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THE LANGUAGE OF SANTA ANA PUEBLO

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PREFACE

Data for this monograph were collected at intervals from 1954 through 1961 under the auspices of the Summer Institute of Linguistics. Much of the phonological material first appeared in my master's thesis and the grammatical material in my doctor's dissertation, both prepared at the University of New Mexico (1958 and 1960) under the supervision of Stanley S. Newman. Sincere thanks are due the latter for his understanding guidance and for the many hours of consultation spared from his busy schedule.

Many features of the language as recorded in this paper are shared with the other Keresan dialects, among which Santa Ana is rather centrally located both geographically and linguistically. While much remains to be done in adequately describing Keresan linguistic structure, it is hoped that this analysis will be found worthy of a place among the contributions to our knowledge of a heretofore little-known language. The analysis almost can be said to be that of an idiolect rather than a dialect. It is based largely on data obtained from one informant, a middle-aged man whose mother tongue is that of the Santa Ana Pueblo. I am deeply indebted to him for the endless hours which he spent in patiently supplying the material without which this work would have been impossible.

THE LANGUAGE OF SANTA ANA PUEBLO

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PHONOLOGY

SYLLABLE STRUCTURE

Santa Ana Keresan utterances normally may be segmented exhaustively into recurrent structural units, or syllables, of the shape CV. The syllable margin, C, is composed of a simple consonant or a phonetically complex consonantal segment. The nucleus, V, consists of a vowel or vocalic sequence, with or without terminal glottal closure. A few loanwords and a word of possible onomatopoeic origin contain syllables which are closed by a nasal:

nárán *orange* (Spanish *naranja*)
ʔúyáumbúmer *drum*

Syllables closed by consonants other than a glottal stop, however, are considered as an aberrant pattern.

Excluding sounds introduced by loanwords, there are 48 contrastive syllable margins:¹

b	d	dʷ	g
p	t	č	k
p̣	ṭ	č̣	ḳ
sb	sd	sdʷ	sg
sp	st	sč	sk
sp̣	sṭ	sč̣	sḳ
	z	ʒ	
	c	ç	
	ć	č̣	
	s	ʂ	ʃ
	š	ʂ̣	ʃ̣
m	n		
ṃ	ṇ		
	r		
	ṛ		
w		y	h ?
ẉ		ỵ	

¹ The symbols herein used conform to the orthography developed by Wick R. Miller (1959 a, 1959 b, and 1960).

The stops include a voiceless unaspirated series, b, d, and g; a voiceless aspirated series, p, t, and k; and a glottalized series, p̣, ṭ, and ḳ, at bilabial, alveolar, and velar points of articulation:

bí-ʃU	<i>bee</i>
pí-tA	<i>step on it</i>
p̣í-tA	<i>let him step on it</i>
dí kUPAWA	<i>maybe he chopped</i>
tí kUPAWAŋE	<i>maybe we chopped</i>
ṭí kUPAWA	<i>maybe I chopped</i>
gá-mA	<i>his house</i>
ká-ni	<i>let me walk</i>
ḳá-ni	<i>he walked</i>

The alveopalatals, dʲ, č, and č̣, require special comment. These are grouped with the stops for the sake of symmetry and because there is evidence for their historic development from a set of stops parallel to the bilabial, alveolar, and velar sets. The voiceless alveopalatal stop, dʲ, is unaspirated preceding a voiced vowel and aspirated preceding a voiceless vowel:

čídʲa	<i>I caught him</i>	sí-dʲA	<i>squirrel</i>
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The voiceless alveopalatal affricates, č̣ and č̣̣, are aspirated and glottalized respectively:

č̣úgúYA	<i>maybe he sat</i>	č̣̣úgúYA	<i>sit</i>
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The Keresan dialects at the present are in various stages of transition to a structure which includes both a set of alveopalatal stops and a set of affricates at the same point of articulation. Acoma, for instance, has a few occurrences of glottalized alveopalatal stops which contrast with the unglottalized phoneme. It also has unaspirated alveopalatal affricates occurring in loanwords. The Santa Ana dialect has unaspirated affricates in loanwords but has not developed aspirated or glottalized alveopalatal stops as distinct phonemes.

Each of the above stops and affricates may occur in a sibilant cluster:

sbíga	<i>woodpecker</i>	sčáuʔU	<i>a crowd</i>
sdú-ci	<i>bowl-shaped</i>	skú-ná	<i>blackbird</i>
sdʲiudiʲ?	<i>I (didn't) give it to him</i>	ẉlsp̣i	<i>cigarette</i>
sgá-waʃi	<i>rat</i>	ṣṭó-ci	<i>straight</i>
spérá-ná	<i>plate</i>	sč̣ísa	<i>six</i>
stú-ná	<i>autumn</i>	sḳáʃi	<i>fish</i>

There are voiceless unaspirated affricates, z and ẓ; voiceless aspirated affricates, c and c̣; and voiceless glottalized affricates, č̣ and č̣̣, at alveolar and retroflexed points of articulation:

zādʲa	<i>desert</i>	zàkU	<i>let him bite you</i>
càci	<i>breath</i>	çàkU	<i>maybe you bit him</i>
č̣àkU	<i>it bit him</i>	č̣̣àkU	<i>maybe I bit you</i>

There is a series of voiceless sibilants, s, ʃ and ʂ, and of glottalized sibilants, ś, ṣ́ and ṣ̣́ at alveolar, retroflexed and alveopalatal points of articulation respectively:

sa	<i>back</i>	śa	<i>mine</i>
ʃa	<i>scattered</i>	ṣ́a	<i>you are mine</i>
ṣ́aśka	<i>roadrunner</i>	há-ṣ́uwiŋi	<i>shoe</i>

The plain sonorants, m, n, r, w, and y, and the glottalized sonorants, ṃ, ṇ, ṛ, ẉ, and ỵ, are normally voiced but occur as voiceless variants when flanked by voiceless vowels:

kúçayawa	<i>he is angry</i>	sgúhima	<i>I believe</i>
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In their occurrence between a voiced and a voiceless vowel they may be voiceless, partly voiced, or fully voiced, depending on factors such as the rate of speech:

díya	<i>dog</i>	çína	<i>turkey</i>	gâ-ṃa	<i>his house</i>
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Unlike other glottalized consonants, which are produced with the glottis closed, glottalized sonorants are initiated with a momentary glottal closure and release.

The nasals are produced at bilabial and at alveolar or alveopalatal points of articulation. The alveopalatal variant occurs preceding a front vowel, while the alveolar form occurs elsewhere:

másâ-ni	<i>leaf</i>	ṃá-ní	<i>word</i>
nóti	<i>prairie dog</i>	ṇə	<i>down</i>
nèkʊ	<i>will bite</i>	ṇí-zúwa	<i>will pay</i>

The phonemes r and ṛ are alveolar flaps, while w, ẉ, y and ỵ are nonsyllabic vocoids:

ráwá·	<i>good</i>	ṣ́ířá	<i>crow</i>
wá·wá	<i>medicine</i>	ẉá·yuśa	<i>duck</i>
yá?ái	<i>sand</i>	ỵáuni	<i>stone</i>

The "glottal fricative," h, and the glottal stop, ʔ, complete the inventory of native consonants:

há-bí	<i>feather</i>	?á?á-táwi	<i>key</i>
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Sounds introduced through loanwords include the voiceless unaspirated alveopalatal affricate, ʒ; the voiced stops, b, d and g; and the voiced alveolar lateral, l:

ʒí-ri	<i>chili</i>
bendá-na	<i>window</i> (Spanish <i>ventana</i>)
?amá-đu	<i>pillow</i> (Spanish <i>almohada</i>)
gayê-ta	<i>biscuit</i> (Spanish <i>galleta</i>)
lé-ba	<i>coat</i> (Spanish <i>leva</i>)

Phonemic sequences introduced by loanwords include stops plus r or l and nasals plus homorganic stops:

blá-sa	<i>city</i> (Spanish <i>plaza</i>)
sandiyá-kʊ	<i>St. James</i> (Spanish <i>Santiago</i>)

Vowels are produced at five contrastive tongue positions and may be either voiced or voiceless:

High front unrounded, i and ɪ.

Mid to low front, e and ɛ.

Low central, a and ʌ.

High central to back unrounded, ə and ɤ.

Mid to high back rounded, u and ʊ.

Examples of the five voiced vowels in initial syllables are as follows:

si	<i>again</i>	séwi	<i>my neck</i>
sa	<i>back</i>	sóna	<i>middle</i>
súwá	<i>yesterday</i>		

Voiced and voiceless vowels are in nearly complementary distribution. Relevant conditioning factors include the position of the vowel within larger phonological units, the pattern of suprasegmental features, and the nature of contiguous consonants. Word-final vowels, for instance, are normally voiceless if they are short, unaccented, and not preceded by an unglottalized sonorant which is in turn preceded by a long accented or by an unaccented vowel:

cína	<i>turkey</i>	čá-pɪ	<i>fly</i>
tá-má	<i>five</i>	gùpɪ	<i>forehead</i>

Compare:

šína-	<i>louse</i>	gášé	<i>white</i>
dʷá-na	<i>four</i>	gánami	<i>beans</i>

There are, however, a number of words containing voiced vowels in environments in which voiceless vowels normally occur. It is because of these occurrences that phonemic significance must be ascribed to voicing versus voicelessness in vowels:

gùdi	<i>give it to me</i>	ńína	<i>salt</i>
sbíga	<i>woodpecker</i>	kásdi	<i>his foot</i>

Examples of the five voiceless vowels in final and in medial positions are as follows:

néɪɪ	<i>prairie dog</i>	káuɛɪgái	<i>maybe</i>
sùpɛ	<i>I ate</i>	zývɛɛyá	<i>he carried it</i>
?úwàkà	<i>baby</i>	ýáwástí	<i>stick</i>
kú-ká	<i>winter</i>	hóçɛskáwa	<i>willow</i>
yúku	<i>away</i>	zíkUSDʷáwi	<i>bridge</i>

Vowels occur singly or in clusters of two. The following vowel sequences have been recorded:

iu as in sfuni	<i>I know him</i>
ei as in dʷèicɪ	<i>piñon pine</i>
eu as in čèu?ɪ	<i>I gave it to him</i>
ai as in sai	<i>all</i>
ʌɪ as in čɪkʌɪ	<i>he lay down</i>
au as in hau	<i>who</i>
ui as in šúisɪ	<i>bluejay</i>
ua occurring in the data only in páguaɾa	<i>salamander</i>

The nucleus of a syllable consists of one of the single vowels or vowel clusters, with or without terminal glottal closure. The nucleus is also the domain of certain suprasegmental features yet to be described. Terminal glottal closure is written as a segmental feature only in unstressed syllables:

náza? *will say* sí·baʔtʉ *I slept*

Contrastive suprasegmental features include accent and vowel length. There are four kinds of accent: level, indicated by an acute accent; falling, indicated by a circumflex accent; breathy, indicated by a grave accent; and glottal, indicated by an apostrophe over the vowel. Unaccented vowels are not marked. Level accented vowels are stressed and normally have a high level pitch:

ká·ci *ten* záwini *old*

There is a tendency for a slight upglide in pitch on long vowels or vowel clusters with level accent:

kó·ci *antelope* háubá· *everyone*

The pitch on level accented vowels is conditioned to some degree by the position in the word and by the nature of the preceding consonant. A vowel preceded by a plain sonorant, for instance, often has a higher relative pitch than a vowel in a comparable position but preceded by one of the other consonants. The two vowels of čámá *tomorrow* normally have approximately the same pitch, while there is a pronounced drop in pitch on the second syllable of gásé *white*.

Falling accent occurs only on long vowels or vowel clusters and is characterized by a downglide in pitch together with diminishing stress:

dá·ni *pumpkin* ýáuni *stone* māsá·ni *leaf*

Vowels or vowel clusters with breathy accent begin with voicing and terminate in voicelessness. The initial voiced segment is short and stressed, and has a relatively high pitch:

càci *breath* màidʷana *seven*

Single short accented vowels or accented vowel clusters which are terminated by glottal closure are written with the glottal accent:

gákʉ *he is located* sáubónaca *I sewed*

A voiceless echo vowel may follow the release of the glottal stop, although this is not a consistent feature. The reasons for treating glottal accent as a phenomenon distinct from the glottal closure in unstressed syllables derive largely from comparative considerations.

Vowel length always occurs with falling accented vowels and may occur with level accented or with unaccented vowels:

pá·ni *bag* čí·ná *river* háwe· *snow*

A slight downglide in pitch tends to occur on final long unaccented vowels.

Potential combinations of the 48 syllable margins with the various types of nuclei number several thousand. Only a fraction of these, however, actually occur in the data. The lack of some combinations may be attributed to incomplete data or to the extremely low probability of certain rare types of nuclei following the less common margins. The absence of other kinds of combinations is apparently a relevant feature of the phonological structure. The more important of these are as follows:

1. A bilabial semivowel, w or w̄, is never followed by the back rounded vowel, u.
2. An alveopalatal semivowel, y or ȳ, is never followed by the high front vowel, i.
3. A retroflexed consonant, ɕ, ɕ̄, ʒ, ʒ̄, ʂ, or ʂ̄, is never followed by a front vowel, i or e.
4. An alveopalatal affricate or fricative, ɕ, ɕ̄, ʂ, or ʂ̄, is never followed by the high central unrounded vowel, ə.
5. The voiceless unaspirated stops and affricates, b, d, g, z, and ʒ are never followed by a voiceless vowel.

WORD STRUCTURE

The definition of a word is treated in a later section. Here the general phonological structure of words is described.

Words may be composed of a single syllable, *za no*, but are more often disyllabic or polysyllabic. Words of up to nine syllables have been recorded: *sgú-wâkačaniguyase-te we are (not) looking at them.*

With few exceptions, each of the 48 margins may occur in any syllable of the word. The margins *sč*, *č̄* and *ś* show evidence of special development and occur only word-initially as verb prefixes. Although *h* is very common initially, its extremely low frequency of occurrence in medial position is significant. In the present data it occurs in this position only in *gúháya bear* and in verbs based on the cores, *-hima to believe* and *-héʔé-záni to permit.*

Each of the single voiced vowels may occur in any syllable of the word, while the voiceless vowels may occur in any except the initial syllable. Of the vowel clusters, *iu* is found almost exclusively in the initial syllable of verbs where it is divided by a morpheme boundary. The distribution of *eu* is similar, although the particle *ʔeu* is of very frequent occurrence. The sequences *ai*, *au*, and *ui* are found in all positions in the word, while the remaining clusters occur so infrequently that generalizations are impossible.

Level accented syllables, both short and long, are found in all positions in the word. The glottal accent may occur on any syllable, but only rarely on other than the first. Falling and breathy accents may occur on an initial or medial, but never a final, syllable. Although any syllable of the word may be unaccented, the initial syllable is accented in an overwhelming majority of the words.

Word patterns based on the number of syllables and the arrangement of suprasegmental features are extremely varied. The more commonly occurring patterns found among dissyllabic and trisyllabic words are indicated below:

CŶCV	núya	<i>night</i>
CŶCŶ	gáshé	<i>white</i>
CŶ.CV	stó-ci	<i>straight</i>
CŶ.CŶ	sbí-ná	<i>chicken</i>
CŶ.CV	dá-ni	<i>pumpkin</i>
CŶCV	dékɯ	<i>they went</i>
CŶCV	cèci	<i>wall</i>
CŶCVCV	sínani	<i>flesh</i>
CŶCŶCV	?ásháni	<i>wheat</i>
CŶCŶCŶ	dámáyá	<i>Santa Ana Pueblo</i>
CŶCŶ.CŶ	skúrú-ná	<i>peas</i>
CŶCŶ.CV	híyâ-ni	<i>road</i>
CŶCŶCV	?úwâka	<i>baby</i>
CŶ.CVCV	nú-bêda	<i>alone</i>
CŶ.CŶCV	yá-číni	<i>corn</i>
CŶ.CŶ.CV	?ú-mú-ci	<i>gun</i>
CŶ.CŶCŶ	dí-skámá	<i>cornhusk</i>
CŶ.CVCV	wâ-yuša	<i>duck</i>
CŶCVCV	mâidʷana	<i>seven</i>

RHYTHM GROUPS

A rhythm group is a segment of speech which is marked off by pauses and/or which is characterized by the presence of one syllable of extra intensive stress. This unit may consist of an isolated monosyllabic word, such as *ýu*. *I don't know*, but ordinarily embraces a sequence of many syllables. In normal speech (i.e., in which there are no hesitation pauses) the boundaries of a rhythm group fall at word boundaries, although every word boundary is not a rhythm group boundary. The number of words included in a rhythm group depends on the grammatical content of the particular utterance and on the style of speech. A free flowing conversational style is characterized by rhythm groups that include relatively long segments of speech. Such extensive groups are consequently few in number in relation to those in a comparable utterance delivered in a more vigorous or in a more hesitating style of speech. In rapid speech the pauses tend to be few in number and the onset of a new rhythm group may be signaled only by a rise in intensity and pitch on an accented syllable. This syllable is most often the initial syllable of the rhythm group.

Rhythm groups are normally characterized by a gradual falling off of the general pitch level and intensity following the syllable which receives the greatest stress. The extent of this falling off depends on the length of the rhythm group. Toward the end of a very long

rhythm group the speech may fade into a whisper in which normally voiced phonemes are unvoiced.

In contrast to normal rhythm groups, an utterance may sometimes show no diminishing of pitch on successive accented syllables. This is true of certain types of questions or other utterances for which a response is anticipated:

mə· háwé· ʃu ʔúmómó *Listen here, grandchild . . .*

Hortatory utterances often are characterized by a gradual diminishing of the pitch level as in a normal rhythm group until the final syllable is reached. The final syllable is then given an extra emphasis that involves the rearticulation of a normally voiced vowel or the voicing of a normally voiceless vowel together with added intensity and pitch:

háwé· ʔí·maʔá *Come here!*
dísí ba čúyú·kámí *Wait for me here!*

Compare the same utterances without the hortatory emphasis:

háwé· ʔí·ma
dísí ba čúyú·kámí

MORPHOPHONEMICS

The morphophonemic rules outlined below consist of a series of statements which simplify the morphological description to follow. Included for consideration are a number of changes in stems and in affixal morphemes which are somewhat regular and which can be explained on the basis of the phonological environment. Two processes, vowel reduction and the voicing or unvoicing of vowels, are rather extensive in their operation and are described in the following two sections respectively. "Miscellaneous Processes" deals with a number of phenomena of more restricted occurrence.

Excluded for consideration here are numerous cases of phonologically similar forms (e.g., the second person subject markers ʃ- and š-) which at an earlier stage in the language may have been in mutually exclusive distribution in terms of their phonological environment. In a synchronic description of the present Santa Ana dialect, however, they are most conveniently treated as allomorphs, the distribution of which is defined morphologically rather than phonologically.

VOWEL REDUCTION

Changes in the vowel or vowels immediately following the pronominal affix in verbs may often be explained in terms of vowel reduction. This involves a fusing of the thematic adjunct with a preceding voice prefix or with the vowel of a preceding pronominal affix. Vowel reduction normally follows the patterns outlined below.

