＞（cf．422．1．1．） forms noun themes that occur with all substantival markers except the vocative and the locative （temporal）．Examples of usage are given below．
 would be the son＇．

In the example above，we find＜hí＞cooccurr－ ing with＜－əHná•㕸•＞；i．e．＜a•khwi hí－əHná••i•＞

```
    'son-referential-definitive'
    /Píwa`súr té*xe`ke? ?u`mä`nucí*tu? ?á`hu`híyá`war/
        '?u`má`nuc's brothers were
        sick at heart.'
    /Páni`ní? ?áta`tá•par kwé?•a`ma/ 'Mother and
```

    Father went hurting.'
    422.1.3. Number suffixes. The two thematic
    suffixes that mark number are described below.
    Themes formed with these suffixes can occur with
    all substantival suffixes except the locative
        (temporal). These suffixes cannot be followed
        by other thematic markers. Although they can be
        preceded by other suffixes, they, themselves, are
        mutually exclusive.
    422.1.3.1. <yä•war> collective. This lexeme,
    which has a frequent variant <yä•r>, primarily
    refers to animate things; however, it is infre-
    quently used in reference to things inanimate,
    e.g. /čínkiniyá•war/ 'shells(var.)'. Examples
    of the more usual usage are as follows:
    /Pú•pitaktakyá•war/ 'a bunch of hounds'
    /tarícíiyá•war/ 'a group of women'
        /Pin•áyá•warik̊•áskwa•mí• ?íkhwi k̉wáwi•ka?/
                            'They are the ones that
                            gave me a boat.'
    In the example above, the verb /kwáwi•ka?/ is unmarked for collectiveness. Although, collective noun themes often occur with verbs marked for collectiveness, agreement as to collectiveness between a noun satellite and the verb is not obiligatory.
422.1.3.2. <xa•yxér> paucal diminutive. This lexeme, which has the frequent variant <xé•r>, is most often used in reference to the young of animals that bear cnly a few offspring, e.g. /’ě•xa•xa•yxér/ 'bear cubs', as opposed to animals that bear litters. An example of usage is
/kás mí• kimpíxa•yxér rá•ke?/ 'They are getting pretty big.'.

The lexeme <yah•ar> 'child' has an irregular phonemic shape when occurring with <xa•yxér>; i.e.
<yah•ar xa•yxér> : /yáx•axa•yxér/ 'children'.
422.1.4. Attributive suffixes. There are a few suffixes that stand in an attributive relationship to the radicals they occur with. There are only semantic restrictions on their cooccurrence with the number suffixes.
422.1.4.1. <-ehé•nax> ~ <-ehé'rax> 'female'. The following are examples of usage of this suffix

Whose occurrence is infrequent:

$$
\begin{aligned}
& \text { <?e•tiski -ehé•nax> : /?é•tiskehé•nax/ 'morning } \\
& \text { star (Venus)' } \\
& \text { <u•sa -ehé•nax> : /əú•sahé•nax/ 'a promiscuous } \\
& \text { woman' }
\end{aligned}
$$

<uswé•?e -画é•nax>: /?uswé•?ehé•nax/ 'a shedevil'
<kičuk -ehé•rax>:/kíçukehe•rax/ 'a woman doctor'

It also occurs in the form/yú•čehé•nax/ 'a Yuki(?) woman'.
Presumably the radical in this form ends morphophonologically in a vowel. If so, we have here an example of an irregular phonemic shape for <-ehé•nax>, i.e. the expected vowel apheresis does not take place.

In the form / 'á•rakahé•nax/ 'evening star (Venus)', we find the variant shape <-ahé•nax>.
422.1.4.2. <taktak>. The translations for <taktak> are 'loose, floppy, baggy'. It is marginally productive. Examples of usage are: /míritaktak/ 'Floppy Mary (pers. name)' and /?ú•pitaktak/ 'a lopeared dog (i.e. hound)'. 422.1.4.3. <-opsi> 'pitiful'. Examples of
usage are as follows:
/yap•úkupsi/ 'a bucket belonging to someone who is dead'
/súk'axapsi/ 'a pitiful boy' (as used in reference to a bachelor)
422.1.4.4. Sxí•yáx> 'diminutive'. Examples of usage are as follows:
/?á•psuxí•yáx/ 'a little dog'
/'ípxa•n•a•xíyáx/ 'a little lake'
This suffix can also occur as an enclitic (cf. 450.). In /'am•axxí•yáx/, 'a little way', it occurs with a locative, and in /Píyaxá túp•iyá•raxí•yáx/, 'I'd better have a little nap', it occurs with a verb in the volitional mode. 422.1.4.5. <-aknak> 'big'. Examples of usage are:
<apka -oknak>> : 'hand-big' : /Pápkaknak/ 'thumb' <kimpí -oknak’> 'big-big' : /kimpíknak/ 'a great big one'
<k̇ari•wá -oknak̀> 'brother-big' : /kári•wáknak/ 'eldest brother'
422.1.5. <-i\#hi> ~<iffi> 'animal hair'. This suffix also has the variant shapes <-a•hi> ~ <-a•wi>.

It is not possible to predict which of the four variants will occur. Cp. /kwa•taka•hi/ ~ /kwá•taka•wi/ 'coyote hide' and /tiní•čxuki•wi/
'raccoon hide', /Pa•ráwi•hi/ 'deerhide'.
422.1.6. Syé•yu> factitive. This suffix can follow <-iFni> ~ <-iFwi> 'animal hair'. It has the variant shape <-viHyu>; e.g.,
/čút•a•wí•yu/ 'something made out of gray squirrel hide.

Other examples are:
<atká• -v́Hyu>: / 'atká•yu/ 'a lot of wild plums'
<čifuk•u yé•yu>: /čítuk•uyé‘yu/ 'fat around the kidney'
422.2. Locative thematic affixes. There is one locative thematic prefix and there are eight locative thematic suffixes. These are described in the following sections.

