Title
Yokuts Grammar: Chukchansi

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Yokuts Grammar: Chukchansi

By

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A.B. (Seattle Pacific College) 1950
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DISSERTATION

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Approved:

[Signature]

[Signature]

Committee in Charge

Degree conferred............................................ Date
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KEY TO SYMBOLS

[X] X is phonetic.

[\x] X is voiced.

[+] extended length.

/X/ X is phonemic.

[X] X is morphophonemic. Unbracketed writing is also morphophonemic, unless designated otherwise.

L/X/ X is lexemic.

L/(X)/ X is a class of lexemes.

{X,Y} X or Y may be present.

(X) X is optional.

W(X) X is also true of W (no space between W and (X)), section 600ff.

(....) optional C or V (one or more) suiting syllable canon.

*X X is fabricated by the linguist, not elicited.

X[\_ Y/Z Read: X preceding environment Y is Z in the next lower stratum of analysis.

X[\_ 2Y[\_ Z Read: XY is realized as YZ; i.e., the order of elements is reversed in the realization (metathesis).

--- "everywhere" or "elsewhere".

C consonant.

V vowel.

# silence.

£ freely fluctuates with.

(200) Numbers in parenthesis refer to numbered paragraphs of this paper, unless indicated otherwise.
INTRODUCTION

Yokuts is one of four language families, belonging to the Penutian stock, that once occupied the great central valleys and foothills of California. The others are Wintun of the Sacramento River valley, Maidu of the northern Sierras, and Miwok-Costanoan (Miwok occupying the territory from west of Yosemite to San Francisco Bay and Costanoan extending about 150 miles south from the Bay Area). Yokuts speakers occupied the San Joaquin valley and Sierra foothills from south of Bakersfield to the delta west of Stockton.

It has been estimated that the number of tribes belonging to the Yokuts group may have numbered as many as forty at one time (see section 1010). Chukchansi is a Yokuts language spoken by a small remnant of the tribe of the same name. A. L. Kroeber classified it (1020) as one of the "Northern Valley Division" of Yokuts, and V. Colla (1010) calls it "the most prominent representative of the Northern Foothill group of the Foothill division."(p. 55)

No doubt, the best known thoroughgoing work on Yokuts is that of S. Newman (1030) which gathers all available features from six dialects into one composite phonology and grammar. Chukchansi was only fragmentarily treated, since his data were very limited. While the analysis here differs from Newman's in many ways, his influence may be noticed even though no conscious effort at imitation has been made.

Possibly thirty speakers of Chukchansi remain at present, with a few more who can understand it somewhat. All speakers known to me are quite proficient in English, except for Mrs.
Liza Jack, who is of a great age. When last heard of (over a year ago) she was in a rest home in Fresno. She did serve as informant on a few occasions when she lived in Coarsegold.

The field work for this project extended over the summers of 1963, 1965 and 1966 (25 weeks in all), most of it being done in the area of Ahwahnee and Coarsegold just a few miles south of Yosemite National Park. Several informants gave considerable help, and two died while serving as informants, viz., Banjo Graham of Ahwahnee and Willie Graham, his cousin, of Coarsegold. Some work was done with Mesdames Rose Watt and Emma Lord of Usona, who were Miwok informants for S. Broadbent (1040). Both speak Chukchansi as well as Miwok.

The first work was done with Miss Bessie Jacobs of Madera, who worked with good humor and great patience, but who had been away from the language for many years. It is to her that I am indebted for introductions to several Chukchansi speakers near Coarsegold through whom I finally met my two best informants. These last are Mrs. Reilly (Lucy) Jones, about sixty years of age, who lives on her family homestead five miles back in the hills southeast of Coarsegold, and a middle-aged woman nearer Coarsegold who requested that her name not be published. Both of these women had the time and the energy for the task of assisting me, and they did nobly. Any lack of data cannot be laid to their charge.

None of the informants was of pure Chukchansi ancestry. One parent or grandparent was, in every case, either Miwok (in most cases) or Kashowu (Mrs. Jones). They claim, too, that some "Chinese blood got into us back there somewhere." My youngest
informant possessed facial features which made this quite credible. Bilingualism was a trait of most, except the younger one, and occasionally a Miwok or Kashowu word would be given. Usually this was quickly corrected or caught by another informant later.

The general theoretical model for the treatise is the stratificational analysis associated with the name of Sydney Lamb. That is, three linguistic strata of analysis are assumed, besides the phonetic (omitting consideration of the sememic here). These are, from highest to lowest, lexemic, morphemic and phonemic. Lamb's symbolism and some terms as seen in some of his articles (e.g., 1050) are modified to a more traditional approach (e.g., the phonons are treated in phonetic symbols, not in terms of mechanical features).

The term "morpheme" refers to a phonological level of representsates, the components of which (the morphophonemes) are represented by phonemes, the next lower stratum. The term "lexeme" refers to a unit of grammar on the non-phonological stratum of which the morphemes are representations. The total number of lexemes, then, is the inventory of grammatical pieces of which the language is composed. The term "word" (211) has been used as a substitute for "composite lexeme" or "free lexeme," i.e., a unit of the language composed of initial and suffixal lexemes and in a few instances of only one lexeme.

Diversification (1050, p. 64), i.e., more than one representation of the representate at the higher stratum, is common from the lexemic to the morphemic stratum and from the morphemic to the phonemic. This is noted especially among the vowel morphophonemes. However, many representsates have only one repre-
sentation on the next lower level.

Because conditioning environments for some phonemic alternations operate differently over morpheme boundaries than otherwise, the boundary itself (| |) has had to be posited as a part of the phonological conditioning environment in many instances. Also, due to the fact that similar phonemic environments accompany dissimilar alternations, a few arbitrary environment-symbols have been introduced as operators which "generate" for the grammarian the proper alternation; e.g., morphophonemic Z "causes" loss of the preceding vowel. Z represents some factor not discoverable by examining the phonemic environment which accompanies this reduction or "zeroing" of a stem. The use of such operators arises from a deliberate attempt to describe phonologically as many alternations as possible. The alternative is to make numerous lists of "allolexes" for many lexemes. This appears to be more cumbersome than the necessarily elaborate morphophonemic statements appearing in this phonology.

Expressions of appreciation are due to the Survey of California Indian Languages of the University at Berkeley for providing the funds by which the field work was carried on; to Prof. Mary Haas under whose tutelage a good share of my studies have been carried on, and who stimulated my interest in California Indian linguistics; and to Prof. William Shipley who shared freely his time for consultation in the early stages of preparation of the thesis, as chairman of the reading committee. Thanks are also due to the other members of the committee, Professors Murray B. Emeneau and Haruo Aoki for their suggestions and corrections. I bear responsibility for any errors or in-
consistencies which survived the careful scrutiny of these helpful men.

A further word of thanks is owed to my colleagues at Simpson Bible College, where I have been employed full time throughout the doctoral work. Their carrying of my duties on many an occasion to permit me to engage in field work or to attend classes puts me much in their debt. Lastly, and perhaps most importantly, thanks to my wife and four children who put up with my absence from home in the night hours and hoped and prayed with me for accomplishment.

T. L. Collord
San Francisco,
February 1968
100. Phonology

The phonemic inventory of Chukchansi contains twenty-eight consonants, vowel length, five vowels and three junctures—thirty-seven phonemes in all:

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<tr>
<td>Plain</td>
<td>p</td>
<td>t</td>
<td>c</td>
<td>k</td>
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<tr>
<td>Aspirated</td>
<td>ph</td>
<td>th</td>
<td>ch</td>
<td>kh</td>
</tr>
<tr>
<td>Glottalized</td>
<td>p'</td>
<td>t'</td>
<td>c'</td>
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<td>Nasals</td>
<td>m</td>
<td>n</td>
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<tr>
<td>Semivowels</td>
<td>w</td>
<td>(r)</td>
<td>y</td>
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<tr>
<td>Lateral</td>
<td>l</td>
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<tr>
<td>Glottalized</td>
<td>m'</td>
<td>n'</td>
<td>w'</td>
<td>l'</td>
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<th>Vowels</th>
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<td>Low</td>
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<th>Junctures</th>
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110. Articulation and Allophony

111. The Stops

The stops of the plain series are voiceless and unaspirated. Lax (lightly voiced) allophones are found in the speech of all speakers of Chukchansi, but especially among the younger people. However, in final position preceding pause, or immedi-
ately before a spirant, the plain stops are usually lightly aspirated. Occasionally they are unreleased finally. The points of articulation are bilabial, dental, alveo-palatal and velar. Usually, the alveo-palatal "stop" is an affricate, but the plain one, /c/, is so lightly affricated before a voiced consonant that it is there frequently a stop.

In the aspirated series, the aspiration is quite pronounced intervocally and in final position before pause. The bilabial and dental orders are most noticeably aspirated. The palatal stop, /cʰ/, is of rare occurrence.

In the third series of stops, glottalization varies from simultaneous release of oral and glottal closure, the glottal release being almost imperceptible, to a definite lag between the two releases. Before pause, these stops may be released with light aspiration, the glottal release not being heard. Vowels in the immediate environment of a glottalized stop, especially between such stops, are articulated with varying degrees of rasping laryngealization. Glottal release is clearly heard initially, especially in the speech of older persons who use little English. (See 132)

112. The Continuants

The spirants, particularly initial /h/ and /ʃ/, are of frequent occurrence in all positions. /s/ is an alveolar, grooved (but nearly flat) spirant, articulated with the tongue blade near the tip. /ʃ/ is an alveopalatal, grooved spirant, somewhat more "hissing" than English /ʃ/. /x/ is a velar spirant, backed when with back vowels. When following a back
vowel, the lip-rounding accompanying the vowel follows through
the articulation of the spirant. The result is [xʷ] in a word
like /soxis/ [sɔxʷis] 'soap root'. /h/ is a glottal spirant
with qualities of English [h].

Both nasal continuants are common in Chukchansi, especially
due to their occurrence in personal pronouns and in a few
common suffixes. They are common in all positions in non-
suffixal functions, as well. Allophony is limited in the bilab-
ial to changes in roundness of the lips caused by articulation
near back vowels (lip-rounding is very moderate in any case in
Chukchansi) and in the dental to slight backing from the teeth
with back vowels.

The voiced bilabial semivowel has the quality of non-
syllabic [U] except after /u/, in which case it is higher. The
quality is somewhat fronted after front vowels. Lip-rounding
is slight except after back vowels, and even then it is moderate.
The palatal semivowel, /y/, has the quality of non-syllabic [i]
after front vowels; it is somewhat lower elsewhere.

The retroflexed palatal semivowel is cup-tongued, like the
typical far-western American /r/. It is found only in words
borrowed from other languages, especially Spanish (but it is
never a flap or trill) and English. Except for a few proper
nouns, all items in the corpus using /r/ appear here:

/ʔo·roʔ 'gold' (Spanish 'oro')
metyan 'Maryan Ramirez'
mo·roʔ 'grey' (origin unknown)
ra·liʔ 'Reilly Jones'
rancʰoʔ 'farm' (Span. 'rancho')
tiyente-ro? 'store' (Span. 'tendero')
to-ro? 'bull' (Span. 'toro')
warâ-hâ? 'playing cards' or 'card game' (Span. 'baraja')
The most aged informant, Liza Jack, says [walâ-hâ?], and uses [l] for English /r/ in some other words.

The lateral, /l/, is a voiced dental lateral. It is generally high-tongued [l*], especially after front vowels, and is only slightly lower elsewhere.

The glottalized continuants, /m', n', w', l', y'/, are restricted to post-vocalic occurrence. They contrast with their non-glottalized counterparts. Articulation varies from a momentary glottal tenseness to a complete glottal occlusion during the articulation, resulting phonetically (intervocally) in a [C?C] cluster; e.g.: /$om'o?/ [§om?mo?] 'swell up'; /lol'o/
[lol?lo] 'let him go'.

113. The Vowels

All five vowels are of common usage, with /a/ by far the most frequent. Their description and allophony are:

/i/, high front unrounded

\[\underbrace{(-\cdot)y(')}_{i} \quad e.g., /tiyit^{h}/ [tiyɪt^{h}] 'it stung'

/e/, low front unrounded

\[\underbrace{(-\cdot)y(')}_{e} \quad e.g., /c'ey'/ [c'e'y'] 'bone'

\[\underbrace{-/\hat{\epsilon}^{\cdot}}_{e} \quad e.g., /hat^{\cdot}m'e?/ [hát^{\cdot}m'e?] 'to sing'

\[\underbrace{-/\hat{\epsilon}}_{e} \quad e.g., /hew/ [hɛw] 'here'
/a/, low central unrounded

\{\{l,m,n,k,k^h,k^\prime\}\{c,\#\}/a^\prime, e.g., /mam/ [ma^m] 'me'
w_C/b, e.g., /wamle?/ [wοmlē^\prime^\prime] 'throw down'
---/a, e.g., /na?/ [na?] 'I'
(Note: [a] is central in this treatise, never front.)

/o/, low back rounded

\{\{\}w<)/o, e.g., /xo?ow/ [xο^<^< otw] 'to the house'
---/o^\prime, e.g., /xo?/ [xο^<] 'house'
---/o, e.g., /nopko/ [nοpkο] 'gather it!'

/u/, high back rounded

\{\{\}w<)/u, e.g., /hu.was/ [hū.wbs] 'grapes'
---/u?, e.g., /tu?/ [tu?] 'y'know'
---/U, e.g., /mukuš/ [mūkuš] 'grandmother'

114. Length

Length constitutes phonetically about one-half to one mora, follows any vowel, and configurates as a consonant, with the exception that it occurs only post-vocally, never intervocally. It is seldom found outside one or both of the first two syllables in a word; e.g., /o:mis/ 'mother'; /tiye:lic'/ 'herder; /lu:ca:lewše?/ 'to wrestle'.

Length contrasts with its absence in /a:lit^h/ 'salt grass', /a:lit^h/ 'long ago'.

115. Examples of phoneme contrasts
115.1 Stops in initial position (p. 7)
115.2 Stops in medial position (p. 8)
115.3 Stops in final position (p. 9)
115.4 Continuants in initial position (p. 10)
115.5 Continuants in medial position (p. 11)
115.6 Continuants in final position (p. 12)
115.7 Vowel contrasts (p. 13)

116. Suprasegmental phonemes

The suprasegmental phonemes involve three types of intonation patterns. These are marked as junctures /;/, /./, and /?/. They include six phonetic features:

[1] low pitch
[2] middle pitch
[3] high pitch
[↓] drop in pitch
[➔] pause, maintaining pitch
[⬆] rise in pitch

The juncture, /;/, indicates pause, which is characterized by the maintaining of pitch, whether [3], [2] or [1], and by [➔], which may be quite short.

The juncture, /./, signals the termination of an utterance at [1], accompanied by [↓].

The juncture, /?/, marks two kinds of intonation patterns: 1) a definite rise in pitch for several syllables consecutively, followed by silence, and 2) a drop from [3] on the penultimate syllable of the utterance to [1] and [↓] on the last syllable, followed by silence.

Examples of the junctures:

(continued on page 14)
Table 115.1 Stops in initial position

**Plain**

<table>
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<tr>
<th>Bilabials</th>
<th>Aspirated</th>
<th>Glottalized</th>
</tr>
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<tbody>
<tr>
<td>pil'itʰ 'hem it'</td>
<td>pʰe·liw 'in the road'</td>
<td>p'ilix 'slippery'</td>
</tr>
<tr>
<td>pala·šitʰ 'crawled in'</td>
<td>pʰalat'at' 'woodpecker'</td>
<td>p'alašʰa? 'made bald'</td>
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<tr>
<th>Dentals</th>
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<tr>
<td>taptapic' 'webbed'</td>
<td></td>
<td>t'ap't'ap'is 'flat'</td>
</tr>
<tr>
<td>talim' 'fish'</td>
<td>tʰalxas 'tongue'</td>
<td>t'uya?an' 'shooting'</td>
</tr>
<tr>
<td>tuya?an' 'sucking'</td>
<td>tʰiše? 'to go out'</td>
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<thead>
<tr>
<th>Alveopalatalas</th>
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<tr>
<td>ca? 'tea'</td>
<td>cʰiše? 'to cut'</td>
<td>c'ɪše? 'to lift hot rocks'</td>
</tr>
<tr>
<td>cawan 'strong'</td>
<td>cʰew'kʰitʰ 'hatched'</td>
<td>c'a? 'glued'</td>
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<thead>
<tr>
<th>Velars</th>
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<tbody>
<tr>
<td>koyko 'Mix it!'</td>
<td></td>
<td>k'oyko 'Design it!'</td>
</tr>
<tr>
<td>kaʔiš 'acorn meal'</td>
<td>kʰaʔitʰ 'belched'</td>
<td>k'uyuk' 'sweet'</td>
</tr>
<tr>
<td>kʰuyuʔ 'salt'</td>
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Table 115.2 Stops in medial position

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<th>Plain</th>
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<tr>
<td><strong>Bilabials</strong></td>
<td></td>
<td></td>
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<tr>
<td>tap tap 'webbed'</td>
<td>?epʰe•sic' 'lawyer'</td>
<td>t'ap't'ap'is 'flat'</td>
</tr>
<tr>
<td>nepec' 'older brother'</td>
<td>nipʰil' 'sister-in-law's brother'</td>
<td></td>
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<tr>
<td><strong>Dentals</strong></td>
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</tr>
<tr>
<td>hatam'hiy' 'river crossing'</td>
<td>hatʰam'hiy' 'hymnal'</td>
<td>hat'axniš 'cranky'</td>
</tr>
<tr>
<td></td>
<td>šintʰi 'soot'</td>
<td>šint'i 'dirty diaper'</td>
</tr>
<tr>
<td><strong>Alveopalatals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pece•can' 'bending over'</td>
<td>pʰec'enwiše? 'grip'</td>
<td>pec'e•c'an' 'being cold'</td>
</tr>
<tr>
<td>huco? 'growl'</td>
<td></td>
<td>huc'o? 'weave'</td>
</tr>
<tr>
<td><strong>Velars</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>šo•ko? 'pull out'</td>
<td></td>
<td>šo•k'o? 'drink up'</td>
</tr>
<tr>
<td>šokol'ôn' 'boring a hole'</td>
<td>šokʰow'ôn' 'blowing (wind)'</td>
<td>yukʰoc' 'person (Indian)'</td>
</tr>
<tr>
<td></td>
<td>yuk:ul 'buried'</td>
<td></td>
</tr>
<tr>
<td><strong>Glottal (contrasted with length)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>na•way' 'cheek'</td>
<td>na?way' 'nephew'</td>
<td></td>
</tr>
</tbody>
</table>
Table 115.3 Stops in final position

<table>
<thead>
<tr>
<th>Plain</th>
<th>Aspirated</th>
<th>Glottalized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilabials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nop 'gathered'</td>
<td>?opʰ 'sun'</td>
<td>sep' 'tore'</td>
</tr>
<tr>
<td>šepʰ 'wrote'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dentals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hut 'knew'</td>
<td>t'uyutʰ 'shot it'</td>
<td>šuyut' 'laced it'</td>
</tr>
<tr>
<td>c'at 'patched it'</td>
<td>xatʰ 'ate'</td>
<td>c'at' 'split it'</td>
</tr>
<tr>
<td>Alveopalatals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>buc 'growled'</td>
<td>?ipʰιcʰ 'threw away'</td>
<td>hoc' 'wove it'</td>
</tr>
<tr>
<td>Velars</td>
<td></td>
<td>wamic' 'chewed it'</td>
</tr>
<tr>
<td>šok 'pulled'</td>
<td>?ekʰ 'Do it!!'</td>
<td>?ok' 'clam'</td>
</tr>
<tr>
<td>pʰinikʰ 'Tie it!!'</td>
<td></td>
<td>?ilik' 'water'</td>
</tr>
<tr>
<td>Glottal</td>
<td></td>
<td>wa' 'far'</td>
</tr>
</tbody>
</table>
Table 115.4 Continuants in initial position

**Spirants**

**Alveolar and alveopalatal**
- sep' 'tore it'
- so·xín 'skunk's'

**Velar and glottal**
- xalal 'lace material'
- xoy' 'deer'

**Nasals and semivowels**
- may' 'we all'
- me·k'e? 'to swallow'
- nuhuk't'h'a? 'knelt'
- nup'h'op'h 'father'

**The lateral (contrasted with /y/)**
- lehemʔan' 'running'
- lo·wit'h 'husband'

<table>
<thead>
<tr>
<th>Spirants</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alveolar and alveopalatal</td>
<td>sep' 'buckskin'</td>
<td></td>
</tr>
<tr>
<td>so·xín 'skunk's'</td>
<td>soxít'h 'got lots of it'</td>
<td></td>
</tr>
<tr>
<td>Velar and glottal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>xalal 'lace material'</td>
<td>halax 'high climber'</td>
<td></td>
</tr>
<tr>
<td>xoy' 'deer'</td>
<td>hoy'li 'now'</td>
<td></td>
</tr>
<tr>
<td>Nasals and semivowels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>may' 'we all'</td>
<td>way 'dug it'</td>
<td></td>
</tr>
<tr>
<td>me·k'e? 'to swallow'</td>
<td>we·wil' 'a branch'</td>
<td></td>
</tr>
<tr>
<td>nuhuk't'h'a? 'knelt'</td>
<td>yuho? 'to search'</td>
<td></td>
</tr>
<tr>
<td>nup'h'op'h 'father'</td>
<td>yup'p'a 'wrinkled'</td>
<td></td>
</tr>
<tr>
<td>The lateral (contrasted with /y/)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lehemʔan' 'running'</td>
<td>yehešne? 'to rest'</td>
<td></td>
</tr>
<tr>
<td>lo·wit'h 'husband'</td>
<td>yowik' 'side of body'</td>
<td></td>
</tr>
</tbody>
</table>
Table 115.5 Continuants in medial position

**Spirants**

**Alveolar and alveopalatal**

<table>
<thead>
<tr>
<th>wosit(^{h}) 'did hit'</th>
<th>(o)sit(^{h}) 'fire'</th>
</tr>
</thead>
<tbody>
<tr>
<td>?ip(^{h})ist(^{h})a? 'threw out'</td>
<td>(i)p(^{h})i(^{h})st(^{h})a? 'ground it up'</td>
</tr>
</tbody>
</table>

**Velar and glottal**

<table>
<thead>
<tr>
<th>waxal(^{h})an' 'crying'</th>
<th>(w)aham(^{h})an' 'passing by'</th>
</tr>
</thead>
<tbody>
<tr>
<td>wexel(^{h})an' 'treating medically'</td>
<td>(we)he(^{h})(\dot{s})it(^{h}) 'mountain lion'</td>
</tr>
</tbody>
</table>