1. Two contiguous identical vowels reduce to a single vowel of the same quality. This reduction takes place, for instance, when a pronominal prefix of the shape CV- precedes a stem having an initial vowel of the same quality as that of the prefix:

šàkʉ (ša- + -àkʉ) *I bit you*

Compare:

šáuni (ša- + -úni) *I know you*

Apparent shifts in accent in the above and other examples arise from orthographic conventions. Accent is indicated only on the first vowel of a cluster, although it is the entire cluster that is accented. This, together with the fact that accent is not indicated on prefixes of the shape CV- (the prefix vowel assumes the accent of the following thematic adjunct), results in a shift of the written accent to the prefix vowel. Vowel reduction of the above type also occurs when the reflexive prefix -a- or the passive prefix -á?a- precedes a verb stem beginning with -a-:

šàkʉ (š- + -a- + -àkʉ) *you bit yourself*

šá?àguñɛ (š- + -á?a- + -àguñɛ) *you were bitten*

Compare:

šàukačA (š- + -a- + -ùkačA) *you saw yourself*

šá?àudi?tA (š- + -á?a- + -ùdi?tA) *it was given to you*

2. No vowels or vowel clusters of more than two moras' length occur. A reduction from three to two moras of length takes place when a short and long vowel are juxtaposed:

čí-zúwA (či- + -í-zúwA) *I paid him*

čúizúwA (ču- + -í-zúwA) *you paid me*

3. The vowel -u- followed immediately by -a- reduces to the single vowel -a-. This occurs when the pronominal prefix ends with -u- and the verb stem begins with -a-:

čàkʉ (ču- + -àkʉ) *you bit me*

kàkʉ (ku- + -àkʉ) *bite me*

škàkʉ (sku- + -àkʉ) *he bit me*

Compare:

čúizúwA (ču- + -í-zúwA) *you paid me*

kúizúwA (ku- + -í-zúwA) *pay me*

škúizúwA (sku- + -í-zúwA) *he paid me*

4. The vowel -i- immediately followed by -a- reduces to the single vowel -e-. This takes place when a pronominal prefix ending with -i- precedes a verb stem beginning with -a-:

sèkʉ (si- + -àkʉ) *I bit him*

tèkʉ (ti- + -àkʉ) *maybe I bit him*

pèkʉ (pi- + -àkʉ) *let him bite him*

Compare:

síukàica (si- + -ú-kàica)	<i>I hit him</i>
tíukàica (ti- + -ú-kàica)	<i>maybe I hit him</i>
píukàica (pi- + -ú-kàica)	<i>let him hit him</i>

5. The vowel -i- immediately followed by -ə- reduces to the single vowel -i-. This takes place when certain stems beginning with -ə- are preceded by a prefix containing -i-:

sískA (si- + -əskA)	<i>I drank</i>
sí-tá (si- + -ə-tá)	<i>I am full</i>

Compare:

gəskA (g- + -əskA)	<i>he drank</i>
gə-tá (g- + -ə-tá)	<i>it is full</i>

6. The vowel -a- followed immediately by -ə- reduces to the sequence -ai-. This change occurs in the first person hortative form of some verbs having stems which begin with -ə-:

kàiskA (ka- + -əskA)	<i>let me drink</i>
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Compare:

káiba?tu (ka- + -i-ba?tu)	<i>let me sleep</i>
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7. The vowels -a- and -u- followed immediately by a short level accented -í- reduce to -á- and -ú- respectively:

šásti (ša- + -ísti)	<i>I gave you a liquid</i>
dʷásti (dʷu- + -ísti)	<i>you gave me a liquid</i>

Compare:

zísti (zi- + -ísti)	<i>he gave him a liquid</i>
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A vowel cluster results, however, if the -i- is characterized by any other type of accent.

sáizúwa (ša- + -í-zúwa)	<i>I paid you</i>
čúita (ču- + -i-tá)	<i>you stepped on me</i>
čúišaça (ču- + -išaça)	<i>you named me</i>

The patterns of vowel reduction outlined above avoid the following vowel sequences: -ua-, -ia-, -iə-, -aə- and double vowels. With the exception of a single recorded example of -ua-, these vowel clusters do not occur in Santa Ana Keresan. Other nonoccurring sequences, -ie-, -ae-, -eə-, -ea-, -eə-, -əi-, -əa-, -əu-, -ue- and -uə-, involve vowels which are never brought into juxtaposition in morphological constructions.

In addition to the vowel reduction already described there are certain patterns of reduction which involve semivowels. A stem-initial -uw- (in which the -u- is short) reduces to -w- when preceded by a prefix of the shape CV-:

zíwa-sa (zi- + -úwa-sa)	<i>he is sick</i>
-------------------------	-------------------

Compare:

gúzúwa-sa (góz- + -úwa-sa) *you are sick*

Under similar conditions -iy- reduces to -y-. This reduction, however, may be alternatively explained as an example of the pattern $u + í > ú$ previously described.

skúyanikuya (sku- + -íyanikuya) *he told me*

Compare:

éíyanikuya (či- + -íyanikuya) *I told him*

In stems of four or more syllables, an initial -uwi- (but not -uwi-) reduces to -ui- when preceded by a prefix of the shape C-:

gúíšikuya (g- + -úwíšikuya) *he scolded him*

The reduction of -uw- to -w- as described above occurs in the same stem when the prefix is of the shape CV-:

siwíšikuya (si- + -úwíšikuya) *I scolded him*

Vowel reduction similar to the patterns already described sometimes operates across an intervening glottal stop. The following types of reduction have been recorded:

1. -i- plus -a?a- reduces to -e?e-:

sé?éčA (si- + -á?áčA) *my tooth*

Compare:

zá?áčA (z- + -á?áčA) *his tooth*

2. -i?- plus -a?a- reduces to -é.?e-:

pé.?é.šA (pí?- + -á?á.šA) *let him close it*

Compare:

šá?á.šA (š- + -á?á.šA) *you closed it*

3. -i?- plus a short -i- or -ə- with level or breathy accent reduces to -i- when followed by a voiceless consonant:

pikupawa (pí?- + -íkupawa) *let him chop*

piskA (pí?- + -əskA) *let him drink*

Compare:

zíkupawa (z- + -íkupawa) *he chopped*

gəskA (g- + -əskA) *he drank*

Under similar conditions -i?- plus -a- reduces to -é- and -i?- plus -u- reduces to -iu-:

pézé (pí?- + -ázé) *let him be talkative*

piukái (pí?- + -úkái) *let him be satisfied*

Compare:

gázé (g- + -ázé) *he is talkative*

kúkái (k- + -úkái) *he is satisfied*

If the following consonant is a sonorant, -i[?]- plus -a- becomes -e[?]e-, -i[?]- plus -u- becomes -i[?]y-, and no change is involved if the second vowel is -i-:

pé [?] éyaka (pí [?] - + -áyaka)	<i>let him burn it</i>
pí [?] yúyá (pí [?] - + -úyá)	<i>let him skin it</i>
pí [?] ínàta (pí [?] - + -ínàta)	<i>let him buy it</i>

Compare:

záyaka (z- + -áyaka)	<i>he burned it</i>
gúyá (g- + -úyá)	<i>he skinned it</i>
zínàta (z- + -ínàta)	<i>he bought it</i>

Changes in the vowel following the pronominal suffix of Type B intransitive verbs are only partly explained in terms of the regular patterns of vowel reduction. The shift to -e or -E in the first person forms of verbs normally taking -a or -A follows the regular pattern of reduction in which -i- plus -a- becomes -e-:

ʔé.sé (ʔé- + -sí- + -á)	<i>my name</i>
cá.se (cá- + -sí- + -A)	<i>I breathed</i>

Compare:

ʔé.gá	<i>his name</i>
cá.ka	<i>he breathed</i>

The shift to -e or -E in the first person forms of verbs normally occurring with -u or -U, however, does not result from any regular pattern of reduction:

zùse	<i>I went</i>
zùku	<i>he went</i>

VOICING

Voiceless vowels occurring in the final syllable (and sometimes those occurring in the penultimate syllable) of a word become voiced under certain conditions of suffixation. A word-final voiceless vowel becomes voiced if it is followed by a suffix containing a voiced vowel:

dʔùkAčnikUYA (dʔùkAčA + -nikUYA)	<i>you are looking at me</i>
dáʔácinu. (dáʔáči + -nu.)	<i>when he arrived</i>

Compare:

dʔùkAčA	<i>you saw me</i>
dáʔáči	<i>he arrived</i>

Suffixes consisting of a glottalized sonorant followed by a voiceless vowel have a similar effect on a preceding vowel:

gàguñE (gàkU + -ñE)	<i>they bit him</i>
čúčAñE (čúčA + -ñE)	<i>maybe they two fell</i>

Compare:

gàkU	<i>he bit him</i>
čúčA	<i>maybe he fell</i>

A voiceless vowel cluster becomes voiced when followed by any suffix:

šćigaitE (šćikAI + -tE) *I (didn't) lie down*

Compare:

škùikAI *I lay down*

Vowel clusters resulting from the suffixation of -kuyA (see "Miscellaneous Processes") are likewise voiced:

šùeukuyA (šùpE + -kuyA) *I am eating*

Compare:

šùpE *I ate*

Certain final voiceless vowels become voiced and long when followed by any suffix:

šáudʷúmiše-tE (šáudʷúmišE + -tE) *we (don't) remember you*

Compare:

šáudʷúmišE (šáudʷúmi + plural suffix, -šE) *we remember you*

It cannot be predicted from the phonological environment whether or not a voiceless vowel undergoes this change (see "Stem variants"). The fact is indicated in the listing of forms by the vowel length symbol in parentheses:

-šE(.) *plural suffix*

A sequence (vowel + unglottalized semivowel + vowel) in which neither vowel is accented, behaves as a single unit with respect to voicing; it is either completely voiceless or completely voiced. A voiceless sequence of this type becomes voiced when followed by any suffix:

šàtiguyasE (šàtikuyA + -sE) *you are crying*

Compare:

šàtikuyA *you cried*

Of much less frequent occurrence than the above processes is the unvoicing of a stem-final vowel. This occurs when a completely voiceless suffix follows a stem which normally terminates in an unaccented voiced vowel preceded by a voiceless consonant:

šáutisE (šáudi + -sE) *I am planting*

Compare:

šáudi *I planted*

The alternation between aspirated and unaspirated consonants seen in some of the examples cited in this section is closely linked to the voicing and unvoicing of vowels. The unaspirated consonants, b, d, g, z, and ʒ, do not occur preceding voiceless vowels. When a normally voiced vowel is unvoiced, as in *I am planting*, a^{is} preceding

consonant of this group changes to its aspirated counterpart, p, t, k, c, or ç. When a normally voiceless vowel is voiced, a preceding aspirated consonant is usually replaced by its unaspirated counterpart:

gàguñE (gàkU + -ñE) *they bit him*

There are, however, exceptions to the latter rule, in which an aspirated consonant is retained when the following vowel becomes voiced:

zíkɔpawañE (zíkɔpawa + -ñE) *they chopped*

Compare:

zíkɔpawa *he chopped*

MISCELLANEOUS PROCESSES

Vowel assimilation.—The vowels -a- or -ə- occurring in prefixes of the shape CVC- change to -u- when the prefix is attached to verb stems beginning in -u-:

gúzùkAčA (gózɔ- + -ùkAčA) *he saw you*

túʔúɔʔašɪ (táʔ- + -úɔʔašɪ) *maybe I fasted*

Compare:

gózàkU (gózɔ- + àkU) *he bit you*

táʔàutA (táʔ- + -àutA) *maybe I killed it*

The vowel cluster -ai- changes to -ei- following an alveopalatal consonant:

čéiwádʔañE (č- + -áiwádʔañE) *they assembled*

Compare:

sáiwádʔañE *we assembled*

Change from glottal to level accent.—A glottal accent in the thematic adjunct normally changes to a level accent following a pronominal prefix containing a glottalized consonant:

čúpe (č- + -úpe) *eat*

Compare:

šúpe *you ate*

This type of change does not affect the á allomorph of the passive voice prefix:

škádʔaʔtA (sku- + -á- + -ádʔaʔtA) *I was caught*

Certain verb stems with a glottalized sonorant following the thematic adjunct show a shift to a plain sonorant when the pronominal prefix contains a glottalized consonant:

čúwàñE (č- + -úwàñE) *hunt*

Compare:

šúwàñE *you hunted*

The glottalized sonorant in stems of this kind may have developed from a plain sonorant preceded by a glottal accent in the thematic adjunct, and thus undergoes the above change. Other stems with a glottalized sonorant in a comparable position do not show this change:

káwAsdá *it is sour*

Introduction of -u-.—The addition of the continuative suffix -kuya to a verb stem ending in -a, -e, or their voiceless counterparts, results in the formation of a vowel cluster the second member of which is -u-:

súbeukuya (súpe + -kuya) *I am eating*
síwí-deyaukuya (síwí-teya + -kuya) *I am worshipping*

Compare:

súpe *I ate*
síwí-teya *I worshiped*

Change of ç to t.—The phoneme ç in the final syllable of a word changes to t when followed by a high front vowel:

súwí-tita (súwí-ça + -(i)tA) *I am making it*²

Compare:

súwí-ça *I made it*

Certain pronominal prefixes also show a shift from a retroflexed affricate to an alveolar stop (e.g., sáz- and sád-; see charts 1 and 2). These allomorphs undoubtedly have developed from the process outlined above, but are, in the present stage of the language, no longer phonologically defined. Forms ending in d sometimes occur before vowels other than i:

sáda *I am*

MORPHOLOGY

UNITS OF ANALYSIS

While the validity of the *word* as a universal linguistic unit is sometimes questioned, it is found convenient in this description of the grammatical structure of Santa Ana Keresan to recognize such a unit. The morphology-syntax division employed here is based on the assumption that the word can be defined with sufficient precision for descriptive purposes. This does not mean, however, that there may not remain a certain degree of arbitrariness in the drawing of some word boundaries.

The principal criterion for recognizing words is that of unlimited substitutability at word boundaries.³ Severe restrictions on the

² For an explanation of the change in the stem-final vowel, see "Inflectional affixes" and "Stem variants."

³ A full treatment of this approach to the definition of a word is given in Greenberg, 1957, pp. 27-34.

number and types of items that may be introduced into an utterance at a morpheme boundary is taken as an indication that the boundary is an infraword boundary. The boundary between a verb core and a following plural subject suffix, for instance, is of this type. The only items that may be introduced at this point are aspect and/or benefactive morphemes, neither of which ever occurs except following a verb core.

A morpheme boundary at which a wide variety of items may be introduced, on the other hand, is regarded as a word boundary. Although a verbal auxiliary is closely linked to a preceding verb core and is meaningless in isolation, it is, nevertheless, a separate word according to the above criterion. Not only may a number of suffixes occur following the verb core and preceding the auxiliary, but also items which, on the basis of distributional criteria, are themselves free words may be introduced at this point.

Words may be exhaustively segmented into *morphemes*. The term is used here in the sense generally used in American descriptive linguistics and includes word roots as well as various kinds of derivational and inflectional affixes and clitics. *Clitics* in Santa Ana Keresan are morphemes which, following the distributional criteria for marking word boundaries, are parts of words. They differ from affixes in that they are not so closely linked phonologically to the rest of the word. Specifically, they do not cause morphophonemic voicing of a preceding voiceless vowel and are much more likely than are affixes to be separated from the rest of the word by a pause.

WORD CLASSES

Three major word classes are distinguished on the basis of their internal structure. Of these, the verbs and the verbal auxiliaries occur with inflectional affixes. The third major word class is composed of all uninflected words.

Three principal levels of internal structuring are recognized in words: inflection, stem formation, and derivation. The terms *inflection* and *inflectional affixes* are used only with reference to those affixes which are external to the *stem*. *Stem formation* involves the combination of a *thematic adjunct* with a *core* and may include the addition of a benefactive suffix as well. The term *derivation* is used with reference to the internal structuring of certain verb cores and of some words of the uninflected class. Although *clitics* are, by definition, parts of words rather than free words, they are disregarded in the following description of word structure and are reserved for separate consideration.

The general structure of the three major word classes may be distinguished as follows:

1. Verbs are always inflected, always include stem formation and sometimes include derivation.
2. Verbal auxiliaries are always inflected but never include stem formation or derivation.
3. Uninflected words include neither inflection nor stem formation but may include derivation.

Specific morphemes involved in each level of structuring also may serve to distinguish the major word classes. Verbs are distinguished from verbal auxiliaries, for instance, in that all verb stems are potentially capable of occurring with a future tense marker while verbal auxiliaries never include this morpheme.

VERBS

VERB INFLECTION

GRAMMATICAL CATEGORIES

The following grammatical categories are expressed by verb inflection, or, less commonly, by changes in the verb stem:

Subject person.—First, second, or third person subject is recognized in all intransitive verbs in the non-future tense. It is most commonly indicated by a prefix, although in some verbs the pronominal element is a suffix:

s-ùpɛ <i>I ate</i>	zù-sɛ <i>I went</i>
ʃ-ùpɛ <i>you ate</i>	zù-ʃɛ <i>you went</i>
k-ùpɛ <i>he ate</i>	zù-kɛ <i>he went</i>

In addition, some verbs occur with a pronominal morpheme indicating indefinite subject:

sḱ-áukui *one's wives*

Subject-object person.—The subject and object of every transitive verb in the non-future tense are indicated by a single prefix. Seven principal subject-object combinations are recognized.

First person subject with third person object: s-èkɛ	I bit him
Second person subject with third person object: ʃ-àkɛ	you bit him
Third person subject with third person object: g-àkɛ	he bit him
First person subject with second person object: ʃ-àkɛ	I bit you
Second person subject with first person object: ʃ-àkɛ	you bit me
Third person subject with first person object: sḱ-àkɛ	he bit me
Third person subject with second person object, góʒ-àkɛ	he bit you

In some, but not all, transitive verbs a fourth person subject with third person object is recognized which is distinct from the third person subject with third person object:

g-àkɛ <i>he (third person) bit him</i>	
é-àkɛ <i>he (fourth person) bit him</i>	

Fourth person is used when the subject of the action is obscure, as when the speaker is telling of something that he himself did not observe. It is also used when the subject of the action is inferior to the object, as when an animal is the subject and a human being the object.