The discussion of the suffixes is organized according to the following patterns which are mutually exclusive.
(1)

$$
\left[\left\{\begin{array}{c}
<-\partial ́ r a><h_{i} \cdot h_{u}^{\prime}> \\
<h_{i} \cdot>
\end{array}\right\} \quad<h a ́ \cdot k_{i}>\sim \text { <e ́•ki> }\right]
$$

(See $422,2,3,4,5$ ).
(2) $\left[\left\{\begin{array}{l}\langle\dot{t i} i ́ c \\ \langle m \cdot a\rangle\end{array}\right\}\right.$ <axá $]$
(See $422,6,7,8$ ).
422.2.1. Sku> place name prefix. Examples follow:
<čáwa•k> 'jaw' : /kuçáwa•k/ 'name of a little hill(spec.)'
<č̊i•ták> 'head louse' : /kúči•ták/ 'a deerlick
(spec.)'
422.2.2. <-źra•> characterized by. This suffix can occur before <h i•hú> 'plant, bush' and before <ḩá•ki> 'collective locative'. Examples are: <atká• -óra• hi•hú há ki> 'wild-plum characterized-by bush collective-locative':
/Patká•ra•hi•huwá•ki/ 'wild plum bush country'. <ac•a -ára•>: /’ac•ára•/ 'water-characterized-by (ie. wet)'
<t'arak -óra•>: /'tárakára•/ 'dirty'
422.2.3. <h i•hú> plant, bush. This suffix can occur before <há•ki> 'collective locative'. Examples are as follows:

$$
\begin{aligned}
& \text { <cpi tat hi •hú>: /čítathi•hú/ 'applebird-plant(i.e. } \\
&f e r n(v a r .)) ' ~
\end{aligned}
$$

<mantá•x hi•hú há•ki> 'grapes plant collectivelocative': /mantá•xhi•huwá•ki?/ 'where there are grapevines'.
<pičis hi•hú>: /píčishi•hú?/ 'a peach tree'
There are petrified forms containing this suffix; e.g. /na•h•ú/ ~/nah•ú/ ~ /Ránax́a•hú/ ~ /Pínaxa•hú?/ 'cedar'.
422.2.4. <hi•> (?). The meaning of this lexeme is uncertain. It does not occur after other locative thematic suffixes. It only occurs before <háekỉ̀̀>~ <é•ki> 'collective locative (cf. 422.2.5.). Examples are:
<ikni•his hi• há•ki> 'celeryroot' ? coll-loc.': /Píkni•hishi•wá•ki/ 'where wild celery grows thick'
<yumaxá hi• há•ki> 'oldman ? coll-loc.' : /yúmaxáhi•wá•ki/ '(with) the old men'
<e•wará•r hi•há•ki> 'boy-paucal ? coll-loc.':
/Pé‘wará•rhi•wá•ki/ '(with) the boys'
<ipxa•n•a•hi• é•ki> 'lake ? coll-loc.':
/דípxa•n•a•yé•ki/ 'a lot of little lakes'
(cp. <ipxa•n•a•há•ki>: /'ípa•n•á•ki/ 'lake country').
422.2.5. Collective locative. The collective locative has the variant shapes <há•ki> and <é•ki>.

These shapes are in partial complementary distribution: <érki> occurs after lexemes whose morphophonological shapes end in a front vowel, or front vowel plus consonant, or apical consonant (i.e. <i,e[C],T>; <há•ki> occurs as /wá•ki/ after <hi•hú> 'plant, bush' and <hi•> '?' and as /á•ki/ after lexemes whose morphophonological shapes end in a back vowel or back vowel plus nonapical consonant (i.e. <u,a[P]>. Examples are:
<wak•we• é•ki>: /wak•wé•ki/ 'mountain country' <ecik é:ki> : /čiké•ki/ 'in the mud' \llkika•'c é•ki> : /kíka•'cé•ki/ 'kíka•'c country' <a•wá•s hi•hú há•ki> 'madrone tree coll-loc.' : /?a•wá•shi•húwá•ki/ 'where madrones grow'

```
<e*wará•r hi | há*ki> 'boy-
        paucal ? coll-loc.' : /?é`warárhi`wáki/ '(with)
                                    the boys'
<čururu há•ki> :/čúrurá•ki/ 'brush country'
<ac•a há\bulletki> ; /'ac•á*ki/ 'swampy ground'
<ičkák há`ki> 'heavy, strong
    coll-loc.' : /'íčkaká•ki/ 'hard ground'
        <há•ki> and <ě*ki> also occur in the same
environments; e.g.:
```

<uswé•?e há•ki> : /Puswé•?ehá•ki/ 'devil country (i.e. hell)'; <wak•we‘ éki> : /wak•wéki/ 'mountain country!' (n.b. /?úswé•१á•ki/ 'hell(CW))'.
<ipxa•n•a•hi•é•ki> : /Pípxa•n•a•yé•ki/ 'a lot of little lakes'; <yač•apxá•hi• há•ki> 'girl-paucal ? coll-loc.': /yáč•apxá•hi•wá•ki/ '(with) the girls'.
422.2.6. Stíč> quantitative. The only locative thematic suffix this lexeme occurs before is <-axá> '?' (cp. 422.2.8.). Examples of its usage are as follows:
<is•í• tíč> 'middle quant.' : /Pis•i•tíč/ 'half of'
<in•á tíč axá> 'that one quant. ?': /in ${ }^{\prime}$ •atíčaxá?/ 'as big as that one'
<kurá•tíč> !wheréquant.' : /kura•tíč/ 'How much?'
<kurá•tíč -ə́H’i> 'where quant. $\operatorname{loc}($ temp $)$;

> /kurá•tičí•?i/ 'at what
> time...?'
422.2.7. $\leq m \cdot a \cdot>$ hither. This suffix has the phonemic shape /ma•/ after a morphophonological shape that ends in a consonant; e.g.
<uk•áx m•a•> 'a-long-way hither' : / Duk•áxma•/

> <m•a•> occurs before <-axá> ? (cp. 422.2.8.).