**Nasals and semivowels (contrasted with glottalized counterparts)**

**Nasals**

<table>
<thead>
<tr>
<th>s(om)e(^{h}) 'to cover it'</th>
<th>(\dot{s})om(^{h})o? 'to swell up'</th>
</tr>
</thead>
<tbody>
<tr>
<td>none(^{h})an' 'growing up'</td>
<td>(n)on(^{h})e(^{h})(\dot{p})an' 'it's nine o'clock'</td>
</tr>
<tr>
<td>(\dot{a}n)nit(^{h}) 'it's late'</td>
<td>(\dot{a}n)it(^{h}) 'leaned it'</td>
</tr>
</tbody>
</table>

**Semivowels**

<table>
<thead>
<tr>
<th>hewn(n)it(^{h}) 'saved it'</th>
<th>hewn(n)it(^{h}) 'did like that'</th>
</tr>
</thead>
<tbody>
<tr>
<td>saw(k)a 'Yell!'</td>
<td>saw(k)a 'Put it on!'</td>
</tr>
<tr>
<td>(\dot{\theta})oyix 'animal hole'</td>
<td>(\dot{\theta})oyit(^{h}) 'planted it.'</td>
</tr>
</tbody>
</table>

**The lateral**

| lolit\(^{h}\) 'hung it' | lol\(^{h}\)it\(^{h}\) 'did quit it' |
Table 115.6 Continuants in final position

**Spirants**

*Alveolar and alveopalatal*

- soxis 'soap root'
- las 'chopped'

*Velar and glottal*

- sox 'skunk'
- wex 'plowed'

**Nasals and semivowels** (contrasted with glottalized counterparts)

*Nasals*

- som 'covered'
- min 'my'

*Semivowels*

- saw 'yelled'
- way 'dug it'
- pohiy 'scolded'

**The lateral**

- lol 'hung it'
- ?e·hil 'did it'

<table>
<thead>
<tr>
<th>Spirants</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alveolar</td>
<td>soxis 'soap root'</td>
</tr>
<tr>
<td></td>
<td>las 'chopped'</td>
</tr>
<tr>
<td>Velar</td>
<td>sox 'skunk'</td>
</tr>
<tr>
<td></td>
<td>wex 'plowed'</td>
</tr>
<tr>
<td>Nasals</td>
<td>som 'covered'</td>
</tr>
<tr>
<td></td>
<td>min 'my'</td>
</tr>
<tr>
<td>Semivowels</td>
<td>saw 'yelled'</td>
</tr>
<tr>
<td></td>
<td>way 'dug it'</td>
</tr>
<tr>
<td></td>
<td>pohiy 'scolded'</td>
</tr>
<tr>
<td>The lateral</td>
<td>lol 'hung it'</td>
</tr>
<tr>
<td></td>
<td>?e·hil 'did it'</td>
</tr>
<tr>
<td></td>
<td>som' 'cloud'</td>
</tr>
<tr>
<td></td>
<td>limin' 'hard acorn meal'</td>
</tr>
<tr>
<td></td>
<td>saw' 'watered plants'</td>
</tr>
<tr>
<td></td>
<td>lay' 'kicked it'</td>
</tr>
<tr>
<td></td>
<td>lasa?hiy' 'chopper'</td>
</tr>
<tr>
<td></td>
<td>lol' 'quit it'</td>
</tr>
<tr>
<td></td>
<td>ma·mil' 'berries'</td>
</tr>
</tbody>
</table>
Table 115.7 The vowels

<table>
<thead>
<tr>
<th>High and low front</th>
<th></th>
<th>Central and other</th>
<th></th>
<th>High and low back</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>lihimka  'Run!'</td>
<td>lehem'an' 'running'</td>
<td>waxal?an' 'crying'</td>
<td>wexel?an' 'treating medically'</td>
<td>kʰuyu? 'salt'</td>
<td>kʰuyo? 'to root'</td>
</tr>
<tr>
<td>minnil 'large bee'</td>
<td>menc'itʰ 'sucked'</td>
<td>ya·we? 'a key'</td>
<td>yo·we? 'to go home'</td>
<td>šuyut'ka 'Thread it!'</td>
<td>šoyot'?an' 'threading it'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>hay'li 'today'</td>
<td>hoy'li? 'right away'</td>
<td>yuwo? 'to pucker lips'</td>
<td>yo·we? 'to go home'</td>
</tr>
</tbody>
</table>
'He would not hurry, because he himself had certainly done it.'

"You used to go to the witch-doctor, didn't you?"

120. Stress

In a word (211) uttered in isolation three intensities of stress can be detected. Primary stress, [\*], is on the penultimate syllable and, as a rule, is accompanied by a higher pitch than preceding syllables. A secondary stress, [\`], is found on the closed syllables (non-penult) with pitch \[1\] if following primary stress, \[2\] or \[3\] elsewhere. Non-penultimate open syllables are weakly stressed ([ ] unmarked) with pitch \[1\] following primary stress and about the same pitch as surrounding syllables elsewhere. It must be borne in mind that these features characterize the isolated word of two or more syllables, and they do not necessarily hold true in longer utterances. 8

130. Phonotactics

131. The Chukchansi syllable canon is \(C_1V(C_2)\). CVC is a closed
syllable. C₁ may be a glottalized continuant only if preceded by a vowel. C₂ may be any consonant, including /ʔ/, except that /ʔ/ is never intervocalic.

Vowel clusters do not appear; consonant clusters are only medial. Though some clusters are missing from the corpus, it appears that all consonants are unrestricted in distribution except as noted just above. 9

132. Where both consonants of a medial cluster are within the same morpheme (212) and both are stops of the same point of articulation, both are also after the same manner of articulation. That is, /p/ clusters only with /p/, not with /ph/ or /p'/ in the same morpheme. One exception is found in the velar order, in /k'ukk'uknan̥/ 'pecking', where /k̥/ is clustering with /k'/. But while /k'ukk'uk-̥/ is a morpheme, it results from re-duplication (215).

When the consonants are of different orders, no homogeneity of series necessarily prevails: /xapc'it̥h̥/ 'picked a flower.'

133. Rapid speech phenomena

The phonotactics of rapid speech present some phenomena which differ from those found in deliberate speech, probably in all languages. Some important considerations in Chukchansi follow.

133.1 Glottalization and the glottal stop

Glottalization, both in the stops and in the continuants, is usually light in rapid speech and may completely disappear except where its lexical importance requires it. The glottal stop commonly disappears. This is especially true in forms of
very frequent use; e.g., the sequence /aʔa/ will usually be [aa], which may be identical in time lapse to /aˑ/ or even shorter.

133.2 The glottal spirant

In slow speech, /h/ is voiceless. In conversation, it frequently has a voiced allophone, [ph]. There is then a free fluctuation in words like /ʔohom'/ 'not' ([ʔohom' [f] ʔphôm']). This is especially true when the vowels between which it occurs are of the same quality.

133.3 Abbreviations

The following abbreviations are used:

[ʔa·maw] < /ʔama·maw/ 'right here' or 'over there'

[hɛʔmaw] < /hewʔama·maw/ 'right over here' (/hew/ 'here')

[ʔaltʰ] < /ʔalitʰ/ 'long ago'

[ʔam] < /ʔamaʔ/ 'he', /ʔamin/ 'his', /ʔamam/ 'him (objective case)'

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140. Morphophonemics

A correlative morphophoneme is posited for each phoneme.

141. Among the consonants, all have a one-to-one relationship with their respective phonemes, except as described below in 141.1-12. (See 212.1 re: hyphenation.)

141.1

\[
\begin{array}{c}
\text{C-Z} \\
\text{Z-} \\
\text{C(-)C} \\
\text{CV-}^\text{h} \\
\text{CV-CVC-\{Z,B,V\}} \\
\text{-V}
\end{array}
\]

/Ø

\[\text{e.g.: ma-x-ka /maxka/ 'Fetch it!'}\]
\[\text{nepe-c'-Z-a /nipe'a/ 'sisters'}\]
\[\text{ka-tu-}^\text{h}-\text{init}/\text{kato'hungut}^\text{h}/ 'from the cats'}\]
\[\text{ma-mil-Zam' /mamlam'/ 'having berries'}\]
\[\text{no-kum-Ba'a-e'n' nokom'?an'/ 'believing'}\]
\[\text{no-kum-e'n' /nokmo'/ 'to believe'}\]
\[\text{p^h} \text{ana-}^\text{al} /\text{p^hanal/ 'would arrive'}\]

141.2

h\text{VCVC}_1-\text{Ba'?} /\text{Ø} \text{where C}_1 \text{ is non-glottalized stop or a spirant.}

\[\text{e.g.: t^h} \text{a'iš-Ba'hiy' /t^ha'iš'iy' 'television (lit: 'something to look at')'}\]

141.3

\[
\begin{array}{c}
\text{C-\{h, #\}} \\
\text{V-V-C#}
\end{array}
\]

/Ø

\[\text{e.g.: no?om-}^\text{h-a /no?imha/ 'mothers (objective case')}\]
\[\text{no?om-}^? /\text{no?om/ 'mother (subjective case')}\]
\[\text{hu'se-e'n' /hu'sen/ 'to drive}\]
141.4

?h-·/?-, e.g., ka·tu-ʔh·-i /katoʔu/ 'cats (subjective)'
cʰe·xa-ʔh·-a /cʰixaʔa/ 'dogs (subject.)'

141.5

\[M^{[m]}_{[n]} V(\cdot) / [m] \]

- C/∅

---/n

e.g.: na·M-ikʰ-w-a /na·nikʰwa/ 'us two (obj.)'
ma·M-ikʰ-w-a /ma·nikʰwa/ 'you two (obj.)'
na·M-ʔ /naʔ/ 'I'; hiM-ʔ /hiʔ/ 'this one (subj.)'
hiM-a /hin/ 'this one (obj.)'

141.6

\[l_{m} \]
\[n_{w} \]
\[-Z/ \]
\[y \]

e.g.: ma·mil'Zan /mamlan/ 'with a berry (instrumental)'
mokʰiy'Zin /mokʰyin/'wife's'
-payin'Za /payna/ 'acorn (obj.)'
talim'Za /talma/ 'trout (obj.)'

141.7

\[l_{m} \]
\[n_{w} \]
\[VCV-Baʔ?/ \]
\[y \]

e.g.: hoʰiwa-Baʔa-eʔn' /hoʰowʔonʔ/ 'being cold'
hupʰul-Baʔhiyʔ-ʔ /hopʰolʰuyʔ/ 'place to dig roots'
hiš-in-Baʔhiyʔ-ʔ /hešenhiyʔ/ 'hiding place'
hec'ey-Baʔhiyʔ-ʔ /hec'eyhiyʔ/ 'wrench'
141.8

\[ \{ C-V_\# -\#\} /\emptyset \]

\[ C\{C,\#\} /\emptyset \]

e.g.: hat\^h im-e?n' /hat\^h me?/ 'to sing'

hew-n' xu?- /hen' xu?/ 'how far?'

141.9

\[ C_1V_1\}[CVC-G-Z/V_1C_1, e.g.: ?ont\^h ip-h-Za /?onit\^h p a/ 'mother-in-law' (objective) \]

141.10

\[ C_1V_1C_2V_2C_3-C_4V_3C_5-V/C_1V_1C_2C_3-V_3C_4C_5-V \] (unless C is h)

e.g.: lihim-mix-it\^h /lihmim\^xit\^h/ 'he ran with him'

\[ ti?i\^s-\^sh-it\^h /ti?i\^sh\^it\^h/ 'made it for someone' \]

But: \[ ti?i\^s-han-it\^h /ti?i\^shan\^it\^h/ 'it was made' \]

141.11

\[ V_1C_1\}[CVC-G-V/C_1V_1, e.g.: hapilk'y-a-e?n' /haplik'y an'/ 'it got red' \]

142. Five vowel morphophonemes, i, e, a, o, u, are correlated with the five vowel phonemes in a one-to-one relationship, except as stated below in 142.1-13.

142.1

\[ a\{\#,-\}Co(\cdot)(C)-(B)(C)_(C)(\_)/0\]

\[ CoC\{i,o,u\}C-(\{}2,\{}B\}\}(C)_(C)(\_)/0\]

\[ _\cdot C^-7h/1 \]
\[
\begin{align*}
\left\{ VCVC-B_{-} \right. \\
V-\{k,x\}_{-}\# / \emptyset \\
M_{-}\# \\
\end{align*}
\]

e.g.: no\textsuperscript{p}-ma\textsuperscript{a}-\textsuperscript{š}-xo-e\textsuperscript{n}' / no\textsuperscript{p}mo\textsuperscript{o}-\textsuperscript{š}xon' / 'wanting to gather' \\
xat\textsuperscript{h}-Ba\textsuperscript{a}-xo-t\textsuperscript{h}a? / xat\textsuperscript{h}a\textsuperscript{x}axot\textsuperscript{h}o? / 'kept on eating' \\
lox-ka / lo\textsuperscript{x}ko/ 'Pour it!' \\
ho\textsuperscript{š}iw-Ba\textsuperscript{a}-e\textsuperscript{n}' / ho\textsuperscript{š}ow?on' / 'being cold' \\
xoc\textsuperscript{o}.y-anit\textsuperscript{h} / xoc\textsuperscript{o}.yonit\textsuperscript{h} / 'from the dirt' \\
t'oyix-Za / t'oyxo/ 'medicine' \\
komuc'-Ba\textsuperscript{a}-e\textsuperscript{n}' / komoc'?on' / 'hugging' \\
kac'a.p-\textsuperscript{h}-a / kac'ipha/ 'daughters' \\
hu\textsuperscript{š}e-ka / hu\textsuperscript{š}ek/ 'Drive it!' \\
hu\textsuperscript{š}e-xa / hu\textsuperscript{š}ex/ 'Let's drive it.' \\
na.M-a / nan/ 'me'

142.2

a\textsuperscript{\[2\textsuperscript{SL}]-V/e e.g.: xat\textsuperscript{h}-ma\textsuperscript{a}-\textsuperscript{š}-it\textsuperscript{h}. / xat\textsuperscript{h}ma\textsuperscript{š}et\textsuperscript{h}. / 'He was about to eat.'

142.3

e,a,o,u][C[e] [e'] \\
a C\_C-V/ [a'] \\
o [o']

C\{e,a,o\}C\_C-Gi\_c'-? / \emptyset

e.g.: hewet\textsuperscript{h}-e\textsuperscript{n}' / hewet\textsuperscript{h}'e? / 'to walk' \\
halal-al / hala.lal/ 'could lift' \\
\textsuperscript{?}op\textsuperscript{h}ot\textsuperscript{h}-e\textsuperscript{n}' / \textsuperscript{?}op\textsuperscript{h}ot\textsuperscript{h}'e? / 'to arise' \\
komuc'-e\textsuperscript{n}' / komo\_c'e? / 'to hug' \\
hewet\textsuperscript{h}-Gi\_c'-? / hiwt\textsuperscript{h}ic'/ 'a walker' \\
\textsuperscript{?}op\textsuperscript{h}ot\textsuperscript{h}-Gi\_c'-? / \textsuperscript{?}op\textsuperscript{h}t\textsuperscript{h}ic'/ 'a riser' \\
halal-Gi\_c'-? / hallic'/ 'a lifter' \\
komuc'-Gi\_c'-? / komic'ic'/ 'a hugger'
142.4

\[
\begin{align*}
&\text{CeC-G} \\
&\text{e} \left\{ (\cdot) \text{CV}(C) - \{Z, ?h\} \right\} /i \\
&\text{C}\text{eC}-?\{\#, h\} \\
&\text{ma'?}\text{eC(o,a)} / o \sim \text{e} \\
&\text{CVC}\{u,e\}\text{C-D/\_a} \\
&\text{VC_C-D/\_a}
\end{align*}
\]

e.g.: hewet\text{^h}_-\text{G}_i\text{c}-'? \text{\text{/hiw}t^h_{ic}/ 'a walker'}

c\text{h}e\cdot\text{x}a-'?\text{h-a} /\text{c\text{h}ixa?ha}/ 'dogs'

nepe\text{c}-'?\text{h-a} /\text{nip\text{c}'ha}/ 'older brothers'

\text{sawik-ma'?}\text{s}\text{e-xo-e'?n}' /\text{sawikma?}\text{s}\text{eaxon}' \sim \text{sawikma?}\text{s}\text{oxon}'/

'wanting to buy something'

?ut\text{^h}_\text{u}y\text{-De-xo-t^h}_a? /?ot\text{^h}y\text{a}xot\text{^h}o?/ 'pushed it here and

there'

hewet\text{^h}_\text{De-xo-t^h}_a? /hewt\text{^h}a\text{xot\text{^h}o?/ 'walked all around'

nepe\text{c}-'Z-a /\text{nipc\text{a}/ 'older brothers'}

142.5

\[
\begin{align*}
i, a\text{]}\text{CVC_C-D/e.}
\end{align*}
\]

e.g.: hat\text{^h}_\text{im-De-xo-e'?n}' /hat\text{^h}\text{e-}\text{m\text{e}xon}'/ 'singing all around'

halal-De-xo-t^h_a? /\text{hale-}\text{lexot\text{^h}o?/ 'was lifting it up

and down'}

142.6

\[
\begin{align*}
e, u\text{]}\text{CVC_C-D/\_a}
\end{align*}
\]

e.g.: hewet\text{^h}_\text{De-xo-e'?n}' /hewt\text{^h}axon'/ 'walking all around'

?ut\text{^h}_\text{u}y\text{-De-xo-e'?n}' /?ot\text{^h}y\text{a}xon'/ 'pushing it here and

there'
142.7

\[ \{ (C\{u,o\})Cu(\cdot)C-(C)_-(C)(\_)/[\_u] \}
\]

e.g.: hu:c'-hil /hoc'hul/ 'did weave it'
    lum-hil /lumhul/ 'did pile it'
    šuyut'-hil /šuyut'hul/ 'did lace it'
    no·kum-hil /no·kumhul/ 'did believe'
    nim-o·k-in /numo·kun/ 'our'
    hu:c'-e?n' /ho:c'o?/ 'to weave'
    lum-e?n' /lumo/ 'to pile'
    šuyut'-e?n' /šuyt'o?/ 'to lace'
    no·kum-e?n' /nokmo?/ 'to believe'

142.8

\[ \#CV(\cdot)C-G_/a \]

e.g.: ma.x-Gi·c'-i /maxa·c'i· 'a fetcher'

\[ \{ e,a,u \} (C\_C_o(C)(-\text{?h}(-)(Z)(\_)(C)\_u \}
\]

e.g.: k'exum-Zi /k'exmu/ 'a rich man'
    yunuk'-Zi /yunk'u/ 'warm'
    kašow-?h-i /kašowhu/ 'Kashowu Indians'
    t'oyo·š-init\textsuperscript{h} /t'oyo·šunut\textsuperscript{h}/ 'from an arrow'
    ka·tu-?h-i /kato?hu/ 'cats'

\[ \{ e, e \} \]
\[ \{ e, e \} \]

\[ \text{e.g.: šilit'-Ba?a-e?n' /šelet'\?an'/ 'jumping'}\]
\[ \text{šilit'-Gi·c'-? /šelet'\textsuperscript{ic}' / 'a jumper'}\]
\[ \text{hat\textsuperscript{h}im-Gi·c'-? /hat\textsuperscript{h}a·mic'/ 'a singer'}\]
\[
\{CV(\cdot)C(-)C-V\} /\emptyset \\
\{V-m_\#\}
\]
e.g.: hiš-in-e?n' /hišneʔ/ 'to hide oneself'  
hatʰim-e?n' /hatʰmeʔ/ 'to sing'  
hu·še-mi /hu·šem/ 'and then drive it'

142.9

\[
\begin{bmatrix}
\#C\_C-\{C,V\} \\
(C)_?h \\
M-ne(\cdot)
\end{bmatrix} / \begin{bmatrix}
e \\
0
\end{bmatrix}
\]
e.g.: ?i·pʰ-e?n' /ʔe·pʰeʔ/ 'to swim'  
?i·pʰ-ka /ʔepʰka/ 'Swim!'  
hu·c'-e?n' /ho·c'oʔ/ 'to weave'  
hu·c'-ka /hoc'ka/ 'Weave it!'  
ka·tuʔ-h-i /katoʔhu/ 'cats' (obj)  
kiM-ne·-initʰ /kene·nitʰ/ 'from that (far, invisible)'  
hiM-ne·šinʔ /henešin/ 'those (near invisible)'

142.10

\[
\begin{bmatrix}
\text{Cu} \\
\text{Cu} \\
\{u,o\}C_-
\end{bmatrix} \begin{bmatrix}
B,D,G \\
B \\
G,\emptyset
\end{bmatrix} / \begin{bmatrix}
o \\
o \\
\emptyset
\end{bmatrix}
\]
e.g.: ?utʰuy-Baʔa-eʔn' /ʔotʰoyʔanʔ/ 'pushing'  
?utʰuy-De-xo-eʔn' /ʔotʰyaxonʔ/ 'pushing it here and there'  
?utʰuy-Gi·c'-ʔ /ʔotʰo·yicʔ/ 'pusher'  
no·kum-eʔn' /nokmoʔ/ 'to believe'  
no·kum-Gi·c'-ʔ /noko·micʔ/ 'a believer'
142.11

\( \text{o}_{-}\text{-h/e} \) e.g.: no\text{c'o}-?h-\text{i} /no\text{c'e}hi/ 'youths'

\( \text{oC}_{-}\text{C-?h/i} \) e.g.: nop\text{h-o-p}h-\text{-h-a} /nop\text{h}ip\text{h}a/ 'fathers'

\( \text{uC}_{-}\text{C-?h/u} \) e.g.: puc'o-n-\text{-h-a} /puc'unha/ 'sons'

\[\begin{array}{c}
\text{[o]_1-1/}[1]
\end{array}\]

e.g.: ?anaswo-la-e?n' /?anaswulan'/ 'to make him dream'

hu\text{še-la-e?n'}/hu\text{še}ilan?/ 'to make him drive it'

142.12

\( \text{V[CV} \text{(-)}\text{C-C-}\{?,\emptyset\}a} \) e.g.: c'ipxi-\text{?} /c'ipxal/ 'act of spitting'; xat\text{h-wi}\text{-}\text{-}\text{?} /xat\text{h}wa\text{š}/ 'what I ate myself'

\( \begin{cases} \text{V}_1?-\text{n} \\ \{\text{CV}_1(\cdot)\text{c(\text{-})C-B}\} \end{cases} /\text{V}_1 \\
\)

e.g.: ka\text{t}u-\text{?V}_n /ka\text{t}u\text{?un}/ 'cat'

\( \text{šakma-?V}_n /\text{šakma}an/ 'clover'

\( \text{noh?o-?V}_n /\text{noh?o?on}/ 'bear'

\( \text{t'axa-t\text{h}i-?V}_n /\text{t'axa-t\text{h}i}\text{?in}/ 'sourberries'

\( \text{c'a-p\text{h}-in-Ba?a-e?n'}/\text{c'a-p}\text{h}an?an'/ 'it's melting'

\( \begin{cases} \text{V(\cdot)}_1 \\
\text{(-\text{\cdot})C-Z} \\
\{\text{V-C}_{1}\text{-C-V (unless C}_1\text{ is h)}/\emptyset \\
\text{CCVC-\text{-C(-)VC} } \\
\text{CV\text{C-}CVC-?h} \end{cases} \)

e.g.: p\text{h}ana-\text{\cdot}\text{-a}/p\text{h}anal/ 'would arrive'

muku\text{š-Za} /muk\text{š}a/ 'grandmother'

nepe\text{c'-Z-\cdot}a /nipc\text{a}/ 'older brothers'

hu\text{še-\text{št}h-e?n'}/hu\text{še}\text{št}h/e?/ 'to drive for someone'

(But: hu\text{še-han-it}h /hu\text{še}hanit\text{h}/ 'it was driven'

t\text{ap'}p\text{aš-anit}h /t\text{ap'}p\text{aš}nit\text{h}/ 'from a leaf'
naxa-miş-ʔ-h-a /naxmiša/ 'fathers in law'

142.13

\[
V_1 C_1 \begin{bmatrix}
0 & e, i \\
\ u & \ a
\end{bmatrix}
C_2 -ʔ-e-< V_1 C_1 \begin{bmatrix}
1, a \\
\ u & \ a
\end{bmatrix}
C_2 \begin{bmatrix}
0 & e \\
\ e & \ o
\end{bmatrix}
\]

\[\neg a \text{ if } V_1 \text{ is low } V\]

\[\text{e.g.: } \text{sep}^h\text{en-ʔ-e-ka }/\text{sep}^h\text{i?neka}/ \text{'Raise it!'}\]
\[\text{šiliw-ʔ-e-ka }/\text{šili?weka}/ \text{'Weave it!'}\]
\[\text{c'atip-ʔ-e-ka }/\text{c'ata?pek}/ \text{'Turn it over!'}\]
\[\text{ʔop}^h\text{ot}^h-ʔ-e-ka }/\text{ʔop}^h\text{o?teka}/ \text{ʔop}^h\text{i?teka}/ \text{'Get up!'}\]
\[\text{halal-ʔ-e-ka }/\text{hala?lek}/ \text{'Lift it!'}\]
\[\text{šuyut}-ʔ-e-ka }/\text{šuyu?tok}/ \text{'Thread it!'}\]

143. A number of non-correlative morphophonemic statements are to be made (S means syllable and R means reduplicate syllable which follows it; other symbols are cover symbols for certain types of phonological environments as described in the foregoing rules.).