Number.—Singular, dual, and plural number are recognized in both the subject of intransitive verbs and in the subject and object of transitive verbs. The dual and plural of transitive verb subjects are normally expressed by suffixation, while the absence of number suffixes indicates singular subject:

gàkʉ *he bit him*
 gàgu-ńa *they two bit him*
 gàgu-ńe *they bit him*

Subject number of intransitive verbs may be indicated in a variety of ways:

1. By suffixation as in the case of transitive verbs:

zíkʉpawa *he chopped*
 zíkʉpawa-ńa *they two chopped*
 zíkʉpawa-ńe *they chopped*

2. By changes in the thematic adjunct (i.e., the vowel or vocalic complex that ordinarily immediately follows the pronominal affix). These changes are usually accompanied by other number markers but may sometimes constitute the only indication of number:

g-áu-dʷaʃɪ *he fasted*
 g-ú-ʔù-dʷaʃɪ *they two fasted*
 g-ú-wà-dʷaʃɪ *they fasted*

3. By the prefixation of different sets of pronominal allomorphs together with suffixation and/or changes in the thematic adjunct:

s-iskʌ *I drank*
 sóz-askʌ *we two drank*
 sóz-askʌta *we drank*

Object number of transitive verbs is indicated by changes in the thematic adjunct:

s-è-kʉ *I bit him*
 s-é-ʔè-kʉ *I bit them two*
 s-éiyà-kʉ *I bit them*

Tense.—Future and non-future tenses are recognized. Verbs which include a pronominal affix are in the non-future tense. Future tense is indicated by replacing the pronominal affix with a tense marker. The pronominal element is then incorporated in a separate word, the verbal auxiliary, which follows the verb:

şáizúwa	<i>I paid you</i>	ńí-zúwa şáumʌ	<i>I will pay you</i>
sùpe	<i>I ate</i>	nùpe si	<i>I will eat</i>

Mode.—Pronominal affixes indicate not only the person of the subject or the subject and object but also indicate the mode. For each mode there is a distinctive set of pronominal affixes. A total of six modes are recognized; indicative, negative, dubitative, hortative, negative hortative, and future hortative. For each subject-object combination, however, only certain modes are indicated formally in the inflection:

é-í-zúWA	<i>I paid him</i>	š-í-zúWA	<i>you paid him</i>
sdʷ-í-zúWA	<i>I (didn't) pay him</i>	š-í-zúWA	<i>you (didn't) pay him</i>
ť-í-zúWA	<i>maybe I paid him</i>	c-í-zúWA	<i>maybe you paid him</i>
ká-izúWA	<i>let me pay him</i>	p-í-zúWA	<i>pay him</i>
ň-í-zúWA	<i>let me (not) pay him</i>	sdʷ-í-zúWA	<i>(don't) pay him</i>
ň-í-zúWA	<i>let me pay him (in the future)</i>	c-í-zúWA	<i>pay him (in the future)</i>

Certain particles characteristic of specific modes may precede the verb and are often necessary in order to avoid ambiguity. Verbs in the negative mode, for instance, are always preceded by the negative particle zázi, and those in the negative hortative mode by the particle bâ.mí:

zázi sdʷ-í-zúWA	<i>I didn't pay him</i>
bâ.mí. sdʷ-í-zúWA	<i>don't pay him</i>

Voice.—Reflexive-reciprocal and passive voice are indicated by a prefix following the pronominal prefix of transitive verbs together with a distinctive set of pronominal allomorphs. Reflexive and reciprocal voice are indicated by the prefix -a- and are distinguished one from the other by different thematic adjuncts:

š-à-ukAČA	<i>I saw myself</i>
š-à-ukAČANATI	<i>we two saw ourselves</i>
š-á-ýàKAČANATI	<i>we two saw each other</i>

Passive voice is indicated by the prefix -áʷa- or -à- and takes the plural subject suffix:

šk-áʷá-izúWA--ŋE	<i>I was paid</i>
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Aspect.—There are three aspect morphemes. The most common of these expresses continuative action:

súKAČA-nikUYA	<i>I am looking at him</i>
---------------	----------------------------

Compare:

súKAČA	<i>I saw him</i>
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A less common aspect morpheme indicates unfulfilled action:

sùPE-WE	<i>I have come to eat</i>
---------	---------------------------

Compare:

sùPE	<i>I ate</i>
------	--------------

The third aspect morpheme indicates a remote state and occurs with only a limited number of verb stems:

gó-tá-mA *it is full (something remote from the speaker)*

Compare:

gó-tá *it is full (something at hand)*

Condition.—Verbs which are linked to the larger context by various kinds of subordinate or conditional relationships occur with one of a class of suffixes of rather elusive semantic categorization:

skúizúwa-ne *when he paid me*

skúizúwa-nu. *if he pays me*

Compare:

skúizúWA *he paid me*

In addition to the patterns of inflection indicated above, the expression of specific grammatical categories sometimes involves irregular changes in the verb stem (see pp. 99 ff.). In some cases there are changes of such a revolutionary character that the phenomenon may best be described as stem suppletion, which most commonly involves intransitive verbs in the three numbers:

zù-SE *I went*

sád-é?èyU *we two went*

sád-ékU *we went*

In rare cases, the expression of continuative action or of plural object number in transitive verbs involves stem suppletion:

é-àkU *he bit him*

é-á-pi-kuyA *he is biting him*

é-íy'èiñA *I found him*

s-íwádè.ñA *I found them*

INFLECTIONAL AFFIXES

Each inflectional affix is assigned an identification number and is a member of a century class. Century classes are numbered according to the relative order of occurrence of their members within transitive verbs. An exception to this sequential numbering of century classes is the case of classes 100 and 200 which are never represented in the same verb. Members of both Century Class 100 and 200 are always in initial position in the verb.

Century Class 100 includes all pronominal affixes.⁴ Within the class are nine decade classes (100, 110, 120, 130, 140, 150, 160, 170, and 180), each of which includes affixes indicating a specific subject or subject-object combination. Within each decade class, with the exception of 180, there are six morphemes (numbered 101-106, 111-116, etc.), each of which is characteristic of a specific mode. Century

⁴ These are termed "affixes" rather than specifically "prefixes" or "suffixes" because, although they occur most commonly as prefixes, there are some intransitive verbs in which they occur as suffixes.

Class 200 consists of one morpheme, the future tense affix. Century Class 300 consists of voice prefixes. Century Class 400 consists of aspect suffixes. Century Class 500 consists of number suffixes. Century Class 600 consists of condition suffixes.

Affixes of Century Class 100 are tabulated in charts 1 and 2 and comprise a set of pronominal indicators. Those affixes which occur with transitive verbs in their primary paradigms appear in chart 1; those occurring with intransitive verbs and with transitive verbs in their secondary paradigms are listed in chart 2. The two charts overlap to a considerable extent, as many forms appear both with transitive and intransitive verbs. This overlap is so extensive that it is convenient to group those pronominal indicators which occur with intransitive verbs together with those which occur with transitive verbs and which indicate first, second, or third person subject with third person object. Affix 101, for instance, occurs with intransitive verbs indicating first person subject and with transitive verbs indicating first person subject with third person object. The difference lies in the fact that there are more allomorphs of each affix affiliated with intransitive verbs than with transitive verbs. The overlapping decade classes appear in the two charts with the designations T or I (e.g., 100T, 100I) indicating transitive or intransitive. The morpheme membership of T and I decade classes are identical: both 100T and 100I, for example, consist of affixes 101, 102, 103, 104, 105, and 106. Decade Class 100I, however, includes many more allomorphs than does Decade Class 100T.

Affixes of Century Class 100 form a rather elaborate system. With few exceptions, there is a distinctive affix for each subject-object combination within each of the three principal modes (indicative, dubitative, and hortative). There is, in addition, a distinctive affix for certain subject-object combinations within the negative and the negative hortative modes. A sixth mode, the future hortative, is indicated by affixes which, in most instances, are identical in form with the corresponding dubitative, hortative, or negative hortative affix. For purposes of description, the entire series is filled-in for each of the six modes, although this results in assigning two numbers to certain forms that, from one point of view at least, may be regarded as the same affix (e.g., affixes 111 and 112, 121 and 122). Thus, there are eight decade classes, each of which contains six morphemes indicating the same subject-object combination, plus Decade Class 180 which consists of a single morpheme. Each of the six morphemes within a decade class indicates a different mode. Within each mode the final digit of the affix identification number remains constant.

Allomorphs of each pronominal affix are distinguished by upper case letters following the identification number. All allomorphs listed

Decade Class	Person		Mode					
	Subj.	Obj.	Indicative	Negative	Dubitative	Hortative	Negative hortative	Future hortative
100T	1st	3d	101A si 101B ċi	102A sg 102B sdʷi	103A ti 103B ʔi	104A ka 104B ʔa	105A ni 105B ʔi	106A ni 106B ʔi
110T	2d	3d	111A s 111B ši	112A s 112B ši	113A c 113B ċi	114A c 114B ċi	115A sg 115B sdʷi	116A c 116B ċi
120T	3d	3d	121A g 121B zi	122A g 122B zi	123A dʷ 123B di	124A pi 124B ʔi	125A pi 125B ʔi	126A pi 126B ʔi
130	4th	3d	131A zi 131B ċ	132A zi 132B ċ	133A di 133B ʔ	134 ʔi	135 ʔi	136 ʔi
140	1st	2d	141A ʃa 141B ʃa	142A ʃa 142B ʃa	143A ʃa 143B ʃa	144A ʃa 144B ʃa	145A ʃa 145B ʃa	146A ʃa 146B ʃa
150	2d	1st	151A dʷu 151B ċu	152A dʷu 152B ċu	153A dʷu 153B ċu	154A gu 154B ku	155A gu 155B ku	156A dʷu 156B ċu

160	3d	1st	161A sg 161B sku	162A sdʸ 162B sc̣	163A tɔẓ 163B tɔdi	164A nɔẓ 164B nɔdi	165A nɔẓ 165B nɔdi	166A nɔẓ 166B nɔdi
170	3d	2d	171A gɔẓ 171B gɔdi	172A gɔẓ 172B gɔdi	173A dʸɔẓ 173B dʸɔdi	174A ẓ 174B di	175A sdʸ 175B sc̣	176A dʸɔẓ 176B dʸɔdi

CHART 1.—Century Class 100 Pronominal Affixes Occurring with Transitive Verbs in Their Primary Paradigms

Decade Class	Person		Mode					
	Subj.	Indicative	Negative	Dubitative	Hortative	Negative hortative	Future hortative	
100 I	1st	101A ši 101B ši 101C s 101D š 101E ši 101F ši? 101G sšz 101H sšd 101I sg 101J sku	102A sg 102B sdʷi 102C sk 102D sk 102E sga 102F ská? 102G sdʷ 102H sš 102I ši 102J sš	103A ši 103B ši 103C t 103D tá? 103E táz 103F tád 103G tédi 103H tí?	104A ka 104B ka 104C k 104D ká? 104E ni 104F ši 104G n 104H š 104I ši? 104J néz 104K néd 104L nédi 104M š 104N š 104O st 104P stf? 104Q sti	105A ni 105B ši 105C ka 105D ka 105E k 105F ká? 105G n 105H š 105I ši? 105J néz 105K néd 105L nédi 105M š 105N š 105O st 105P stf? 105Q sti	106A ni 106B ši 106C n 106D š 106E ši? 106F nšz 106G néd 106H nédi	
110 I	2d	111A š 111B ši 111C š	112A š 112B ši 112C š	113A c 113B ci 113C c	114A p 114B pi 114C t	115A sg 115B sdʷi 115C sk	116A c 116B ci 116C c	

120 I	3d	<p>111D š 111E gʷz 111F gʷd 111G gʷdi</p> <p>112D š 112E gʷz 112F gʷd 112G gʷdi</p> <p>113D čá? 113E dʷʷz 113F dʷʷd 113G dʷʷdi</p> <p>114D č 114E z 114F d 114G di 114H ?</p> <p>115D sk 115E sga 115F ská? 115G sdʷ 115H sč 115I sčí 115J sč</p>	<p>116D čá? 116E dʷʷz 116F dʷʷd 116G dʷʷdi</p>
		<p>121A g 121B zi 121C k 121D k̄ 121E ga 121F ká? 121G z 121H č 121I čí 121J c</p>	<p>122A g 122B zi 122C k 122D k̄ 122E ga 122F ká? 122G z 122H č 122I čí 122J c</p>
		<p>123A dʷ 123B di 123C č 123D č̄ 123E dʷa 123F čá? 123G d 123H t̄ 123I tí 123J t̄</p>	<p>124A pi 124B pi 124C p 124D p̄ 124E pa 124F pá? 124G pi?</p>
		<p>125A pi 125B pi 125C p 125D p̄ 125E pa 125F pá? 125G pi?</p>	<p>126A pi 126B pi 126C p 126D p̄ 126E pa 126F pá? 126G pi?</p>
180	Indefinite	<p>181A sg 181B sk 181C sč 181D sč</p>	

CHART 2.—Century Class 100 Pronominal Affixes Occurring with Intransitive and Transitive Verbs in Their Secondary Paradigms

in the charts are morphologically defined, i.e., their occurrence cannot be predicted in terms of phonological environment. Phonologically defined allomorphs (e.g., *gúz* derived by morphophonemic vowel assimilation from *góz*) are not listed in the charts but may be predicted from the morphophonemic processes described under "Morphophonemics."

The same upper case letters have been used to identify allomorphs which tend to be affiliated with the same group of verbs. This consistency is especially evident in transitive verbs and within each decade class:

éí-zúWA (101B+verb stem)	<i>I paid him</i>
sd'í-zúWA (102B+verb stem)	<i>I (didn't) pay him</i>
ťí-zúWA (103B+verb stem)	<i>maybe I paid him</i>
etc.	

This tendency also is manifested to a lesser degree from one decade class to another within each mode:

éí-zúWA (101B+verb stem)	<i>I paid him</i>
ší-zúWA (111B+verb stem)	<i>you paid him</i>
zí-zúWA (121B+verb stem)	<i>he paid him</i>
etc.	

The fact that not all affixes have the same number of allomorphs, makes it obvious that this tendency cannot hold true in the case of every verb. Intransitive verbs, especially, often show a shift from one series of allomorphs to another even within the same decade class:

sózâ. [?] Abe (101G+verb stem)	<i>we two ate</i>
sgâ. [?] Abe? (102A+verb stem)	<i>we two (didn't) eat</i>
tózâ. [?] Abe (103E+verb stem)	<i>maybe we two ate</i>
etc.	

The phonetic shape and distribution of many affixes of Century Class 100 is suggestive of certain historical processes. It is probable that many of the B-allomorphs were derived from the corresponding A-allomorphs either through glottalization (compare 141B with 141A, for example) or through palatalization (compare 111B with 111A). B-allomorphs that appear to be a palatalized form of the corresponding A-allomorphs nearly always occur with verb stems beginning in -i-. The few exceptions prevent the phenomenon from being described as a morphophonemic process.

Another type of historical development is suggested by the overlap in phonetic form of certain allomorphs of affixes belonging to different decade classes. This overlap is evident when one compares affixes of Decade Class 100I with those of 160, affixes of Decade Class 110I with those of 170, and affixes of Decade Class 120 with those of 130. This suggests that the system of pronominal affixation may have

developed from one in which intransitive subject and transitive object were equated.

Century Class 200 is comprised of a single morpheme which indicates future tense. It replaces affixes of Century Class 100 as to position in the verb but not as to function. The future tense affix includes the following allomorphs:

201A	n
201B	ni
201C	n̄
201D	n̄i
201E	niʔ
201F	nóʔ
201G	nód
201H	nódi

Examples of allomorphs of affix 201 are as follows:

n-úpe	<i>will eat</i>
ni-ukača	<i>will see</i>
n̄-àuta	<i>will kill</i>
n̄i-udiʔ	<i>will give</i>
nikupawañe. (niʔ- + -fikupawañe.)	<i>will chop (plural subject)</i>
nóʔ-á-ʔAbcʔ	<i>will eat (dual subject)</i>
nód-aʔ	<i>will be</i>
nódiubu-ci	<i>will be frightened</i>

Century Class 300 contains two morphemes, 301 and 302, which function as voice indicators and occur prefixed to transitive verbs following the pronominal prefix.

Affix 301 expresses reflexive or reciprocal action with the single allomorph 301 -a-. Affix 302 indicates passive voice and includes two allomorphs: 302A -áʔa- and 302B -á-. The following examples illustrate the affixes of Century Class 300:

ś-à-ukača	<i>I saw myself</i>
sk-áʔá-izúwa-ñe	<i>I was paid</i>
sk-á-dʔaʔta	<i>I was caught</i>

Century Class 400 is comprised of three morphemes, 401, 402, and 403, which function as aspect indicators and (except for 401H) are suffixed to verb stems.

Affix 401 indicates continuative action and includes the following allomorphs:

401A	-kuya
401B	-nikuya
401C	-tikuya
401D	-ku
401E	-(i)ta(·)
401F	-sɛ
401G	-čAdʔaya
401H	reduplication of the verb core

The following examples illustrate occurrences of allomorphs of affix 401:

sùbeu-kUYA	<i>I am eating</i>
gùkAčA-nikUYA	<i>he is looking at him</i>
éidʷaʷ-tikUYA	<i>I am catching him</i>
káiskóʷʷzai-kU	<i>he is turning around</i>
sfukáicr-tA	<i>I am hitting him</i>
šáuti-sE	<i>I am planting</i>
kâ-ni-čAdʷAYA	<i>he is walking</i>
wókə-wəkə-kA	<i>it is shaking</i>

Associated with allomorph 401E, -(i)tA, is a change from -a or -A to -i or -I in the stem-final vowel of the verb to which it is suffixed. Compares síukáica *I hit him* with síukáicita *I am hitting him*. Affix 402, which refers to unfulfilled action, contains the following allomorphs:

402A	-ñE(·)
402B	-nE(·)
402C	-wE

Illustrations of the occurrence of allomorphs of affix 402 are as follows:

éi-zúwa--ñE	<i>I came to pay him</i>
sfukAčA-nE	<i>I came to see him</i>
sùpE-wE	<i>I came to eat</i>

Affix 403 expresses remote state and has the single allomorph, 403 -mA:

gó-tá--mA	<i>it is full (something remote)</i>
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Century class 500 contains two morphemes, 501 and 502, which express subject number. They are suffixed either directly to the verb stem or follow affixes of Century Class 400. Affix 501 indicates dual subject and includes the following allomorphs:

501A	-ñE	501E	-mæti
501B	-næti(·)	501F	-ñAšuti
501C	-dʷI	501G	-šuti
501D	-ñE	501H	-pE

The occurrence of these allomorphs is illustrated by the following examples:

síkupawa-ñE	<i>we two chopped</i>	sáiskóʷʷzai-mæti	<i>we two turned around</i>
šíukAčA-næti	<i>we two saw him</i>	šíuni-ñAšuti	<i>we two know him</i>
šídʷaʷ-dʷI	<i>we two caught him</i>	sédéʷE-šuti	<i>we two are</i>
šáudi-mE	<i>we two planted</i>	síwí-deya-pE	<i>we two worshipped</i>

Affix 502, expressing plural subject, has the following allomorphs:

502A	-ñE(·)	502H	-wE
502B	-nE(·)	502I	-šE(·)
502C	-tA(·)	502J	-šI
502D	-ñE	502K	-ʷE
502E	-mE	502L	-(i)YA
502F	-ñASA	502M	-šE(·)
502G	-wA		

Examples of the allomorphs of affix 502 are as follows:

sikupawa-nĕ	<i>we chopped</i>	síwĭ-deya-wa	<i>we worshiped</i>
šúkačĕa-nĕ	<i>we saw him</i>	záʔá-tĕa-we	<i>they opened it</i>
šídʷaʔ-tĕa	<i>we caught him</i>	súwĕdʷúmĕ-šĕ	<i>our brother</i>
sáwá-di-mĕ	<i>we planted</i>	zéʔé-baiʔ-šĭ	<i>we went to sleep</i>
sáyá-skó.ʔazai-me	<i>we turned around</i>	súwawĕne-ʔĕ	<i>we hunted</i>
šuni-mĕsa	<i>we know him</i>	šĭ-zúwi-tĭ-ya	<i>we are paying him</i>
		šúkačĕaniguya-se	<i>we are looking at him</i>

Century Class 600 is comprised of three morphemes, 601, 602, and 603, which express conditional or contrary-to-fact action. Affix 601 has two allomorphs, 601A -ne and 601B -de. Affix 602 has a single allomorph, 602 -nu. Affix 603 likewise has a single allomorph, 603 -tĕ. The following examples illustrate the occurrence of these allomorphs:

skúizúwa--ne	<i>when he paid me</i>
gùkačĕane--de	<i>when they saw him</i>
skúizúwa--nu.	<i>if he pays me</i>

It is difficult to differentiate affixes 601 and 602 by meaning function except that the latter apparently has a dubitative connotation lacking in the former. Affix 603 occurs with many verbs in the negative mode which have a plural subject:

sgùkačĕane-tĕ	<i>we (didn't) see him</i>
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DISTRIBUTION OF AFFIXES

The distribution within verbs of the inflectional affixes, the thematic adjunct (TA), the verb core, and the benefactive suffix (B) serves to distinguish three major structural types. These are represented by three formulas:

1. TV = + 100 ± 300 + TA + Core ± 400 ± B ± 500 ± 600/
+ 200 ± 300 + TA + Core ± 400 ± B ± 500

Transitive verbs are composed of three obligatory parts, a prefix of either Century Class 100 or Century Class 200 followed by a thematic adjunct and a verb core. Prefixes of Century Class 300 and suffixes of Century Classes 400, 500, and 600 as well as the benefactive suffix occur in some, but not all, verbs of this type. Suffixes of Century Class 600 may occur only if the verb is prefixed by members of Century Class 100.

2. IVA = + 100 + TA + Core ± 400 ± 500 ± 600/
+ 200 + TA + Core ± 400 ± 500

Intransitive verbs of Type A are composed of at least a prefix of either Century Class 100 or Century Class 200 followed by a thematic adjunct and a verb core. They may include, in addition, suffixes of Century Classes 400, 500, or 600.

3. IVB = + Core ± 400 + 100 + TA ± 600/
+ Core ± 400 ± 200 + TA

Intransitive verbs of Type B are composed of a verb core together with an affix of either Century Class 100 or 200 occurring as a suffix and followed by a thematic adjunct. An affix of Century Class 400 may follow the core and, in forms containing a member of Century Class 100, a suffix of Century Class 600 may follow the thematic adjunct.

A complete set of paradigms of transitive verbs in all of their possible inflections includes the following:

Primary paradigms.—Transitive verbs in their simplest forms, i.e., those which include only the three obligatory elements and which have unexpanded thematic adjuncts, are members of one of the primary paradigms. A transitive verb primary paradigm is composed of seven or eight forms based on the same verb stem, all belonging to the same mode, and each expressing a different pronominal reference. Examples of these paradigms are given in Appendix 1. The classification of verb stems on the basis of the specific allomorphs of Century Class 100 with which they occur in their primary paradigms is dealt with under "Verb Classes."