Examples of this and other usage follow:

```
<ihí•ni m•a•> 'a-length-of-time hither' :
        /Pihí•nim•a•/ 'afterward'
<ihí•ni m•a• -axá> 'a-length-of-time hither ?':
        /?ihí•nim•a•xá/ 'quite a while
                        afterwards'
<
    now'
    422.2.8. <-axá-> (?). The meaning of this suffix
is uncertain. Examples are:
    <?ihíni m•a• -axá> !a-length-of-time hither ?' :
        /?ihí•nim•a•xá/ 'quite a while
                                    afterwards'
<kurá• -axá -ácHu> as in /kura•xác•uči• ste?•akak/.
                                    'Where are
                                    you(coll.) coming
                                    from?'
<mi• -axá> :/mi•xá> 'over that way'
<K̇a•?u -axá -ócHu> 'now ? aibl.': /ká•?uxác•u/
                                    'not long. ago'
<am•áx -axá> 'close by ?': /'am•áxaxá>/ 'not far
                    away'
```

The following example, in contrast to the immediately, preceding one, contradicts the morphophonological rule concerning behavior of vowels

```
after consonants, e.g.
    <uk`áx -axá -áHtuhú> 'a long way ? direct.(thither):
    /?úk`axxá`tuhú?/ 'on the other side'
```

422.3. Pronouns. Pronouns are characterized by inherent number and person and the fact that they cannot be expanded. They can occur with the noun thematic suffix <-əHná•?i•> definitive, and the substantival markers <-óHtu> possessive and <-óHpár>comitative; however, they do not occur with other suffixes. The pronominal paradigm is given below.

|  | ingular | Plurai |
| :---: | :---: | :---: |
| $1 P$ | <ya.?a> | <ča•¢á> |
| 2 P | <ma.9i> | <ma ${ }^{\text {cká> }}$ |
| $3 P$ | <kwac'> | <kwa•ká> |

When occurring with the possessive marker, pronouns have the following phonological shapes: Morphophonological Phonemic

| Shape | Shape |
| :---: | :---: |
| ya.9a | yap. ~ ya•p |
| ma.Pi | ma ${ }^{\text {m }}$ |
| kwac | kwač. |
| ča-k̇á | ča. ${ }^{\text {ch }}$ |
| ma chá $^{\text {a }}$ | ma-k |
| kwa•'Ká | kwa-k |

Examples are as follows:
/yap•útúk/ ~/ya•pútúk/ 'at my place'

| /ma•mútúk/ | 'at your(sg.) place: |
| :--- | :--- |
| /kwač•útúk/ | 'at his place' |
| /ča•kútúk/ | 'at our place' |
| /ma•'kútúk/ | 'at your(pl.) place: |
| /kwa•kútúk/ | 'at their place' |

422.4. Numeral themes. The Shasta counting system is based on five substantive radicals and six thematic suffixes. The lexemes involved are charted below. The numbers in the chart represent the glosses for constructions resulting from the combination of radical and thematic suffix; read 'x' beside a number as 'times'. (Assume the thematic suffixes are mutually exclusive; discussion of their cooccurrence possibilities follows the morpholexical statements below.).

RADICAI - THEMATIC SUFFIX
<wa•te•há•><ehé•wi><Hhi•s><nay><?i•rú><-viHyu>
<če・ワa> 6
'one'
<xuk•a>
'two'
<xački>
'three'

| <iraha•ya•> <br> 'four' | 9 | 80 | $4 x$ |
| :--- | :--- | :--- | :--- |
| <e•čá> | 10 | 100 | $5 x$ |
| 'five' |  |  |  |

No glosses can be assigned to <wa•te•há•> or <ehé•wi>. <Hhi•s> is a vigesimal marker. <?i•rú> and <-v́Hyu> are multiplicatives. <ną̈ and a variant shape <n•imá•?i> occur only with <cée?a> and the resulting constructions are translated 'once'.
<xački> has the variant shape <xacki>. <Hhi•s> has the phonemic variants /*hi•s/ and /•his/.

The following morpholexical variations occur: Morphophonological Morpholexical Mor"phophonological

| Shape | Variant | Environment |
| :---: | :---: | :---: |
| ce.pa | : ču | /__wa te thá• |
|  | če. | /__nay, n •imá• $\mathrm{i}_{\mathrm{i}}$ |
| wa ${ }^{\text {ete }}$ há | : wa•t | /__?i•rú |
| xuk'a | : xuk.a. | /___ri•rú |
| Pi•rú | - Pir | /xuk.a |
|  | e•rú | /íraha•ya. |
|  | i.rú | /wna・も |
|  | ír | /_ |
| The constructions formed with <wa-te•há>> and |  |  |
| <Hhi•s> can occur with <?i•rú>; <e•čá ehé*wi> :ten |  |  |
| like <xački> 'three', occurs with <-v́Hyu>: |  |  |

/čúúwa•ti•rú/
/?íraha•ya•wa•ti•rú/ /čéni-sír/
/?é•čehe•wíry/
Constructions formed with <wa•te•há•> cannot occur with <Hhi•s>.

The numeral themes are rarely used with substantival markers. There are no examples of multiplicatives formed with <?i•ru> or <-viHyu> occurring with substantival markers. <?i•rú> and <-v́Hyu> also occur with <tá•wi> 'amount'. Cp. the following dialogs:

Question: /ta•wí•yu ké・の túwata•yrak/ 'How many shall I bring?'

Answer: /xacki•yu/
Question: /ta•wírri•:ké• tá•/

Answer: /xuká•yu/
Number concepts, excluding l-10 and multiples of 20 and 100 , are expressed by a substantival construction formed with <tulk>, 'loc.(spat.) and the nominal deverbative <k̇̀̀ e•he•há•> 'lying across', e.g.,
/Pé•čehé•witúk गe•čá? ke•he•há・ク/ 'fifteen' $/$ xúk•a•hi•stúk ?e•čehé•wi ke•he•há•?/ 'fifty' /čé•histúk गíraha•ya•wa•te•há・つ ke•he•há•?/

$$
\begin{aligned}
& \text { 'twenty } \\
& \text { nine' }
\end{aligned}
$$

The adverb <či•mi> 'again' is optionally used
in such constructions, e.g.,
/xáčki•histứk čír•mi ?e•čehé•wi ke•he•há•?/ 'seventy'
Multiples of 100 , excluding 1000 , are expressed
as follows:
/xáčkiwa•ti•rú ?e•čá•hi•s/ 'eight hundred (i.e. eight times one hundred)'.

The form for 1000 is /ré•čehé•wi•his/, (i.e. 'ten-vigesimal' (or 2000 ?).
422.5. Residual thematic suffixes. Lack of distributional evidence militates against unequivocal class assignment of a residue of suffixes. These forms have tentatively been considered as substantival or as locative thematic.
422.5.1. <-əHrú> (?). This lexeme is arbitrarily categorized as a substantival suffix. It seems to mark the concept of comitative. The examples extant in the data are given below: <yah•ar -aHrú> 'child' ?' as in /Pac•e. yán•ara•rúp/ 'a female grizzly bear with one cub'
<čirik -əHrú> 'young elł ?' as in /číriki•rú?/ 'a female elk with a young elk'
<čup•ax -əHrú> 'fawn ?' as in /čúp•axa•rưo / 'a doe with a fawn'
422.5.2. Residual locative thematic suffixes. The residual suffixes which have been tentatively categorized locative thematic fall into three semantic groups: aspectual, body part locative, and directional.
422.5.2.1. Aspectual residue. The two suffixes in this group are described below.
422.5.2.1.1. Syáki> durative. This suffix has the lexemic variant <hí•ya•ki> which occurs in one example, i.e. <wak•wí hí•ya•ki>: /wák•wihí•ya•ki/ 'all winter long'.