143.1

\[G[\text{V-i-c'}-?/, \text{e.g.: } \text{hu-še-Gi-c'}-? /\text{hu-še?ic'/ 'a driver'}\]

---/Ø, \text{e.g.: } \text{c'atip-Gi-c'}-? /\text{c'ata-pic'/ 'a turner'}\]

\[\text{t'ul-Gi-c'}-? /\text{t'ulac'/ 'a burner'}\]

143.2

\[R[\text{S}_1/\text{S}_1, \text{e.g.: } \text{Rk'aš-e?n' } /\text{k'ašk'aše'/ 'to prick again and again'}; \text{Rxat}^h\text{-xo-e?n'} /\text{raxt}^h\text{raxt}^h\text{xon' } /\text{eat a little here and there, nibbling'}\]

143.3

\[Ø[\#S-ʔ-h/e, \text{e.g.: } \text{p'ayØ-ʔ-h-i } /\text{p'aye?hi/ 'children' (obj.)'}\]

143.4

\[B, D, Z, -[]---/Ø\]

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e.g.: t'ul-Ba?a-e?n' /t'ula'an'/ 'burning'
no·kum-Ba?a-e?n' /nokom?an'/ 'believing'
hošiw-De-xo-e?n' /hoše·wexon'/ 'being cold all over'
ʔutʰuy-De-xo-e?n' /ʔotʰyaxon'/ 'pushing it here and there'
k'exum-Zi /k'exmu'/ 'a rich man'
ma·mil'-Za /mamla/ 'a berry'
200. Morphemics and morphotactics

210. Introduction to morphemics

211. The word and macrosegment

While the Chukchansi word in isolation can be defined phonologically as an utterance ending on the syllable following stress (120), the word in a longer utterance must be defined morphologically. This is because the stress pattern of a multi-word utterance may not coincide with isolation criteria in identifying word boundaries. Thus, the chain of speech between silence and a juncture or between junctures must be looked at as a macrosegment. While the phonetic stress pattern of the macrosegment may make it possible to identify some of the words, they can accurately be marked only by morphological criteria. The word, then, is defined as an utterance which 1) is a free morpheme (i.e., lacking a suffix) or 2) ends with a final morpheme (suffix).

As an example, each word in the following utterance (composed of two macrosegments) is, in isolation, accented on the penult. The utterance may, however, be accented in at least the two ways shown (The unhyphenated spaces in the morphemic, i.e., the unbracketed, writing are the word boundaries. See 212.1):

[hawâânti'mââk'fîlîth'ânan']
[hawâânti'mââk'fîlîth'ânan']
/hawa?an'tîta'ma?ak'îwil'tâna?nan./
"'What's the matter with you?" he said to me.'

212. Types of morphemes

212.1 The lexemes of Chukchansi have three types of morphemic
representations: 1) initial morphemes, which may also be free morphemes, 2) non-final suffixes and 3) final suffixes. A word may be composed of one initial (free) morpheme, an initial and a final morpheme, or an initial morpheme with one or several non-final suffixes plus a final suffix. (In the morphemic writing, bound morphemes are hyphenated where affixation must take place; therefore, the hyphen or its absence classifies each morpheme as to type. Two consecutive hyphens are written as one.

212.2 Examples of morphemes:
   a. Initial (bound): ka·tu- 'cat'
   b. Initial (free): hi[k]aw 'tomorrow'
   c. Non-final: -m[a]š- 'want to' (the "desiderative")
   d. Final: -ka, the "imperative"

212.3 Examples of words:
   a. Free morpheme: ʔohom' 'not', 'No'
   b. Initial and final morphemes: ka·tuʔn /ka·tuʔun/ 'cat + objective case suffix'
   c. Initial, non-final and final morphemes:
      hat[imš]it[h]maʔaš-ʔo-eʔn' /hat[imš]it[h]maʔašxoʔon'/ 'sing + benefactive + desiderative + durative + factive' ('wanting to keep singing for someone')

212.4 The final suffixes display a variety of meanings both verbal and substantival, such as tense, mode, case and gerund formation. The non-final suffixes are also varied in meaning but are largely nominalizing, verbalizing, aspectual or showing transitivity (voice). The suffixes are treated specifically under the sections on verb, noun and pronoun formation (300-535).
213. Base and stem

213.1 Initial morphemes which are not free are called bases.
Except for the pronouns, which are not verbalized, bases may
act in both verbal and substantival functions in the sentence
according to the grammatical meaning given them by the suffixes;
e.g.:
halix-? /halix/ 'soapstone' (base + subjective case)
halix-Za /halxa/ 'soapstone' (base + objective case)
halix-ka /halixka/ 'Put the soapstones in!' (base + im-
perative mode)

213.2 A base plus one or more of certain non-final suffixes
(222-224) form a stem, which will receive suffixes of a verbal or
nominal function in about the same fashion as the base; e.g.:
halix-han-it\h /halixhanit\h/ 'It has just had soapstones put
in it.' (base + passive + simple past tense)
halix-han-na-\qVn /halixhanna\qan/ 'that which has had soap-
stones put in' (base + passive + nominalizer + objective
case)

In the second example, halix- 'soapstone' plus han- 'pas-
sive' form a verbal stem. The nominalizer -na- then produces a
noun stem, to which the final case morpheme -\qVn is then suf-
fixed.

Some forms appear in the corpus only as nouns; i.e., they
are bases, or perhaps frozen stems (214 and 214.3), which are suf-
fixed only by case morphemes (420) and in some instances by the
diminutive (431) or the plural (432) morphemes. Many of these
have vowel combinations different from the patterns listed in
214.1-2. The vowel changes which do take place, however, are
included in the morphophonemic rules (140).

214. Base alternants

Bases are of three fundamental morphemic shapes:

a. CV(·)C
b. CV(·)CVC
c. (····)CV(·)

Deviations from or expansions of these patterns are probably all alternants or derivatives of these three. There are numerous words, usually longer words, the morphemic components of which are not all identified. They have no doubt been used in the altered shape for so long that at least some of the morphemic components no longer have their original meanings. These are called frozen stems and are referred to from time to time in the grammar, such as in 214.3.

Some suffixation is accompanied by phonemic alternation within both the bases and the suffixes. Hence, a base lexeme may have several alternant morphophonemic and phonemic representations. Section 214.1-3, as follows, provides examples of the fundamental base types and their alternants. See 140 for the morphophonemic rules describing these alternations.

214.1 Monosyllabic bases

In the chart below, column I gives the morphophonemic shape of each base, the other columns being phonemic. Column II gives the prevocalic forms, column III the preconsonantal, and column IV lists the forms preceding -B and -G (phonological environments involved in certain suffixes; see Introduction), which may be phonemically prevocalic or preconsonantal. A space in a col-
umn means that the form to the left is used in that environment.

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II pv</th>
<th>III pc</th>
<th>IV p-B,-G</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>no·p-</td>
<td>/no·p</td>
<td>nop</td>
<td></td>
<td>'gather'</td>
</tr>
<tr>
<td>2.</td>
<td>lox-</td>
<td>lox</td>
<td></td>
<td></td>
<td>'pour'</td>
</tr>
<tr>
<td>3.</td>
<td>hu·c'-</td>
<td>ho·c'</td>
<td>hoc'</td>
<td>huc'</td>
<td>'weave'</td>
</tr>
<tr>
<td>4.</td>
<td>lum</td>
<td>lum</td>
<td></td>
<td></td>
<td>'pile'</td>
</tr>
<tr>
<td>5.</td>
<td>?i·pʰ-</td>
<td>?e·pʰ</td>
<td>?epʰ</td>
<td>?ipʰ</td>
<td>'swim'</td>
</tr>
<tr>
<td>6.</td>
<td>hiš-</td>
<td>hiš</td>
<td></td>
<td></td>
<td>'hide'</td>
</tr>
<tr>
<td>7.</td>
<td>ma·x-</td>
<td>ma·x</td>
<td>max</td>
<td></td>
<td>'fetch'</td>
</tr>
<tr>
<td>8.</td>
<td>xatʰ-</td>
<td>xatʰ</td>
<td></td>
<td>/</td>
<td>'eat'</td>
</tr>
</tbody>
</table>

214.2 Polysyllabic bases

The majority of the lexicon is made up of disyllabic bases. A list of the base types and their phonemic alternants is on page 32. The columns identify characteristics as follows:

Column I, morphophonemic transcription.

II, preconsonantal alternant.

III, pre-B alternant.

IV, prevocalic alternants for types 10, 12, 15; pre-G alternant for the remainder.

V, pre-G alternant for types 10, 12, 15; prevocalic alternant for the remainder.

VI, pre-D alternant

214.3 The "V-stems"

The third fundamental base ends in a vowel. With a few monosyllabic exceptions, such as ?e·- 'do' and xo·- 'stay', it is possible that these are not true bases, but stems of uncertain origin. (Continued, page 33)
<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>hošiw</td>
<td>/hošiw</td>
<td>hošow</td>
<td>hošow</td>
<td>hošw</td>
<td>hošew</td>
</tr>
<tr>
<td></td>
<td>komuc'</td>
<td>komuc'</td>
<td>komoc'</td>
<td>komoc'</td>
<td>komc'</td>
<td>komc'</td>
</tr>
<tr>
<td>11</td>
<td>šuyut'</td>
<td>šuyut'</td>
<td>šoyot'</td>
<td>šoyot'</td>
<td>šuyt'</td>
<td>šuyt'</td>
</tr>
<tr>
<td></td>
<td>no·kum-</td>
<td>no·kum-</td>
<td>nokom</td>
<td>nokom</td>
<td>nokm</td>
<td>nokm</td>
</tr>
<tr>
<td>12</td>
<td>hewetʰ</td>
<td>hewetʰ</td>
<td>hewetʰ</td>
<td>hewetʰ</td>
<td>hiwtʰ</td>
<td>hewtʰ</td>
</tr>
<tr>
<td>13</td>
<td>šilit'</td>
<td>šilit'</td>
<td>šelet'</td>
<td>šelet'</td>
<td>šilt'</td>
<td>šile·t'</td>
</tr>
<tr>
<td></td>
<td>me·cin-</td>
<td>me·cin-</td>
<td>mecen</td>
<td>mecen</td>
<td>mece·n</td>
<td>mece·n</td>
</tr>
<tr>
<td>14</td>
<td>hatʰim</td>
<td>hatʰim</td>
<td>hatʰam</td>
<td>hatʰäm</td>
<td>hatʰm</td>
<td>hatʰem</td>
</tr>
<tr>
<td></td>
<td>k'a·min-</td>
<td>k'a·min-</td>
<td>k'aman</td>
<td>k'aman</td>
<td>k'ämäm</td>
<td>k'ämäm</td>
</tr>
<tr>
<td>15</td>
<td>halal-</td>
<td>halal-</td>
<td>halal</td>
<td>hala·l</td>
<td>hall</td>
<td>hale·l/</td>
</tr>
</tbody>
</table>

*Numbering continues from 214.1.
Most are CVCV or CVCCV (the latter being possibly a zeroed form of an unknown disyllabic base or polysyllabic base\textsuperscript{10}), but there is a considerable number of longer "frozen" V-stems. These are usually CV(C)CVCCV, such as:

\begin{itemize}
  \item ?ulk\textsuperscript{10}Ya-'get nauseated'
  \item ?um\textsuperscript{10}um\textsuperscript{10}k\textsuperscript{10}a-'giggle'
  \item wo-\textsuperscript{10}soy\textsuperscript{10}no-'whistle'
  \item hat\textsuperscript{10}i\textsuperscript{10}\textsuperscript{10}i\textsuperscript{10}s\textsuperscript{10}a-'sneeze'
  \item ?an\textsuperscript{10}as\textsuperscript{10}wo-'dream'
\end{itemize}

V-stems use allomorphs of the same suffixes as the other bases, except that -xo- (3316) is used in place of -Ba\textsuperscript{10}a- (333) to make a present tense statement. Compare:

\begin{enumerate}
  \item Monosyllabic base:
    lum-Ba\textsuperscript{10}a-e\textsuperscript{10}n'/luma\textsuperscript{10}an'/ 'piling it'
  \item Disyllabic base:
    hat\textsuperscript{10}im-Ba\textsuperscript{10}a-e\textsuperscript{10}n'/hat\textsuperscript{10}am?\textsuperscript{10}an'/ 'singing'
  \item V-stem:
    huy\textsuperscript{10}a-xo-e\textsuperscript{10}n'/huy\textsuperscript{10}axon'/ 'permitting it'
\end{enumerate}

It should be noted, however, that -xo- occurs as second or third suffix in many words, whether or not the initial morpheme is a V-stem (see 224).

214.4 The CVCCVC stem

A small number of stems of the type $C_1V_1C_2C_3V_2C_4$ exist, whose base may be CVCC, but no base alternants other than the disyllabic CVCCVC are used. The full form acts as a base. The fact that $V_2$ is usually $i$ and $C_4$ is $l$ or $n$ hints at a possibility of a pair of archaic morphemes, -il- and -in-, of obscure meanings. Examples:
c'ipxil-e?n' /c'ipxile?/ 'to spit'
c'atlin-e?n' /c'atline?/ 'to stumble'

215. Reduplication

Considerable reduplication takes place in Chukchanski, usually to indicate doing something repeatedly; e.g.:
/t'apt'apxon'/ 'petting'. Sometimes it has a distributive connotation: /hul'hul'saxon'/ 'sitting all around'. Most are verbs, but some are substantives such as names (onomatopoetic, possibly) and sounds of animals, things or events: /nišniš 'quail'; /taktakla/ 'firecracker'; /c'ayc'ay/ 'California jay'; /sohil-sohil/ 'daddy long legs spider'; /k'e·talk'etal/ 'wasp'; /ta·kaltakal/ 'scorpion'. Unreduplicated bases for the preceding words are not found.

Coining reduplications, however, to show repetitiveness of an act can fairly safely be done, especially with monosyllabic bases. The effort may be met with some humor and with the mildly skeptical attitude, "It's all right to say that, I guess. I know what you mean, but I never heard it and I don't say it."

While reduplication is essentially repetition of the base (whether historically or by present choice) there are some variations. Three general kinds of reduplication are to be noted.

215.1 Simple repetition of the base, e.g.:

Rk'et'-e?n' /k'et'k'et'e?/ 'to scrape clean'
Rc'am-e?n' /c'amc'ame?/ 'mash all up'

215.2 Reduplication of base only when it is involved in a stem, e.g.: Rk'eš-in-a-it'h /k'ešk'ešnat'h/ 'went from one room to another.'
215.3 Reduplication of part of a base (probably reveals an archaic monosyllabic base no longer in use as a base), e.g.: 
Rhuluš-De-xo-e?n' /hul'hu1'șaxon/ 'sitting all around'.

215.4 Several reduplications involve lowering of the vowel. No determining factor is posited, and for some, free fluctuation is apparent. Examples: (hyphen here means suffixes omitted)
/cen'cin- 'have a headache'
c'owc'uw- 'drip, drip'
hew'hiw- 'take big steps'
?oy?uy- 'roadrunner'
tewtiw- 'chicken hawk'
tʰemtʰim- 'hawk'.
wilwil-f welwil- 'pump' or 'wind a reel'
wośwuš- 'raven'
xitʰxitʰ-f xetʰxitʰ- 'wash on washboard'
yelyil-/earthquake'

One further irregularity appears: /wicapcapna/ 'robin'. It is said that ladies prefer /wicepcepna/, but no other such distinction between men's and women's speech exists in the corpus.

220. Morphotactic position classes
221. The non-final suffixes (except the pronominal, which are very specialized, being used only with pronoun bases and stems) are listed in the chart below in numbered positions, numbers increasing in distance from the base. Any series of suffixes occurring with a base will occur in the order listed. All, however, are stem-formatives in that a final suffix may be attached
to every non-final suffix. Those in row I on the chart may receive only nominal final suffixes, and those in row II may receive only verbal final suffixes. Row III may have either verbal or nominal final suffixes.

### 222. Chart of position classes of non-final suffixes:

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II. aʔ De la han a aʔa xo ya na tʰa (331) me·we

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III. in ay

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### 223. Suffixes listed below on the left may be suffixed by the higher numbered position classes stated at their right (reference is to the Roman and Arabic numerals in the chart above).

These—receive these suffixes, one or more at a time:

- Base all (in sequences allowed below)
- I 1 III 2 only

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II 1
II 4, 8, 9; III 6, 7.

III 1
I 10; II 2, 3, 4, 5, 6; III 6, 7, 10.

II 2
I 10; II 3, 4, 6 (except aʔa), 8; III 6, 7, 10.

III 2
II 4, 8; III 6, 7.

II 3
I 10; II 4, 6 (except aʔa), 8, 9; III 6, 7, 10.

II 4
I 10; II 6 (except aʔa), 8; III 6, 7, 10.

II 5
II 6 (except aʔa), 8, 9; III 6, 7.

II 6
I 10; II 8, 9; III 7, 10.

III 6
I 10; II 8, 9; III 7, 10.

III 7
II 8, 9; III 10.

II 8
I 10; II 9; III 10.

II 9
I 10; III 10.

III 10 (see 321) II 5.

224. The longest words in the corpus are five morphemes long and largely verbal in function, although No. 5 below is nominal:

1. xatʰ-han-šitʰ-xo-hil /xatʰhanštʰxohil/ 'were eaten up for them'

2. xatʰ-Baʔ-a-xo-ya-eʔn' /xatʰaʔaxon/' 'just finished eating'

3. xatʰ-wiš-maʔ-so-xo-eʔn' /xatʰwišmaʔšoxon' 'wanting to be eating it myself'

4. xatʰ-šitʰ-maʔ-so-xo-eʔn' /xatʰšitʰmaʔšoxon' 'wanting to be eating it for someone'

5. xatʰ-Baʔ-a-xo-n-aw /xatʰaʔaxonow' 'to where he's been eating'

(Note that the final suffixes here are not in the charts above, since only non-final suffixes are charted there.)
300. Verb formation

The verb is a syntactic class of words whose final suffixes are verbal, and which are independent in the clause. The lexemes which are verb-formative follow throughout section 300, with examples of their allolectic forms and of their use in clauses given in both morphemic (morphophonemic) and phonemic transcription. Unless stated otherwise, the morphemic and lexemic transcription are identical except for the lexeme brackets (L/ /).

310. The final suffixes which have verbal functions are:

311. L/e^n' factive
312. it\textsuperscript{h} simple past tense
313. hil aorist tense
314. t\textsuperscript{h}a? past perfective
315. al pontentiative
316. ka imperative
317. xa/ precative

311. The factive, -e^n', marks the action or event expressed by the base as simply true without implications of time. It may refer to a future or a past event, but depends on its context for assignment to time. It is frequently used with mi\textsuperscript{i}n 'soon' expressing a future event; e.g.:

a. na·M-? ?i·p\textsuperscript{h}-e^n'. /na? e·p\textsuperscript{h}e?/. 'I swam.'

b. mi\textsuperscript{i}n na·M-? ?i·p\textsuperscript{h}-e^n'. /mi\textsuperscript{i}n na? e·p\textsuperscript{h}e?/. 'I am going to swim.'

With wil' 'used to' the factive implies customary action in the past; e.g.:

c. ?ama·M-? wil' esek\textsuperscript{h}-e^n'. /?ama? wil' ?esk\textsuperscript{h}e?/. 'He
used to beg.'

Following \( t^h \)a?an 'usually' or 'always' the factive indicates customary action extending into the present, or action which 'kept going on', e.g.:

d. mur\( \overline{m} \)-\( \overline{z} \)-\( \overline{I} \)-\( \overline{l} \) na\-\( M \)-? \( t^h \)a?an sa\-\( w \)-\( e \)-\( n \)-. \( /mu\overline{n} \)-\( \overline{\text{\'u}} \)-\( \overline{l} \) na? \( t^h \)a?an sa\-\( w \)-\( e \)-./ 'I always water it eight times.'