Forms with prefixes of Century Class 300.—Transitive verbs occurring with the reflexive-reciprocal or the passive voice prefix take distinctive sets of allomorphs of the pronominal prefixes. Furthermore, the class division evident in the primary paradigms is lacking in these forms; all transitive verbs take the same sets of allomorphs.

Verbs in the reflexive-reciprocal voice occur with the following set of pronominal allomorphs:

š	ská?	tá?	ká?	ń	ń
101D	102F	103D	104D	105H	106D
ṣ̌	ṣ̌	čá?	č̣	ska?	čá?
111D	112D	113D	114D	115F	116D
ká?	ká?	čá?	pá?	pá?	pá?
121F	122F	123F	124F	125F	126F

Those in the passive voice occur with the following:

sku	sč̣	ti	ni	ni	ni
101J	102H	103B	104E	105A	106A
š	š	c	z	sč̣	c
111C	112C	113C	114E	115H	116C
č	č	ṭ	pi	pi	pi
121H	122H	123H	124B	125B	126B

Verbs in the passive voice regularly take the plural subject suffix:

šk-á?á-izúwa--ńE (101J+302A+stem+502A) *I was paid*

An alternative translation of this verb would be *they (certain unspecified persons) paid me*. This translation is consistent with the presence of the plural subject suffix and with the expansion of the thematic adjunct in forms indicating dual or plural persons being acted upon.

It is not consistent, however, with the presence of pronominal affixes of Decade Classes 100I, 110I, and 120I, which express first, second, and third person subject respectively.

The occurrence of allomorph 302B, -á-, as opposed to 302A, -áʔa-, is apparently restricted to verbs having a voiceless and unglottalized core-initial consonant and a normally short and level accented thematic adjunct:

éídʔáWA *I stabbed him*
skádʔáWAÑE *I was stabbed*

Forms with suffixes of Century Class 400.—Most transitive verb stems may occur with suffix 401, indicating continuous action. These forms occur with the same pronominal prefixes as occur in the primary paradigms:

gùkačanikUYA (121A+stem+401B) *he is looking at him*

Compare:

gùkača (121A+stem) *he saw him*

Subclasses of transitive verbs are based in part on their occurrence with specific allomorphs of 401 (see "Verb Classes"). A few transitive verbs are defective in that they never occur with affix 401. The occurrence of affix 402 is quite limited and has been recorded in relatively few verbs. The subclass to which the verb belongs determines which of the several allomorphs occur. There are no occurrences in the present data of transitive verbs which include affix 403.

Forms with suffixes of Century Class 500.—All transitive verbs, with the exception of a few defective stems, may occur with a subject number suffix, 501 or 502. In general, the same sets of allomorphs of Century Class 100 occur with these forms as occur in the primary paradigms:

gùkačanəti (121A+stem+501B) *they two saw him*
gùkačane (121A+stem+502B) *they saw him*

Compare:

gùkača (121A+stem) *he saw him*

Forms expressing first person subject and third person object, however, are an exception. Verbs which in their primary paradigms occur with A-allomorphs of Decade Class 100 (101A, 102A, 103A, etc.) take allomorphs 101E, 102A, 103H, 104F, 105B, and 106B when the subject is dual or plural. Those with B-allomorphs in their primary paradigms occur with allomorphs 101E, 102B, 103H, 104F, 105B, and 106B in the dual and plural forms:

šúkačane (101E+stem+502B) *we saw him*
ší-zúwa.ñe (101E+stem+502A) *we paid him*

Compare:

šúkača (101A+stem) *I saw him*
éí-zúwa (101B+stem) *I paid him*

The choice of allomorphs of suffixes 501 and 502 depends on the subclass to which the transitive verb belongs and on the presence or absence of affixes of Century Classes 200 and 400. The occurrence of these allomorphs is described more fully under "Verb Classes."

Forms with suffixes of Century Class 600.—Suffixes 601 and 602, in general, may be attached to any transitive verb in the non-future tense. This involves no concomitant changes in the allomorphs of other affixes which are present in the verb:

skúizúwa-ne (161B+stem+601A) *when he paid me*
 skúizúwa-nu- (161B+stem+602) *if he pays me*

Compare:

skúizúwa (161B+stem) *he paid me*

Allomorph 601B rather than 601A occurs with verbs in which the subject is dual or plural:

skúizúwa-ñe-de (161B+stem+502A+601B) *when they paid me*

Affix 603 is of much more limited distribution, occurring only in verbs with plural subject in the negative mode when other Century Class 600 suffixes are absent:

sgùkačane-tE (102A+stem+502B+603) *we (didn't) see him*

Forms with prefix 201.—All forms of transitive verbs outlined above, with the exception of those containing suffixes of Century Class 600, may be changed to the future tense by replacing the pronominal prefix with prefix 201. This results in a form of the verb that does not include subject-object person and which must be followed by a verbal auxiliary. Transitive verbs which occur with allomorph 101A in forms indicating first person subject with third person object take allomorph 201B in most future tense forms:

síukačA (101A+stem) *I saw him*
 níukačA (201B+stem) *will see*

Those verbs which occur with allomorph 101B take allomorph 201D:

čí-zúwa (101B+stem) *I paid him*
 ñí-zúwa (201D+stem) *will pay*

Future tense verbs in the reflexive voice, however, occur with allomorph 201C rather than 201B or 201D:

ñàukačA (201C+stem) *will see oneself*

The presence of affix 201 sometimes determines the choice of allomorphs of suffixes 501 and 502. Some verbs in the future tense take the same allomorph of a number suffix as do the corresponding non-future forms:

ñí-zúwa-ñA (201D+stem+501A) *will pay (dual subject)*

Compare:

zí-zúwa-h̄a (121B+stem+501A) *they two paid him*

Verbs occurring with allomorphs 502A, 502B, or 502C in the non-future tense show a lengthening and voicing of the suffix vowel in the future tense:

zí-zúwa-h̄e (121B+stem+502A) *they paid him*

ńí-zúwa-h̄e (201D+stem+502A) *will pay him (plural subject)*

Chart 3 summarizes all possible sequences of inflectional affixes representative of the six century classes and illustrates them with examples based on the verb *to see*. For each of the non-future forms in the chart there are parallel forms representing other modes and other subject-object persons, as well as forms incorporating other affixes of Century Classes 300, 400, 500, and 600. The multiplicity of forms based on a single verb core is further increased by the possibility of changes in the thematic adjunct and/or the inclusion of a benefactive suffix. These, however, are regarded as stem changes rather than inflection and are treated in that portion entitled "Stem Formation."

Type A intransitive verbs follow the same general pattern of inflection as transitive verbs, but occur with a more restricted inventory of inflectional affixes. These verbs, for example, never occur with affixes of Century Class 100 which express first person object (i.e., Decade Classes 150 and 160). Furthermore, specific intransitive verbs commonly lack the capacity for combining with affixes of one or more of the optionally occurring classes; few intransitive verbs exhibit the full pattern of inflection indicated for transitive verbs in chart 3. Affixes of Century Class 300, for instance, rarely occur with intransitive verbs. There are a few verbs, however, which are classified as intransitive on structural grounds, but which have a transitive meaning and which admit affixes of this class:

śkáʔautawa (101J+302A+stem+502G) *I was killed*

Members of Century Classes 400 and/or 500 may likewise be lacking in the inventory of inflectional affixes with which specific Type A intransitive verb stems occur. Certain of these verbs have no distinctive continuative action forms, while others indicate dual and plural subject by changes in the stem rather than by inflection.

Type B intransitive verbs are even more restricted in their inflection than are Type A. They never occur with affixes of Century Class 500, and the expression of aspect is limited to the reduplication of the verb core to indicate continuative action (allomorph 401H):

wókəka *it moved*
wókəwəkəka *it is shaking*

<p>100+S+400 g-ùkačá-nikuyA <i>he is looking at him</i> 200+S+400 ní-ukáčá-nikuyA <i>will be looking</i> 100+300+S+400 ká?-à-ukáčá-nikuyA <i>he is looking at himself</i> 200+300+S+400 ù-à-ukáčá-nikuyA <i>will be looking at oneself</i></p>	<p>100+S g-ùkačá <i>he saw him</i> 200+S ní-ukáčá <i>will see</i> 100+300+S ká?-à-ukáčá <i>he saw himself</i> 200+300+S ù-à-ukáčá <i>will see oneself</i></p>	<p>100+S+600 g-ùkačá-nu. <i>if he sees him</i> 100+300+S+600 ká?-à-ukáčá-nu. <i>if he sees himself</i></p>
<p>100+S+500 g-ùkačá-ne <i>they saw him</i> 200+S+500 ní-ukáčá-ne. <i>will see (plural subject)</i> 100+300+S+500 ká?-à-ukáčá-ne <i>they saw themselves</i> 200+300+S+500 ù-à-ukáčá-ne. <i>will see themselves</i></p>		

<p>100+S+400+500 g-ùkAčá-niguyá-se they are looking at him</p> <p>200+S+400+500 ní-ukAčá-niguyá-se will be looking (plural subject)</p> <p>100+300+S+400+500 ká?-à-ukAčá-niguyá-se they are looking at themselves</p> <p>200+300+S+400+500 ñ-à-ukAčá-niguyá-se will be looking at themselves</p>	<p>100+S+400+600 g-ùkAčá-niguyá-nu. if he is looking at him</p> <p>100+300+S+400+600 ká?-à-ukAčá-niguyá-nu. if he is looking at himself</p>	<p>100+S+500+600 g-ùkAčá-ne--de when they see him</p> <p>100+300+S+500+600 ká?-à-ukAčá-ne--de when they see themselves</p>
<p>100+S+400+500+600 g-ùkAčá-niguyá-se--de when they are looking at him</p> <p>100+300+S+400+500+600 ká?-à-ukAčá-niguyá-se--de when they are looking at themselves</p>		

CHART 3.—Century Class Stem Sequences

A few Type B intransitive verbs always occur with -*ni* in word-final position. This morpheme cannot be assigned a meaning function and does not fit in any of the classes of inflectional affixes:

kó-ga^hni *it is red*
kó-se^hni *I am red*

There is a tendency for words beginning in *g-*, *k-* or *k'-* to develop by analogy a set of inflectional affixes even though the word may not originally have been a verb. This may be seen in the word *gasí-ki cacique* borrowed from the Spanish. The initial *g-* no longer behaves like a part of the stem but is identified with the third person prefix and may be replaced by other pronominal or future tense affixes:

sesí-ki *I am a cacique*
nesí-ki *will be a cacique*

Some words have an indicative and a dubitative form but never occur with the future tense prefix or any other inflectional affix:

k'ú-tí *mountain*
čú-tí *there may be a mountain*

The potentiality for occurring with a future tense prefix is taken as a necessary condition for membership in the verb class. *Mountain*, therefore, is not a verb, but is classified as an uninflected word which exhibits two alternate forms.

VERB STEMS

Verbs are analyzed as consisting of a stem plus inflectional affixes of the various classes previously described. The stem itself is analyzed as consisting of two obligatory components, a thematic adjunct and a core, and may include a benefactive suffix as well. The combination of these elements to form verb stems is described in the section to follow. Certain verb cores, in turn, may be analyzed further. These will be described under "Verb Core Derivation."

STEM FORMATION

The thematic adjunct (abbreviated TA) is an element of the verb occurring, in most cases, immediately preceding the core (i.e., it is the initial element of the verb stem). The verb *zínàta he bought it*, for example, may be dissected as follows:

<i>z-</i>	<i>-í-</i>	<i>-nàta</i>
	TA	core
pronominal prefix	stem	

In those verbs in which the pronominal affix follows the core the thematic adjunct is the element immediately following the pronominal affix:

zù-k- σ (core + pronominal affix + TA) *he went*

The stem in such cases, as zù— σ in the above example, is discontinuous.

Thematic adjuncts occurring in transitive verbs are either *simple*, indicating singular object, or *expanded* to indicate dual or plural object. Simple thematic adjuncts in transitive verbs are most commonly single vowels, either short or long:

g-ú-ni	<i>he knows him</i>
dʷ-ù-di	<i>you gave it to me</i>
é-í-zúWA	<i>I paid him</i>

A few transitive verbs occur with vowel clusters as simple thematic adjuncts:

š-ài-kú-mi	<i>I brought it to you</i>
š-áu-ʔ σ	<i>I gave it to you</i>

A particular transitive verb ordinarily retains the same thematic adjunct throughout its primary paradigms (see Appendix 1). Frequently, however, there is a different thematic adjunct in the passive voice (see "Stem Variants").

To indicate dual or plural object, the thematic adjunct of transitive verbs is expanded according to a pattern that is regular but not analyzable in terms of additive morphemes. Chart 4 lists simple transitive thematic adjuncts together with their dual and plural expanded forms. With the simple thematic adjuncts are vowels or vowel clusters which result from a combination of the final vowel of a preceding prefix together with the thematic adjunct. This includes, for instance, -e- resulting from a combination of -i- plus -a- and -au- resulting from a combination of -a- and -u-. Only those vowels and vowel clusters are given which have actually been recorded in transitive verbs. This accounts for the omission from the chart of many vowels and vowel combinations that might be expected to occur.

Thematic adjuncts and their expansions are listed in the chart by types based on the forms which appear in the primary paradigms and in the passive voice respectively. Type u/a, for example, has reference to verbs which exhibit -u- as thematic adjunct in their primary paradigms and -a- in the passive voice. The expansion of these adjuncts involves a radical change in the accent pattern only in the case of those which in their simple form are short and level accented. These are grouped together in a separate section of the chart. In other verbs the accent of the simple thematic adjunct is retained on

the final vowel or vowel cluster of the expanded forms, while the initial syllable receives a level accent. Vowel length occurring with a simple thematic adjunct likewise is retained on the final vowel of the expanded forms.

	Type	Simple	Dual Expanded	Plural Expanded
Short level accent	i/a	-í-	-à-	-áiyà-
		-á-	-à-	-áiyà-
		-ú-	-à-	-áiyà-
	u/a	-ú-	-û.ʔu-	-úwà-
		-áu-	-â.ʔu-	-áuwà-
		-íu-	-î.ʔu-	-íuwà-
-â-		-áʔá.ʔa-	-áʔáwà-	
Long level, falling or breathy accent	a/a	-a-	-a.ʔa-	-aiyá-
		-e-	-e.ʔe-	-eiyá-
	ai/ai	-ai-	-a.ʔai-	-aiyái-
		-ei-	-e.ʔei-	-eiyái-
	au/au	-au-	-a.ʔau-	-aiyáu-
		-eu-	-e.ʔeu-	-eiyáu-
	i/i	-i-	-a.ʔai-	-aiyá-
		-ai-	-a.ʔai-	-aiyá-
		-ui-	-a.ʔai-	-aiyá-
	u/a	-u-	-u.ʔu-	-u.wá-
		-au-	-a.ʔau-	-auwá-
		-iu-	-i.yú-	-íuwá-
-a-		-a.ʔa-	-auwá-	
u/u	-u-	-a.ʔau-	-aiwá-	
	-au-	-a.ʔau-	-aiwá-	
	-iu-	-a.ʔau-	-aiwá-	

CHART 4.—Expansion of Thematic Adjuncts

Examples of such expansion in the order that they occur in chart 4 are as follows:

šídʷa	<i>you caught him</i>	šàdʷa	<i>you caught them two</i>	šáiyádʷa	<i>you caught them</i>
šádʷa	<i>I caught you</i>	šàdʷa	<i>I caught you two</i>	šáiyádʷa	<i>I caught you all</i>
šéúdʷa	<i>you caught me</i>	dʷadʷa	<i>you caught us two</i>	dʷáiyádʷa	<i>you caught us</i>
gúsukʷca	<i>he kicked him</i>	gú.ʷusukʷca	<i>he kicked them two</i>	gúwásukʷca	<i>he kicked them</i>
šásukʷca	<i>I kicked you</i>	šá.ʷusukʷca	<i>I kicked you two</i>	šáuwásukʷca	<i>I kicked you all</i>
šusukʷca	<i>I kicked him</i>	sí.ʷusukʷca	<i>I kicked them two</i>	stuwásukʷca	<i>I kicked them</i>
skásukʷcañe	<i>I was kicked</i>	skáʷá.ʷasukʷcañe	<i>we two were kicked</i>	skáʷáwásukʷcañe	<i>we were kicked</i>
šákʷ	<i>you bit him</i>	šá.ʷákʷ	<i>you bit them two</i>	šáiyákʷ	<i>you bit them</i>
šèkʷ	<i>I bit him</i>	sé.ʷèkʷ	<i>I bit them two</i>	séiyákʷ	<i>I bit them</i>
šáikú-mi	<i>I brought it to you</i>	šá.ʷáikú-mi	<i>I brought it to you two</i>	šáiyáikú-mi	<i>I brought it to you all</i>
šéikú-mi	<i>I brought it to him</i>	sé.ʷéikú-mi	<i>I brought it to them two</i>	séiyáikú-mi	<i>I brought it to them</i>
šáuʷ	<i>I gave it to you</i>	šá.ʷáuʷ	<i>I gave it to you two</i>	šáiyáuʷ	<i>I gave it to you all</i>
šéuʷ	<i>I gave it to him</i>	sé.ʷéuʷ	<i>I gave it to them two</i>	séiyáuʷ	<i>I gave it to them</i>
ší-zúwa	<i>you paid him</i>	šá.ʷáizúwa	<i>you paid them two</i>	šáiyá-zúwa	<i>you paid them</i>
šáizúwa	<i>I paid you</i>	šá.ʷáizúwa	<i>I paid you two</i>	šáiyá-zúwa	<i>I paid you all</i>
šéizúwa	<i>you paid me</i>	dʷá.ʷáizúwa	<i>you paid us two</i>	dʷáiyá-zúwa	<i>you paid us</i>
gú-káica	<i>he hit him</i>	gú.ʷú-káica	<i>he hit them two</i>	gú-wá-káica	<i>he hit them</i>
šáukáica	<i>I hit you</i>	šá.ʷáukáica	<i>I hit you two</i>	šáuwá-káica	<i>I hit you all</i>
stúkáica	<i>I hit him</i>	sí-yú-káica	<i>I hit them two</i>	stuwá-káica	<i>I hit them</i>
skáʷá-káizañe	<i>I was hit</i>	skáʷá.ʷá-káizañe	<i>we two were hit</i>	skáʷáuwá-káizañe	<i>we were hit</i>
dʷàdi	<i>you gave it to me</i>	dʷá.ʷàdi	<i>you gave it to us two</i>	dʷáiwádi	<i>you gave it to us</i>
šàudi	<i>I gave it to you</i>	šá.ʷàdi	<i>I gave it to you two</i>	šáiwádi	<i>I gave it to you all</i>
šùdi	<i>you gave it to him</i>	šá.ʷàdi	<i>you gave it to them two</i>	šáiwádi	<i>you gave it to them</i>

Thematic adjuncts occurring in intransitive verbs with singular subject are single vowels or vowel clusters:

g-ú-yá	<i>he skinned it</i>
ṣ-á-ni	<i>you walked</i>
ṣ-ái-natA	<i>I cooked it</i>
ṣ-àu-tA	<i>I killed it</i>

In most cases the thematic adjunct remains the same in all singular forms of the verb. Two exceptions, however, should be noted. (1) Type B intransitive verbs which normally take -u or -u show a shift to -e or -E in certain forms (see also "Vowel Reduction") as:

zùk-u	<i>he went</i>
zùs-E	<i>I went</i>

(2) Intransitive verbs of classes 9-11 and 9-12 (see pp. 110 ff.) show a change from -au- to -u- in the second person hortative:

ṣ-àu-tA	<i>you killed it</i>
ṣ-ù-tA	<i>kill it</i>

Intransitive verbs with dual or plural subject often have the same thematic adjunct as the singular form:

z-í-kupAWA	<i>he chopped</i>
z-í-kupawañE	<i>they two chopped</i>
z-í-kupawañE	<i>they chopped</i>

In other verbs there are changes resembling the expansion of the thematic adjunct of transitive verbs:

s-ú-tá-niçA	<i>I worked</i>
s-úwA-tá-niçañE	<i>we worked</i>

There is, however, no regular pattern of expansion in intransitive as there is in transitive verbs. Stem changes involving the thematic adjunct are treated under "Stem Variants."