Other examples are:
<ač••áy yá•ki>: /ヤáč••ayá•ki/ 'all day long'
<apxá• yá:ki>: /’apxa•yá•ki/ 'all night long'
<ata•hí• yá•ki>: /fáta•hi•yá•ki/ 'all summer long'
422.5.2.1.2. SHma> continuative. This lexeme is also averb thematic suffin. It occurs in the substantive system in the following example:
<?a•yax•í Hma> as in /rá•yax•íma číricwe•ki甲/ 'We're going to work
again tomorrow.'
422.5.2.2. <-əHwí•ma> body part locative. This suffix occurs with the substantive radicals <ičwat> 'chest' and <e•pka> 'nape of neck':
/Píčwati•wí•ma/ 'all over the chest'
/Pé•pka•wíma/ 'the whole back of the head'
It also occurs with nominal themes:
<'̇̀े ehení -aHwí•ma>: /kéheni•wíma/ 'around the tongue'
<kv e•ri -əHwíma>: /ké•ri•wíma/ 'the end of the nose'
<k̉v̀ ir -əHwí•ma>: /kíru•wí•ma/ 'male genitali'
<k̀̀̀ $u \cdot p c ̌ i ~-ə H w i ́ m a>: / k u ́ \cdot p c c_{i}^{2} \cdot w i ́ \cdot m a /$ 'on the shoulder'

This suffix cannot be used with body part terms such as:
<é•raw> 'navel', <apka> 'hand, fingers, arm', <ičxí•k> 'penis', <a•rawá•?i> 'leg'.
422.5.2.3. Directional residue. There are three residual suffixes which have directional meaning.
422.5.2.3.1. <á•nay>~<yá•ray>. The two examples in the corpus are as follows:
/mí•tičá•?ay/ 'quite a ways'
/mí•yá•?ay/ 'way over yonder'
422.5.2.3.2. <hu•rú̀ upstream(creek). The examples are:
<uka'hu•rú>: /Puka•hu•rú/ 'upstream(creek)' cf. /Pưka•hu•rú•tuhú?/ 'up the creek from there' /Puka•hu•rúc•u/ 'from up the creek' (as name for the Scott River Shasta)
422.5.2.3.3. <tú> upstream(river). The examples are:
<uk tú>: /rúka•túp/ 'up the river' cf. /Puka•túc•u ?iss/ 'a person from up the river'
422.6. The nominal theme. The deverbative nominalzing prefix <k̀े>, which has the variant <?ণ̀, occurs with verb themes to form a construction than can enter into constituency with a substantival marker. This type of theme formation is very productive. The restrictions on the kinds of werb thmese that can be nominalized are unknown.

Examples are as follows:
/kan•iti•k/ 'chopping(perf.):
/kir•e•ke?/ 'the ones they had with them(perf.).'
/ké•kaha•ma/ 'father(i.e. 'watching ahead')(cont.) as in /'ké•kaha•má•tu’ sá•tawac/ 'Father's horse'. /kípa•kira•?/~/pi•pa•kira•?/ 'a stinger(dur.).' /káris•á•ki?/ 'a suitable place(neut.)' 422.7. The gerundial theme. A gerundial verb (i.e. a verb construction containing the declarative gerundial prefix <?wì> plus an aspectual theme) functions as a deverbative substantive theme which occurs with substantival marker to form verb satellite expressions that can occur exparided or unexpanded, e.g.
$\begin{array}{ll}\text { /?wík•wahá•wa•ták/ } & \text { 'up in the corner there' } \\ \text { /Pum•akáy ?wis•á•kwaya•/ } & \text { 'God (i.e. the one sit- }\end{array}$ ting up over head).'
In both the examples above, the verb theme is in the durative aspect.
422.8. The temporal theme. Verbs in the potential, subjunctive and declarative modes function as deverbative substantive themes., that occur only with the temporal locative suffix <-óH?i>. The resulting construction is a temporal locative expression that is a satellite of a verb, e.g. $/$ yím•akwantay mí• steruka•ri•?i/ 'He would tell him if he asked.' /yičkwá•?i/ 'When we(pauc.) were eating.' /yičkwa•ké•?i/ 'When a whole bunch of us were eating.'
430. The adverb. An adverb is a verb satellite that is never in constituency with thematic or substantival suffixes. Adverbs never occur expanded.

The above statements characterize all the lexemes in this class; however, it is possible that further analysis would reveal the necessity for a more refined classification than has been made.

The adverbs found in the corpus are discussed below.
430.1. Invocatory adverbs. The invocatory adverbs form a semantic group. They divide into maledictory and neutral groups. These adverbs always occur in first tactic position in an utterance.

The maledictory group consists of <huswa> and <na•fía.>. <huswa> is used with verbs in the hortative mode; <na•má•> is used with verbs in the volitional mode. Examples are:
/húswa kakácki?/ 'Would that you would trip!'
(A variart form <hawa> was elicited from CW). /na•má stakácki?/ 'Would that you would trip!' The neutral group of adverbs consists of <i•ya>,