Examples with various stems:

e. yat\( h \)-\( w \)-\( i \)-\( s \)-\( e \)-\( n \)-? \( am \)-\( ? \)-\( an \)-. \( /y\overline{a}t^h \)-\( w \)-\( i \)-\( s \)-\( e \)-\( ? \)-\( am \)-\( ? \)-\( an \)-./ 'They are going to have a trial (lit: "talk to each other")'

f. \( \dot{s}i \)-\( p^h \)-\( \dot{s} \)-\( i \)-\( t^h \)-\( e \)-\( n \)-? mi\-\( in \). \( /\dot{s}e\overline{p}^h \)-\( \dot{s} \)-\( i \)-\( t^h \)-\( e \)-\( ? \)-\( na \)-\( ? \)-\( mi \)-\( in \)./ 'I will write it for you.'

g. \( t^h \)a?i\( \dot{s} \)-\( m \)-\( a \)-\( s \)-\( e \)-\( n \)-? \( ma \)-\( \bar{M} \)-? \( ? \)/\( t^h \)a?i\( \dot{s} \)-ma?\( \dot{s} \)-\( e \)-\( n \)-? \( ma \)-?/ 'Do you want to watch?'

h. \( t^h \)a?i\( \dot{s} \)-\( a \)-\( c \)-\( a \)-\( e \)-\( n \)-? \( ma \)-\( \bar{M} \)-?. \( /t^h \)a?\( \dot{a} \)-\( s \)-\( a \)-\( n \)-? \( na \)-?./ 'I am watching.'

312. The simple past, \( -i t^h \), indicates that the event has happened very recently or is about to be completed. In a narration it may mark events which are recent in comparison to an action marked by the more remote past, \( -t^h \)a?. Examples are:

a. \( t^h \)a?i\( \dot{s} \)-\( i \)-\( t^h \)-\( a \)-\( m \)-? \( ?u^h \)-\( l \)-\( a \)-\( l \)-\( ? \)-\( \bar{V} \)-\( n \). \( /t^h \)-\( a \)-\( \dot{s} \)-\( i \)-\( t^h \)-\( a \)-\( m \)-? \( ?u^h \)-\( l \)-\( a \)-\( l \)-\( ? \)-\( \bar{V} \)-\( n \)-. 'I just saw a dove.'

b. mi\-\( in \) kala\-\( p \)-\( i \)-\( t^h \)-? \( \dot{m} \)-\( e \)-\( c \)-\( i \)-\( n \)-\( i \)-\( t^h \). \( /m\overline{i}n \)-\( kala \)-\( p \)-\( i \)-\( t^h \)-? \( \dot{m}e\overline{c} \)-\( i \)-\( n \)-\( i \)-\( t^h \)/ 'Then she gave up, because there was so much fire.'

(lit: "Then she gave up. It was very much so, it was burning."
The simple past can also be used very generally for any past action that is not simply an event (where -tʰaʔ or -hil would be used); e.g.,

\[
\begin{align*}
\text{c. tuš-itʰ na-M-ʔ.} & \quad /tušutʰ naʔ.\! / 'I got used to it.' \\
\text{d. le·le-la-itʰ na-M-ʔ ma·M-a.} & \quad /le·lilatʰ naʔ mam.\! / 'I made you learn.'
\end{align*}
\]

313. The aorist tense, -hil, marks an event as having occurred recently, but usually not more than a few days ago. It is used, for example, with /lakyiy/ 'yesterday'. An event of the past few moments is indicated by the simple past tense -itʰ, and an event of more than a few hours or days past is referred to by the use of the past perfective, -tʰaʔ. These three tenses are, hence, relative to each other. Their use depends on whether the speaker thinks of the event as more remote or more immediate.

Examples of -hil are:

\[
\begin{align*}
\text{a. yunuš-hil ma·M-ʔ.} & \quad /yunušhul maʔ.\! / 'You shook it (e.g., yesterday).' \\
\text{b. tik-hil cʰe xa-ʔ.} & \quad /tikhil cʰe xaʔ.\! / 'The dog held its breath.'
\end{align*}
\]

314. The past perfective -tʰaʔ, marks action as remote in past time (see discussion in 312.) and is the typical tense marker in narratives both formal and informal; e.g.,

\[
\begin{align*}
\text{a. tʰaʔiš-tʰaʔ na-M-ʔ ma·M-a.} & \quad /tʰaʔištʰaʔ naʔ mam.\! / 'I saw you (the other day).' \\
\text{b. hot'-in-tʰaʔ.} & \quad /hot'innʰaʔ.\! / 'It flamed up.' \\
\text{c. he·tam na·M-ʔ kew xo·tʰoʔ.} & \quad /he·tam naʔ kew xo·tʰoʔ.\! / 'I stayed right there in that place.'
\end{align*}
\]
315. The potentiative,-al, marks the action as either possible or optional, and is usually accompanied by the adverb, /na?aš/, 'can, could, would, should,' although not necessarily.

Examples:

a. ?ohom' ma·y'-? na?aš hawit'-al.
   /?ohom' nay' na?aš hawt'al./ 'We couldn't do anything (about it):'

   'He wouldn't hurry.'

c. hac'ah ma·y-? na?aš xatʰ-al. /hac'ah may' na?aš xatʰal./
   'We may eat now.'

d. waham' puš na?aš tʰa·n-al. /waham' puš na?aš tʰa·nal./
   '(I) wish he would go.'

e. t'ul-in-al ?alitʰ. /t'ulnal ?alitʰ./ 'He could have burned up way back then.'

316. The imperative suffix,-ka, gives to the verb a mood of entreaty or command; e.g.:

a. tʰaxin-ka. /tʰaxinka./ 'Come!!'

b. toš-ka ?ama·M-a. /toško ?am (133.3)/. 'Tell him!

c. ?an' na·M-a niw-ka. /?an' nan niwka./ 'Don't touch me!!'

d. c'awa·la-ka. /c'awa·lak./ 'Pay up!!'

The vain entreaty, as a wish directed to oneself, may use the imperative, e.g.:

waham' puš na·M-? tʰa·n-ka. /waham' puš na? tʰanka./
   'I wish I could go!' (cf. 315.d)

317. The precative, -xa, indicates an exhortation or wish, usually involving the first person, but not always (317.e); e.g.
a. xatʰ-xa ma'y'-. /xatʰxa may'/ 'Let's eat it.'
b. waham' puš na·M-? xatʰ-xa. /waham' puš na? xatʰxa./
   'I wish I could (hope I can) eat it.'
c. hew'ne-xa ma·k'-?. /hew'nex mak'/ 'Let's do it like
   this (gesturing)?'
d. ?utʰuy-ka na·M-a, le·lupsa-xa na·M-?.
   /*utʰuyka nan, le·lupsax na?./ 'Push me so I can swing.'
e. hawil'-. ta? ma·M-? tʰaxin-xa?
   /hawil' ta? ma? thaxinka./ 'Why (didn't) you come home?'

320. Six final verbal suffixes form a class of words called ger-
undials. All but one of these (L/ni/) form a dependent verbal
substantive, which, therefore, cannot constitute a clause as the
independent verbs can. The gerundials provide for the sentence
a circumstance in effect in some (usually) temporal relationship
with the independent verb ("finite" verb).

Since these are final suffixes, the resulting lexemes are
not inflected for case. There are, however, two inflected verbal
substantives treated in 410, 454 and 612, i.e., the verbal
noun and the agentive.

321. L/ni    consequent gerundial
322. tʰaw    precedent gerundial
323. tʰin    indirective gerundial
324. ni      passive gerundial
325. ?aš     precative gerundial
326. nu/     resultative gerundial

321. The consequent gerundial, -mi, marks action taking place
during or after that expressed by the accompanying independent
verb; e.g.:

a. yalik-mi na·M-? le·le-itʰ /yalikmi na? le·letʰ./
   'I stood up and read.' (yalik- 'stand')

b. k’a·l-eʔn’ na·M-? miʔin tʰaxin-mi.
   /k’a·l-eʔ naʔ miʔin tʰaxinmi./ 'I'll trim it and then
   come down.' (tʰaxin- 'come')

c. we·n-aw na·M-? xatʰ-mi sanayis-tʰaʔ.
   /we·naw naʔ xatʰmi sanayistʰaʔ./ 'When I first started
   to eat, I was scared.' (xatʰ- 'eat')

322. The precedent gerundial, -tʰaw, marks action that is taking
place concurrently or precedent to the action of the independent
verb. The possessive pronoun indicates the actor of the gerund;

   e.g.:

a. xatʰ-tʰaw na·M-? ʔamin-∅ tʰaʔan ha·y-eʔn’.
   /xatʰtʰaw naʔ ʔamin tʰaʔan ha·yeʔ/ 'I always laugh when
   he eats.'

b. xatʰ-Baʔa-xo-tʰaʔ ma·M-? wosik-tʰaw nim-∅.
   /xatʰaʔa xo tʰoʔ maʔ wosiktʰaw nim./ 'You kept on eating
   when I passed by.' (wosik- 'pass')

c. tʰan-tʰaw min-∅ na·M-? c’al-itʰ pila·suʔVn.
   /tʰantʰaw min naʔ c’alith pila·suʔun./ 'After you left,
   I broke the plate.' (tʰaʔ- 'go')

d. pʰana·-tʰaw min-∅ ma·y-ʔ xatʰ-eʔn’.
   /pʰana·tʰaw min may’ catʰeʔ./ 'After you arrive, we will
   eat.' (pʰana·- 'arrive')

In the following example, although the gerund seems to be the
object of the verb, it is actually in the same relation to
the main verb as the foregoing examples:

e. hoy'li na·M-? hut-Ba?a-hil ?amin-Ø tʰexetʰ-in-tʰaw.
   /hoy'li naʔ hutaʔahil ?amin tʰixtʰintʰaw./ 'I knew
   right away that he was sick.' (tʰexetʰ- 'to pain')

323. The indirective gerundial, -tʰin, marks an action as being
the indirect objective of another action or as limiting a sub-
stantival idea; e.g.:

   a. pacxaʔal-? waši xatʰ-tʰin. /pacxaʔal waši xatʰtʰin./
      'After a while it will not be good for eating.'
      (Lit: "bad after a while for eating")

   b. yoʔ naʔaš poppl-aw ši·pʰ-tʰin.
      /yoʔ naʔaš popplaw šepʰtʰin./ 'It should be written on
      paper, too.' (Lit: "also should on paper for writing")

   c. kalpiytʰ-taʔ tʰa·n-tʰin. /kalpiyitʰ taʔ tʰantʰin./
      'It is hard to go there.' (Lit: "is difficult for going")

   d. kay'e·s-ʔ ma·y'-in naʔaš hew xo·tʰin.
      /kay'is ma·yin naʔaš hew xo·tʰin./ 'It would be best for
      us to stay here.' (Lit: "good us would here for staying")

324. The passive gerundial, -ni, when in a construction with a
subjective substantive, functions like a finite verb, but some-
times it is with a possissive actor functioning like a verbal
noun (410,600); e.g.:

   a. miʔin na·M-? k'un-ni. /miʔin naʔ k'un'nu./ 'I'll get
      punched.' (k'un'- 'punch')

   b. miʔin nim-Ø k'un-ni. /miʔin nim k'un'nu./ 'I'll punch
      him.' (Lit: "soon my get-(him)-punched")

   c. xatʰ-ni ma·y'-ʔ tʰaʔan k'e·nic'-en.
/xat\textsuperscript{h}ni may' t\textsuperscript{h}a\textsuperscript{?}an k'\textsuperscript{e.}nic'\textsuperscript{en}./ 'We always get eaten by the ants.' (xat\textsuperscript{h} - 'eat')

d. hiM-? xat\textsuperscript{h}-a\textsuperscript{?}a\textsuperscript{?} ?ohom' na\textsuperscript{a}x\textsuperscript{a} xat\textsuperscript{h}-ni.

/hi? xat\textsuperscript{h}a\textsuperscript{?}a\textsuperscript{?} ?ohom' na\textsuperscript{a}x\textsuperscript{a} xat\textsuperscript{h}ni./ 'This food can't be eaten.'

325. The precative gerundial\textsuperscript{11}, -\textsuperscript{a}x\textsuperscript{a}, marks an act as wished for or desired for oneself or another; e.g.:

?a\textsuperscript{na}-ka ?amin-\textsuperscript{0} xat\textsuperscript{h}-?a\textsuperscript{?}a\textsuperscript{?}. /a\textsuperscript{na}nak ?amin xat\textsuperscript{h}?a\textsuperscript{?}a\textsuperscript{?}/

'Let him eat.' (Lit: (?) 'permit his eat-desire')

326. The resultative gerundial, -nu, occurs only on the passive stem formed by L/han/ and indicates the result of another act or condition; e.g.:

a. mec' kayi-na-? c'\textsuperscript{in-it}\textsuperscript{h}, ?ohom' laniy-han-nu.

/mec' kayi-na\textsuperscript{?} c'\textsuperscript{in-it}\textsuperscript{h}, ?ohom' laniyhan\textsuperscript{n}nu./ 'The chickens are so loud (we) can't be heard.' (laniy- 'hear')

b. mec' ?otix-? cawwan-?, ?ohom' hulu\textsuperscript{s}-han-nu.

/mec' ?otix cawwan, ?ohom' hulu\textsuperscript{s}hannu./ 'The pillow is so hard it can't be sat on.' (hulu\textsuperscript{s}- 'sit')

c. mec' ma\textsuperscript{m}il'-? k'iyit'-?, ?ohom' xat\textsuperscript{h}-han-nu.

/mec' ma\textsuperscript{m}il' k'iyit', ?ohom' xat\textsuperscript{h}han\textsuperscript{n}nu./ 'These berries are so bitter, they can't be eaten.'

The use of L/nu/ in the corpus is limited to these three utterances. Its use, therefore, seems specialized.
Several non-final verbal suffixes are to be described.

L/a inchoative
a? progressive perfective
a?a present tense
e distributive
han passive
i? imperfective
in medio-passive
i-wi hortative
?e, la causative
ma?aš desiderative
mix comitative
me·we processive
šit'h benefactive
wiš reflexive-reciprocative
xaš exclusive
xo durative
ya/ culminative

The distribution of the inchoative is:
L/a/ (non-final suffix) /-Za-
---/-a-

The inchoative indicates that the event or quality expressed by the base or stem is viewed from its inception; e.g.:

a. k'ole·s-a-it'h. /k'ole·sat'h./ 'It got smaller.'
b. teye·š-a-t'a?. /teye·ṣat'a?./ 'He became a witch doctor.'
c. haplik'ay·a-e?n'. /haplik'yan'./ 'It has gotten red.'
d. hat'him-Gi·c'-Za-ma?aš-xo-e?n'.
   /hat'hamc'ama?ašxon'./ 'He wants to become a singer.'
332. The present perfective, -aʔ-, implies a present effect or continuation of a past event; e.g.:
   a. pʰiʔ-aʔ- xo-eʔn'. /pʰiʔaʔxon'/ 'He stands waiting.'
   b. c'ik'-aʔ- xo-eʔn'. /c'ik'aʔxon'/ 'It stands tied.'
   c. kitiw-aʔ- xo-eʔn'. /kitwaʔxon'/ 'They're around it.'

333. The present tense marker, -Baʔa-, may indicate action taking place at present, or it may mark an event as being presently evident or important to the speaker; e.g.:
   a. xatʰ-Baʔaʔ-eʔn' na·Mʔ-?. /xatʰaʔan'/ 'I'm eating now.'
   b. hatʰim-Baʔaʔ-eʔn' ma·Mʔ-?? /hatʰamʔan'/? 'Are you singing?'
   c. yuk'ul-Baʔaʔ-hil na·Mʔ-. /yok'oʔahil naʔ./ 'I buried it a while ago.'
   d. hatʰim-Baʔaʔ- xo-ya-eʔn' na·Mʔ-?an. /hatʰamʔaxoyon' naʔan./ 'We were just now singing.'

334. The distributive, -De-, indicates that the action is performed iteratively, pervasively, widely, or in a thoroughgoing manner; e.g.:
   a. Compare:
      th'aʔiš-ka. /th'aʔiška./ 'Look!'
      th'aʔiš-De-ka. /th'aʔe·šek./ 'Look all around!'
   b. hatʰim-De-eʔn' wil' na·Mʔ-?an. /hatʰe·men' wil' naʔan./
      'We used to sing all over the country.' (hatʰim- 'sing')
   c. ʔoyikʰ-De-xo-eʔn'. /ʔoye·kʰxon'/ 'Everybody is singing with shaky voices.'
   d. ʔutʰuy-De-xo-eʔn'. /ʔotʰyaxon'/ 'He's pushing it here and there.'

335. The passive, -han-, indicates that the subject is the goal or recipient of the action expressed by the base or stem to which
it is suffixed; e.g.:

a. xat$^h$-han-xo-e$?n$. /xat$^h$hanxon$'$. /'They are being eaten.'
   'It can't be eaten.'
c. hiM$^-$ xat$^h$-han-na$?$. /hi$^?$ xat$^h$hanna$'$. /'This is what was eaten.'

336. The imperfective, $'i?-$, draws attention to the fact that an action has been going on, whether or not it has been completed; e.g.:

a. th$^a$?i$?i$-xo-e$?n$. /th$^a$?i$?i$xon$'$. /'He's been looking up.'
b. p$^h$ot$^h$-xo-e$?n$. /p$^h$ot$^h$i$?i$xon$'$. /'He's been holding on.'
c. op$^h$pt$^h$-xo-e$?n$. /op$^h$pt$^h$i$?i$xon$'$. /'We stayed up, stayed awake.'

337. The medio-passive, $-i?-$, marks a verb as intransitive, the subject participating or benefiting some way in the action or in its outcome; e.g.:

a. Compare:
   c'a$^h$-Ba$^h$-a-e$?n$. /c'a$^h$a$^h$an$'$. /'He's melting it.'
   c'a$^h$-in-Ba$^h$-a-e$?n$. /c'a$^h$an$'$. /'It's melting.'

b. Compare:
   hi$?i$-e$?n$. mi$?i$in. /hi$?i$e$?i$ mi$?i$in$'$. /'He'll hide it.'
   hi$?i$-in-e$?n$. /hi$?i$ne$?i$ mi$?i$in$'$. /'He'll hide.'
   d. kay$'i$-is-in-hil na$M$?- $?ilik'$-Za. /kay$'i$sinhil na$'?$ilk'a$'$. 
   'I consider the water to have been good.'

338. The hortatory suffix, $'i$-wi$-$, marks that to which someone
is being motivated by the entreaty or command of another; e.g.:

a. xatʰ-i·wi·ka. /xatʰi·wik./ 'Go eat!'

b. hotʰe·law ma·y'-ʔ xatʰ-i·wi·xa.
   /hotʰe·law may' xatʰi·wik./ 'Let's go eat at the hotel!

c. tʰaʔiš-i·wi·ka kiM-a no·noʔVn. /tʰaʔiši·wik kin no·noʔon./
   'Go see that man.'

339. The causative, -la-, marks causation of the action expressed by the base or stem. The form, -la-, may be used with any base; but -la- Ꞛ a·la (142.2) on monosyllabic bases, and -la- Ꞛ -e- (142.13) on disyllabic bases, in which circumstances -ʔe- is preferred; e.g.:

a. hiš-a·la-ka. /hiša·lak./ 'Make him hide it!'

b. xatʰ-la-ka' /xatʰlak./ 'Make him eat it!'

c. hu·še-la-itʰ. /hu·šilatʰ./ 'He made them drive (them) away.'

d. yuk'uʔe·ka. /yuk'uʔlok./ 'Make him bury it!'
   (/ə yuk'u·la-ka. /yuk'u·lak./)

3310. The desiderative marks the action as desired or on the verge of taking place. It's distribution is:

L/maʔaš- (142.2)

--- / maʔaš Ꞛ maʔše- (142.2)

Examples:

a. xatʰ-maʔaš-xo-eʔn' na·M·ʔan. /xatʰmaʔašxon' na·ʔan./
   'We all want to eat.'

b. xatʰ-maʔše-itʰ. /xatʰmaʔšetʰ./ 'He was about to eat.'
   (According to rule 142.2, xatʰ-maʔaš-itʰ would also be /
   xatʰmaʔšetʰ/.)

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3311. The comitative, -mix-, indicates that the action is being carried on in company with someone or something; e.g.:
   a. hatʰim-mix-tʰa? na·M-? /hatʰimmixtʰa? na?. /'I sang along with someone.'
   b. t'uy-mix-tʰa? /t'uyumuxtʰa?./ 'He shot with someone,'
   c. ʔohyo-mix-eʔn' na·M-? miʔin hiM-a.
     /ʔohyomxe? na? miʔin hin./ 'I'll go hunting with him.'

3312. The processive, -me·we-, marks the action as accompanying motion or locomotion of the subject; i.e., one acts as one 'goes along'; e.g.:
   a. xatʰ-me·we-itʰ na·M-ʔanʔ. /xatʰme·wetʰ naʔan./ 'We kept eating as we went along.'
   b. ʔilikʔ- k'ole·s-a-me·we-itʰ wakay-aw.
     /ʔilik k'ole·same·wetʰ wakayaw./ 'The water is receding (getting less as it goes along) in the river.'

3313. The benefactive, -šitʰ-, indicates that the action is performed on behalf of someone. The beneficiary is in the objective case; e.g.:
   a. xatʰ -šitʰ-ka na·M-a. /xatʰšitʰka nan./ 'Eat it for me!!'
   b. xatʰ-han-šitʰ-xo-hil. /xatʰhanšitʰxohil./ 'It was being eaten for someone.'
   c. noʔomʔ- nim-ʔ tiʔiš-šitʰ-itʰ na·M-a.
     /noʔom nim tiʔiššitʰitʰ nan./ 'My mother made it for me.'

3314. The reflexive-reciprocative, -wiš-, marks the action as happening to or for the subject actor, or as involving a mutual
sharing in the action; e.g.:

a. šawik-wiš-t₇a? hiM-a. /šawikwišᵗ₇a? hin./ 'He bought that for himself.'

b. tip-wiš-itʰ. /tipwišⁱᵗʰ./ '(Chicken) is plucking his own feathers.'

c. miʔin na·M-ʔak'-? pa·ne-wiš-eʔn'.
/miʔin na·ʔak' pa·newše?./ 'We two are going to run a race.'

d. ma·k'-? lu·ca·le-wiš-eʔn'. /mak' lu·ca·lewše?./ 'Let's (you and I) wrestle.'