The benefactive suffix is analyzed as part of the stem rather than as an inflectional affix because its inclusion in a verb normally involves a change in the classification of the verb: verbs with this suffix occur with a distinctive set of pronominal allomorphs that differs, in most cases, from the set which occurs in the simpler forms. All verb stems with the benefactive suffix are Class D transitive stems (see p. 108). They may be formed, however, from stems that are either transitive or intransitive and which belong to any of the principal classes. There are five allomorphs of the benefactive suffix: -ni, -mi, -ni, -dimi, and -wi. The occurrence of these allomorphs correlates with specific allomorphs of the plural subject suffix. Verbs which are pluralized by 502A or 502B in forms lacking Century Class 400 suffixes take the -ni allomorph of the benefactive suffix:

ćínàtA	<i>I bought it</i>	ṣàtišA	<i>I talked to you</i>
śéžánàdañE	<i>we bought it</i>	ṣàtišANE	<i>we talked to you</i>
ćífunàdani	<i>I bought it for him</i>	ṣàtišani	<i>I talked to him for you</i>

Allomorph -mi correlates in a similar fashion with 502E and 502K; -ni, correlates with 502D; -dini with 502C; and -wi with 502G and 502H:

súwàñE	<i>I went hunting</i>	éíɖʷa	<i>I caught it</i>
súwawàñeʔE	<i>we went hunting</i>	śídʷaʔtA	<i>we caught it</i>
śáwàñemi	<i>I went hunting for you</i>	śáudʷaʔdini	<i>I caught it for you</i>
śáudi	<i>I planted</i>	záʔá.tA	<i>he opened it</i>
śáwá.dimñE	<i>we planted</i>	záʔá.tAWE	<i>they opened it</i>
éíudini	<i>I planted for him</i>	śáʔá.tawi	<i>I opened it for you</i>

Examples showing a correlation of benefactive suffixes with 502F, 502I, 502J, 502L, 502M, and 502N are lacking in the data. Positionally, the benefactive suffix occurs between suffixes of Century Class 400 and Century Class 500. In forms containing a suffix of Century Class 400 the stem is thus discontinuous:

śáukàicrta-ni (141B + TA + verb core + 401E + benefactive suffix, -ni)
I am hitting him for you

STEM VARIANTS

Stem variants result primarily from changes in the thematic adjunct and from changes in the final syllable of the verb stem, although other syllables may occasionally be involved as well. Certain of these changes are irregular and must be indicated in a listing of stems. Others, however, may be predicted on the basis of previously described processes which show a certain degree of regularity. The latter result from specific morphophonemic processes, from the expansion of transitive verb thematic adjuncts and the change in the thematic adjunct of intransitive verbs of classes 9-11 and 9-12, ("Stem Formation"), and from the suffixation of affix 401E or 502L ("Inflectional Affixes").

Vowel reduction normally results in the fusing of the thematic adjunct with a preceding vowel. Stem variants will then show either a shift in, or a loss of, the initial (thematic adjunct) vowel, depending on how the prefix-stem cut is made:

g-àkU (g- + -àkU)	<i>he bit him</i>
ś-àkU or śà-kU (śa- + -àkU)	<i>I bit you</i>
s-èkU or sè-kU (si- + -àkU)	<i>I bit him</i>

The morphophonemic reduction of vowel plus semivowel sequences results in similar stem changes:

g-úwî.tEYA (g- + -úwî.tEYA)	<i>he worshiped</i>
ś-wî.tEYA (si- + -úwî.tEYA)	<i>I worshiped</i>
g-úwîšikUYA (g- + -úwîšikUYA)	<i>he scolded him</i>
ś-wîšikUYA (si- + -úwîšikUYA)	<i>I scolded him</i>

Morphophonemic processes involved in suffixation, too, often result in regular stem changes:

g-ùkačA (g- + -ùkačA)	<i>he saw him</i>
g-ùkačA-nikUYA (g- + -ùkačA + -nikUYA)	<i>he is looking at him</i>
g-ùpe (g- + -ùpe)	<i>he ate</i>
g-ùbeu-kUYA (g- + -ùpe + -kUYA)	<i>he is eating</i>
s-úwí-čA (s- + -úwí-čA)	<i>I made it</i>
s-úwí-ti-tA (s- + -úwí-čA + -(i)tA)	<i>I am making it</i>

Stem variants may result from regular changes which do not involve morphophonemic processes. The most common of these is the expansion of the thematic adjunct to indicate dual or plural object of transitive verbs. This kind of change is regarded as stem change rather than inflection because (1) the changes are of such a nature that no additive morpheme can be isolated, and (2) it parallels in many ways the kind of irregular change which takes place in certain intransitive verb stems in the dual and plural as compared with the singular forms. The expansion of thematic adjuncts in transitive verbs has been described in "Stem Formation" and examples given.

The regular change from -au- to -u- in the second person hortative forms of Class 9-11 and 9-12 intransitive verbs likewise produces stem variants:

š-údi	<i>I planted</i>
č-údi	<i>plant it</i>

The change to -i or -i of a stem-final -a or -A preceding allomorph -tA of the continuative action suffix and before allomorph -yA of the plural subject suffix was noted in "Inflectional Affixes":

čí-zúWA (či- + -í-zúWA)	<i>I paid him</i>
čí-zúwi-tA (či- + -í-zúWA + -tA)	<i>I am paying him</i>

Changes which are irregular and which must be indicated in stem listing are of the following types:

1. *Changes in intransitive verb stems in the dual and in the plural as compared to the singular.*—Dual and plural forms of intransitive verbs, except for a relatively few which exhibit stem suppletion, are clearly related to the singular forms. The changes in the stem, however, are highly irregular:

g-úñǻ	<i>he left</i>
g-ú.ñǻ	<i>they two left</i>
z-é.ñǻ	<i>they left</i>
k-ùpe	<i>he ate</i>
g-â.ʔAbe	<i>they two ate</i>
g-â.ʔApe	<i>they ate</i>
k-útâ.ñiçA	<i>he worked</i>
g-útâ.ñiçA-ñǻ	<i>they two worked</i>
g-úwátâ.ñiçA-ñǻ	<i>they worked</i>

Because of this irregularity, intransitive verb stems are listed separately for the singular, dual, and plural.

2. *Accentual changes and the alternation between voiced and voiceless vowels in verb stems of the same number.*—In some verbs the thematic adjunct alternates from a short accented vowel in most forms to a voiceless vowel in forms prefixed by pronominal morphemes of the shape CVC-:

š-étid^vA *my back*
g'éç-Atid^vA *your back*

Verbs of this type also may show a shift to a voiceless vowel in the verb core if the core is monosyllabic and normally contains a voiced vowel:

š-ád^vá *my animal*
g'éç-Ad^vA *your animal*

Verb stems which exhibit this type of alternation are listed with the thematic adjunct accent in parentheses:

-^oátid^vA *back*
-^oád^vá *to possess an animal*

A few verb stems have a distinctive form which occurs only following prefixes composed of a consonant plus -i-. This form of the stem is characterized by a breathy accent on the thematic adjunct and by a final voiceless vowel:

sìd ^v A (sì- + -ìd ^v A)	<i>I descended</i>	sìkA (sì- + -ìkA)	<i>I looked</i>
géd ^v A (g- + -éd ^v A)	<i>he descended</i>	zìgá (z- + -ìgá)	<i>he looked</i>

These stems are listed thus:

-ìgá (-ìkA) *to look*

Some transitive verbs normally characterized by a breathy accent in the thematic adjunct take a level accent in those forms of the primary paradigms in which a vowel cluster results from prefixation:

g-ùkAčA *he saw him*
sì-ukAčA *I saw him*

Stems that exhibit this type of change are listed with the following notation:

-ùkAčA (-'v-) *to see*

A few type B intransitive verbs show a shift from a breathy to a falling accent when the core is followed by -n-:

zù-kU *he went*
zù-ne *will go*

These are listed in the following manner:

zù--U (zù·n-) *to go*

3. *Shifts in the thematic adjunct vowel of transitive verbs in the passive voice.*—Some verbs that normally occur with -u- as the thematic adjunct show a shift to -a- in the passive voice:

sg-ú-kàica	he hit me
ská?-á-kàizane	I was hit

This change cannot be predicted from the phonetic content of the stem nor from its class membership, and is indicated as follows in stem listings:

-ú/á-kàica to hit

4. *The change from a glottalized to a plain sonorant in the initial stem consonant.*—Stems which are based on cores normally beginning with a glottalized sonorant sometimes show a shift to a plain sonorant in forms prefixed by a glottalized consonant. Other verbs, however, retain the glottalized sonorant:

š-úwàne	you hunted	góz-â-wi	your child
č-úwàne	hunt	k-â-wi	his child

Those stems which exhibit this type of change are indicated thus:

-úw/wàne to hunt

5. *The lengthening of a stem-final vowel.*—In "Voicing" it was noted that some vowels which are normally voiceless become voiced and long when followed by a suffix. This lengthening is characteristic of some, but not all, stem-final vowels:

čí-zúwa	I paid him	číd ^v áwa	I stabbed him
ší-zúwa-ñe	we paid him	číd ^v áwane	we stabbed him

Vowels which undergo this type of lengthening are followed by a vowel length symbol in parentheses in stem listings:

-í-zúwa(.) to pay

6. *The introduction of a glottal stop after the stem-final vowel.*—Some verb stems are characterized in certain forms by the introduction of a glottal stop following the stem-final vowel. The glottal stop appears regularly, in forms without suffixes, in the negative mode and in the future tense:

zíd ^v a	he caught him
zázi zíd ^v a?	he didn't catch him
ńíd ^v a?	will catch

In some of these verbs the glottal stop also appears in all forms containing suffixes, together with the rearticulation of the stem-final vowel if the suffix begins with a sonorant:

zíd ^t .ša	he fed him
zíd ^t .ša?-ta	he is feeding him
zíd ^t .ša?a-ñe	they fed him

These verbs are listed thus:

-ídi.ša(?) *to feed*

Other verbs show the glottal stop in word-final position but not in forms containing a suffix:

zí-bádʷu *he awoke him*

ní-bádʷu? *will awaken*

zí-bádʷUSA *he is awaking him*

Verbs of this type are listed with the glottal stop in double parentheses:

-í-bádʷu((?)) *to awaken*

There is at least one verb in the data which contains a final glottal stop in the negative mode and future tense, and retains the glottal stop with vowel rearticulation when followed by a suffix beginning with a sonorant, but which shows a lengthening of the stem-final vowel and no glottal stop when followed by other suffixes:

gùbe *he told him*

gùbeʷe-nĕ *they told him*

zázi gùbe? *he didn't tell him*

gùbe--tA *he is telling him*

This verb is listed as follows:

-ùbe(.?) *to tell*

7. *The voicing of a final vowel or vowel-consonant sequence.*—The future tense of some verbs is characterized by the voicing of certain segments which are voiceless in other forms. This usually involves vowel clusters or sequences of the type -kuya:

číkAI *he lay down*

sódékUYA *I did it*

ńgai *will lie down*

ńdéguya *will do*

These stems are listed in this manner:

-íkAI (fut. -įgai) *to lie down*

-ékUYA (fut. -éguya) *to do*

8. *The retention of aspirated stops under conditions in which unaspirated stops normally appear.*—Stops which are aspirated preceding voiceless vowels normally become unaspirated if the vowel is voiced. A few stems and suffixes, however, retain aspirated stops in all environments:

zíkupAWA *he chopped*

zíkupawaĕ *they chopped*

Stops which remain aspirated before voiced vowels are underlined in the listing of stems:

-íkuPAWA *to chop*

VERB CORE DERIVATION

The verb core is the element which, together with the thematic adjunct, normally comprises the verb stem. The verb core may be a single morpheme and often consists of one or two syllables:

-sti *to give a liquid*

-kača *to see*

-pe *to eat*

-tiša *to speak to*

ca- *to breathe*

-nata *to buy*

Some two-syllable cores and most, if not all, polysyllabic cores show evidence of being derived from simpler forms. However, very few derivational affixes which are still productive can be identified. The majority of polysyllabic verb cores are suspected of being derived for one of the following reasons:

(1) They include sequences of phonemes which recur with great frequency in verb cores, although such sequences cannot be correlated with any common semantic feature. For example:

- | | |
|--------------------------|---------------------|
| a. -WA | in |
| -čAYAWA | <i>to be angry</i> |
| -žá·čÚWA | <i>to awaken</i> |
| -kUPAWA | <i>to chop</i> |
| b. -YA | in |
| -wí·TEYA | <i>to worship</i> |
| -yùCEYA | <i>to carry</i> |
| -wáçAŠAYA | <i>to stir</i> |
| c. -mI | in |
| -wiŋ·niŋI | <i>to care for</i> |
| -disduwiŋI | <i>to be sticky</i> |
| -stid ^v inaŋI | <i>to sweat</i> |
| d. -kUYA | in |
| -za [?] anikUYA | <i>to preach</i> |
| -ñikUYA | <i>to bathe</i> |
| -tikUYA | <i>to cry</i> |
| -wíšikUYA | <i>to scold</i> |

(2) They include sequences of phonemes which occur in two or more semantically related verb cores. For example:

- | | |
|-------------------------|----------------------|
| a. -stU | in |
| -yamastU | <i>to be hungry</i> |
| -pániustU | <i>to be thirsty</i> |
| b. -stA | in |
| -sume [?] estA | <i>to teach</i> |
| -čid ^v ustA | <i>to ponder</i> |

(3) They include sequences of phonemes which, if eliminated from the core, would leave a remainder that would itself be a verb core semantically related to the longer form. For example.:

- | | |
|---|---|
| a. -ci | in |
| -ščú·ci | <i>windpipe</i> ; compare <i>ščú-</i> <i>to swallow</i> |
| It also recurs in a number of semantically unrelated cores: | |
| -sá·baci | <i>to pound</i> |
| -sgú·çuci | <i>to drool</i> |
| b. -çA | in |
| -kúičA | <i>man's sister</i> ; compare <i>-kui</i> <i>wife</i> |
| -d ^v umiçA | <i>to learn</i> ; compare <i>-d^vumi</i> <i>to remember</i> |
| Other cores in which it occurs include the following: | |
| -tá·niçA | <i>to work</i> |
| -wíčá·çA | <i>to listen</i> |

- c. -CA in
 -čáyUCA *to break*; compare čáyú- *to be broken*
 It also recurs in a great many semantically unrelated cores including the following:
 -pé-ruCA *to lick*
 -čê-naca *to chew*
 -ýučídʷi-CA *to rest*
- d. -tU in
 -m̄etU *to freeze*; compare -m̄eʔE *to be frozen* and hâ-m̄e. *ice*
 -baʔtU *to sleep*; compare -baʔ *to be sleepy*
- e. -tA in
 -be-tA *to ask*; compare -be *to tell*
- f. -da- in
 -dácšçACA *to cut*; compare -čšçACA *to cut*
- g. -wai- in
 -wáičA *to be hot (liquid)*; compare -čA *to be hot*
 -wáistAYA *to be cold (liquid)*; compare -stAYA *to be cold*

VERB CLASSES

The primary division in verbs is between transitive and intransitive verbs. Transitive verbs occur with a full set of pronominal affixes (except Decade Class 180 and, in some cases, Decade Class 130) while most intransitive verbs occur with only those of Decade Classes 100, 110, and 120. Some intransitive verbs occur with affixes of Decade Class 140; others occur with Decade Class 180; but none occur with Decade Classes 130, 150, or 160. Certain verbs which are intransitive according to this inflectional definition must be translated by an English transitive expression with a third person object:

šâuta *I killed it*

The transitive-intransitive dichotomy is thus based on structural and not semantic criteria.

TRANSITIVE VERBS

Transitive verb stems are classified on the basis of their occurrence with specific allomorphs of inflectional affixes. The most important such classification is based on allomorphs of the pronominal prefixes. While the number of verb classes is considerable, this number is only a small fraction of what theoretically could result from all possible combinations of the many allomorphs of inflectional affixes. There are rather strict limitations on the freedom of distribution of specific allomorphs. Groups of allomorphs rather than individual allomorphs may be viewed as independent units in an examination of the combinations which may constitute a complete verb paradigm.

Allomorphs of Century Class 100 occurring with transitive verbs may be arranged in two sets of three partial paradigms. These are designated 1a, 2a, 3a, 1b, 2b, and 3b (chart 5). Each allomorph is listed by its phonemic shape and its reference number. In general,

Partial paradigm	Person		Mode						
	Subj.	Obj.	Indicative	Negative	Dubitative	Hortative	Negative hortative	Future hortative	
1a	1st	2d	ʂa- 141A	ʂa- 142A	ʂa- 143A	ʂa- 144A	ʂa- 145A	ʂa- 146A	
2a	2d	1st	dʂu- 151A	dʂu- 152A	dʂu- 153A	gu- 154A	gu- 155A	dʂu- 156A	
3a	3d	1st	sg- 161A	sdv- 162A	tóʂ- 163A	nóʂ- 164A	nóʂ- 165A	nóʂ- 166A	
	3d	2d	gʂʂ- 171A	gʂʂ- 172A	dʂʂ- 173A	ʂ- 174A	sdv- 175A	dʂʂ- 176A	
	1st	3d	si- 101A	sg- 102A	ti- 103A	ka- 104A	ni- 105A	ni- 106A	
	2d	3d	ʂ- 111A	ʂ- 112A	ʂ- 113A	p- 114A	sg- 115A	ʂ- 116A	
	3d	3d	g- 121A	g- 122A	dv- 123A	pi- 124A	pi- 125A	pi- 126A	

1b	1st	2d	ša- 141B	ša- 142B	ča- 143B	ša- 144B	ša- 145B	ča- 146B
2b	2d	1st	ču- 151B	ču- 152B	ču- 153B	ku- 154B	ku- 155B	ču- 156B
3b	3d	1st	sku- 161B	sč- 162B	tédi- 163B	nódi- 164B	nódi- 165B	nódi- 166B
	3d	2d	gédi- 171B	gédi- 172B	d'vdi- 173B	di- 174B	sč- 175B	d'vdi- 176B
	1st	3d	či- 101B	sdvj- 102B	ti- 103B	ka- 104B	ni- 105B	ni- 106B
	2d	3d	ši- 111B	ši- 112B	ci- 113B	pi- 114B	sdvj- 115B	ci- 116B
	3d	3d	zi- 121B	zi- 122B	di- 123B	pi- 124B	pi- 125B	pi- 126B

CHART 5.—*Transitive Verb Partial Paradigms*

the occurrence with a specific verb of one allomorph within a partial paradigm presupposes the potential occurrences of all other allomorphs of that partial paradigm with the same verb. For instance, if a verb occurs with allomorph 141A it may be predicted that the same verb will occur with 142A, 143A, 144A, 145A, and 146A; if it occurs with 151A it may be predicted that it also will occur with 152A, 153A, 161A, etc.

The combinations of three partial paradigms (1a or 1b with 2a or 2b and 3a or 3b) plus, in certain cases, allomorphs of Decade Class 130, form the primary paradigms of a transitive verb. The partial paradigms combine in four different ways resulting in four principal classes of transitive verbs:⁵

Class A verbs occur with partial paradigms 1a, 2a, and 3a.

Class B verbs occur with partial paradigms 1b, 2b, and 3a.

Class C verbs occur with partial paradigms 1a, 2b, and 3b.

Class D verbs occur with partial paradigms 1b, 2a, and 3b.

Class A transitive verbs occur with the following allomorphs of Decade Class 130:

zi-	zi-	di-	pi-	pi-	pi-
131A	132A	133A	134	135	136

Those of Class B occur with the following:

č-	č-	č-	pi-	pi-	pi-
131B	132B	133B	134	135	136

Verbs of Classes C and D do not occur with prefixes of Decade Class 130.