<sira•> as in /kwi•yá•čača• makáy síra. yá•?a? ku•čá? síkhyewa•/ 'I thought that I hear something:'
<isa•> as in /ku•čá? ?ísa•? tis•áy/ 'What are you saying?'
<makáy> as in (l) above and:/kwi•yá•č̀ača. makáy kás sá• tú•仿ú tat•a?/ II thought I would go some other time.' /makáy Pis tíc•e•ke? rákapía/ 'They were drinking lager beer.'
/makáyču mí• xuwá•tirík•a? stúwa?•ak/ 'Would that a rattlesnake will strike you:'
/makáy ríkaha•kwaya•/ 'He's sure dressed up!'
/makáy kwač•ú ke•kwáyik kwántu•me•/ 'I mentioned his name.'
430.3. <sa•> first person volitional marker. <sa•> is used optionally with the first person volitional; e.g.
/'íčku sá•/ 'I'll eat', /čiččku sá•/ 'we'll eat'. Although its occurrence is optional, <sa•> is often
used to differentiate both first person and volitional when there is a possibility of ambiguity;
e.g.,
/čér.a?/ 'Let's go!'(hort.)
/čép•a? sá•/ 'We'll go.'(vol.)
/wá•ra sá• Pin•ál tír•e?e pú•Pastúk/ JIll
put dried salmon in a sack.' (vol.)
/wá•ra Pin•áp típ•e?e• pú•’astúk/ 'Herl put dried salmon in a sack.'(vol.)
430.4. <max> 'not'. <max> is the negative marker. It occurs not only as a verb satellite, but also in expansions of substantive expression:
/má• Pin•á? skutis•a•yak̉/ 'Don't say that to me:'
/má• tá twi ke•mám•u/ 'not a few days hence (ie. before long)'
/má• mí• sin•á? túta•/ 'That's not the way to do.'
/Pí•ya mí• má•kwacčí• rú•wa•?i/ 'Don't let him be with the group:'
430.5. Adverbs expressing uncertainty. There are two lexemes in this group <xamí> 'maybe' and
＜sí•way＞＇it is possible that．．．＇．＜si•way＞is used with verbs in volitional mode．＜xamí＞is used with verbs in the volitional and declara－ five modes．

Examples are：
／xamí sá• te •wíka•hu？／＇Maybe I＇ll move in．＇ （vol．）
／tíkwacá•？i•ma xamí／＇He must have gotten hungry．＇（decl．rep．）
／makáy xamí，té？e•kik／．＇Maybe it＇s cooked：＇ （decl．rep．）
／si ́•way ta •yé•ke？／＇They might cry．＇（vol．）
／$i$ is•ík sí•way stik•íl／＇You might get cold．＇ （vol．）
430．6．Miscellaneous adverbs．The adverbs in their group represent a semantic miscellany． （I）＜ccími＞＇again＇．＜ce i•mi＞occurs in utter－ andes such as／cf ícmi sa•yax•í típ•iknam•ika？／ ＇Again the next day they went to look up over［it］．＇

It also can occur in expansions of substan－ rival expressions，egg．，
／čí••孟i čé•？atúk／＇again one－loc．（spat．）＇（ie． at another place）＇
（See 422．4．for an example of＜cpi $\cdot$ mi＞occurring in
a substantival expression used in counting.)
(2) $\leq m a \cdot h i>$ 'first'. Examples of usage are: /yá•’ạ má•hi te•cni•?/ 'I'll sing first:' $/$ Pu・クí má•hi mí kwá•yaknik/ 'He was the first one who went by.'
(3) <xakáw> '?'. Examples of usage are:
/kás xakáw ?in•á? číčku"/ 'We're going to
eat some grease now.'
/xakáwčú ké• Pin•á? ku•čá kwís•a•ke?/ 'What are they saying?'
(4) <xa•hú> 'still, yet'. An example of usage is /xa•kú tá•?/ 'It was still there.'
(5) $\leq$ maka•> 'no matter that...'. An example of usage is:
/máka•ku•čá skwís•ik/ 'No matter what you say'
The most frequent occurrence of <máka•> is in a set phrase /máka• stá• mí/ 'as it was' which is used as aisconjunctive phrase in narrative.
<maka•> also occurs in a line from a trans-
lation from English into Shasta by Clara Wicks of the Twenty-third Psalm: /yé ${ }^{\text {máka• yá•Pa? }}$ kwat•ehé•ha•ma ?ahúturé•?e čá•purák ?íkiwíwiwá•ki/ 'Yea, although I crossed the valley in the darkness among the dead.'
(6) <axmá・ワi> 'undisturbed'. An example is:

$$
\begin{aligned}
& \text { /?axmá•?ihú ?in•á? kwára•ke?/ 'They were sit- } \\
& \text { ting there } \\
& \text { undisturbed.' }
\end{aligned}
$$

(In this example <axmá•?i> occurs with the enclitic <hú>. Cf. 452.).
(7) San •éx> 'nearly'. An example of usage is: /’an•éx kúč•i•ma/ 'I nearly fell'.
440. Demonstratives. <we*>, <in•á>, and <mi•> are the members of a major syntactic class that functions as verb satellites, with or without substantive or thematic suffixes, and can occur as nouns, locatives, or a connective in satellite expansions.

No matter how it is used, a demonstrative primarily signifies, from the speaker's point of view, location in time or space. <we•> specifies relative immediacy, <mi•> specifies relative remoteness, and <in•á> specifies, as it were, the absence of immediacy or remoteness. These forms can also be used to express aspectual concepts; <we•> marks inceptive/momentaneous, <mi•> marks durative/stative and <in•á> seems to designate imperfective (i.e. 'in the process of...').
440.1. Substantive/Adverb function. Demonstratives can be bases for substantive suffixation or they can occur unsuffixed in a substantive or adverbial function, with the restriction that a demonstrative never occurs at the head of a substantive phrase.

There are only semantic restrictions on occurrence of the demonstratives with the substantive
suffixes; e.g. demonstratives don't occur with <-óH> 'vocative' or <hí> 'referential'; however, a noun theme that has a demonstrative base can occur with the vocative; e.g. /in•áyá•warí/ 'Oh, you fellows there:'
440.2. The connective function. The precise nature of the connective function of demonstratives is not fully understood; consequently, the analysis that follows must be considered tentative.
440.2.1. Connection of clauses. A demonstrative can connect two unexpanded clauses (i.e. verbs),* the resulting construction being a compound clause; e.g.
/kwát•ima mi••kwé•ra•kik/ 'He's-going-hither-on-I゙oot that-one he's-turning-back (i.e. 'He's going back and forth')' It is also possible to express the above idea as follows:

[^4]/kwát•i•ma mí kás kwé•ra•kik/ or ?kwát•i•ma kás mi• kwé•ra•kik/.

As the clause marker <kas> is always in constituency with a following clause, the last two examples are evidence that it is possible for <mi•> to be a constituent of both clauses. It is assumed for the original example that <mi•> is functioning as a connective and that the constituency relationship is a ternary one.
440.2.2. Role of demonstratives in satellite expansions. Demonstratives occur as connectives in various types of substantive phrases. Because of the freedom of Shasta word order and because the demonstratives have multiple class membership, syntactic ambiguity is possible, i.e. there are optional parsings for expressions containing connectives.