3315. The exclusive, -xaš-, indicates that only that action so marked is important at the moment, or that nothing else accompanies the action; e.g.:

a. tʰaʔiš-xaš-tʰaʔ. /tʰaʔišxašᵗʰaʔ./ '(They) just looked on, that's all.'

b. xatʰ-xaš-eʔn' na·M-ʔ miʔin. /xatʰxašeʔ naʔ miʔin./ 'All I'm going to do is eat!'

3316. The durative, -xo-, is very frequently used and marks action as continuous or iterative; e.g.: (See also 224)

a. xatʰ-han-xo-eʔn'. /xatʰhanxon'. /'It's being eaten now.'

b. hitʰya-ʔ xatʰ-Baʔa-xo-hil. /hitʰyaʔ xatʰaʔaxohil./
'They all kept on eating.'

c. c'etma-xo-eʔn' na·M-ʔ. /c'etmaxon' naʔ./ 'I'm thinking.'

3317. The culminative, -ya-, indicates that the action is to be viewed from the perspective of its completion or near completion; e.g.:

a. law'sikʰ-ya-itʰ. /law'sikʰyatʰ./ 'He's getting limp.'
b. xat\(^h\)-Ba\(^a\)-xo-ya-e\(^n\)\'. /xat\(^h\)a?axoyon\'. /'(I) just finished eating.'

340. The repetitive, L/R/, is described as an initial morpheme of a specialized sort. As explained in 143.2, it is simply the reduplication of the first closed syllable of a base or stem, indicating that the event or action is being done repeatedly or by several subjects at about the same time; e.g.:
   a. Rxat\(^h\)-xo-e\(^n\)\'. /xat\(^h\)xat\(^h\)xon\'. /'He's nibbling at his food; eating a little here and there.'
   b. Rllum-xo-t\(^h\)a\(^a\). /llumxot\(^h\)o\(^7\). /'He piled it here and there!
   c. Rhan'-e\(^n\)\'/han'hane\(^7\)'/ 'to kick around, back and forth, as in a dance.'
   d. Rhul\(\check{u}\)š-De-xo-e\(^n\)\'/hul\(\check{u}\)ul\(\check{u}\)šaxon\'/ 'to be sitting all around (several people)'

350. Two non-final suffixes function only as verbalizers of bases which are substantival in their usual functions:
   351. L/na  acquisitive
   352. t\(^h\)a/ causative-assumptive

351. The acquisitive verbalizer, -na-, marks the base as something acquired by the subject; e.g.:
   ?e\(^\cdot\)law-na-šit\(^h\)-hil /?e\(^\cdot\)lawnašit\(^h\)hil/ 'got a flower for (someone)' (?e\(^\cdot\)law- 'flower')

352. The causative-assumptive, -t\(^h\)a-, indicates that the quality expressed by the base is made true, considered true, or in some
way realized; e.g.:

a. poye·m-tʰa-ka. /poyem'tʰak. 'Make it pretty!'

b. kaye·s-tʰa-hil na·M?-an-? yow·hil.
   /kayestʰahil na·ʔan yowhil./ 'We got home safe.'

c. cewew'-tʰa-ka. /cewew'tʰak./ 'Stiffen it!'
400. Noun formation

410. The noun and the verbal noun

It is important to recognize that although Chukchansi displays a set of fundamental bases which can be suffixed both verbally and nominally as described in 200, a large number of initial morphemes exist which cannot be described by the statements already made about the fundamental bases and their alternants. These morphemes are not all simply bases, some being longer stems. What they have in common is that their suffixation involves largely the eight case suffixes (430) and occasionally the inchoative (331), the diminutive and plural (440) and the verbalizers in 350.

As discussed in 200, some bases (with vowel sequences like those on page 32) participate rather freely in both verbal and nominal suffixation. When these are suffixed by certain case lexemes (see paradigm below), they are called verbal nouns (612). A base which thus functions may have a different noun classification (i.e., suffix vowel pattern) as a verbal noun than as a noun. Verbal nouns are of the A-class (423.2).

The paradigm which follows shows the case suffixation of one base. As a noun, it is I-class and as a verbal noun, of course, A-class. (Since the verbal noun is found with five of the eight case suffixes, only those are listed for both types.)

<table>
<thead>
<tr>
<th>Case</th>
<th>Noun</th>
<th>Verbal noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective</td>
<td>/hošiw 'cold'</td>
<td>hošiw 'being cold, cold-</td>
</tr>
<tr>
<td>Objective</td>
<td>hošwi</td>
<td>hošwo ness'</td>
</tr>
<tr>
<td>Locative</td>
<td>hošwiw</td>
<td>hošwow</td>
</tr>
<tr>
<td>Ablative</td>
<td>hošwenit\textsuperscript{h}</td>
<td>hošwonit\textsuperscript{h}</td>
</tr>
<tr>
<td>Possessed</td>
<td>hošwem'</td>
<td>hošwom'/</td>
</tr>
</tbody>
</table>

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The bases or stems under discussion in this section (400) are primarily nominal, only rarely functioning with suffixes other than the cases and not functioning as verbal nouns.

The nouns do not follow consistent patterns of vowel harmony between stem and case suffix, though certain phonological criteria are applied within classes. The suffix vowels are not predictable, except as the stem is known to belong to one of the classes outlined in 420-423.

420. Noun classification

421. The criteria for classification of nouns are 1) the stem alternation and 2) the quality of the objective case vowel, neither of which is predictable except in class H (423.1). In H-class (harmonized) nouns, the objective suffix vowel is of the same quality as that of the final vowel of the stem. Between the A-class and I-class nouns (423.2-3) /a,o/ contrast with /i,u/ respectively, the alternation being predictable within each class, but not between classes. For a few irregular nouns, both subjective and objective stem alternants must be given, the objective stem serving all other case suffixes.

422. An outline of noun classes is given in 423, with examples (symbols in parenthesis are for later reference). The following summary is in order:

a. H-class means that stem vowel and first suffix vowel (unless elided) are harmonized.

b. A-class means that the morphophoneme a, with /a,o/ alternants, predominates in the objective and other cases.

c. I-class means that the morphophoneme i, with /i,u/ alternants, predominates in the objective and other cases.
d. Static means that the stem has no alternants.

e. Zeroed means absence in all other cases of the last vowel of the subjective stem.

f. Irregular means that stem alternants must be listed, for the pattern is not predictable; or that the object suffix is /∅/.

423. Noun class types

423.1 H-class (H)

Subj. ka·tu-?= /ka·tu?/ 'cat'

Obj. ka·tu-?=Vn /ka·tu?un/

S. ?e·ni-?= /?e·ni?/ 'snow'

O. ?e·ni-?=Vn /?e·ni?in/

423.2 A-class

a. Static A (SA)

S. k'ut'-= /k'ut'/ 'tail'

O. k'ut'-a /k'ut'a/

b. Zeroed A (ZA)

S. t'oyix-? /t'oyix/ 'medecine'

O. t'oyix-Za /t'oyxo/

S. mukuš-?= /mukuš/ 'grandmother'

O. mukuš-Za /mukša/

423.3 I-class

a. Static I (SI)

S. t'ap'p'aš-? /t'ap'p'aš/ 'leaf'

O. t'ap'p'aš-i /t'ap'p'aši/

b. Zeroed I (ZI)
S. k'exum-? /k'exum/ 'rich'
0. k'exum-Zi /k'exmu/
S. mok^hiy-? /mok^hiy/ 'wife'
0. mok^hiy-Zi /mok^yi/

423.4 Irregular (Ir)

a. Zero object
S. c'e-han-? /c'e-han/ 'smoke'
0. c'e-han-Ø /c'e-han/

b. Like ZA, but stem not zeroed in possessive, locative and possessed cases
S. xo·wis-? /xo·wis/ 'hail'
0. xo·wis-Za /xowo/.

Stem for above-named cases: xo·wis-.

430. Final suffixes for nouns; i.e., case suffixes:

431. L/S subjective case
432. in possessive case
433. 0 objective case
434. an instrumental case
435. aw locative case
436. anith ablative case
437. am' possessed case
438. amen' associative case

Eight grammatical relationships are marked by the eight case suffixes. The pronouns (500) function in all but the last two. Following are descriptions of their allomorphy and explanations and illustrations of their functions:
The subjective case distribution:
L/S\l{h}_/-a, -i (depending on whether the plural stem is A-class or I-class)

This suffix marks 1) the subject of the clause, i.e., the actor of an active verb or receiver of the action of a passive verb; 2) both A and B of a pair of substantives in an equation- al relationship (i.e., 'A is B'); and 3) direct address. In addition, it may form a verbal noun, with a substantive in the possessive as actor (432).

Examples:

a. ka\l{tu}-?h-\l{i} ?ipis-in-t^h^a?. /kato-\l{u} ?ipisint^h^a?./
   'The cats got lost.'

b. no\l{t}^h^u-\l{a} kew. /not^h^a-\l{a} kew./ 'Northerners are there.'

c. k'e\l{x}a-? ipis-in-t^h^a?. /k'e\l{x}a? ipisint^h^a?./ The money was lost.'

d. hiM-? nim-Ø nepe\l{c}-? . /hi? nim nepec'/ 'This is my older brother.'

e. hat^h^im-? nim-Ø. /hat^h^im nim./ 'I sang.' or 'what I sang.'

f. meryan-\l{a}. t^h^axin-ka. /meryan. t^h^axinka./ 'Maryan! Come here!'

The possessive case distribution:
L/in\l{H}_/-?Vn

(2A,2I)_/-Zin

{hi, xi, ki}_/-?in

(Sglr personal pronouns)_/-Ø

---/-in
The possessive suffix marks 1) the possessor of another substantive and 2) the actor: of a) a verbal noun, b) a passive gerundial (324), c) a precedent gerundial (322), and d) a passive with L/han/ (335).

Examples:

a. ka·tu-?Vn k'ut'-a. /ka·tu?un k'ut'a./ 'cat's tail'

b. hoyuc'-Ba?a-e?n' na·M-? nim-Ø ch'iš-a.
   /hoyoc'?an' na? nim ch'iša./ 'I want to cut it (lit.: 'I
   want my cutting '). (ch'iša - verbal noun)

c. t'uy-han-it^h na·M-? mukuš-Zin nim-Ø.
   /t'uyhanith na? mukšun nim./ 'I was shot by my mother.'
   (mukuš- 'mother')

d. he-?in (516) somle·la^-?Vn. /he?in somle·la?an./
   'this person's hat' (somle·la?an - objective)

e. mokšay-in somle·la^-?. /mokšayin somle·la?./ 'grandma's
   hat'

433. The objective case distribution:

L/0][(H)~?Vn
   (SI)/-i
   (ZI)/-Zi
   (ZA)/-Za
   (Some Ir)/Ø

---/a

433.1 The most common use of the objective is to mark the goal or object of a verb; e.g.:

a. t'ap^hil-e?n' ka·tu-?Vn /t'ap^hle? ka·tu?un/ 'to whip a
cat'

b. th'a?iš-t'ha? xo·y'-i. /th'a?išth'a? xo·y'i./ 'He saw a deer.'
c. t'uy-itʰ ʔamin-Ø mokʰiy-Zi. /t'uyutʰ ʔamin mokʰyi./
   'He shot his wife.'
d. ...ʔamin-Ø mukuš-Za. /ʔamin mukša./ '(He shot) his
grandmother.'
e. c'e·han-Ø tʰaʔiš-tʰaʔ. /c'e·han tʰaʔišʰaʔ./ 'He saw
smoke.'
f. ʰiš-itʰ k'ut'-a. /ʰišitʰ k'it'a./ 'He cut the tail.'

433.2 An attributive substantive may stand as a kind of "object-
ive absolute", not in concord with the noun with which it would
be in case agreement if adjacent to it; e.g.:

mikic'-Zi na·M-ʔ wec'e·tʰ-ám'. /mikc'i naʔ wec'e·tʰám'./
   'I have a heavy stick.' (Lit: 'heavy one I stick-have')

433.3 The objective impersonal interrogative (532) may have telic
connotation, sometimes ambiguously with it's typically objective
meaning; e.g.:

a. ha·ʔVn taʔ ma·yʔ-ʔ naʔaš tʰa·n-al ?
   /ha·ʔan taʔ maʔ naʔaš tʰa·naʔal/ 'Why should we go?'
b. ha·ʔVn taʔ na·M-ʔ naʔaš ʰiš-al ?
   /ha·ʔan taʔ naʔ naʔaš ʰišal/ 'Why should I cut it?' or
   'What should I cut?'

433.4 The second member of a comparison is marked by the objec-
tive suffix; e.g.:

hiM-ʔ mec' poyo·miʔ wakʰiy' nim-Ø hitʰyaʔ Vnʔ e·law-i.
   /hiʔ mec' poyo·miʔ wakʰiy' nim hitʰyaʔanʔ e·lawi./
   'This is the most beautiful of all my flowers.'
   (Lit: 'this superlatively beautiful more my all flower')
434. The instrumental case distribution:

\[ L/\text{an}[]\text{(SI)}]_/-\text{in} f \quad \text{-en} f \quad \text{-ni} \]

\[ (\text{ZI})_/-\text{Zen} \]

\[ (\text{ZA})_/-\text{Zan} \]

\[ ---/-\text{an} \]

The instrumental suffix marks that which is used as means, material or implement with which to carry out an action; e.g.:

a. ?ate-ka no-no?-Vn t'ap'p'aš-ni.
   /?atek no-no?on t'ap'p'ašni. / 'Bring the man a leaf!' (Lit: 'supply man leaf-by-means-of')

   /t'uyt-ha? he?maw (133.3) ye.t'an šilšen. / 'He shot me right here with one hair.' (ye.t'-'one', šiliš-'hair')

c. lowit-h-Zan na-M?-wan-han-it-h.
   /lowit-on na? wanhanit-h. / 'I was given a husband.' (Lit: 'husband-by-means-of I was supplied')

d. k'o?-it-h ka.tu?-Vn šele.l-an. /k'o?it-h ka.tu?un šele.lan./ 'He hit a cat with a rock.' (šele.l- 'rock')

e. hiM-? ti?iš-han-na-? k'e?e.l-an.
   /hi? ti?išhanna? k'e?e.lan./ 'This is something made of clay.' (k'e?e.l- 'clay')

435. The locative case distribution:

\[ L/\text{aw}[]\text{(SI)}]_/-\text{iw} f \quad \text{-ew} \]

\[ (\text{ZI})_/-\text{Ziw} \]

\[ (\text{ZA})_/-\text{Zaw} \]

\[ ---/-\text{aw} \]

The locative suffix indicates that near, toward or within
which an event takes place or is directed. In abstract usage, it marks the manner in which, or the person for whom something is done; e.g.:

a. miʔin na·Mʔ havenʔ-eʔnʔ e·law·iw.
   /miʔin naʔ hewe·teʔ e·lawiw/. 'I'm going to walk among the flowers.'

b. tʰa·n-xa k'exum-Ziw. /tʰanxa k'examw/. 'Let's go to the rich man.'

c. ma·Mʔ tuʔ yoʔ wil' tʰeyiš-Zaw tʰa·n-eʔnʔ.
   /maʔ tuʔ yoʔ wil' th'eyšaw th'a·neʔ/. 'You, too, used to go to the witch doctor, you know.' (th'eyiš- 'witch doctor')

d. to·li·aw ma·Mʔ e·itʰ. /to·liw maʔ eʔtʰ/. 'You did it wrong.' (to·li-'wrong')

e. xoʔʔ hitʰya·aw. /xoʔ hitʰyaw/. 'There's a house for everybody.' (hitʰya- 'all', 'every')

436. The ablative case distribution:
L/anitʰ]],(SI)/-initʰ f- enith
   (ZI)/-Zinitʰ f -Zenith
   (ZA)/-Zanith
   ---/anitʰ

The ablative suffix indicates that from which movement or sound originates or departs; e.g.:

a. lihim·itʰ na·Mʔ t'oyo·š·initʰ.
   /lihimʰ naʔ t'oyo·šunutʰ/. 'I ran from the arrow.'

b. 'eše-ka xap'il'·Zinitʰ ho·t'on·initʰ.
   'ešek xap'lenitʰ ho·t'onnitʰ/. 'Keep away from the hot flames.' (xap'il'-'hot', ho·t'on-'flame')
c. c'enpay'— hatʰ'im-Baʔa-eʔn' topʰ'in-Zanitʰ.
   /c'enpay' hatʰ'amʔan' topʰ'nonitʰ./ 'The bird is singing
   in (from) the buckeye.'

d. c'enpay'— hoyin-itʰ kah'o-n-anitʰ.
   /c'enpay' hoynitʰ kah'o-nanitʰ./ 'The bird flew out of
   the box.'

437. The possessed case distribution:

   L/am' [](SI)/ -im' ḋ -em'
   (ZI)/ -Zim' ḋ -Zem'
   (ZA)/ -Zam'

   --/ -am'

The possessed case suffix marks that which is possessed as
an object, attribute or capability. It also serves as the 'plus'
in numbers above ten; e.g.:

   a. c'eyew-? ye·c'-am' /c'eyew ye·c'am'/ 'eleven' ('ten one-
      plus')

   b. punoy-? c'eyew-? ye·c'-am' /punoy' c'eyew ye·c'am'/
      'twenty-one' ('two ten one-plus')

   c. mikic'-Zi na·M-? wec'e·tʰ-am'. /mikci na? wec'e·tʰ'am'/
      'I have a heavy stick.' (wec'e·tʰ- 'stick')

   d. hut-? nim-Ø no·no-? hatʰ'ém'am'.

      /hut nim no·no? hatʰ'mam'/ 'I know a man who is a sing-
      er.' (Lit: 'know my man sing-possesses')

   e. mec' hiM-? no·no-? xatʰ'am'. /mec' hi? no·no? xatʰ'am'/
      'This man can really eat!' (Lit: 'superlatively this man
      eat-possesses')
f. 'an' xatʰ-ka. yenpa-am'. /'an' xatʰka. yenpam'/.

'Don't eat it! It is (has) poison.'

438. The associative case distribution:

L/amen'/ (SI)/-imen'
   (ZI)/-Zimen'
   (ZA)/-Zamen'
   --/-amen'

The associative suffix marks that which either incidentally accompanies someone or something or is generally associated with that one. It is of rather infrequent usage, L/am'/ being used instead, wherever the idea of possession may be stressed. In the latter circumstance, the fluctuation is practically free between L/am'/ and L/am'/; e.g.:

a. ma·mil-Zamen' hiM-? no·no-.? (Zamen' f ~ -Zam')
   /mamlamen' hi? no·no?./ 'This man has a berry.'

b. tʰa?iš-ka hiM-a no·no-?Vn noh?o-amen'.
   /tʰa?iška hin no·no?on noh?omen'./ 'Look at the man with the bear!' (noh?o- 'bear')

c. hili-? ta? ?ama·M-? no·no-? pu?-amen' ?
   /hili? ta? ?ama? no·no? pu?amen'/? 'Where is the man with the hawks?' (i.e., 'who usually keeps hawks')

d. wikwik-amen' hiM-? payin-.? /wikwikmen' hi? payin./
   'This acorn is wormy (has worms).' 

e. Contrast:

  ?o·k'-em' ma·M-? ? /?o·k'em' ma??/ 'Have you any clams?'
  ?o·k'-imen' ma·M-? ? /?o·k'imen' ma??/ 'Do you own clams?'
Two non-final nominal suffixes are used with nouns, most commonly with kinship terms:

441. L/ay' diminutive
442. ?h/ plural

The distribution of the diminutive:
L/ay'/?h/-ay'-
     ---/-Zay'-

The diminutive indicates smallness or endearment; e.g.:

a. Compare:
   ?e-naš-? /?e-naš/ 'grandfather'
   ?e-naš-Zay'--? /?enšay'/ 'grandpa'

b. Compare:
   ne?e·š-? /ne?eš/ 'younger brother'
   ne?e·š-Zay'--? /ne?šay'/ 'Hey, kid brother!'

c. kac'ap-Zay'--? /kac'pay'/ 'little daughter'

d. kac'ap-?h-ay'--? /kac'iphay'/ 'small daughters'

The stem formed by L/ay'/ is rarely verbalized to indicate repeated acts conceived of as diminutive; e.g.:

a. halil-?h-ay'xo-e?n'. /halilhayxon'./ 'It's flapping
   (like a bit of curtain flipping in the wind)'

b. c'ok'on-?h-ay'xo-e?n'. /c'ok'onhayxon'./ 'He keeps running
   out of things.'

The distribution of the plural:
L/?h[SA, SI] S/-Z-
     ---/-?h-

Most nouns have only singular forms, plurality being expressed by the use of a number in connection with the singular
noun or by the use of words like /kalcen/ 'many' or /so·phit'/ 'few'. The plural is almost exclusively the property of kinship terms, certain words for people and a few animals. Rarely, a plural form of an inanimate object occurs, usually because that object has been personified at some time in an ancient myth; e.g.: /t'ewis/ 'basket'; /t'ewessaʔ/ 'baskets' (an irregularly formed plural).

The complete objective plural noun form must be known in order to classify the plural stem as A-class or I-class. No H-class plural stems exist. The noun may be in different classifications in the singular and plural. (See 423.)

Examples:

a. nim-Ø kac'a·p-Z·a /nim kac'pa/ 'my daughters'

b. tʰaʔiš-hil kalcen-a kətuʔ-h-i.
   /tʰaʔišhil kalcena katoʔhu./ 'I saw several cats.'

c. ... kalcen-a cʰeːxaʔ-h-a. /... kalcena cʰixaʔha./
   '(I saw) several dogs.'

d. tʰaʔiš-ka nim-Ønapʰaʔhimʔ-h-a.
   /tʰaʔiška nim napʰtʰimha./ 'Look at my brothers-in-law!'

450. Five non-final suffixes nominalize an otherwise verbal base or stem:

451. L/a·ʔ nominative
452. aʔhiy' adjunctive
453. ?a dubitative agentive
454. i·c' agentive
455. na / verbal noun formative
451. The nominative, -a·š-, forms a noun stem of the SI class (423) which is the simple noun cognate to the verb (like English 'song' cognate to 'sing'); e.g.:
   a. laniy-ka nim-Ø hatʰim-a·š-i. /laniyka nim hatʰma·ši./  
      'Hear my song!! (hatʰim- 'sing')
   b. ?ipʰis-ka xatʰ-a·š-i. /?ipʰiska xatʰa·ši./ 'Throw out
      the garbage.' (xatʰ- 'eat')
   c. hiM-? xatʰ-a·š-? ?ohom' naʔaš xatʰ-ni.  
      /hiʔ xatʰaš ?ohom' naʔaš xatʰni./ 'This food can't be
      eaten.'