The primary paradigms of all four classes of transitive verbs are given in full in Appendix 1, page 143. It should be noted that this four-fold classification applies only to verbs with singular object. All transitive verbs take A-allomorphs of the pronominal prefixes in forms indicating dual or plural object:

ší-zúWA (111B + stem)	<i>you paid him</i>
šá-ʔáizúWA (111A + stem)	<i>you paid them two</i>
šáiyá-zúWA (111A + stem)	<i>you paid them</i>

A further subclassification of transitive verbs may be made on the basis of their occurrence with specific allomorphs of the inflectional suffixes. At least eight subclasses may be defined in terms of occurrence with allomorphs of suffixes 401, 501, and 502. Verbs of Subclass 1 take allomorphs 401E, 501A, and 502A:

síukàier-tA	<i>I am hitting him</i>
šíukàiza-nĕ	<i>we two hit him</i>
šíukàiza-nĕ	<i>we hit him</i>

⁵ There is one transitive verb in the data which does not conform to any of the four major classes: -auʔu to give a long or flat object. In general it takes allomorphs of partial paradigms 1b, 2b, and 3b. However, the -i- is omitted from the prefix in all forms except those expressing first person subject with third person object in the indicative, dubitative, negative hortative, and future hortative modes: čəuʔu (či- + -auʔu) *I gave it to him*, but zəuʔu (z- + -auʔu) *he gave it to him*.

Verbs of Subclass 2 occur with the B-allomorphs of these three suffixes (401B, 501B, and 502B):

śúkača-níkUYA	<i>I am looking at him</i>
śúkača-nəTI	<i>we two saw him</i>
śúkača-ŋE	<i>we saw him</i>

Verbs of Subclass 3 take the C-allomorphs (401C, 501C, and 502C):

éidʷaʔ-tíkUYA	<i>I am catching him</i>
śídʷaʔ-dʷI	<i>we two caught him</i>
śídʷaʔ-tA	<i>we caught him</i>

Subclass 4 transitive verbs occur with allomorphs 401F, 501D and 502D:

éi-bádʷU-sA	<i>I am awakening him</i>
śi-bádʷU-mA	<i>we two awakened him</i>
śi-bádʷU-mE	<i>we awakened him</i>

The remainder of the subclasses are poorly represented in the data, each being attested by a single verb. As far as the data show, verbs of Subclasses 5, 6, and 7 do not occur with the continuative action suffix (401). Those of Subclass 5 occur with allomorphs 501F and 502F in the dual and plural:

śúni-mAŞUTI	<i>we two know him</i>
śúni-mASA	<i>we know him</i>

Verbs of Subclass 6 take allomorphs 501G and 502I:

śíyú.kami-ŞUTI	<i>we two waited for him</i>
śíyú.kami-ŞE	<i>we waited for him</i>

Those of Subclass 7 occur with allomorphs 501H and 502G:

śíyêiŋA-pA	<i>we two found him</i>
śíyêiŋA-wA	<i>we found him</i>

Subclass 8 transitive verbs occur with allomorphs 401A, 501H, and 502H:

śúbe.tau-kUYA	<i>I am asking him</i>
śúbe.tA-pA	<i>we two asked him</i>
śúbe.tA-wE	<i>we asked him</i>

Transitive verbs furthermore occur with a different allomorph of suffix 502 if suffix 401 is also present than they do in the simpler forms. Subclass 1 verbs take allomorph 502L in plural continuative forms:

śúkàiciti-YA	<i>we are hitting him</i>
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Compare:

śúkàiza-ŋE	<i>we hit him</i>
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Verbs of other subclasses occur with allomorph 502M in the plural continuative:

śúkačaniguya-SE	<i>we are looking at him</i>
-----------------	------------------------------

Compare:

šíukača-ne *we saw him*

The distribution of specific allomorphs of suffix 402 correlates with the subclasses outlined above. Examples are lacking for the occurrence of this suffix with verbs of several of the subclasses. So far as the data go, however, allomorphs of 402 correlate with homophonous allomorphs of 502:

šíukača-ne *I came to see him*

čí-zúwa--ňe *I came to pay him*

Compare:

šíukača-ne *we saw him*

ší-zúwa--ňe *we paid him*

Transitive verb subclasses crosscut the major classes previously described. The data contain examples, for instance, of Class A verbs which belong to Subclasses 1, 3, 4, and 5. A single designation (A1, A3, A4, A5, etc.) may be used to indicate both the major class and the subclass to which the transitive verb belongs.

INTRANSITIVE VERBS

Like transitive verbs, intransitive verbs are classified on the basis of the particular pronominal allomorphs with which they occur. There are, however, many more intransitive than transitive verb classes. Furthermore, intransitive verbs in general may be transitivized by the addition of the benefactive suffix. This means, in effect, that these intransitive verbs belong not only to their own intransitive class, but also are linked to a transitive class.

Major classes of intransitive verbs are designated by a code composed, in most cases, of two numbers (e.g., 1-3). The first number identifies the allomorphs of the third person affixes (121-126) as well as the first person negative (102) and the second person negative hortative (115) affixes with which the verb occurs. The code numbers with their corresponding sets of allomorphs are tabulated below. Indicated in the tabulation are allomorphs of affixes 121, 123, 124 and 102. Allomorphs of 122 are identical in phonetic content to those of 121, while the same is true of 115 in relation to 102, and of 125 and 126 in relation to 124.

1.	121A	123A	124G	102A
	g-	dʷ-	piʔ-	sg-
2.	121A	123A	124C	102A
	g-	dʷ-	p-	sg-
3.	121B	123B	124A	102B
	zi-	di-	pi-	sdʷi-
4.	121C	123C	124G	102C
	k-	č-	piʔ-	sk-

5.	121C	123C	124C	102C
	k-	č-	p-	sk-
6.	121D	123D	124B	102D
	ḳ-	č̣-	pi-	sḳ-
7.	121D	123D	124D	102D
	ḳ-	č̣-	p̣-	sḳ-
8.	121E	123E	124E	102E
	ga-	d ^{va} -	pa-	sga-
9.	121F	123F	124F	102F
	káʔ-	čáʔ-	páʔ-	skáʔ-
10.	121G	123G	124G	102G
	z-	d-	piʔ-	sdʔ-
11.	121G	123G	124C	102G
	z-	d-	p-	sdʔ-
12.	121H	123H	124B	102H
	č-	ṭ-	pi-	sč̣-
13.	121I	123I	124B	102I
	či-	ṭi-	pi-	sč̣i-
14.	121J	123J	124G	102J
	c-	t-	piʔ-	sč-

Some intransitive verbs, because of semantic limitations, occur only in the third person. These are identified by a single code number in accordance with the above scheme. The data include examples of verbs of this type belonging to Classes 1, 4, 6, 9, 10, 13, and 14:

gágóçati	<i>flower, it blossomed</i> (Class 1)
kàč̣a	<i>it rained</i> (Class 4)
kápaṣ̌i	<i>it is dark</i> (Class 6)
káʔámuca	<i>it thundered</i> (Class 9)
zèstaya	<i>it is breezy</i> (Class 10)
čiya-ti	<i>it is sharp</i> (Class 13)
cídʔu	<i>it cost</i> (Class 14)

The second number of the code identifies allomorphs of the first and second person affixes, with the exception of the first person negative and the second person negative hortative morphemes. Tabulated below are the allomorphs of affixes 101, 103, 104, 106, 111, 113 and 114 corresponding to each code number. Allomorphs of 105 are phonetically identical to those of 104; allomorphs of 112 correlate with those of 111; and allomorphs of 116 with those of 113.

1.	101A	103A	104A	106A	111A	113A	114A
	si-	ti-	ka-	ni-	š-	ç-	p-
2.	101A	103A	104C	106A	111A	113A	114D
	si-	ti-	k-	ni-	š-	ç-	č̣-
3.	101A	103A	104A	106A	111A	113A	114H
	si-	ti-	ka-	ni-	š-	ç-	ʔ-
4.	101A	103A	104A	106A	111C	113C	114B
	si-	ti-	ka-	ni-	š-	c-	pi-
5.	101A	103A	104C	106A	111C	113C	114C
	si-	ti-	k-	ni-	š-	c-	ṭ-
6.	101A	103A	104A	106A	111C	113C	114H
	si-	ti-	ka-	ni-	š-	c-	ʔ-

7.	101B	103B	104B	106B	111C	113C	114B
	ši-	ti-	ka-	ni-	š-	c-	pi-
8.	101C	103C	104C	106C	111A	113A	114D
	s-	t-	k-	n-	š-	ç-	č-
9.	101C	103C	104G	106C	111A	113A	114D
	s-	t-	n-	n-	š-	ç-	č-
10.	101C	103C	104M	106C	111A	113A	114D
	s-	t-	š-	n-	š-	ç-	č-
11.	101D	103D	104D	106D	111D	113D	114D
	š-	táʔ-	káʔ-	n-	š-	çáʔ-	č-
12.	101D	103D	104N	106D	111D	113D	114D
	š-	táʔ-	š-	n-	š-	çáʔ-	č-
13.	101C	103C	104C	106C	111E	113E	114E
	s-	t-	k-	n-	góʔ-	dʷóʔ-	ʔ-
14.	101D	103D	104D	106D	111E	113E	114E
	š-	táʔ	káʔ	n-	góʔ-	dʷóʔ-	ʔ-
15.	101D	103D	104H	106D	111E	113E	114E
	š-	táʔ-	n-	n-	góʔ-	dʷóʔ-	ʔ-
16.	101E	103H	104C	106B	111A	113A	114A
	ši-	tíʔ-	k-	ni-	š-	ç-	p-
17.	101E	103H	104F	106B	111A	113A	114A
	ši-	tíʔ-	ni-	ni-	š-	ç-	p-
18.	101E	103H	104Q	106B	111A	113A	114A
	ši-	tíʔ-	sti-	ni-	š-	ç-	p-
19.	101E	103H	104F	106B	111C	113C	114B
	ši-	tíʔ-	ni-	ni-	š-	c-	pi-
20.	101E	103H	104Q	106B	111C	113C	114B
	ši-	tíʔ-	sti-	ni-	š-	c-	pi-
21.	101F	103H	104I	106E	111C	113C	114B
	síʔ-	tíʔ-	níʔ-	níʔ-	š-	c-	pi-
22.	101F	103H	104P	106E	111C	113C	114B
	síʔ-	tíʔ-	stíʔ-	níʔ-	š-	c-	pi-
23.	101G	103E	104J	106F	111E	113E	114E
	sóʔ-	tóʔ-	nóʔ-	nóʔ-	góʔ-	dʷóʔ-	ʔ-
24.	101G	103E	104M	106F	111E	113E	114E
	sóʔ-	tóʔ-	š-	nóʔ-	góʔ-	dʷóʔ-	ʔ-
25.	101H	103F	104K	106G	111F	113F	114F
	sád-	tád-	nád-	nád-	gád-	dʷád-	d-
26.	101H	103F	104O	106G	111F	113F	114F
	sád-	tád-	st-	nád-	gád-	dʷíd-	d-
27.	101I	103E	104J	106F	111E	113E	114E
	sg-	tóʔ-	nóʔ-	nóʔ-	góʔ-	dʷóʔ-	ʔ-
28.	101J	103G	104L	106H	111G	113G	114G
	sku-	tódi-	nódi-	nódi-	gódi-	dʷídi-	di-

Various combinations of the two code numbers identify the major intransitive verb classes. At least 31 such classes are attested by the data.⁶ Classes 1-1, 1-3, 1-16, 4-3, 4-5, 5-2, 5-8, 6-3, 7-13,

⁶ A few intransitive verbs have been noted which occur with allomorphs 101E ší-, 111E góʔ- and 121D k- in the indicative mode: šé-na *my eye*, góʔá-na *your eye*, ká-na *his eye*. Full paradigms (including the hortative modes) have never been obtained for these verbs. Since they do not fit any of the major classes outlined here they are listed in the vocabulary as unclassified.

7-15, 8-14, 9-11, 10-6, 10-7, 12-27, 13-28 and 14-4 are apparently confined to singular verb stems. Classes 1-17, 2-23, 5-9, 10-21 and 14-19 are found only among plural verb stems, and Classes 1-18, 2-24, 5-10, 9-12, 10-22, 11-26, and 14-20 among dual verb stems. Class 11-25 occurs in both the singular and the plural, and Class 3-27 in all three numbers.

There is a certain degree of correlation between classes characteristic of the three numbers. Verbs, for example, which belong to Class 1-17 in the plural number normally belong to Class 1-18 in the dual and Class 1-1 in the singular. Other common correlations are as follows:

Singular	Dual	Plural
5-8	5-10	5-9
9-11	9-12	5-9
10-7	10-22	10-21
14-4	14-20	14-19

Furthermore, dual Class 2-24 is commonly linked with plural Classes 2-23 or 11-25. These combinations, however, occur with a variety of singular classes.

Class membership does not necessarily imply the potential occurrence of the full set of affixes represented by the code numbers. Some verbs, notably those referring to body parts, are seldom if ever found in the hortative modes and only rarely in certain other forms. The code numbers, nevertheless, indicate at least the indicative affixes with which the verb occurs.

Class 7-15 verbs are unique in that they often occur, not only with the allomorphs indicated by the code numbers, but also with allomorphs of Decade Class 140. Specifically, verbs of this class take allomorphs 141B *ša-*, 142B *ša-*, 143B *ča-*, 144B *ša-*, 145B *ša-* and 146B *ča-*. In this context, affixes of Decade Class 140 may express either first person subject with second person object or the reverse:

šáukí-ni you are my friend (or) I am your friend

Verbs belonging to Class 7-15 are, in general, those which refer to kinship or similar relationships, or which indicate possession.

Type B intransitive verbs fall into the general scheme of classification, although many of the classes are not represented in these verbs. Furthermore, in Type B verbs ending in a voiceless vowel there is no contrast between aspirated and unaspirated pronominal affixes. Aspiration in such cases is ignored in stem classification. For example, *zùkū* he went, occurs with an aspirated pronominal affix, -k-. The stem, however, belongs to Class 1-1, a class normally taking *g-* in the third person indicative. This classification is consistent with the occurrence of other affixes such as -d^v- in the third person dubitative: *zùd^vū* maybe he went.

The occurrence of affix 181 is rather restricted and apparently not related to class membership except that allomorphs of this affix correlate with those of affix 121. The data indicate a correlation of allomorph 181A with 121A or 121E, 181B with 121D, and 181D with 121G:

sg-â-m̄A (181A + stem)	<i>one's houses</i>
g-â-m̄A (121A or 121E + stem)	<i>his house</i>
sk-âukui (181B + stem)	<i>one's wives</i>
k-âukui (121D + stem)	<i>his wife</i>
sč-î-k̄A (181D + stem)	<i>one's mouths</i>
z-î-k̄A (121G + stem)	<i>his mouth</i>

Allomorph 181C occurs in the data only in sčâu?u *a crowd*. An apparently related form is gâu?u *he dwells*, although the correlation is not certain.

Intransitive verbs may be subclassified, as are transitive verbs, on the basis of their occurrence with specific allomorphs of the inflectional suffixes. Since intransitive verbs are listed and classified separately for the three numbers, affixes of Century Class 500 are not involved, and such a subclassification would be based solely on allomorphs of suffix 401. Rather than designate intransitive subclasses by a code, it is simpler to indicate directly the allomorph of suffix 401 with which the verbs occur.

Paradigms illustrating the major intransitive verb classes are to be found in Appendix 1, page 143.

VERBAL AUXILIARIES

Verbal auxiliaries are a class of words which always are inflected to indicate person and sometimes are inflected to indicate other grammatical categories as well. They are distinguished formally from verbs in that they are never inflected to indicate future tense. Semantically and functionally they differ from verbs in that alone they cannot constitute a predicate.

The function of the verbal auxiliary is to indicate the person of the subject or the subject and object of an action when this is not otherwise indicated. The most common occurrence of verbal auxiliaries is in conjunction with verbs in the future tense. In such cases the verb does not include a pronominal affix:

nùpE si	(future tense prefix, n- + verb stem followed by auxiliary, si)
	<i>I will eat</i>
ńí-zúWA si	<i>I will pay him</i>

Compare:

sùpE	(first person prefix, s- + verb stem) <i>I ate</i>
čí-zúWA	<i>I paid him</i>

The verbal auxiliary may also occur following a verb containing an allomorph of affix 124 (third person subject with third person object

in the hortative mode). The result is a hortative expression with an added pronominal element:

piʔinàta si (hortative prefix, 124G piʔ-, + verb stem followed by auxiliary, si) *I want him to buy it*

Compare:

piʔinàta *let him buy it*

Occasionally an uninflected word will function as a predicate, in which case a verbal auxiliary indicates the subject and object:

té·né si *I like him*

The word té·né fulfills the function ordinarily performed by a verb, both semantically (it may be translated *to like*) and syntactically (it fills a predicate slot) although it is never inflected.

The basic forms of the verbal auxiliaries are listed in chart 6. As in the case of pronominal prefixes occurring with transitive verbs, verbal auxiliaries appear with seven principal subject-object combinations. In addition, there is a form expressing fourth person subject with third person object, distinctive forms for the passive voice, and a form expressing indefinite subject. Unlike the set of verb affixes, however, only three modes are recognized. A comparison with charts 1 and 2 reveals that verbal auxiliaries are based on a set of prefixes identical in form to certain allomorphs of the affixes of Century Class 100. Verbal auxiliaries actually have nothing that can be regarded as a stem unless it is the vowel -u (or -i in a few cases). This vowel, however, is comparable to the thematic adjunct of verbs. The -m̄a occurring in many forms may best be regarded as a suffix, although it cannot be assigned a meaning.