The following are examples of a demonstrative occurring in coordinate substantive expression:
(I) /?á•watikhwá•par ?in•á? tarí•či?/ 'man-com. that-one woman (i.e. a man and a woman)'
(2) /?áni•ní mí ?áta•tápaw mi̛ ri•wáykaha•ke?/ 'Mother-ref. that-one
father-ref.-only that-one they-know (i.e. Mother and Father are the only ones who know.)'

Both these examples are representative of ambiguous structures. The structure of (1) is either N D N (where $N=/$ Pá•watikhwá•par tarí•či?/) or $N_{1} N_{2}$ (where $N_{2}=/$ คin•á tari•cíi?/). In the first parsing <in•á> is a connective; in the second it is adnominal.
(2) has the alternative structures $N[N, A] V$ and $N N V$. In the structure $N[N, A] V, N=N D N$ (D is connective) and the second $<\mathrm{mi} \cdot>$ is either a substantival or-an adverbial satellite. In the structure $N \cdot N V, N=N N(i . e .<m i \cdot>)$ is adnominal.
440.2.3. Occurrence with <ké•>. The demonstratives occur with the conjunctive particle <ke•> in a connective pattern that hasn't been completely analyzed yet. The following examples demonstrate the pattern:
/mí ké• mí kwá•?/ 'That was what it was:'
 Pértúk/ 'a cold to be(pot.)-temporal loc. this one it-is-so-that that-one it-nose-snuffs-up-

```
cont. nose-loc. (i.e. When I get a cold, this is
what I snuif up my nose.)'
    /wé• ké• wé ' túti?/ 'This is what he'll do.'
```

450. Enclitics. Enclitics can occur with other syntactic classes. An enclitic is only followed by another enclitic, the clitic <na•> (cf. 460.) or juncture; thus a word in Shasta has the structure $W[E][C]$ (where $W=$ verb, substantive, demonstrative, particle, clause marker, or interjection).

Enclitics are constituents of endocentric constructions. As many as three enclitics can cooccur. A two or three member sequence is called a cluster.

An enclitic that never occurs in a cluster or whose occurrence is restricted to first position in a cluster is referred to as a postposition. An enclitic whose positional occurrence in clusters is unrestricted, except when the first position is filled by a postposition, is called a postfix.
451. Postpositions. Postpositions occur with verbs, substantives, adverbs, or demonstratives. Twelve forms have been identified as members of this class; however, since verb thematic suffixes and substantive thematic suffixes are found functior ing as postpositions, it is assumed that
the class is potentially an open one. For example, the su'bstantive thematic <xí•yáx> 'diminutive' (cf. 422.1.4.4.) occurs with a verb in the volitional mode in /?íyaxá túp•irá•raxí•yáx/ 'I'a better have a little nap'. Some directional/locational verb thematic suffixes (cf. 4l2.2.2.4.) occur as enclitic particles with substantive themes; e.g. <tac•á> 'allative' as in /má•?itac•áj 'towards you(sg.)', <ke•hú> 'upstream from the mouth of a stream' as in / Pam•íka•hú mí kwá•?/ 'It's up the creek here.', <-əpá"k> 'in liquid' as in /'tárakapáck/ 'dirty water'. Also found occurring with substantive themes are attributive verb thematic suffixes.(cf. 4Z2.․․․․) ; e.g. <ča•m•主> 'intensifier' as in /’á•taxára•ča•m•i Pin•áp rá•?/ 'It's too salty.'. The twelve forms identified as enclitic particles are listed below. Accompanying the items on the list are symbols indicating the syntactic classes the forms occur with ( $V=$ verb, S=substantive, $A=$ adverb, $D=$ demonstrative). Examples of usage follow the list.

/xamíhampe•ki əam•í rá•○/(A) 'He might/could be here.'
6. /tí•ti•má•paruru/ 'He ran away at once.'
7. /yíhi•ruxnarin•a•tuwax stúwasá•s/ 'He growled back at him to order him away.'
8. /ku•čé?e•hawna• mí•/(S) 'Why is it that...?'
/kihí•tayikhyaw mí•ké• túta•yik/ (S) 'Because
of the speaking of the name, he did this.'
/mínyaws/ (D) 'That's the reason.'
9. /kás kwér•i•matkay ?wi'wawáw/ (V) 'Everything is
all gone.'
/kás ’wé•ha•wá・の" kás Pim•átkay คwe•hú•ya•ka?/
'All that are living each one has fire.'
10. /rátu? má• kúra•xákamáx stíwa•?i/ (s) 'There's
no place to build a fire.'
/má•kamáx kurá• tutik/ (A) 'He didn't in the least do anything.'
11. /nipxúye•kík•ą mí•čax ničkwá•ki/ You(coll.) go and smoke it out; then you(coll.) can eat it.'

## 12. /mí•knawa•คihú tútik Pihíni•hú/ 'That's what

was always done all
the time'
In the examples above, postpositions occur with postfixes in 1 and 12. The first item in 8 contains an example of a postposition occurring with the clitic <na•> (cf. 460.).
452. Postfixes. There are fifteen members of this class. Postfix occurs with other classes, alone or in clusters. The table below shows the distribution of single postfixes. Discussion, accompanied by examples, follows the table. Following the discussion is a list of enclitic clusters which covers all the coocurrence possibilities found.
452.1. Single postfixes. In the table that follows a blank space in a row indicates that no example of cooccurrence was found in the data. Whether or not a blank is fortuitous is unknown. The class symbols used in the table and discussion are: $V, S, A, D$; and $P=$ conjunctive particle, $C M=$ clause marker, $I=$ interjection.

## Syntactic Class

| Postfix | V | S | A | D | P | CM | I |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

No.

| 1 | <-əp•ahu> | + | $+$ |  | + |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | <-əskwa•> | + | + | $\dot{+}$ | + |  | + |  |
| 3 | <-am•u> | + | + | + | + |  |  |  |
| 4 | <-ókHa> | + | + | + | + |  | + |  |
| 5 | <či $\cdot>\sim<$ čij•> |  | + |  | + | $+$ |  |  |
| 6 | <č̇i•> |  | + | $+$ |  |  |  |  |
| 7 | <ču> ~ =ču> | + | + | $+$ | + | + | + |  |
| 8 | <hư> | + | + | + | + |  | + | + |
| 9 | <kwa•?ís> |  | + |  | $\div$ |  |  |  |
| 10 | <ka> |  | $+$ | + | ? |  |  |  |
| 11 | <ri•> | $+$ | + |  | $+$ |  |  |  |
| 12 | <ya> | $+$ | $+$ |  | + |  | + |  |
| 13 | <yamí> |  | + |  |  |  |  |  |
| 14. | <yahú> |  | $+$ |  |  |  |  |  |
| 15 | <tam•í> |  | $+$ |  |  |  |  |  |

The discussion below is organized according to the ordering of the postfixes in the table above.