452. The adjunctive nominalizing suffix, -Baʔhiy'-, forms a noun
   stem of the SA type, and adds one of two possible concepts to the
   base: 1) the place where the event or action occurs; 2) the im-
   plement in or by which the action is performed; e.g.:
   a. hiM-? nim-Ø xatʰ-Baʔhiy'-?. /hiʔ nim xatʰaʔhiy'/  
      'This is my eating place (or utensil).' (xatʰ- 'eat')
   b. hiš-in-Baʔhiy'-aw k’e·š-iw xoʔ-eʔn'.  
      /hešen'hiy'aw k’e·šiw xo:n'/ 'He is staying inside the
      hiding place.' (hiš- 'hide')
   c. k’eweš-Baʔhiy'-? nim-Ø /k’eweš?iy' nim/ 'my cooking
      place (or pot)'

453. The dubitative agentive, -Bʔa-, forms a noun stem of the
   H-class, indicating that agency or the action itself is in doubt;
   e.g.:
   a. ?ohom' tax ma·M-? xatʰ-Bʔa-? hiM-a ?  
      /?ohom' tax ma? xatʰa? hin?/ 'Don't you ever eat this?'  
      (Lit: 'not ever you eater this')
b. '?ohom' tax ma·M-? yatʰ-B'a-? ?
   /'?ohom' tax ma? yatʰa??/ 'Don't you ever talk?'
c. ṣi·pʰ-B'a? ma·M-? /ṣipʰa? ma??/ 'Do you write?'
   (i.e., 'are you a writer')

454. The agentive, -Gi·c'-, forms from an essentially verbal
base or stem a noun of the ZI class, or, on monosyllabic bases
not ending in a vowel, a noun of the SI class.

454.1 The word formed by L/i·c' / plus a case suffix often func-
tions as a typical substantive; e.g.:
   a. tʰaʔiš-xa šiliw-Gi·c'·Zi. /tʰaʔišxa šelewc'i./ 'Let's
      watch the weaver.' (šiliw- 'weave')
   b. mec' xiM-? šiliw-Gi·c'·? . /mec' xi? šele·wic'./ 'He's
      a real weaver!'
   c. mec' xiM-? xatʰ-Gi·c'·?. /mec' xi? xatʰac'./ 'He's a
      real eater!'
   d. mec' xiM-? hewetʰ-Gi·c'·?. /mec' xi? hiwtʰic'./ 'He's a
      real walker!'
   e. tʰaʔiš-ka hewetʰ-Gi·c'·Zi. /tʰaʔiška hewetʰc'i./ 'Look
      at him walk!' (Lit: 'see walker')

454.2 Being a verbal substantive (6 ), the agentive may have a
direct object:
   a. '?ohom' na·M-a tʰaʔiš-hil t'uy-Gi·c'·i xo·y-i.
      /'?ohom' nan tʰaʔišhil t'uyac'i xo·yi./ 'No one saw me
      shoot the deer.' (Lit: '...me...shooter (of) deer')
   b. tʰaʔiš-Baʔa-eʔn' na·M-? min-∅ mokʰiy-Zi ?ilik'-Za ma-x-
      Gi·c'·i. /tʰaʔaš'an' na? min mokʰyi ?ilk'a maxa·c'·i./
      'I saw your wife fetching water.' (Lit: '...wife water
      fetcher')
454.3 Sometimes the word formed by the agentive is appositive to a substantive, ascribing some act or process to that substantive, involving occasionally a telic connotation; e.g.:

a. th’a?iš-Ba?a-hil na·M-? ?ama·M-a xat’h-Gi·c’-i.
   /th’a?ais?ahil na? ?am (133.3) xat’hac’i./ 'I saw him eating.' (Lit: 'saw I him eater')

b. ...p?i?-a?-xo-Gi·c’-Zi. /...p?ia?xo?c’i./ '(I saw him) keep on waiting.' ('a continuous waiter')

c. th’a·n-it’h ?am-?an-? t’ul-Gi·c’-?.
   /th’anit’h ?am’an t’ulac’./ 'They went to burn them.' (Lit: 'went they (as) burners')

455. The verbal noun formative, -na- has the distribution:
L/na[h]. -na-
---/-n-

This suffix is used with the V-stems (214.3) and passives formed by L/han/ to form the verbal noun (410); e.g.:

a. hoyuc’-Ba?a-e?n’ nim-Ø hu·še-n-a.
   /hoyuc’?an’ nim hu·šena./ 'He wants me to drive.' (Lit: 'wanting my driving')

b. hoyuc’-Ba?a-e?n’ na·M-? nim-Ø hu·še-han-na-?Vn.
   /hoyuc’?an’ na? nim hu·šehanna?an./ 'I want to be driven.' (Lit: 'wanting I my being-driven')

c. Note phonemic contrast:
   hu·še-n’ /hu·šen/ 'driving' (subjective)
   hu·še-e?n’ /hu·šen’/ 'to drive' (factive, 311)
460. The remaining suffixes
461. The multiplicative, L/îl'/-Zîl'-, suffixed to (usually a modified stem of) a numeral, indicates that the event occurred that many times; e.g.:
   a. punoy'-Zîl'-? /punyîl'/ 'twice'
   b. hatʰp-Zîl'-? /hatʰpîl'/ 'four times' (hatʰpənay 'four')
   c. c'olîp-Zîl'-? /c'olîpîl'/ 'six times' (c'olîppʰiɣ 'six')
   (For numerals, see 810)
462. The quantitative adverbial adjunct, L/n'xu/-n'xu-, forms an H-class substantive interrogative on the locative interrogative base (534); e.g.:
   a. hele·-n'xu-? ta? tʰa·wan-iw? /helen'xu? ta? tʰa·wanîw?/ 'How far is it to the city?'
   b. hele·-n'xu-? Vn ta? ma·M-? naʔaš k'oʔ-iy? /helen'xu?un ta? ma? naʔaš k'oʔol?/ 'How far can you throw it?'

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500. The pronouns

510. The personal, demonstrative and indefinite pronouns are described here by listing the initial morphemes (the bases) and the non-final suffixes which indicate duality, plurality and inclusiveness. The resulting stems are of the SA classification (423) for the personal pronouns and of the SI class for the demonstratives and the indefinite (the corpus contains very few examples of the indefinite). Six of the eight case suffixes are used with the pronouns, the possessed (437) and the associative (438) being excluded. For full paradigms of the pronouns, see section 830.

511. First personal pronoun, 'I':

L/naån{ó.k, in}/nim-

---/na·m-

(In dual and plural, this base indicates exclusion of addressee.)

512. Second personal pronoun, 'you':

L/maån{ó.k, in}/min-

---/ma·m-

513. Third personal pronoun, 'he, she, it':

L/?amån{ó.k, in}/?amin-

_{k, n} S/?am-

---?ama·m-

514. First person dual, L/ma·k'/ ma·k', is inclusive of addressee, 'we two, i.e., you and I'. (The bilabial nasal hints at another possible perspective, that of second person dual, inclusive of speaker: 'you and I'. This is, however, a more complicated approach to the pronoun system.)

515. First person plural, L/ma·y'/ ma·y', is also inclusive of addressee: 'we all, including you!' (Or (see 514) second person plural, inclusive of speaker: 'you all and I')
516. The near demonstrative pronoun, 'this one, he, she, it':
L/hi{-in, -an, -aw, -anit}/he-
---/hiM-

This pronoun refers to a present, visible person or object, unless suffixed by L/ne/ (521).

517. The remote demonstrative, 'that one, he, she, it':
L/ki{-in, -an, -aw, -anit}/ke-
---/kiM-

This pronoun refers to a relatively distant person or object, visible unless suffixed by L/ne/ (521).

518. The indefinite pronoun, 'someone, this one, that one, he, she, it':
L/xi{-in, -an, -aw, -anit}/xe-
---/xiM-

This is a general reference demonstrative referring to a person or object, near or far, but visible unless L/ne/ (521) is used to indicate otherwise.

The demonstratives have typical substantive functions in six case relationships and are frequently attributive to other substantives; e.g.:

a. hiM-? nim-Ø xat-h-Ba?hiy'-?. /hi? nim xat-ha?hiy'/.'This is my eating place.'

b. hiM-? xat-h-a·š-? 'ohom' na?aš xat-h-ni.
   /hi? xat-haš 'ohom' na?aš xat-hni./ 'This food can't be eaten.' Note the case concord (subjective) between hi?
   and the substantive to which it is attributive, xat-haš.

c. tʰaxin-hil ma·M-? ke·-anitʰ ? /tʰaxinha? hila ma? ke·nitʰ?/.'Did you come from over there?'
The non-final suffixes used with the pronoun bases are:

The non-visibility marker:

\[ \text{L/ne\_{S, 0}/-ni-} \]
\[ _{(\text{other cases})/-ne-} \]
\[ ---/-ne- \]

Used with the demonstratives and indefinite only, this lexeme indicates non-visibility or vagueness as to whereabouts; e.g.:

a. kiM-? /ki/? 'that one (visible)'

b. kiM-ni-? /kini/? 'that one (not visible)'

L/o\cdot k/ -o\cdot k-, the possessive plural adjunct to personal pronouns; e.g.:

a. nim-o\cdot k-in /numo\cdot kun/ 'our' (exclusive of addressee)

b. min-o\cdot k-in /muno\cdot kun/ 'your'.

The duality marker:

\[ \text{L/k/\_S/-?ak'-} \]
\[ _{\text{in/-k-}} \]
\[ \{ki, hi, xi, ne\}_/-\text{\_ik-} \]
\[ ---/-ik- \]

This indicator of duality is used with all personal, demonstrative and indefinite pronouns. The first personal pronoun thus formed is exclusive of addressee: 'na\cdot M-?ak'-? /na\cdot ?ak'/ 'we two (but not you)', (See 514)

The plurality marker:

\[ \text{L/n\_S/-?an-} \]
\[ \{ki, hi, xi, ne\}_/-\text{\_in-} \]
\[ ---/-in- \]

The plural indicator has the same tactic distribution as
the dual (523). The first personal pronoun thus formed is exclusive of addressee: na·M-ʔan-ʔ /na·ʔan/ 'we all (but not you)'. (See 515.)

525. A non-singular oblique adjunct, L/ʔw/ -w-, is used with all personal pronouns (suffixed to L/k/ and L/n/) in the dual and plural, except in the subjective and possessive cases. In the demonstratives, it occurs with the possessive also. (See 830.)

530. The interrogatives

The interrogatives which are inflected (see 841 for uninflected ones) are so only in the singular. No dual or plural occurs. They are used in both direct and indirect questions and have occasional use as indefinite pronouns. They are:

531. L/wa·t' personal interrogative
532. ha· impersonal interrogative
533. hawil' qualitative interrogative
534. hili locative interrogative
535. hiliʔsi selective interrogative

531. The personal interrogative, wa·t'-, is a base of the SA class; e.g.:

a. wa·t'-? xiM-ʔ? /wat' xiʔʔ/ 'Who is that?'
b. wa·t'-aw taʔ ma·M-ʔ xo·hilʔ? /wa·t'aw taʔ maʔ xo·hilʔ?/ 'With whom did you stay?'
c.ʔohom' na·M-ʔ yatʰ-hil wa·t'-a.
/ʔohom' naʔ yatʰ-hil wa·t'a./ 'I didn't talk to anyone.'

532. The impersonal interrogative, ha-. is a V-stem of the H-class; e.g.:
a. ha·? kiM? ? /ha? ki??/ 'What's that?'
b. ha·?Vn ta? na·M? na?aš cʰiš-al ?
   /ha·?an ta? na? na?aš cʰišal?/ 'What can I cut?'
c. ha·?Vn ?ukʰ na·M? laniy-itʰ. /ha·?an ?ukʰ na? lanyitʰ./
   I'm pretty sure I heard something.'

533. The qualitative interrogative, haw’il’-, is a base of the
   ZI class; e.g.:
   a. haw’il’-? ta? min-Ø šuyun’?-? /haw’il’ ta? min šuyun’?/
      What kind are your shoes?'
   b. haw’il’-Zi ?ukʰ ?am-ʔan-? xaya·waš-amen’ ?
      /haw’il? ukʰ ?am?an xaya·wašmen’?/ 'What sort of clothes
      are they wearing?'

534. The locative interrogative:
L/hili[] S/hili-
     ---/hele--

Examples: (it is an H-class base)
   a. hili-? ta? ma·M-? ? /hili? ta? ma??/ 'Where are you?'
   b. hele·aw ta? ma·M-? tʰa·n-itʰ ?
      /helew ta? ma? tʰanitʰ?/ 'Where did you go?'
   c. hele·anitʰ ta? ma·M-? lihim·Ba?a·e’n’ ?
      /hele·nitʰ ta? ma? lehem?an’?/ 'Where are you running
      from?'

535. The selective interrogative is an H-class base; e.g.:
   a. hili?si-? ta? ma·M-ʔan-? sasiy-itʰ ?
      /hili?si? ta? ma·ʔan sasyitʰ?/ 'Which one of you broke
      it?'
   b. hili?si·aw ma·M-? xo·e’n’ ? /hili?siw ma? xon’?/
      'Which side are you on?' (Lit: 'which-at you staying')
c. hili?si-?Vn ta? na·M-? ma·M-ik-w-a xap'-e?n’ ?
hili?si?in ta? na? ma·mikwa xap’e??/ 'Which one of you two shall I spank?' (Lit: 'which (ta?) I you two to spank' ---meaning of ta? is unknown)
600. The tactics of the clause and sentence

610. The syntactic classes into which the lexemes fall as constituents of the clause or sentence are:

611. Verbs, i.e., words ending in one of the final verbal suffixes (310).

611.1 Emphatic verbs (Ve --- this and symbols which follow in this section are for convenience in later reference) which may stand alone but are usually auxiliary to a Vf (611.2); e.g.:

a. L/me cin/ 'be or do very much so'
   me cin-hil xat h-hil. /me cinhil xat h-hil./ 'He really did eat!'

b. L/haw/ 'do'
   haw-e'n wil' ?e sik'-e'n. /hawew wil' ?esk'e/. 'He used to always beg.' (?e sik' - 'to beg')

Others which function in the same way are:

a. L/namat h-ne/ 'do ahead of time, get a head start on'

b. L/hew'ne/ 'do like this (with a gesture)'

c. L/havit'/ 'do like how?'

611.2 Finite verbs (Vf), i.e., all verbs that are not auxiliary; e.g.:

a. t haxin-hil /t haxinhil/ 'he came'

b. hat h-im-ka / hat h-imka/ 'Sing!'

612. Verbal substantives, i.e., words whose functions are both substantival (such as being objects of verbs or locatives) and verbal (such as being transitive or adverbially modified), are of three kinds. Two of these are inflected for case relationship, and one is not:

612.1 The verbal noun (VN) is inflected for case; e.g.:
a. las-? nim-∅. /las nim./ 'I chopped it' or 'what I chopped.' (las- 'chop') (Lit: 'chop my')
b. hoyuc'-tȟaŋ na·M-? nim-∅ las-a hete·ś-a.
   /hoyuc'tȟaŋ na? nim lasa hete·ša./ 'I wanted to chop the wood.' (Lit: 'wanted I my chop wood')
c. tȟaŋ-itȟ na·M-? las-aw ?amin-∅.
   /tȟaŋ-itȟ na? lasaw ?amin./ 'I went to where he was chopping wood.' (Lit: 'went I chop-toward his')

612.2 The agentive (454) (Ag) is also inflected for case; e.g.: a. ?ohom' na·M-a tȟaŋiš-hil t'uy-Gi·c'-i xo·y-i.
   /?ohom' nan tȟaŋišhil t'uya·c'i xo·yi./ 'No one saw me shoot the deer.' (/t'uya·c'i/, itself appositive to the direct object, /nan/, has as its direct object /xo·yi/.)
b. mec' hiM-? šiliw-Gi·c'-?. /mec' hi? šele·wic'./ 'This person is a real weaver!'

612.3 The gerunds (G) are not inflected except for the final suffixes which mark them as gerunds (320).

613. The substantives (N) are the nouns (Nn), pronouns (Np), and interrogatives (Ni). The eight cases operate in seven tactic functions as described in section 430:
613.1 The subjective (S)
613.2 The possessive (Po)
613.3 The locative (L)
613.4 The Instrumental (I)
613.5 The objective (O)
613.6 The ablative (Ab)
613.7 The associatives (As) include two cases, the possessed (437) and the associative (438), functioning syntactically the same, yet
somewhat different in meaning.

614. Minor form and tactic classes (840):
614.1 Adverbs (Av)
614.2 Conjunctions (Cj)
614.3 Particles (P)
614.4 Interjections (Ij)

Examples of the above appear in sections 620 and 630.

620. Order of the tactic classes

There is little restriction on the order of words in the clause. The relationships between the major classes is marked by the system of suffixation. Hence, except for conjunctions, interrogatives and particles, the words may be in almost any order.

The following observations describe typical word order:

621. The orders Vf S and S Vf are about equally common, although Vf is frequently absent since there is no copulative verb (sometimes L/xo./ 'stay' comes near to this use). Furthermore, the concept 'have' is expressed, not by Vf but by As (437-8).

Examples:

a. Vf S: /molihil na?./ 'I fooled him.'

b. S Vf: /pa?om xon' ṣukh'aw./ 'There is tobacco in the pipe.' i.e., 'tobacco stays in the pipe'

622. Of two N in the same case, the first is usually attributive to the second; however, such N in concord may be in the reverse order. Two S may constitute an equational clause, in which case the second is descriptive of the first.

Examples:
a. S P Vf L L: /hi? ta? xo?yon’ mikc’ew wec’e·tʰaw./ 'This was over there by the heavy stick.' (wec’e·tʰ- 'stick')

b. S·Bo Po S: /hi? kanna·tu?un k’ot’e·?in xoyeš./ 'This is a horn of a big cow.' (kanna·tu- 'cow')

c. S S: /hi? tʰeyiš./ 'He is a witch doctor.'

/tʰeyiš ’uʃt’ut’un./ 'Witch doctor is a thief.'

623. O usually follows Vf and/or S but may precede both:

a. Vf S O: /pace·xahil na·?an mam./ 'We were worried about you.'

b. S O Vf: /?am’an nan xo?1ohil./ 'They made me stay.'

c. O S Av Vf L: /p’aye’hi na? mi?in tʰan?en’ tʰa·waŋiw./ 'I'll take the children along to town.'

624. An occasional S O Vf is found, but rarely:

a. Av S O Vf: /c’uuyu? na? xo?o c’enšitʰ./ 'I did sweep the house, but you'd never know it.'

b. L S O Vf: /moxol’c’iwa? hin ma·xitʰ./ 'I got this over by that old thing.'

625. Adverbs usually precede the Vf, the negative adverb practically always being the first word in the clause. Temporal adverbs (841.1) sometimes follow the Vf; e.g.:

a. Av S Vf Po G: /hoy’li na? huta’ahil ?amin tʰixtʰintʰaw./ 'I knew right away that he was sick.'

b. Av S Vf: /ʔohom’ ma? pʰana·hil./ 'You did not come home.'

c. Vf S Av Av: /lopsine? ?am’an mi?in hay’li?./ 'They are going to go fishing today.'

626. Po commonly precedes the substantive which it possesses, but it follows G for which it is the subject of the action; e.g.:

cook, I am hungry.'

627. L typically follows Vf but may precede it:
a. Ve P Av L: /hawth\[a\]? ukh\[h\] he?ma th\[h\]uk\[w\]aw. / 'He did something
or other right here in the ear.'
b. L Av S Vf: /hew wil' na?an xat\[h\]e?/. 'We used to eat
here.'
'I was in town when they arrived.'

628. I and Ab follow S Vf, except an Ni, which will be first in
a clause ending in /?/; e.g.:
a. Vf O I: /k'o?ith ka-tu'un the-lan. / 'He hit a cat with
a rock.'
b. Vf S Ab: /lihmit\[h\] na? t'oyo-sunut\[h\]. / 'I ran from the ar-
row.'
c. Ab P S Vf: /hele-nith ta? ma? lehem'an'?/ 'Where are you
running from?'

629. As usually follows the substantive with which it is in im-
mediate constituency; e.g.:
a. Vf 0 O As: /tha? iška hin no-no?on noh?omen'. / 'Look at
that man with the bear!'
b. VN Po S As: /but nim no-no? hat\[h\]am'. / 'I know a man who
is a singer.' (Lit: 'know my man sing-possesses')

6210. Cj comes first in the clause:
a. Cj S Av Vf: /mi?in na? t\[h\]a?an kaye-san'. / 'Then I always
feel good.' (/mi?in/ is also an adverb, 'soon'.)
b. Cj P S S: /?ama? tu? xat\[h\]aš hit\[h\]ya?/. 'And y'know, it's
all food.' (/hit^h ya?/ 'all')

6211. P are second in the clause, but L/?i/ (marks utterance as a question) may come first before S (Np); e.g.:
   b. P S Vf: /?i ma? th^a·nit^h?/ 'Did you go?'
   c. S P S: /hi? ta? mikic'/ 'This is heavy.' (meaning of /ta?/ is unknown)
   d. Av P S As: /mec tu? ma? hat^h mam'/ 'You really can sing, y'know.' (Lit. 'superlatively y'know you sing-possess')

6212. Ij may constitute an utterance or begin a clause:
   a. Ij Cj Vf S Av: /yei y mi?in hašwint^a? na? ?e·ma./ 'My, oh my, then I almost died'!
   b. Ij S: /ci· wa?at'/ 'Gee, a long one!'
   c. Iji /?an'/ 'Don't!'

630. The clause

   Typical Chukchansi conversation and narration is carried on in short simple clauses (and even sentences) of from four to eight words, seldom exceeding six or seven.

   A clause is defined as an utterance between # or /,/, and a juncture, which is not simply a fragmentary response to an interrogation which would require constituents from the question to complete it. A clause may be composed of the following constituents, plus optional supplementation by other N, Av, P, Cj, or Iji.