Subject	Object	Indicative	Negative	Dubitative
1st	3d	si	sgu	ti
2d	3d	ʂu	ʂu	ɕu
3d	3d	gu	gu	dʷu
4th	3d	ziúm̄a	ziúm̄a	diúm̄a
1st	2d	ʂáúm̄a	ʂáúm̄a	záúm̄a
2d	1st	dʷúm̄a	dʷúm̄a	dʷúm̄a
3d	1st	sgúm̄a	sdʷúm̄a	túzum̄a
3d	2d	gúzúm̄a	gúzúm̄a	dʷúzúm̄a
Passive voice				
	1st person	skáʔám̄asa	sčáʔám̄asa	téʔém̄asa
	2d person	šáʔám̄asa	šáʔám̄asa	cáʔám̄asa
	3d person	čáʔám̄asa	čáʔám̄asa	táʔám̄asa
	Indefinite subject	sgúñe		

CHART 6.—Basic Forms of Verbal Auxiliaries

Transitive verbs occur with the full set of verbal auxiliaries:

núkača si	<i>I will see him</i>
zázi núkača sgu	<i>I won't see him</i>
núkača ti	<i>maybe I will see him</i>
núkača šu	<i>you will see him</i>
zázi núkača šu	<i>you won't see him</i>
núkača çu	<i>maybe you will see him</i>
núkača gu	<i>he will see him</i>
zázi núkača gu	<i>he won't see him</i>
núkača d'u	<i>maybe he will see him</i>
núkača zúma	<i>he (fourth person) will see him</i>
zázi núkača zúma	<i>he won't see him</i>
núkača duma	<i>maybe he will see him</i>
núkača šáúma	<i>I will see you</i>
zázi núkača šáúma	<i>I won't see you</i>
núkača záuma	<i>maybe I will see you</i>
núkača d'uma	<i>you will see me</i>
zázi núkača d'uma	<i>you won't see me</i>
núkača d'uma	<i>maybe you will see me</i>
núkača sgu ^{ma}	<i>he will see me</i>
zázi núkača sd'uma	<i>he won't see me</i>
núkača túzuma	<i>maybe he will see me</i>
né'èkačane- ská'ámASA	<i>I will be seen</i>
zázi né'èkačane- scá'ámASA	<i>I won't be seen</i>
né'èkačane- té'émASA	<i>maybe I will be seen</i>
né'èkačane- šá'ámASA	<i>you will be seen</i>
zázi né'èkačane- šá'ámASA	<i>you won't be seen</i>
né'èkačane- cá'ámASA	<i>maybe you will be seen</i>
né'èkačane- cá'ámASA	<i>he will be seen</i>
zázi né'èkačane- čá'ámASA	<i>he won't be seen</i>
né'èkačane- tá'ámASA	<i>maybe he will be seen</i>

Most intransitive verbs occur with those verbal auxiliaries listed in the first three rows of chart 6:

núpe si	<i>I will eat</i>
zázi núpe sgu	<i>I won't eat</i>
núpe ti	<i>maybe I will eat</i>
núpe šu	<i>you will eat</i>
zázi núpe šu	<i>you won't eat</i>
núpe çu	<i>maybe you will eat</i>
núpe gu	<i>he will eat</i>
zázi núpe gu	<i>he won't eat</i>
núpe d'u	<i>maybe he will eat</i>

A few intransitive verbs (those which are prefixed by sgu- or sku- in the first person indicative) occur with the verbal auxiliaries which normally express third person subject with first object, third person subject with second person object, and fourth person subject with third person object:

nigai sgu ^{ma}	<i>I will lie down</i>
zázi nigai sd'uma	<i>I won't lie down</i>

ñgai túzúñA	<i>maybe I will lie down</i>
ñgai gúzúñA	<i>you will lie down</i>
zázi ñgai gúzúñA	<i>you won't lie down</i>
ñgai d'úúzúñA	<i>maybe you will lie down</i>
ñgai zúñA	<i>he will lie down</i>
zázi ñgai zúñA	<i>he won't lie down</i>
ñgai d'fúñA	<i>maybe he will lie down</i>

In addition to their basic forms, verbal auxiliaries may be inflected to indicate dual or plural subject and/or object. Those forms indicating dual or plural subject, in general, are constructed from the basic forms by the addition of a suffix. Dual subject is expressed by the addition of either the suffix -ʔu, with concomitant lengthening of the preceding vowel, to basic forms which terminate in -u, or the suffix -ñA to forms which terminate in -ñA:

nózá.ʔAbeʔ gú.ʔu	<i>they two will eat</i>
ñí-zúwa-ñA sáumañA	<i>we two will pay you</i>

Note that dual subject is indicated in both the verb and the auxiliary. Compare:

núpe gu	<i>he will eat</i>
ñí-zúwa sáuma	<i>I will pay you</i>

Plural subject is expressed by the addition of the suffix -sa, together with the development of a glottal accent on the preceding syllable in forms lacking the -ñA suffix:

nózá.ʔApe gúsa	<i>they will eat</i>
ñí-zúwa-ñe sáuma ^s sa	<i>we will pay you</i>

Some dual and plural verbal auxiliaries are constructed not from the basic form, but from distinctive dual/plural forms. The following are those which differ from the basic forms:

1. First person subject with third person object indicative:

súzú-, as in nózá.ʔAbeʔ súzú.ʔu *we two will eat*

2. First person subject with third person object dubitative:

túzú-, as in nózá.ʔAbeʔ túzú.ʔu *maybe we two will eat*

3. Second person subject with third person object indicative and negative:

gúzú-, as in nózá.ʔAbeʔ gúzú.ʔu *you two will eat*

4. Second person subject with third person object dubitative:

d'úzú-, as in nózá.ʔAbeʔ d'úzú.ʔu *maybe you two will eat*

Those verbal auxiliaries which terminate in -ñA may be inflected to indicate dual or plural object. This involves a change similar to the expansion of thematic adjuncts in verbs plus, in the case of plural

object, the addition of *-zu-*. The following indicates the forms of the auxiliaries expressing singular, dual, and plural object:

<i>singular</i>	<i>dual</i>	<i>plural</i>
-úṁA	-ú.ʔúṁA	-ú.wázúṁA
-áúṁA	-á.ʔáúṁA	-á.wázúṁA
-íúṁA	-í.ʔíúṁA	-í.wázúṁA

These forms are illustrated in the following examples:

ńí-zúWA dʷúṁA	<i>you will pay me</i>
ńé.ʔéizúWA dʷú.ʔúṁA	<i>you will pay us two</i>
ńéíyázúWA dʷú.wázúṁA	<i>you will pay us</i>
ńí-zúWA sáúṁA	<i>I will pay you</i>
ńé.ʔéizúWA sá.ʔáúṁA	<i>I will pay you two</i>
ńéíyázúWA sá.wázúṁA	<i>I will pay you all</i>
núkača zúṁA	<i>he (fourth person) will see him</i>
ní-yúkača zí-yúṁA	<i>he will see them two</i>
núwákača zú.wázúṁA	<i>he will see them</i>

In addition to being inflected for person and number, verbal auxiliaries may occur with one of three condition suffixes. These are *-ńE*, corresponding to the verbal suffix 601A; *-de*, corresponding to suffix 601B; and *-nu*, corresponding to suffix 602:

núkača s-ńE	<i>when I will see him</i>
ńí-zúWA.ńE. gúsa--de	<i>when they will pay him</i>
ńgai gúzúṁA-nu.	<i>if you will lie down</i>

UNINFLECTED WORDS

Included in the major class of uninflected words are those which express a wide variety of functions and exhibit a considerable number of derivational formations. A division of these words into function classes will be outlined in the section to follow, although a full description of syntactic function will be reserved for the chapter on syntax. Subclasses based on derivational formations will be described under "Derivation."

Uninflected words belong to one of the following function classes depending on their grammatical function:

Referentials.—All uninflected words, with the exception of pronouns, that may alone fill a subject or an object slot are referentials. These are, in general, nounlike words such as names of beings, things, and places.

Pronouns.—This is a class of rather limited membership comparable to English pronouns. The most commonly occurring members of this class are:

hínʋ	<i>I, we</i>	we	<i>that one (inobviate)</i>
híʃʋ	<i>you</i>	ńí-ga	<i>another one</i>
du	<i>this one</i>	ʔískA	<i>one</i>
he	<i>that one</i>	hau	<i>someone</i>

Attributives.—Included in this class are a variety of adjective and adverb-like words. They may modify a referential, a pronoun, or a verb:

ráwá·díya	<i>good dog</i>
hínũ ráwá·	<i>I am good</i>
ráwá·sí·baʔtũ	<i>I slept well</i>

Temporals.—This class is made up of words which specify the relative or the absolute time of an action. Some of the more common temporals are as follows:

súwá	<i>yesterday</i>	há·wíná	<i>right away</i>
híwá	<i>today</i>	má·nu·	<i>a long time</i>
čámá	<i>tomorrow</i>	háma·	<i>long ago</i>
ná·nu	<i>next day</i>	dʔáwá	<i>early</i>
šumí	<i>already</i>	cé·yá	<i>first</i>

Also included are names of days, seasons, or the time of day. Many of these, however, are Spanish loanwords.

Prepositions.—Included in this class are a number of words which specify the location and/or direction of an action with respect to the speaker or to the actor. Among the more common prepositions are the following:

dúké·	<i>that way (near and away from the speaker)</i>
dúwé·	<i>this way (near and toward the speaker)</i>
yúké·	<i>that way (at a distance and away from the speaker)</i>
yúktũ	<i>yonder, away</i>
diʔ	<i>right here</i>
yúsi	<i>from afar</i>

Directionals.—This class comprises a rather limited number of commonly occurring words such as:

dʔi	<i>up</i>
ñə	<i>down</i>
si	<i>back here</i>
sa	<i>back (to previous location)</i>

Also included are the points of the compass which occur with great frequency in native text.

Interrogatives.—Included in this class is the interrogative particle ʔa which, occurring at the beginning of a sentence, makes it a question. Also included are:

zi	<i>what?</i>	há·di	<i>where? (location)</i>
háidí	<i>which one?</i>	hai	<i>where? (destination)</i>
hau	<i>who?</i>	háiwé·	<i>from where?</i>
háiktũ	<i>when?</i>	háikuma·	<i>what direction?</i>

Modals.—This class includes a number of words which fix the mode of a following verb. Negative, negative hortative, and future hortative modes are obligatorily marked by such words:

zázi	<i>not (negative mode)</i>
bá·mí·	<i>don't (negative hortative mode)</i>
ba	<i>future hortative mode marker</i>

In addition, dubitative mode is sometimes marked by *káucigái* *maybe* and hortative mode by the hortatory exclamation, *há.ńé*.

Connectives.—This is a class of very limited membership including *gu and*, *?e and*, and *?ésgæskv but*.

Narrative particles.—This class contains a few short words, *ʃu*, *?e*, *?ai*, *?eu*, and *du*, which occur in various combinations with very high frequency in narrative text. They cannot be translated except in a general way as *and then*.

Exclamations.—Included in this class are a variety of exclamations such as:

ha. <i>yes</i>	hińá <i>O.K.</i>
za <i>no</i>	mə. <i>look!</i>
me. <i>don't</i>	

Most uninflected words are not amenable to internal structural analysis. There are, however, a number of subclasses, largely of quite limited membership, which exhibit specific types of derivational formations. These subclasses will be described below.

Nominalized verbs.—There are three general types of referentials which are derived from verbs by the omission of all verb prefixes and the addition of a nominalizing suffix.

The first type, which principally includes certain body parts, is based on the verb core; i.e., the thematic adjunct is excluded. The nominalizer in such words is regularly *-ni*. The following examples show first the verb form (translatable into English possessed body parts) followed by the nominalized form:

<i>gánásgái</i> <i>his head</i>	<i>násgáini</i> <i>head</i>
<i>gáyú-spi</i> <i>his shoulder</i>	<i>ýú-sbini</i> <i>shoulder</i>
<i>séwł-ʃi</i> <i>my nose</i>	<i>włʃi-ni</i> <i>nose</i>

The second type of nominalized verb also includes body parts primarily and is based on the verb stem (which includes the thematic adjunct) preceded by *h-*. The nominalizer in these words is either *-ni* or *-nani*:

<i>ʃásdi</i> <i>your foot</i>	<i>hásdi?ini</i> <i>foot</i>
<i>ʃá-múčv</i> <i>your toe</i>	<i>há-múčuni</i> <i>toe</i>
<i>ʃá?áčA</i> <i>your tooth</i>	<i>há?áčanani</i> <i>tooth</i>

The third type of nominalized verb includes a wide variety of action words and is based on the verb core preceded by *?ú-* or *?ú-*. The nominalizer in these words is most commonly *-ńi*, but may be any one of several suffixes:

<i>čikupaWA</i> <i>I chopped</i>	<i>?úgupáwańi</i> <i>ax</i>
<i>súgúya</i> <i>I sat down</i>	<i>?úgúyáńi</i> <i>seat</i>
<i>súbe</i> <i>I told him</i>	<i>?ú-bé-tá-ńi</i> <i>story, news</i>
<i>súpe</i> <i>I ate</i>	<i>?úbéwi</i> <i>food</i>
<i>súbáya</i> <i>I built a fire</i>	<i>?úbáyáńi</i> <i>fireplace</i>

Numerals.—Keresan numerals are based on a decimal system. Cardinal numbers 1 through 10 are unanalyzable, although the terms for 7, 8, and 9 are polysyllabic and may be derived forms. The term for *seven*, for instance, includes a sequence of phonemes similar to those in the term for *four*.

ʔiska	<i>one</i>	séisa	<i>six</i>
dʔú-mí	<i>two</i>	màidʔana	<i>seven</i>
čémi	<i>three</i>	gúkúmiši	<i>eight</i>
dʔá-na	<i>four</i>	máyukú	<i>nine</i>
tá-má	<i>five</i>	káci	<i>ten</i>

Numbers 11 through 19 are designated by the word for *ten* followed by the word for *one, two, three, etc.*:

káci ʔiska	<i>eleven</i>
káci dʔu-	<i>twelve</i> (note the omission of -mí- here and in derived forms)
káci čémi	<i>thirteen</i>

The addition of the suffix -wa or -ya to the terms for cardinal numbers 1 through 10 results in forms that occur both in the designations for 20, 30, 40, etc. and, in other contexts, as ordinal numbers. The suffix -ya occurs following the terms for two and three, while -wa is suffixed to the remainder of the number terms:

dʔú-ya	<i>twice, second</i>
dʔú-ya káci	<i>twenty</i>
čémiya	<i>three times, third</i>
čémiya káci	<i>thirty</i>
dʔá-nawa	<i>four times, fourth</i>
dʔá-nawa káci	<i>forty</i>

References to pueblos and their inhabitants.—Place names are sometimes derived from the term designating an inhabitant of that place, while in other cases the reverse is true. The former type of derivation involves the addition of the suffix -zé:

ti-wá	<i>a Tiwa Indian</i>	ti-wá-zé	<i>a Tiwa Pueblo</i>
hé-miši	<i>a person from Jemez</i>	hé-miši-zé	<i>Jemez Pueblo</i>
sâ-ni	<i>a person from Zuni</i>	só-nizé	<i>Zuni Pueblo</i>

The addition of the suffix -mE to a place name indicates an inhabitant of that place:

dámáyá	<i>Santa Ana Pueblo</i>	dámáyá-mE	<i>a person from Santa Ana</i>
dʔi-wi	<i>Santo Domingo Pueblo</i>	dʔi-wi-mE	<i>a person from Santo Domingo</i>

Diminutives and augmentatives.—The prefix ró- occurs in a large number of words indicating smallness:

ró-skíši	<i>little</i>
ró-ká-páši	<i>thin</i>
ró-ká-šika	<i>narrow</i>
ró-káci	<i>shallow</i>
ró-cičá	<i>a small person</i>

The prefix *mé-*, on the other hand, occurs with words expressing largeness:

<i>mé-zíči</i>	<i>big</i>
<i>mé-ká-páši</i>	<i>thick</i>
<i>mé-ká-tíka</i>	<i>wide (something rigid)</i>
<i>mé-káči</i>	<i>deep</i>
<i>mé-éíya</i>	<i>wide (something like cloth)</i>
<i>mé-cičá</i>	<i>a tall person</i>

Derived prepositions.—Many prepositions are derived from a combination of two morphemes. In these words *dú-* expresses nearness and *yú-* distance. Among the second elements, *-ké-* expresses motion away from the speaker, *-wé-* motion toward the speaker, *-si* a return, and *-?ai* a fixed location:

<i>dúké-</i>	<i>that way (near and away from the speaker)</i>
<i>dúwé-</i>	<i>this way (near and toward the speaker)</i>
<i>yúké-</i>	<i>that way (at a distance and away from the speaker)</i>
<i>yúwé-</i>	<i>this way (at a distance and toward the speaker)</i>
<i>yúsi</i>	<i>back from afar</i>
<i>yú?ái</i>	<i>there (located at a distance)</i>

Points of the compass.—Several types of derived forms are based on the points of the compass, *dʷídʷA* north, *bə* west, *ku* south, and *há-east*. Motion toward the cardinal points of the compass is expressed by the following derived forms:

<i>dʷídʷámí</i>	<i>toward the north</i>
<i>bánámí</i>	<i>toward the west</i>
<i>kúwámí</i>	<i>toward the south</i>
<i>há-námí</i>	<i>toward the east</i>

Motion from the cardinal points is likewise expressed by derived forms:

<i>há-ní</i>	<i>from the east</i>
<i>bóní</i>	<i>from the west</i>

Terms for northeast, northwest, southeast, and southwest result from a combination of modified forms of the terms for the cardinal points:

<i>dʷídiyabó</i>	<i>northwest</i>
<i>kúyabó</i>	<i>southwest</i>

Less frequently occurring forms derived from the terms for the points of the compass include those designating the east or the west side of the river (the Rio Grande) and those designating the four corners of the pueblo world:

<i>bónísdé</i>	<i>the west side</i>
<i>há-šukú</i>	<i>Santa Fe (literally east corner)</i>

Interrogatives.—A large majority of interrogatives begin with ha-, suggesting that this is a derivational morpheme:

hau	<i>who?</i>
hai	<i>where? (destination)</i>
há-di	<i>where? (location)</i>
háiwé-	<i>from where?</i>
háíkuma-	<i>what direction?</i>
háíkū	<i>when?</i>
háídí	<i>which one?</i>
háécū	<i>how many?</i>

CLITICS

Clitics are a class of morphemes which do not effect morphophonemic voicing of a previous vowel as do suffixes (see "Voicing") but which, on the basis of distributional evidence, are not treated as free words (see "Units of Analysis"). Their position, then, is intermediate between that of an affix and a free word.

In terms of function there are four kinds of clitics, all of which occur as postclitics:

1. Pluralizing clitics occur following a limited number of referentials and verbs which function as subject or object. The most commonly occurring of these clitics is -d^vé-mí:

ká-wi-d ^v é-mí	<i>his children</i>
ka búna-d ^v é-mí	<i>his servants</i>

2. Locative-instrumental clitics occur following words which function as subject or object and include the morphemes -di, -diká, -ši, and -si:

mé-sa-di	<i>on the table</i>
hínū-diká	<i>by me (through my instrumentality)</i>
gawá-yu-ši	<i>by horseback</i>
gá-íná-si	<i>in his house</i>

3. The nominalizer, -šé, is often attached to verbs which function as the subject or object of a clause:

gáwínuska-ti-šé	<i>his two hearts</i>
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4. The clitics -šanu and -d^vanu (often contracted to -sau and -d^vau with nasalized vowels) occur following referentials which refer to living beings or following kinship terms (verbs) which function as subject or object. They occur rather frequently in narrative text recounting happenings of the distant past. The clitic -šanu occurs in ordinary narrative while -d^vanu carries a dubitative connotation:

káukui-šanu	<i>his wife</i>
kád ^v úmā-d ^v anu	<i>his brother (reported to be)</i>

Both pluralizing and narrative past tense clitics may occur in the same word. In such cases the past tense clitic always follows the pluralizing clitic:

čá-wi-d ^v é-mí-šanu	<i>his children</i>
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SYNTAX

In "Morphology," words were described and classified on the basis of their internal structure. The emphasis in this section is on the grammatical function of words and phrases and the sequential arrangement of functional units. The word-class categories of the previous section are abandoned except in describing the kinds of words which may fill a function slot. This approach is adopted for the reason that there is in Santa Ana Keresan a lack of correlation between structural classes and function classes. Words which structurally are verbs, for instance, may have not only a verblike function but may have a nounlike function as *śâ-mâ* in the following example:

yúké.	śâ-mâ	?e sa	zùsE	<i>I am going home</i>
that way	my home	back	I go	

DEFINITION OF SYNTACTIC UNITS

Syntactic structure will be analyzed in terms of *function slots*. The term is used here to mean a position within the clause or larger syntactic unit which is characterized by:

1. A more or less fixed location in relation to other function slots. This does not imply an absolutely rigid sequential ordering of elements within the clause, but rather a relatively narrow limit to the kinds of sequences which are admissible.

2. A uniform grammatical function assignable to the slot together with the elements which may fill that slot. These grammatical functions (e.g., subject, object, predicate) will be discussed in detail on pp. 126 ff.

3. The potentiality of being filled by a single word. This criterion defines the lower limit of a function unit. Any position within the clause that is always filled by more than one word is not a single function slot.

4. The potentiality of being filled by a continuous sequence of words. A function slot, therefore, may be filled alternatively by a single word or by a sequence of words that are functionally equivalent to a single word. Such a sequence of words constitutes a *phrase*. Two or more non-contiguous positions within a clause which are filled by words or phrases having the same or similar grammatical function will be treated as separate slots rather than a single discontinuous slot.

The usual definition of a clause as a sequence of words containing a subject and predicate needs to be modified somewhat for the purposes of describing Santa Ana syntactic structure. The term *clause* will be understood to refer to a syntactic unit which includes a verb functioning as a predicate as well as to certain other relatively infrequently occurring types of units to be described below. A *predicate clause* in

its minimal form consists of a single verb. There need not be an expressed subject other than the pronominal marker incorporated in the verb. Expanded forms of the predicate clause may contain an expressed subject and/or object as well as various other elements. Certain kinds of word sequences which do not include a verb functioning as predicate are treated as special types of clauses. These word sequences lend themselves to description as clauses comparable to predicate clauses because: (1) they are units with a more or less fixed structure and may be described in terms of function slots in the same manner as predicate clauses; (2) they possess a semantic content comparable to that of predicate clauses and, although not containing a predicate, are usually best translated by full English sentences; (3) they correlate closely with phonological units in the same manner as predicate clauses which, as with all clauses, tend to be set off by pauses in a connected text; and (4) their length and distribution in the text is such that their incorporation into contiguous predicate clauses often would result in unwieldy units. These special clauses are of three types: prepositional clauses, interrogative clauses, and ?eu clauses, all of which will be described under "Non-predicate Clauses."