1 <-op*ahu>. This lexeme has the variant shapes <-əpaw> and <-s? paw>. Its English equivalents are usually "nothing but" or "only".

$$
\begin{gathered}
\text { /tá•ye•kep•aw/(V) 'It is said they did nothing } \\
\text { but cry.' } \\
\text { /?á•pupú•parip•aw wé• yára•ke?/(S) 'Only older } \\
\text { brother and I remain here.' } \\
\text { /?áta•hisé•kipaw yé?•ihi•yi•ma/(S) 'It was noth- } \\
\text { ing but deserted when we got } \\
\text { there.' }
\end{gathered}
$$

$/$ mí•pahu key? kás mi yap •ú? kat •é•ke?/(D)
'That's the only time I was
[ever] around there.'
2 <-óskwa•>. This postfix is a marker of emphasis.
/tičckúskwa• kit•ár?/(V) 'I'm going to eat summer salmon.'
/Pac•áwskwa• ?átu? ’átu’ ’ac•áw/(S) 'pine nuts, no more, no more pine nuts'
/kasískwa• kičkwá•ki?/(cic) 'You(pl.) eat now:' /čaká? ?in•á? sí*wan•á•?i mí•skwa• ké• sumé• tik•í?/(D) If we should sleep (together), there will be children!'
/mahískwa• ?in•á? túč•awa•sir/(A) 'Wait until the storm is over.'

3 <-əm•u>. This lexeme has a variant shape
＜him•u＞as in／cé•hisim•u／～／čé•hishim•u／＇only twenty＇．Its semantic content，which seems to contain the component＇locative＇，is uncertain． ／＇am•áxam•u／（S）＇not far away＇ ／stáhuワ・úm•u mí•kwá・ワ／（V）＇He was just about to say something．＇
$/$ Pis•i•m•u／（s）
＇in the middle＇
$/ m i ́ m \cdot u /$
＇at that time＇
 ku•çás／＇Again，the same one heard（moment．perf．）
kept－on－hearing（dur．
perf．）something．＇
（There are two occurrences of＜－әr•u＞in this example；it occurs with the adverb＜či $\cdot$－mi＞and also in／Pu•住k•am•uhú／which is an example of a substantive occurring with a three member post－ fix cluster）．See also：
／kwíc•ikim•u／（V）＇He drinks all the time．＇ 4 ＜－ákHa＞＇demonstrative＇．The demonstrative is often used to single out the subject satellite in a clause；however，since it is also used for purely emphatic effect，it occurs with other clause constituents as well．（See 10 for a discussion of possibility of confusion with＜ka＞．）


```
    /ku•cáči- tepsík/ 'Whatever are you looking for?'
6 <çi`>. 'too, also'.
    /xátukwi•wač̀i` Duk•warí?/(N) 'Lots of Wintu, too.'
```



```
                            'I'm going to stay overnight -
                                maybe I'll stay two nights.'
        7 <\check{aru> ~ <ču>. The meaning of this lexeme is}
        uncertain.
            /rát\cdotayrakakčú/(V) 'They are running this way
                    after it.'
    /Páp`akčú `ám•a.tuŕk rá•?/(S) 'Mother's brother is
    in the house.'
    /má`ču mí• Pamí/(A) 'not here'
```



```
        'You(pl.) were asked to
                        come.'
    /kás ké`čú twé`rukwarik/(P) 'Then he asked...'
<hú>. 'emphatic'.
    /rúhu\cdotyan•ákikhú/(V) 'Let him come back again:'
    /`apká•tanú `in`á? sí•čuka\/(s) 'I'm carrying it 
        in my hands.'
    /mí*hú ké• té•cni•k/(D) 'He kept on singing.'
```



See also,

$$
/ \text { mạ́•ičúkwa•?ís/(S) 'Of course it was you:' }
$$ 10 <ka> ~ <ka>. The meaning of this lexeme seems to be the same as that of <-ákHa> 'demonstrative'. In some environments, it is difficult to determine which post fix is present, e.g. /má•ka/(A) 'Don't do that!' could represent either <ma• -ákHa> or

<ma. ka>. In this case, it is assumed that <ka> is the form that occurs since a form like /ma•húka/ ~ /ma•húka/ 'not yet' does not show the expected shape for <-ákHa>. <-ákHa> occurs frequently; the occurrence of <ka> is rare. In an utterance such as /mí•kačú ké・の गás•u•hú stárahu•yákni?/(D) 'May you grow as tall as a yellow pine!', whether /mí•ka/ contains <-ákHa> or <ka> is not known. See also /makáyka sá• tat•áp/(A) 'I'll go afterwhile.' /kás ?átửa Pwí•k kwač•ú stíwe•há•?/(CS) 'There was nothing for him to eat.'

11 <ri•> 'contrastive emphatic'.
/kás ké•čú kú•pič̀iyaxikri•/(V) 'He listened carefully.'
/wé:ri• ké• stuta•yik kičkúk/(D) 'This is the may food should be fixed.'
$/ k w a c{ }^{2} \cdot u ́ t a r i ́ c ̌ i r i \cdot /(S)$ 'Let it be his wife.' 13 syamí•> 'sequentitive'. Examples of usage are:

'Then he started in betting his daughter.'