631. A minor sentence (see 642.4) equals a clause.

632. One Vf: /mulunt^h a?/ 'He went down the hill.'

633. Vf Ve: /k'ask'ashant^a? me·cinhant^a?/. 'He was pained
greatly.' (Lit: 'he was pricked, was very much so')
(See also 611.1)

634. Two S; of two S, the first will normally be the attributive in the equation, unless it is a demonstrative pronoun. It may then be the subject; e.g.:
   a. /pacix pa?om./ 'Locoweed is bad.' (/pacix/ 'bad')
   b. /tehe?ic' ma?/. 'Are you a cutter?' (Here S₁ is Ag,
      but in a typical N function.)
   c. /hi? noho?o?./ 'This is a bear.' (/noho?o?/ 'bear')

635. S L: /xo? hitʰyaw./ 'There's a house for everyone.'
     (/xo?/ 'house')

636. Vf S: /molilhil na?/. 'I fooled him.'

637. Vf O₁ /t'uywuštʰa? 'am./ 'He cursed her.'
     /laska hete?sa./ 'Chop the wood!'

638. Vf S O₁ /pokitʰ na? šukʰtʰa./ 'I found a pipe.'
     /wotiymixma?šoxon' na? mam./ 'I want to dance with
      you.'

639. Av S Ag: /mec' ma? xišxišiç'. 'Your teeth really protrude.'

6310. (...)VN Po, or vice versa, in which Po is doer of the action expressed in the VN; e.g.:
   a. VN Po: /hatʰim nim./ 'I sang.' or 'It's what I sang.'
   b. S Vf Po VN-O (meaning O is object of VN, not of Vf):
      /na? hoyoc'?an' min se-nā? e-lawi./ 'I want you to smell
      the flower.'

6311. Vf G (Po); G expresses an attendant circumstance in which Po is actor. Po may be omitted if actor is the same for both Vf and G; e.g.:
   a. Vf G: /haytʰa? pʰanam./ 'He laughed when he got here.'
b. Vf S G Po: /xathaxot'w ma? wosikt'saw nim./ 'You kept on eating while I passed by.'

6312. Vf (S) Ag; Ag expresses, in appositive construction, the action of that to which it is appositive. Being a verbal substantive, Ag may have a direct object; e.g.:
   a. Vf Ag: /t'haxnit'h tošac'/. 'He came to tell about it.' (Lit: 'came as a teller')
   b. Vf S Ag: /t'honit'h ?am?an t'ulac'/. 'They went to burn them.' (Lit: 'went they as burners')
   c. Vf S Po 0 O-Ag: /t'hax?an' na? min mok'h?il?ilk'a maxa·c'i./ 'I saw your wife fetching water.' (Lit: 'saw your wife water fetcher')

6313. Vf 0 I; e.g.:
   a. /k'o?it'h nan šele·lan./ 'He hit me with a rock.'
   b. /?atek nan šele·lan./ 'Bring me a rock!' (Lit: 'supply me by means of a rock')

6314. Vf (S) Ab; e.g.:
   a. Vf Ab: /lihnit'h noh'onit'h./ 'He ran away from the bear.'
   b. Vf S Ab: /halaxnit'h nasis teywisnit'h./ 'The snake crawled out of the basket.'

6315. As; e.g.:
   a. /yenpam'/ 'It's poison.'
   b. As S S: /wikwikmen' hi? payin./ 'This acorn is wormy.'
   c. O S As: (433.2) /mikc'1 na? wece·t'ham'/ 'I have a heavy stick.'

6316. G Po; e.g.:
   /mi'in nim k'un'ni/. 'I'll punch him.' (Lit: 'soon my get-(him)-punched')
640. Phrasal tactic units

Certain groups of words comprise phrases which perform the same functions syntactically as some single unit constituents. For example, a phrase (PH) may serve as an Av, symbolized below as AvPH.

641. G Po may constitute AvPH; e.g.:

a. \[G \text{ Po } S \text{ Vf} = \text{ AvPH } S \text{ Vf} \div /	ext{kosnenot}^h \text{ aw min} \text{ na? katayit}^h./\]
   'When you cook, I am hungry.'

b. \[Vf \text{ S } G \text{ Po } = Vf \text{ S } \text{ AvPH}; /\text{xath}^h \text{ a? exot}^h \text{ o? ma? wosikt}^h \text{ aw nim}./\]
   'You kept on eating while I passed by.'

642. VN Po (0) may constitute the following PHs:

642.1 SPH, e.g.:

\[VN \text{ Po } S \text{ As} = \text{ SPH } S \text{ As}; /\text{hut} \text{ nim no? no? hat}^h \text{ mam}./\]
'I know a man who is a singer.' (This is an equational clause conveying the idea 'My knowing is a singing man.')

642.2 OPH, e.g.:

\[S \text{ Vf } \text{ Po VN-0} = S \text{ Vf } \text{ OPH}; /\text{na? hoyoc}' \text{ ?an'} \text{ min } \text{ senna } ?e \text{ elawi}./\]
'I want you to smell the flower.'

642.3 LPH, e.g.:

\[Vf \text{ S } \text{ Po VN-0} = Vf \text{ S } \text{ LPH}; /\text{ta}\text{-}nith^h \text{ na? ?amin lasaw hete}\text{-}s\text{a}.\]
'I went to where he was chopping wood.'

642.4 AbPH, e.g.:

\[Vf \text{ S } \text{ Po VN-0} = Vf \text{ S } \text{ AbPH}; /\text{t}h\text{-axonith}^h \text{ na? ?amin lasanith}^h \text{ hete}\text{-}s\text{a}.\]
'I came from where he was chopping wood.'
650. The sentence

The sentence is usually one clause, terminating in /./ or /?/. Sometimes a sentence is made up of two or at the most three coordinate clauses, usually without conjunctions between them. These are almost always simple clauses without subordination.

651. Three conjunctions, however, do introduce clauses which may be considered subordinate:

651.1 L/hin’ah/, introducing a conditional clause; e.g.:

a. Cj Av Vf, S Av Vf: /hin’ah waši yop’p’o?, na? waši t’a·le?./ 'If it gets wrinkled, I will iron it after a while.'

b. Cj Vf G Po Av: /hin’ah lo·lot’h, xat’h ni nim waši./ 'If he left it, I’m going to eat it.'

651.2 L/t’ew/ 'whenever', introducing a conditional-temporal clause; e.g.:

Cj P S Vf Av, Ij Av S(Ag): /t’ew ta? na? t’hise? mun’aw, ye’y mec’ co·yac’./ 'Whenever I go outside, I get very lonely.'

651.3 L/te·yaw/ 'before' (also used as Av 'ahead', 'in front of') introducing a temporal clause. Temporal circumstances are usually expressed by gerundials (320), not by subordinate clauses.

Examples:

a. Vf S, Cj Po VN: /xat’h me·wet’h na·?an, te·yaw numo·kun p’hana·na./ 'We were eating before we arrived.'

b. Cj Po VN, S Vf O: /te·yaw min thaxna, na? c’alit’h pila·su’un./ 'Before you came, I broke the plate.'

652. Four sentence types are identified:

652.1 The finite verbal sentence is composed of at least one Vf, suiting any clause pattern in section 630 which involves Vf. Since
a clause may have only one Vf, the sentence which has more than one Vf has that many clauses, at least; e.g.:

a. Vf: /'e-sik't'hə/. 'He begged.'
b. Vf O: /woxlišt'hə nan/. 'She cried for me.'
c. Av P S Vf, Vf: /hiyim' ta? na? kavesit'h, hoylit'h/. 'Right away I felt good and got well.'
d. Cj Vf, Av Vf: /mi?in xaya't'hə?, ?ohom' ka·pint'hə?/. 'Then she put it down, but he didn't accept it.'

652.2 The non-finite verbal sentence is composed of at least one verbal substantive (612) and its subject. The subject will be S for the Ag, G (passive and consequent) and for VN(As); it will be Po elsewhere; e.g.:

a. Av S Ag: /mec' ma? xišxišic'/ 'Your teeth really protrude.'
b. Av S G: /mi?in na? k'un'nu/. 'I'll get punched!'
c. VN(As) S: /wamc'am' ma??/ 'Are you chewing something?'
d. VN Po, Po VN: /hoyuc' nim, ?amin t'uy/. 'I like the way he shoots.' (This sentence is two clauses because both VN are S, or it must be described as an equational clause with /hoyuc'/ and/t'uy/ on either side of the equation.)
e. S Po Av L G: /kay'is ma·yin na?aš hew xo·t'hin/. 'It would be best for us to stay here.'

652.3 The nominal sentence is composed of at least one S plus an N in oblique relation to it, or of at least one equational clause, viz., S S; e.g.:

a. S L: /xo? hit'h yaw/. 'There's a house for everyone.'
b. Cj P S Av: /yo? tu? povo·mi? ?e·ma/. 'It was really quite pretty, too; y'know.' (Lit: 'also y'know pretty almost')
c. S Av S L: /ʔamaʔ mec' kaptan hew./ 'He was really chief here.'

d. S S: /hiʔ nohʔoʔ./ 'This is a bear.'

652.4 The minor sentence is composed of at least one adverb, interrogative or interjection; e.g.:

a. Av: /hiyaʔ./ 'Some other time.'
b. Av: /ʔohom'./ 'No!'
c. Ni: /hawšinʔ/ 'How many?'
d. Ij: /ye:yiʔ./ 'My, oh my!'
e. Cj P Av: /yoʔ tuʔ mec'./ 'It's real, too, y'know!'
700. Text analysis

710. The text which appears here is a fragment from the story of the burning of Nancy Wyatt's house at the Picayune Rancheri. The sentences are numbered for reference convenience, and the lexeme numbers may be matched with those of the glossary which follows in 720. The transcriptions are, from top line to bottom line: lexemic, morphemic, phonemic, a more or less literal English translation word for word, and an English translation of the story.

711. 1 2 3 4 5 6 7 8 9

L/kew tu? na S xo·tʰa? woy'en aw kew.
There y'know I stayed in garden there.
I was over there in the garden, y'know.

712. 10 11 12 13 14 15 16 17

L/miʔin hi S ?am S t'ul in tʰaʔ.
miʔin hiM-? ?ama·M-? t'ul-in-tʰaʔ.
Then this it burned.

Then this thing burned.

713. 18 19 20 21 22 23 24

L/miʔin na S c'e·han O tʰaʔiś tʰaʔ.
míʔin na·M-? c'e·han-ʔ tʰaʔiś-tʰaʔ.
/miʔin na? c'e·han tʰaʔištʰaʔ.
Then I smoke saw.
Then I saw the smoke.
714. 25 26 27 28 29 30 31 32 33
L/hew'ne i.c' S na S tʰaʔiš tʰaʔ c'e:han 0.
hew'ne-Gi·c'-? na·M-? tʰaʔiš-tʰaʔ c'e:han-∅.
/hew'ne?ic'  na? tʰaʔištʰaʔ  c'e:han .
Doer-like-this I saw smoke .
As I turned my head like this, I saw smoke.

715. 34 35 36 37 38 39 40 41 42 43 44 45
L/hili anɪtʰ ?ukʰ t'ul in tʰaʔ,ʔohom' na S hut aʔa eʔn'.
hele·-anɪtʰ ?ukʰ t'ul-in-tʰaʔ,ʔohom' na·M-? hut-Baʔa-eʔn'.
/hele·nɪtʰ ?ukʰ t'ulunth aʔ ,ʔohom' na? hutaʔan' .
From where unsure burned , not I know .
I don't know where it started burning from.

716. 46 47 48 49 50 51 52 53 54
L/hitʰya S taʔ na n S kew xo·tʰaʔ .
hitʰya-ʔ taʔ na·M-ʔan-ʔ kew xo·tʰaʔ .
/hitʰyaʔ taʔ na·ʔan kew xo·tʰoʔ .
All (?) we(ν(not you) there stayed .
We all stayed over there where we were.

717. 55 56 57 58 59 60 61 62 63
L/ha· 0 ?ukʰ na S haw aʔa xo tʰaʔ .
ha·?-Vn ?ukʰ na·M-? haw-Baʔa-xo-tʰaʔ .
/ha·ʔan ?ukʰ naʔ hawaʔaxoʔh oʔ .
What unsure I had been doing .
I am not certain what I had been doing.
718.   64  65  66  67  68  69  70  71  72  73
L/k'ic'  a?axo tʰə?  ?axam'  na  S  ha· 0  hew.
k'ic'-Ba?a-xo-tʰə?  ?axam'  na·M-?  ha·?Vn  hew.
Had been pruning  maybe  I  something here.
Perhaps I had been pruning something here.

719.   74  75  76  77  78  79  80  81
L/pe·l 0  na  S  k'ic'  a?axo tʰə?,
pe·l-as  na·M-?  k'ic'-Ba?a-xo-tʰə?,
/pe·las  na?  k'ic'a?axotʰo,  ,
Pears  I  had been pruning,
I had been pruning pears,

82  83  84  85  86  87  88  89
L/miʔin  na  S  hew'ne  i·c'  S  tʰaʔiʃ tʰə?.
miʔin  na·M-?  hew'ne-Gi·c'ʔ-  tʰaʔiʃ-tʰə?.
/miʔin  na?  hew'neʔic'  tʰaʔiʃtʰə?.
then  I  doer-like-this  saw  .
and then,  as I turned like this, I saw it.

7110.   90  91  92  93  94
L/me·cin  itʰ  t'uł  in  itʰ.
me·cin-itʰ  t'uł-in-itʰ.
/mecnitʰ  t'ułnutʰ.
Was very much  was burning.
It was really burning!
7111. 95 96 97 98 99 100
L/?ohom' ma·y' S na?aš hawit' al.
?ohom' ma·y'-? na?aš hawit'-al.
/?ohom' may' na?aš hawt'al.
Not we could do something.
We couldn't do a thing about it.

7112. 101 102 103 104 105 106
L/ na· S ta? ?ohom' tʰaxin tʰa?.
na·M-? ta? ?ohom' tʰaxin-tʰa?.
/ na? ta? ?ohom' tʰaxintʰa?.
I (?) not did come.
I didn't come over to the house.

7113. 107 108 109 110 111 112 113 114
L/he·tam, wil e?n' na 0 tʰa?an, hu·še e?n'.
he·tam, wil-e?n' na·M-a tʰa?an, hu·še-e?n'.
/he·tam wil-e? n' nan tʰa?an, hu·šen'.
Right there told me kept on drive.
"Stay there!" she kept telling me, driving me back.

7114. 115 116 117
L/?an' tʰaxin ka.
?an' tʰaxin-ka.
/?an' tʰaxinka.
Don't come.
"Don't come over here!"
7115. 118 119 120 121 122 123
L/mihka·na S pʰana·tʰa? kalcen S.
mihka·na-? pʰana·tʰa? kalcen-?
/mihka·na? pʰana·tʰa? kalcen.
White man arrived many.
Many white men arrived at the scene.

7116. 124 125 126 127 128 129 130 131
L/?ohom' ta? ?am n S šapʰ tʰa?, ?ohom'.
Not (?) they quench, no.
They didn't put it out, not at all.

7117. 132 133 134
L/tʰa?iš xaš tʰa?.
tʰa?iš-xaš-tʰa?.
/tʰa?išxaštʰa?.
Did look exclusively.
They just looked on.

720. Glossary for text analysis (cf. numbers with lexemes in 711-7117)
1. Remote local adverb, referring to relatively distant place.
2. Particle 'y'know'.
3. First personal pronoun base (511)
4. Subjective case suffix (431)
5. Verb base of V-stem type (214.3) 'stay'
6. Past perfective final verbal suffix (314).
7. Nominal base of SA class (423.2) 'garden'.
8. Locative case suffix (435)
9. See 1.
10. Conjunction 'then', 'next'. (Also occurs with the factive as an adverb, 'soon')
11. Near demonstrative base, 'this' (516)
13. Third personal pronoun base (513)
15. Verbal base 'burn' (214.1) of type 4.
16. Medio-passive non-final verbal suffix (337)
17. See 6.
18. See 10.
19. See 3.
20. See 4.
21. Noun base of irregular class (423.4)
22. Objective case suffix (433)
23. Bisyllabic verbal base (214.2) of type 14, 'see'
25. Verbal base of V-stem type (214.3) 'do thus' (with gestures)
26. The agentive non-final nominalizing suffix, forming a verbal substantive stem, here appositive to L/na/, 28.
27. See 4.
28. See 3
29. See 4
30. See 23
31. See 6.
32. See 21.
33. See 22.
34. Locative interrogative base (534) 'where?'
35. Ablative case suffix (436)
36. Particle of uncertainty.
37-39. See 15-17
40. Negative aspectual adverb (841.3)
41. See 3.
42. See 4.
43. Verbal base 'know' of type 4 (214.1).
44. Present tense non-final verbal suffix (333).
45. Factive final verbal suffix (311).
46. Nominal base of H-class, 'all' (423.1).
47. See 4.
48. Common particle which is found in hundreds of utterances, the meaning of which is unknown.
49. See 3.
50. Personal pronoun plural suffix (524).
51. See 4.
52. See 1.
53-54. See 5-6.
55. Impersonal interrogative, serving as indefinite here (532).
56. See 22.
57. See 36.
58-59. See 3-4.
60. Verbal base of type 8 (214.1).
61. See 44.
62. Durative aspect non-final verbal suffix (3316).
63. See 6.
64. Verbal base of type 6 (214.1) 'to prune'.
65. See 44
68. Aspectual adverb of hesitant affirmation (841.3).
69-70. See 3-4.
71-72. See 55-56.
73. Near local adverb, referring to relatively nearby place.
74. Nominal base of the SA class (423.2) 'pear'. Apparently an English loan-word (see next item).
75. Objective case suffix borrowed from English plural /s/.
   Since Chukchansi canon prohibits final CC, the vowel of the typical A-class suffixes was used by analogy to produce a correct canonical form.
75-77. See 3-4.
78-81. See 64-67.
82. See 10.
83-84. See 3-4.
85-87. See 25-27.
90. Verbal base of type 13 (214.2). Of the tactic class Ve (611.1).
91. The simple past tense final verbal suffix (312).
92-93. See 15-16.
94. See 91.
95. See 40.
96. First person plural, inclusive of addressee (515).
97. See 4.
98. Aspectual adverb of potentiality (841.3).

99. Verbal base of type 14 (214.2) 'do like how or somehow'.

100. The potentiative aspect final verbal suffix (315).

101-102. See 3-4.

103. See 48.

104. See 40.

105. Verbal base of type 14 (214.2) 'come'.

106. See 6.

107. Local adverb (841.2).

108. Verbal base of type 6 (214.1), rather broad in meaning,

'say', 'do', 'act'.

109. See 45.

110. See 3.

111. See 22.

112. Temporal adverb of habituation or repetitiveness (841.1).

113. Verbal base of V-stem type (214.3) 'drive'.

114. See 45.

115. Negative adverb, also an interjection.

116. See 105.

117. Imperative mode, final verbal suffix (316).

118. Nominal stem of the H-class (423.1) 'white man'.

119. See 4.

120. Verbal base of the V-stem type (214.3), 'to arrive'.

121. See 6.

122. Nominal stem of the SA class (423.2), 'many'.

123. See 4.

124. See 40.

125. See 48.
126. See 13.
127-128. See 50-51.
129. Verbal base of type 7, (214.1) 'erase', 'put out'.
130. See 6.
131. See 40.
132. See 23.
133. Exclusive aspect non-final verbal suffix (3315).
134. See 6.
800. Paradigms and glossary

810. Noun classes

820. Pronouns

830. Numerals

840. Minor form classes

850. Alphabetical list of suffixes found in the grammar.

810. The following paradigms of examples from each noun class are presented in the order of the listing in 423. The classification is in parentheses at the top of each paradigm and the case names (430) are abbreviated at the left. The paradigms are phonemically written.