| -əp•ahu | -ókHa |
| :---: | :---: |
| -əp•ahu ču | -ókHa - -skwa. |
| -əp*ahu hú | -ókHa ču |
| -ákHa -op-ahu | -ók̇Ha ču kwa.?ís |
| -óskwa. | -ókHa -əp ahu |
| -ču -óskwa. | -ókHa čí. |
| -či * -éskwa. | -ók̇Ha yamí. |
| -əm•u hú -óskwa. | -ókHa hú ču |
| -ókHa óskwa. | -ókHa ya hú |
|  | -ottkay -ókHa |
| - $\partial \mathrm{m} \cdot u$ ču | yamí - - ákHa |
| -əm•u k̇a hú | ri - -ókHa |
| -əm•u hú -óskwa. | -ókHa hú ri. |
| -ókHa -om•u hú | -ókHa ri. čic. |
| hú - $2 \mathrm{~m} \cdot \mathrm{u}$ | -ókHa - $\mathrm{mm}^{\text {• } u}$ |
| -əm*u hú | -ókHa ya |
| či. | kwa•?ís |
| či - ču | ču kwa•?ís |
| -ákHa či. | -ókHa ču kwa•?ís |
| -ók̇Ha ri * či. | ka |
| cíi | K̇a hú |
| çi ${ }^{\text {c }}$ - ya | -əm•u ka hú |
| či ${ }^{\text {c }}$ - ${ }^{\text {áskwa. }}$ | ka ču |


| ču | ri. |
| :---: | :---: |
| ču hú | ri - -ákHa |
| či - ču | ri. ču |
| ču -áskwa. | -ókHa hú ri. |
| -əp•ahu ču | hú ri. |
| -əm•u ču |  |
| -ók̇ta ču | ya |
| k̇a ču | -ákHa ya |
| ri• ču | -ókHa ya hú |
| -ókita ču kwa•Pís | ya hú |
| -ók̇̇a hú ču | či $\cdot$ ya |
| hú | hú ya |
| hú ya | yamí |
| hú k a | -ákita yamí. |
| hú -am•u | yamí - -ákHa |
| hú yahú | yahú |
| hú ri. | -ák̇Ha yamí. |
| -әp•ahu hú | yamí - -ákila |
| ču hú | yahú |
| -ákHa hú ču | hú yahú |
| -əm•u ka hú | $\operatorname{tam} \cdot \underline{1}$ |
| -əm•u hú -óskwa. | -ákHa tam•í |
| -óṫHa hú ri. |  |
| k̇a hú |  |
| -家家Ha ya hú |  |

460. Clitic. <na•>, 'addressative', occurs both as an enclitic and as an interjection that occurs in the first tactic position in an utterance. As an enclitic, it follows all other enclitics, most often occurs with question words or forms in the vocative, and enters into the construction it occurs with. As an interjection, it is always followed by <!>, expressive juncture. <nah> is used in conversation when the speaker wishes to address someone. Examples of its usage follow.
/yáčin•a" wé•• tú•?i•na• sá• wé• čí•mac/ 'We're braiding. Wonder when we'll finish?'
/taká•tuna• wé• Pí•nax/ 'Whose hair is this?'
/kurá•či•na• ?in•á? kwát•a?/ 'Where has he gone?'
/rac•ití•na•/ 'Grandmother,
/taká•kari•na•/ 'whoever he is'
/nah: mí• ma•mú? Piskí•k/ 'That's your life: (implying life has been hard)'
/nah: wé• Pwipsí•k yúmaxá? Pwis•á<narrow>•yik/ 'You'll get married, will you, old man!' he said to him.'
461. Conjunctive Particle. <ke•> 'so it is/was that...', is the only member of this class. It occurs alone or with an enclitic. It marks a clause as the final one in a sequence.
/kás ké•čú kwá•tak kú•piči\#zax•ikri•/ ' Then Coyote listened carefully.'
/mípaw ké• kás mí • yap•ú? kat•é•ke?. 'That's the only time I was (ever) around there.'
/máritus srik•í•?i ァin•á? ké• mí kwérisnikwá•ma ?értúk/ 'When getting a cold, so this is that (which) I snuffed up my nose.'

'So what did you just do to my sitting piace: ${ }^{\prime}$
 good to eat.'
$/ k u \cdot c ̌ e ́$ ké• ?in•á? tí•k/ 'What's he doing?'
462. Clause markex. In narrative, <kas> marks a loose conjunctive relationship between a clause and the clause that precedes it. It is always in constituency with the clause that follows.

In conversation, <kas> can occur as an interruptive device or as a hesitation form. With a postfix, it can be used as an interjection, e.g. <kas áskwa•>: /kasiskwa•/ 'Goodbye!'.

Examples of its use as a clause marker follow. /kásčú táka•ka• tis•ík/ 'Then Quail said....' /kás ké•čú kwá•tak kúpičiyax•ikri•/ 'Then Coyote listened carefully.'
/kás wé• sá•ya•pú•ma yá•?ač̉i•/ 'I'm getting old too.'
/kás mí•tičim•u ké•? rúkatehempik/ 'At this point, it ends.'
/0•: kás wé• rán•iwáya•kikak/ 'Oh, here come the brides-to-be!'
/mípaw ké•? kás mí• yap•ú? kat•é•ke?/ 'That's
the only time I was
(ever) around there.'

```
/má• yá*?a kim•á ču•kír Pin•á•tini•hú `ac•áw
    kas xáčki čikí•su kwik`í?/ 'I haven't seen any
                                    acorns or pine nuts
                                    for three years.'
```

490. Interjections. Interjections are lexemes that occur alone or with expressive juncture (<!>) and form complete utterances. They are as follows: $\begin{array}{ll}\text { <hay> 'What!' (an answer given when someóne } \\ & \text { calls your attention) }\end{array}$ jection always occurs in construction with expressive juncture, i.e. <e•x !>: péex/.
<ís•e> 'Here:' as in /Pís•e. wé pía kic•íp/ 'Here, drink this beer!'
<e•huhu> An exclamation made when you are pleased that you have gotten the best of someone. The adverb <má•> 'not', together with <!>, forms a construction that is an interjection, e.g. <má• !>: /má•/.

[^0]:    ${ }^{*} \ell_{1}$ stands for syllable initial; $\phi_{2}$ syllable final

[^1]:    *i.e. before juncture.

[^2]:    i.e. before juncture.

[^3]:    *The verb radical in /kwí•k/ is <i•> 'be(momentaneous)'. <i•> has the morpholexical variants <i•> and <ik•i>; <ik•ì> occurs before juncture and <i•> occurs before <-ik> dmomentaneous' and $\mathrm{me}^{\prime} \mathrm{ki}>$ 'collective momentaneous'. <i•> and <a•> 'be(darative)' occur only with the perfective and collective markers. They enter into construction with verb prefixes to form equational verbs which are the basis for one type of clause (cf. 3I3).

[^4]:    * There are no examples in the corpus of a demonstrative acting as a connective between two expanded clauses.