<table>
<thead>
<tr>
<th>(H)</th>
<th>(H)</th>
<th>(SA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub. hitʰ'yaʔ 'all'</td>
<td>?e·niʔ 'snow'</td>
<td>k'ut' 'tail'</td>
</tr>
<tr>
<td>Obj. hitʰ'yaʔan</td>
<td>?e·niʔin</td>
<td>k'ut'a</td>
</tr>
<tr>
<td>Pve. hitʰ'yaʔan</td>
<td>?e·niʔin</td>
<td>k'ut'in</td>
</tr>
<tr>
<td>In. hitʰ'yan</td>
<td>?e·nin</td>
<td>k'ut'an</td>
</tr>
<tr>
<td>Loc. hitʰ'yaw</td>
<td>?e·niw</td>
<td>k'ut'saw</td>
</tr>
<tr>
<td>Psd. hitʰ'yamʰ</td>
<td>?e·nimʰ</td>
<td>k'ut'amʰ</td>
</tr>
<tr>
<td>Abl. hitʰ'yanitʰ</td>
<td>?e·ninitʰ</td>
<td>k'ut'anitʰ</td>
</tr>
<tr>
<td>As. hitʰ'yamenʰ</td>
<td>?e·nimenʰ</td>
<td>k'ut'amənʰ</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>(SA)</th>
<th>(ZA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub. xoʔ 'house'</td>
<td>mukuš 'grandmother'</td>
</tr>
<tr>
<td>Obj. xoʔo</td>
<td>mukša</td>
</tr>
<tr>
<td>Pve. xoʔin</td>
<td>mukšun</td>
</tr>
<tr>
<td>In. xoʔon</td>
<td>mukšan</td>
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<tr>
<td>Loc. xoʔow</td>
<td>mukšaw</td>
</tr>
<tr>
<td>Psd. xoʔomʰ</td>
<td>mukšamʰ</td>
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<tr>
<td>Abl. xoʔonitʰ</td>
<td>mukšanitʰ</td>
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<tr>
<td>As. xoʔomenʰ</td>
<td>mukšamenʰ</td>
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<td>(SI)</td>
<td>(SI)</td>
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<tr>
<td><strong>Sub.</strong></td>
<td>t'ap'p'aš  'leaf'</td>
</tr>
<tr>
<td><strong>Obj.</strong></td>
<td>t'ap'p'aši</td>
</tr>
<tr>
<td><strong>Pve.</strong></td>
<td>t'ap'p'aši'n</td>
</tr>
<tr>
<td><strong>In.</strong></td>
<td>t'ap'p'ašni</td>
</tr>
<tr>
<td><strong>Loc.</strong></td>
<td>t'ap'p'ašiw</td>
</tr>
<tr>
<td><strong>Psd.</strong></td>
<td>t’ap'p'ašim’</td>
</tr>
<tr>
<td><strong>Abl.</strong></td>
<td>t’ap'p'ašmitʰ</td>
</tr>
<tr>
<td><strong>As.</strong></td>
<td>t’ap'p'ašmen’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(ZI)</th>
<th>(Ir)</th>
<th>(Ir)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub.</strong></td>
<td>k'exum  'rich'</td>
<td>c’e·han  'smoke'</td>
</tr>
<tr>
<td><strong>Obj.</strong></td>
<td>k'exmu</td>
<td>c’e·han</td>
</tr>
<tr>
<td><strong>Pve.</strong></td>
<td>k'exmun</td>
<td>*c’e·hanin</td>
</tr>
<tr>
<td><strong>In.</strong></td>
<td>k'exmun</td>
<td>c’e·hanin</td>
</tr>
<tr>
<td><strong>Loc.</strong></td>
<td>k'exmunw</td>
<td>*c’e·haniw</td>
</tr>
<tr>
<td><strong>Psd.</strong></td>
<td>k'exmun'</td>
<td>*c’e·hanim'</td>
</tr>
<tr>
<td><strong>Abl.</strong></td>
<td>k'exmunutʰ</td>
<td>*c’e·hannitʰ</td>
</tr>
<tr>
<td><strong>As.</strong></td>
<td>k'exmunun’</td>
<td>*c’e·hanmen’</td>
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</table>
### The pronouns

#### The first personal pronoun

<table>
<thead>
<tr>
<th>Singular</th>
<th>Dual inclusive of addressee</th>
<th>Dual exclusive of addressee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub. na? 'I'</td>
<td>mak' 'we two'</td>
<td>na?ak' 'we two (not you)'</td>
</tr>
<tr>
<td>Pos. nim</td>
<td>makwa</td>
<td>na•nikwa</td>
</tr>
<tr>
<td>Obj. nan</td>
<td>makwan</td>
<td>na•nikwan</td>
</tr>
<tr>
<td>In. na•nan</td>
<td>makwaw</td>
<td>na•nikwan</td>
</tr>
<tr>
<td>Loc. na•naw</td>
<td>makwanit^h</td>
<td>na•nikwanit^h</td>
</tr>
<tr>
<td>Abl. na•nanit^h</td>
<td>makwanit^h</td>
<td>na•nikwanit^h</td>
</tr>
</tbody>
</table>

Plural inclus.  
Plural exclus.

| Sub. may' 'we all' | na•?an 'we all (not you)' |
| Pos. mayin         | numo•kun                   |
| Obj. maywa         | na•ninwa                   |
| In. maywan         | na•ninwan                  |
| Loc. maywaw        | na•ninwaw                  |
| Abl. maywanit^h    | na•ninwanit^h              |

#### The second personal pronoun

<table>
<thead>
<tr>
<th>Singular</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub. ma? 'you'</td>
<td>ma?ak' 'you two' ma?an 'you all'</td>
<td></td>
</tr>
<tr>
<td>Pos. min</td>
<td>minkin</td>
<td>muno•kun</td>
</tr>
<tr>
<td>Obj. mam</td>
<td>ma•mikwa</td>
<td>ma•minwa</td>
</tr>
<tr>
<td>In. ma•man</td>
<td>ma•mikwan</td>
<td>ma•minwan</td>
</tr>
<tr>
<td>Loc. ma•maw</td>
<td>ma•mikwan</td>
<td>ma•minwaw</td>
</tr>
<tr>
<td>Abl. ma•manit^h</td>
<td>ma•mikwanit^h</td>
<td>ma•minwanit^h</td>
</tr>
</tbody>
</table>

#### The third personal pronoun

<table>
<thead>
<tr>
<th>Singular</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub. ?ama? 'he'</td>
<td>?am?ak' 'they two' ?am?an 'they all'</td>
<td></td>
</tr>
<tr>
<td>Pos. ?amin</td>
<td>?aminkin</td>
<td>?amno•kun, ?amunkun</td>
</tr>
<tr>
<td>Obj. ?amam</td>
<td>?ama•mik(wa)</td>
<td>?ama•min(wa)</td>
</tr>
<tr>
<td>In. ?ama•man</td>
<td>?ama•mikwan</td>
<td>?ama•minwan</td>
</tr>
<tr>
<td>Loc. ?ama•maw</td>
<td>?ama•mikwan</td>
<td>?ama•minwaw</td>
</tr>
<tr>
<td>Abl. ?ama•manit^h</td>
<td>?ama•mikwanit^h</td>
<td>?ama•minwanit^h</td>
</tr>
</tbody>
</table>
824. The near demonstrative, visible.

<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub.</td>
<td>hi? 'this'</td>
<td>hišik' 'these</td>
<td>hišin 'all these'</td>
</tr>
<tr>
<td>Pos.</td>
<td>hе?in</td>
<td>hišik'win</td>
<td>hišinwin</td>
</tr>
<tr>
<td>Obj.</td>
<td>hin</td>
<td>hišik'wa</td>
<td>hišinwa</td>
</tr>
<tr>
<td>In.</td>
<td>hе?ni</td>
<td>hišik'wan</td>
<td>hišinwan</td>
</tr>
<tr>
<td>Loc.</td>
<td>hew</td>
<td>hišik'waw</td>
<td>hišinwaw</td>
</tr>
<tr>
<td>Abl.</td>
<td>hе?nitʰ</td>
<td>hišik'wanitʰ</td>
<td>hišinwanitʰ</td>
</tr>
</tbody>
</table>

825. The near demonstrative, invisible.

<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub.</td>
<td>hišiʔ</td>
<td>hеšеšik'</td>
<td>henešin</td>
</tr>
<tr>
<td>Pos.</td>
<td>hе?ni?</td>
<td>hеšеšik'win</td>
<td>henešinwin</td>
</tr>
<tr>
<td>Obj.</td>
<td>hеni?</td>
<td>hеšеšik'wa</td>
<td>henešinwa</td>
</tr>
<tr>
<td>In.</td>
<td>hе?ni</td>
<td>hеšеšik'wan</td>
<td>henešinwan</td>
</tr>
<tr>
<td>Loc.</td>
<td>hеnew</td>
<td>hеšеšik'waw</td>
<td>henešinwaw</td>
</tr>
<tr>
<td>Abl.</td>
<td>hе?nitʰ</td>
<td>hеšеšik'wanitʰ</td>
<td>henešinwanitʰ</td>
</tr>
</tbody>
</table>

826. The remote demonstrative, /kiʔ/ 'that', etc., is exactly like the near demonstrative in 824-825 above, except for the initial consonant.

827. The indefinite demonstrative, /xiʔ/ 'someone', 'that', is of rarer occurrence, but a full paradigm would no doubt be like the other demonstratives above.

830. The numerals

831. The cardinal numbers

1. yet' 'one'
2. ponoy'
3. ŝо?pʰin
4. hatpanay
5. yitšinil
6. c'olipʰˈhiy
7. nомcˈin
8. мunoš
9. no·nipʰ
10. c'eyew
11. c'eyew ye·c'am'
12. " post'om'
13. c'eyew $h$omp$^h$yam$'$
14. "  hac$^h$pam$'$
15. "  yitsam$'$
16. "  c'olp$^h$om$'$
17. "  nomc$'$om$'$
18. "  mun$c$am$'$
19. "  non$'$p$^h$om$'$
20. ponoy$'$ c'eyew
21. "  ye.c'am$'$
22. "  post'om$'$
23. "  c$^h$omp$^h$yam$'$
24. ponoy$'$ c'eyew post'om$'$
25. "  "  yit$s$am$'$
26. "  "  c'olp$^h$om$'$
27. "  "  nomc$'$om$'$
28. "  "  mun$c$am$'$
29. "  "  non$'$p$^h$om$'$
30. $s$o$^h$in c'eyew

832. The ordinals, which are also distributive (only these were elicited):

1. ye.c,at  'first', 'once'
2. ponyil'  'second', 'twice'
3. $s$op$^h$yl'  'third', 'thrice'
4. hatpil'  'fourth', 'four times'
5. yitsil'  'fifth', 'five times'
6. c'olp$^h$il'  'sixth', 'six times'
7. nomc'il'  'seventh', 'seven times'

840. Minor form classes

At least six dozen lexemes are free, unsuffixed units. These words bring to the clause or sentence modifications of an adverbial nature (time, place, aspect) for the most part, and some are particles, conjunctions and interjections affecting the whole clause. Among the particles a few are post-positive. These are usually, but not always, the second word in the clause. One of
these, /ta?/, is the second word in hundreds of utterances. It possibly gives a mild emphasis to the preceding word which is very often a pronoun but may be a verb or adverb.

841. Adverbs (transcription is phonemic)

841.1 Temporal adverbs

a. hac'ah 'now': /lowit hnut h e? xi? hac'ah./ 'She just now got a husband.'

b. hawal'ma 'sometimes': /ma? th a-ne? hawal'ma henew./ 'You go there sometimes.'

c. hay'li? 'today': /?ohom' na?as th a-nal hay'li?./ 'He can not go today.'

d. hetta? 'still': /hetta? huca?an'./ 'He's still growling.'

e. hik'aw 'tomorrow': /?ohom' hik'aw xo?ow xon'./ 'He won't be staying home tomorrow.'

f. hiye·ma? 'long ago': /hiye·ma? nim c'ew./ 'I soaked them long ago.'

g. hiya? 'soon': /hiya? na? mam c'awalan'./ 'I'll repay you pretty soon.'

h. hiyim' 'already': /cilet h hiyim'./ 'It's lunch time already.'

i. hoy'li? 'right away': /th a-ne? mak' hoy'li?./ 'Let's go right away.'

j. ?alih' 'long ago': /hut nim xi? ?alih'./ 'I knew him long ago.'

k. ?aya 'later': /mi?in ?aya phana·th a?./ 'Then later he got there.'

l. lakyiw 'yesterday': /?ohom' na? am huy'ahil th a·na lakyiw./ 'I didn't let him go yesterday.'
m. mi?in 'soon': /tʰʌ·ne? na? mi?in./ 'I'll go soon.'

n. nahni? 'sometimes': /nahni? na? tʰaʔan tʰanmaʔšen' ?apʰa·šaw./ 'Sometimes I want to go to Oakhurst.'

o. te·yaw 'in front of, before': /huluʔuy te·yaw./ 'A chair is before me.' (See also 842)

p. waši 'after a while': /waši na? tʰaxne?, wiltʰa?./

"I will come after a while," he said.'

q. wil' 'used to': /ʔalitʰ wil' na? hatʰme?./ 'I used to sing a long time ago.'

r. yo? 'again, also': /yo? na? mi?in le·lupsan'./ 'I'm going to swing again.'

841.2 Local adverbs

a. he·tam 'right here': /hew mak' he·tam ?axe?./ 'We two will camp right here.'

b. hew 'here'. (See a just above.)

c. hewhew 'here' (but closer than /hew/)

d. hitʰwaš 'together': /mokʰiy nim hitʰwaš naʔak' hew xon'./ 'My wife and I stay here together, just the two of us.'

e. kew 'over there': /waʔ kew waʔ./ 'It's way over there.'

f. kewkew 'over there' (but farther than /kew/)

g. mun'aw 'outside': /tʰiše? na? miʔin mun'aw./ 'I'm going to go outside.'

h. te·yaw 'ahead, in front of': /huluʔuy te·yaw./ 'A chair is in front of me.'

i. tʰoynew 'in the center': /tʰoynew na? miʔin t'uyoʔ./ 'I'm going to shoot it in the center.'

j. xa·mi 'on this side': /xa·mi xiʔ lame·saw./ 'It's on this
side of the table.'
k. xum'ay 'beyond'; /xet't'at'hə' na'ak' 'am xum'ay' kew. /

'We dragged her over there, yonder.'

841.3 Aspectual adverbs

a. c'uyu? (concessive?); /lihimə'səxən' c'uyu?/ 'I'll
grant you that he wants to run all the time.'
b. hapt'is 'almost, a little bit'; /hi? hapt'is c'ap'i'y. /

'This is a little damp.'
c. hawṣin 'how many?'; /hawṣin min p'aye'ʔi?/ 'How many are
your children?'
d. ho'kaw 'correctly, straight'; /ho'kaw ma? cokok'ʔan'/

'Are you pointing straight?'
e. hun'ay 'merely'; /hun'ay ?am?an yalk'i xo·t'hə' hit'hə'yə'. /

'They all just stood around.'
f. ?ahmuc' 'it is believed or expected; pretendingly';

/?ahmuc' na? miʔin hat'hme'/ 'I'm going to sing, or so
they think anyway!'
g. ?an' 'Don't!'; /ʔan' t'həxən'ka. 'Don't come over!' 
h. ?axam' 'maybe'; /neʔcat'h ?axam'/ 'Maybe he's sleepy.'
i. ?e·ma 'almost, maybe'; /t'e·wis ?ama? pimmal' ?e·ma. /

'That basket is almost full.'
j. ʔohom' 'not'; /ʔohom' na? huyat'h p'ayeʔhin t'hə·na. /

'I did not permit the children to go.'
k. ?ukta? 'obligatory; insistent'; /ʃap'həkə ?ukta? we·laʔan. /

'Be sure to turn out the lights.'
l. k'ay' 'possibly'; /hawal'ma na? k'ay' t'həxneʔ?/ 'At what
time should I come?'
m. mayni 'by oneself'; /tiʔiška mayni. / 'Do it yourself!'
n. meč' 'superlatively': /meč' hi? hatʰmam'/. 'He surely can sing!'

o. naʔaš 'potentially': /ʔohom' na? naʔaš tʰa·nal./ I can not go.'

p. namay'si 'barely': /miʔin naʔak' ṭam tʰišʔatʰa?
namey'si./ 'We two just barely got her out of there.'

q. neyeh 'as if; just like': /neyeh nim laniy./ 'Seems like I've heard that.'

r. puš 'vain wish': /yatʰka'puš?/ 'Won't you talk?'

s. Rita? 'true': /ma? yo? wil' tʰeyšaw tʰa·ne? tita?/ 'You used to go to the witch doctor, isn't that so?'

t. tʰaʔan 'habitually, repetitively': /wa·k'e? na? nim tʰaʔan šilši pʰe·waw./ 'I always part my hair on the right side.'

u. waham' 'wishfully': /xo? nim waham'/. 'I wish this were my house.' (Frequently with /puš/: /waham' puš na?
thanka./ 'I surely wish I could go.')</n
v. wakʰiy 'elative': /hi? meč' poyo·mi? wakʰiy nim hitʰyaʔan ?e·lawi./ 'This is the most beautiful of all my flowers.'

842. Conjunctions

a. hin'ah 'if': /hin'ah waši yop'p'o?, na? waši t'a·le?./ 'If it gets wrinkled, I'll iron it after a while.'

b. ?ama? 'and, then': /ʔama? tu? xatʰaš hitʰyaʔ./ 'And y'know, it's all food.'

c. miʔin 'then, next': /miʔin yuk'uštʰaʔ./ 'Then he washed it.'

d. te·yaw 'before': /te·yaw min tʰaxna, na? c'alith
pila·su'ün./ 'Before you came, I broke the plate.'

e. t'ew 'whenever'; /t'ew ta? na? tʰiše? mun'aw, mec'
  co·yac'./ 'Whenever I go outside, I become very lonely.'

843. Particles

Only the first one, /?i/, can be the first word in a clause.
a. /?i (indicates that utterance is a question); /ma? /?i hew
  hikʰaw xon'/?/ 'Will you be staying here tomorrow?'
b. /?ukʰ (attitude of uncertainty); /hawa?an' /?ukʰ xi?./
  'Something's wrong with this guy.'
c. ta? (See 840, p. 103)
d. tax 'ever, even'; /?ohom' tax ma? na?ʔaš hewe·tʰal?/
  'Can't you even walk?,'
e. tu? 'y'know'; /huta?an' tu? ma? nim ya·tʰa./ 'You do know
  what I said, y'know!'

844. Interjections

a. ci· 'Gee!'
b. hu·hu 'Yes!'
c. /ʔan' 'Don't!'
d. /ʔay; 'Oh!'
e. k'ay'iwiš 'Please!'
f. micna 'Really!'
g. ye; y 'My, oh my!'

850. Glossary of suffixes in alphabetical order in morphemic
  transcription (numbers refer to sections of the grammar):
  -a- inchoative, verbal. 331
  -a objective case, nominal. 433
  --a subjective plural, nominal. 431
-aʔ- present perfective, verbal. 332
-al potentiative, verbal. 315
-aʔ-la- causative, verbal. 339
-am' possessed case, nominal. 437
-aʔen' associative case, nominal. 438
-an instrumental case, nominal. 434
-aʔniʔ ablative case, nominal. 436
-aʔŋ- nominative, nominal. 451
-aʔaw locative case, nominal. 435
-aʔay' diminutive, nominal. 441
-Baʔa- present tense, verbal. 333
-Baʔhiy'- adjunctive nominalizer. 452
-Bʔa- dubitative agentive, nominal. 453
-De- distributive, verbal. 334
-eʔn' factive, verbal. 311
-em' possessed case, nominal. 437
-en instrumental case, nominal. 434
-eniʔ ablative case, nominal. 436
-eʔw locative case, nominal. 435
-Giʔ-c'- agentive, nominal. 454
-han- passive, verbal. 335
-hil aorist tense, verbal. 313
-ʔ subjective case, nominal. 431
-ʔak'- duality, pronominal. 523
-ʔan- plurality, pronominal. 524
-ʔaʔ precative gerundial. 325
-ʔe- causative, verbal. 339
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<th>Description</th>
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<tr>
<td>-ʔh-</td>
<td>plural, nominal.</td>
<td>442</td>
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<td>-ʔin</td>
<td>possessive case, pronominal.</td>
<td>432</td>
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<td>-ʔVn</td>
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<tr>
<td>-ʔVn</td>
<td>objective case, nominal.</td>
<td>433</td>
</tr>
<tr>
<td>-ʔi</td>
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<td>-ʔi</td>
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<td>-ʔik-</td>
<td>duality, pronominal.</td>
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<td>-ʔimʔ-</td>
<td>possessed case, nominal.</td>
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<td>-ʔimenʔ-</td>
<td>associative case, nominal.</td>
<td>438</td>
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<tr>
<td>-ʔin-</td>
<td>medio-passive, verbal.</td>
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<td>plurality, pronominal.</td>
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<tr>
<td>-ʔin-</td>
<td>possessive case, nominal.</td>
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<tr>
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<td>instrumental case, nominal.</td>
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</tr>
<tr>
<td>-ʔinitʰ-</td>
<td>ablative case, nominal.</td>
<td>436</td>
</tr>
<tr>
<td>-ʔithʰ-</td>
<td>simple past tense, verbal.</td>
<td>312</td>
</tr>
<tr>
<td>-ʔiw-</td>
<td>locative case, nominal.</td>
<td>435</td>
</tr>
<tr>
<td>-ʔiʔwi-</td>
<td>hortatory, verbal.</td>
<td>338</td>
</tr>
<tr>
<td>-ʔka-</td>
<td>imperative, verbal.</td>
<td>316</td>
</tr>
<tr>
<td>-ʔk-</td>
<td>duality, pronominal.</td>
<td>523</td>
</tr>
<tr>
<td>-ʔla-</td>
<td>causative, verbal.</td>
<td>339</td>
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<td>-ʔmaʔaš-</td>
<td>desiderative, verbal.</td>
<td>3310</td>
</tr>
<tr>
<td>-ʔmaʔše-</td>
<td>desiderative, verbal.</td>
<td>3310</td>
</tr>
<tr>
<td>-ʔmeʔwe-</td>
<td>processive, verbal.</td>
<td>3312</td>
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<td>-ʔmi-</td>
<td>consequent gerundial.</td>
<td>321</td>
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<td>-ʔmix-</td>
<td>comitative, verbal.</td>
<td>3311</td>
</tr>
<tr>
<td>-ʔn-</td>
<td>verbal noun formative.</td>
<td>455</td>
</tr>
<tr>
<td>-ʔna-</td>
<td>acquisitive verbalizer.</td>
<td>351</td>
</tr>
</tbody>
</table>
-na- verbal noun formative. 455
-ne- non-visibility marker, pronominal. 521
-ne' non-visibility marker, pronominal. 521
-ni- non-visibility marker, pronominal. 521
-ni passive gerundial. 324
-ni instrumental case, nominal. 434
-nu resultative gerundial. 326
-n'xu- quantitative adverbial adjunct. 462.
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-šit\textsuperscript{h} benefactive, verbal. 3313
-t\textsuperscript{h}a- causative assumptive, verbal. 352
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900. Notes

1. Examples of all the phonemes (except /r/, see this section, p.3), including minimal contrasts where possible, are in the charts on pages 7-13.

2. Some vowel allophones are not found in the corpus following some consonants. These are as follows:

[o] does not follow /pʰ, p', t', c, cʰ/.

[i] " " " /tʰ, cʰ, k/.

[e] " " " /pʰ, p', tʰ, c, cʰ, y, ɐ/.

The absence of these sequences seems to be entirely fortuitous.

3. Vowels may be lengthened at will for emphasis. This is usually accompanied by a pitch glide from [^3] to [^2] or from [^2] to [^1]: /haytʰə?/ [hɑiytʰəʔʔ] 'he laughed at me' (said with considerable self-pity); /miʔin ʔaya pʰanaʔʰəʔʔ/ [miʔinʔaʔʔəpʰanaʔʰəʔʔ] 'Then later he arrived' (i.e., after all that waiting!).

4. Because the word is defined morphologically in Chukchansi, rather than phonologically, no phoneme of juncture exists to mark word boundaries. Morphemic word juncture is the boundary between a final morpheme or a free morpheme and an initial or a free morpheme. The boundary is indicated by a space. However, beginning at section 300, the words in phonemic transcription are also separated by a space for the sake of quick readability. (See section 211 for definition of the word.)

5. In at least one speaker's idiolect (Nancy Wyatt's) the general intonation is at times so nearly monotone, the pitch
changes and pauses so slight in rapid speech, that clause and sentence boundaries are distinguished as much by morphotactics as by any other factor.

6. The plain and aspirated series are not often phonetically different before silence, except when a voiced allophone of the plain stop is heard.

7. See pages 3-4 for /r/.

8. See section 211, page 27 on the macrosegment.

9. Phonetic open transition occurs often between consonants in a cluster. Since at least one consonant of such clusters is always voiced, the transition is voiced, with the quality of [U] before /w/, [I] before /y/, and [ə] elsewhere. Open transition will be heard if:

   a. C₁ and C₂ are not homorganic and
   b. C₁ is voiceless or glottalized and C₂ is voiced or
   c. C₁ is a nasal and C₂ is /l/ or /x/ or
   d. the cluster is /yx/.

10. An example of a known reduction or "zeroing" of a base in the formation of a V-stem is c'i?ik'ay-a-itʰ /c'i?ik'yatʰ/ (V-stem, /c'i?ik'ya/) 'it got green' (141.12, 331, 312).

11. Newman's term (Stanley Newman, Yokuts Language of California, Viking Fund Publications in Anthropology Number Two; New York (1944)), examples being exceedingly rare in the corpus and unclear in meaning.

12. The rarity of this lexeme in the corpus makes it impossible to ascertain its meaning with any degree of assurance.
1000. Bibliography