The term *sentence* will be used much in its traditional sense to refer to a word or group of words which expresses an independent utterance, not part of any larger syntactic construction. A sentence may be a single independent clause, or it may consist of two or more clauses, one of which is an independent clause.

MAJOR FUNCTION SLOTS AND THEIR FILLERS

Nine major function slots are identified within Santa Ana Keresan clauses. Each function slot, assigned an uppercase letter for easy reference, is described in the sections to follow.

In the description of the elements which may fill a function slot the occurrence of narrative particles are ignored. These particles occur with very high frequency in narrative text but are not considered to be an essential part of the syntactic structure. Although they contribute to the sense of continuity of a narrative and are roughly equivalent to English "And then . . .," their omission in no way changes the basic structure and meaning of the utterance. The narrative particles, *ʂu*, *ʔe*, *ʔeu*, *ʔai*, and *du*, occur either singly or in various combinations. The more commonly occurring combinations are:

<i>ʂu ʔe</i>	<i>ʔeu ʂu</i>
<i>ʂu ʔe ʂu</i>	<i>ʔeu ʂu ʔe</i>
<i>ʂu du</i>	<i>ʔai ʂu</i>
<i>ʂu ʔe du</i>	<i>ʔai ʂu ʔe</i>
<i>ʔe ʂu</i>	

Longer combinations made up of two or more of the above sometimes occur:

ʃu ʔe ʔai ʃu
 ʃu ʔe ʃu ʔeu ʃu
 etc.

When the informant is searching for words he often fills in with a rather long series of narrative particles which occur, most commonly, at the beginning of a clause:

ʃu ʔe ʃu dʔi dígâ-nikUYA čéci higâ-nri čádʔá.še
Then the giant's eagle, too, looked up.

Roughly half of the clauses in the text are introduced by a narrative particle or combination of particles. Narrative particles occur less commonly, although with considerable frequency, between function slots within a clause:

ʃu ʔe dʔísi ku ʃu ʔe ʃu dʔáʔáiyŭ
Then they flew southward.

In the analysis of clause structure, narrative particles are assigned, where possible, to the initial position within the function slot. The above clause, for example, is analyzed as consisting of two function slots with the division occurring between *ku* and *ʃu*.

Narrative particles occur occasionally in non-initial position within a function slot. This may be true in certain function slots, such as the D slot (see p.132), which sometimes includes two or more elements with intervening narrative particles:

D slot

ʃu ʔe ʃu dúwé. ʃu si čâ-ničAdʔAYA
 this way back he was walking
Then he was walking back.

PREDICATE SLOT (P)

The grammatical function of a predicate slot with its filler is that normally associated with the term "verb." Among the more common types of concepts which may be expressed by this unit are the following:

Action: skâkŭ	<i>he bit me</i>
Perception: sgûkača	<i>he saw me</i>
State of being: čiyamastŭ	<i>I am hungry</i>
Relationship: ka	<i>it is his</i>

The predicate slot is normally filled by a single verb. It may comprise the entire utterance (as in the above examples) or may be part of a larger construction:

P

ʃu ʔe ʔáisi yúké. dʔáʔáiyŭ yúʔái há-di čú-tí
 there that way they flew there where mountain
Then they flew away to the mountains.

A verb phrase rather than a single verb may fill the predicate slot, although this construction is statistically much less frequent. Four types of modifying elements may occur with a verb in a verb phase.

1. A qualifying word may occur either preceding or following the verb:

P

ʃu ʔáisi ha· nú·yú· ká·ni
 there east alone he walked
Then he walked eastward alone.

P

ʔe ʃu ʔe ʃu čáʔáizi čèci
 he went too
 to bed
Then he went to bed, too.

2. The particle ʔeu may precede or follow the verb. This particle, which cannot be adequately translated into English, gives additional emphasis to a particular word or phrase:

P

ʃu ʔe ʔai hau? dʔá·ʔáci ʔeu
 near they arrived
Then they came near.

P

ʔeu sgúčipa
I need him.

3. The verb may be preceded by an uninflected word which functions semantically as the principal carrier of meaning:

P

ʃumí há·kú dʔáwinʒani ʔeu čáukui-šanu
 already ready she made his wife
His wife had things already prepared.

4. Certain verbs are preceded in most of their occurrences by characteristic particles which have no close semantic equivalent in English. These include ʔe, which precedes most forms of the verbs meaning *to go* and *to say*, and guiʔ, which precedes the verb *to do*:

P

ʃu ʔe ʔeu dʔá·mí ʔe čáza
 eagle he said
And then the eagle said,

P

ʃu ʔe yúké. kú·tí ʔe zùpe:
 that way mountain go
Go away to the mountains!

P

zi guiʔ gódékuyá
 what you are doing
What are you doing?

Predicate slots may be subdivided on the basis of whether or not the verb that fills the slot incorporates a pronominal marker indicating the person of the subject or of the subject and object. P1 slots, illustrated by all of the above examples, are filled by verbs in the non-future tense and incorporate pronominal markers. P2 slots are filled by future tense verbs which do not incorporate pronominal markers:

<u>P2</u>						
nódé?èyü	dísí	ku súzú.ʔü	há-di	hiġâ-nti	dʷâ.mâ	
will go	there	south	we	where	giant	his house
<i>We will go south to the giant's house.</i>						

AUXILIARY SLOT (A)

The occurrence of a P2 slot presupposes the presence in the same clause of an A slot filled by a verbal auxiliary (as súzú.ʔü *we*, in the example above). Verbal auxiliaries comprise both a structural class and a function class. The A slot is always filled by a single verbal auxiliary and performs the function of indicating the person of the subject or subject and object when this is not included in the verb itself. The A slot in general immediately follows the P slot:

		<u>P</u>	<u>A</u>	
háikʷ	dúwé.	si	zû-ne	şu
when	this way	back	will	you
			go	

When will you come back?

The occasional occurrence of other elements between the P and A slots prevents treating the verb plus its auxiliary as a verb phrase filling a simple slot.

SUBJECT SLOT (S)

The grammatical function of a subject slot with its filler is to indicate the subject of the verb in the predicate slot. This unit is not obligatory to a complete clause, as the person and number of the subject is indicated in the verb itself or in the verb together with its auxiliary. The filling of the subject slot either adds redundancy or else indicates the subject with more specificity. The subject slot may be filled by any one of the following elements.

Pronouns.—Included in this category are the first person pronoun, híñü, the second person pronoun, híşü, and various third person pronouns such as ʔiska *one*, du *this one*, he *that one*, hau *someone* and ʔisgawa *both of them*:

<u>S</u>		<u>P</u>
şu ʔe ʔisgawa		ʔai şu ʔe şu ċâdʷâdʷi
both		they fought

Then the two of them fought.

Verbs.—The most common type of verbs filling a subject slot are those indicating inalienably possessed objects (e.g., kinship terms and terms referring to body parts):

S	P
ʔe ʃu ʔe ʃu káháisdʔu	ʔe dʔéíñeta
his father	he said

Then his father said.

Referentials.—These are, in general, nounlike words and the most commonly occurring fillers of the S slot.

S	P
ʔeu ʔáísí dʔi dʔá.mí	ʃu ʔe éúgúya
there up eagle	he sat

Then the eagle perched there.

Phrases based on the above elements.—These are of the five general types given below.

1. Two or more words linked in possessive relationship:

P	S
ʃu ʔe ʃu čéci dʔyú.kamí	gasi.kí čáukui-šanu
also she waited	king his wife

The king's wife was waiting, too.

S	P
ka hážáni dʔi	gáʔašúné
his hair up	it stood

His hair stood up.

S	P
higá.ní čádʔá.še dʔá.mí	ʃu ʔe dʔú.sčèca
giant his eagle	he cried out

The giant's eagle cried out.

2. Two or more words linked in coordinate relationship:

P	S
díʔái dʔá.ʔáuʔu	háčæze.za gu čáukui-šanu
there they lived man	and his wife

A man and his wife lived there.

3. A combination of two or more pronouns or a combination of one or two pronouns with a referential or a verb:

S	P
ʃu ʔe ʔeu ʔái ʔíská hau	čáʔáutisá
one someone	he was planting

There was someone planting.

S	P
zi háídí gané.ru	ʃu dʔúwásčèca
thing which sheep	they bleated

There were some sheep bleating.

4. A verb or a referential with an attributive:

<u>P</u>	<u>S</u>
ʔai ta dʔáku	ríkusi háçæce
thus he was	rich man
<i>Once there was a rich man.</i>	

5. A pronoun, verb, referential or phrase of one of the above types preceded and/or followed by ʔeu and/or čéci:

<u>P</u>	<u>S</u>
ʃu ʔe ʃu dʔúkača	ʔeu mú-kaiça
he saw him	mountain lion
<i>Then the mountain lion saw him.</i>	

<u>S</u>	<u>P</u>
ʃu ʔe ʔeu sandiyá-ku čéci	ʃu yúku ná čúgúyanu.
St. James also	away down he sat
<i>Then St. James dismounted, too.</i>	

Clauses with compound subjects (i.e., two or more words in coordinate relationship) sometimes have two S slots with the subject split between the two:

<u>S</u>	<u>P</u>	<u>S</u>
ʔe háwái búiyasi	zéʔé	gu gawá-yu gu mú-la
there oxen	they are and	horses and mules
<i>There are oxen, horses, and mules.</i>		

OBJECT SLOT (o)

An object slot with its filler indicates the object of the action expressed by the verb in the predicate slot. Like the subject slot, this is a nonobligatory element which adds redundancy or specificity. The same types of words or phrases may fill the object slot as the subject slot:

Pronouns:

<u>P</u>	<u>O</u>
ʔeu ʃáyéiba-tæ	híʃu
I look for you	you
<i>I am looking for you.</i>	

Verbs:

<u>O</u>	<u>P</u>
ʃu ʔe ʃu ʔeu ʃu ká-wi-dʔé-mí	ʃu dʔú-wábéuca
his children	he called them
<i>Then he called his children.</i>	

Referentials:

<u>P</u>	<u>O</u>
ʃu ʔe čáʔaudanu.	mú-kaiça
he killed it	mountain lion
<i>Then he killed the mountain lion.</i>	

Phrases:

1. Two or more words in possessive relationship:

<u>S</u>	<u>O</u>	<u>P</u>
ʃu ʔe sandiyá·ku	kámákɛ gasí·kí	tíwákuiça
St. James	his daughter king	he married

Then St. James married the king's daughter.

2. Two or more words in coordinate relationship:

<u>P</u>	<u>O</u>
há·di ʔégu ʔeu ʃú·wàkačane	gawiyá·ra wá·gaši
where then you saw them	horses cattle

Where, then, did you see the horses and cattle?

3. Combination of pronoun plus pronoun, verb or referential:

<u>O</u>	<u>P</u>	<u>A</u>
du má·čú	ʔeu néyazðce	si
this mule	will choose	I

I will choose this mule.

4. Combination of verb or referential plus attributive:

<u>O</u>	<u>P</u>
ʃu ʔe ʃu ʔeu gášé gawá·yu	ʔeu ʃu ʔe ʔe díwiza·ni·dʒanu
white horse	he saddled him

Then he saddled the white horse.

5. Any of the above elements in combination with ʔeu or čèci:

<u>P</u>	<u>O</u>
ʃu ʔe ʔai táʔámudʒuzañe	ʔeu du higá·ntí
he was killed	this giant

Then the giant was killed.

When both the subject and the object slots in a clause are filled the two are distinguished by relative order (see "Predicate Clauses"). When one but not the other is filled, the context determines whether it is an object or a subject slot. A clause may occasionally have two object slots:

<u>O</u>	<u>P</u>	<u>O</u>
ʔa zázi ʔai há·di	gawiyá·ra	dʒú·wàkačane gu wá·gaši
question not somewhere	horses	you saw them and cattle

Haven't you seen some horses and cattle somewhere?

The two object slots may be filled by a split compound object as in the example above, or they may be filled by a direct and an indirect object respectively:

<u>O</u>	<u>P</u>	<u>O</u>
ʃu ʔe ʃu ʔáisí	sai zí táʔáwiya·ʔaniʔta	ʔeu sandiyá·ku
there	all thing was left to him	St. James

Then everything was left to St. James.

DIRECTIONAL-LOCATIONAL SLOT (D)

A directional-locational slot with its filler specifies the direction taken by an action and/or its location either in an absolute sense or in relation to the speaker. The D slot may be filled by one of the following elements.

A preposition:

D	P
ʔe ʃu ʔe háwé·	čá·ni
this way he came	
<i>Then he advanced.</i>	

A directional:

D	P
ʔe ʃu ʔe dʔi	dɛʔɛyʊ
up they went	
<i>Then they went up.</i>	

A referential which includes a locative clitic:

P	D
ʃu ʔe díyáʔisiwisdʔanu·	gá·ru·di
he hitched them wagon to	
<i>Then he hitched them to the wagon.</i>	

A phrase belonging to one of the following general types:

1. Two prepositions:

D	D	P
yúké·	háwé·	dígá·nikuya
that way this way he was looking		
<i>He was looking this way and that.</i>		

2. Two directionals:

D	P
ʃu ʔe sa dʔi	čúgúyanu·
back up he sat	
<i>Then he sat up again.</i>	

3. A combination of one or more prepositions with one or more directionals:

D	P
ʃu ʔe yúsi nə	zú dʔu
from there down he went	
<i>Then he went back down.</i>	

D	P
dúké· ku nə	ʔeu sɛ·ničadʔaya
that way south down I am going	
<i>I am going on down south.</i>	

4. A preposition plus a referential:

D	P
ʃu ʔe yúké. kú-tí	ʔe zùpe.
that way mountain	go
<i>Go away to the mountains!</i>	

5. A verb phrase:

D	P
śétidʔA ʔai dʔi	čúgúya
my back up	sit
<i>Sit up on my back.</i>	

Most clauses occurring with a D slot contain only one such slot. Occasionally, however, a clause occurs with two D slots, one preceding and the other following the P slot:

D	P	D
ʃu ʔai hauʔ dʔi	śúgúyanu.	mé-SA-di
near up when you sit	table at	
<i>When you sit up at the table,</i>		

TIME SLOT (T)

The grammatical function of a time slot with its filler is to specify the relative time of an action. This slot is usually filled by one of the temporals (see "Function Classes").

D	T	P	A
dúwé. si	há-wíná	zù-ne	si
this way back	soon	will come	I
<i>I will come back soon.</i>			

T	P
ʔe ʃu ʔe ná-nu	čáʔáizá-nu.
next day	it occurred
<i>The next day arrived.</i>	

The T slot is sometimes filled by a phrase composed of two temporals or of the negative, zázi, plus a temporal:

T	P	
ʃumí hána.	záʔáizá-nu.	
already long ago	it occurred	
<i>It already happened long ago.</i>		
T	S	P
ʔésgəskʊ	zázi na	saí záʔANÉ
but	not yet	all it is
<i>But this isn't all yet.</i>		

As in the case of the D slot, a clause may occasionally occur with two T slots, one preceding the P slot and the other following:

T	D	P	T
ʔemí	dúwé. ku	zíyádʔʊ	ʃumí má-nu.
already	this way south	he passed	already long time
<i>It has been a long time since he passed by going south.</i>			

MODIFIER SLOT (M)

A modifier slot with its filler functions as a modifier of the predicate. The filler of this slot is ordinarily a single attributive:

<u>M</u>	<u>D</u>	<u>P</u>
ʃu ʔe ʃu núbada	ʃu ʔe ʃu ʔai hauʔ n̄ə	dʷúbənu.
alone	near down	he entered

Then he went in alone.

<u>M</u>	<u>P</u>	<u>A</u>
ʔésgasku ʃu wínú	čéeri nádéʔe.yaʔata	súzú.ʔu
but fast	also will travel	we

But we will also travel fast.

INTERROGATIVE-MODAL SLOT (I)

An interrogative-modal slot may be filled by a variety of uninflected words classified as either interrogatives or modals (see "Function Classes"). The function of this slot with its filler is to form a question or to reinforce the mode (other than indicative) of the clause.

<u>I</u>	<u>D</u>	<u>S</u>	<u>P</u>
zázi	há-di	hau	gákú
not	where	someone	he is

There is nobody here.

<u>I</u>	<u>P</u>
ʃu ʔe zi	ʃántisə
what	you are planting

What are you planting?

<u>I</u>	<u>O</u>	<u>P</u>
káucigái	du	tíčá.gu
maybe	this	I change

Maybe I'll change it.

<u>I</u>	<u>D</u>	<u>P</u>
há-n̄é	dúké.	kàigá
let me	that way	let me look

Let me look around.

Interrogative or modal phrases sometimes fill the I slot. These are ordinarily composed of an interrogative or a modal together with zázi *not* or ʔégu *then*:

<u>I</u>	<u>P</u>
zázi ʔíte	dʷúm̄ə
not able to	he emerged

He couldn't get out.

<u>I</u>	<u>D</u>	<u>P</u>	<u>A</u>
ʔégu gúwa.	sa	núm̄ə	si
then how	back	will emerge	I

How, then, will I get back out?

CONNECTIVE SLOT (C)

The connective slot with its filler occurs in clause-initial position and relates that clause to the preceding one. This slot is filled by

one of the following connective particles: *gu and*, *?e and*, *?égu then*, *?ésgəskʉ but*, or by the combination *?e ta and thus*.

C	P
gu	?eu éúñAza
and	he is healthy
<i>And he is healthy.</i>	

C	P
?ésgəskʉ	?eu ʃu ?e ʃu díuŵáwa-sa ééci
but	they were sick also
<i>But they were sick, too.</i>	

SEQUENTIAL ORDERING OF FUNCTION SLOTS

The structure of clauses is analyzed here in terms of the sequential ordering of the function slots. The statistical treatment is based on the types of clauses occurring in a sample of text material consisting of myths narrated by one informant. The sample contains about 4,500 words and was transcribed from 55 minutes of recorded narrative.

PREDICATE CLAUSES

The large majority of clauses in the text are predicate clauses. Of 910 clauses identified in the text there are 868 of this type.

Predicate clauses are built around a predicate slot filled by a verb or verb phrase. The predicate clause may contain only a predicate slot, or it may include a wide variety of slots preceding and/or following the predicate slot. The structure of all predicate clauses in the text is indicated in charts 7 and 8. The former shows the structure of P1 clauses, i.e., clauses in which the predicate slot is filled by a non-future tense verb. P2 clauses, outlined in chart 8, contain verbs in the future tense. Formulas indicate the sequential arrangement of the function slots and employ the following abbreviations:

- P=Predicate slot
- S=Subject slot
- O=Object slot
- D=Directional-locational slot
- T=Time slot
- M=Modifier slot
- I=Interrogative-modal slot
- C=Connective slot
- A=Auxiliary slot

The number of occurrences of each type of predicate clause in the text is indicated following the formula. Although certain details of the chart are arbitrary, the arrangement of the formulas indicates an increasing complexity from left to right in terms of the number of slots contained in the clause. The slots are introduced in a specific order from top to bottom within each box bounded by solid lines and

from left to right across contiguous boxes. This order (P, S, O, D, T, M, I, C) reflects, to some degree, an increasingly peripheral nature of the slots.

P 239	SP 42 PS 19	SOP 6	SPO 2	SDOP 1	CSDPO 1
				TSPO 1	
				IOPS 1	CISPO 1
		DSP 12	DSDP 1	DTPS 2	TSPD 1
		DPS 12	DSPD 1	TDSP 2	TDPS 1
		SDP 13	DSPS 1	TSDP 2	
		SPD 1	SDSP 1	DSMP 1	
				IDSP 2	IDPS 1
				ISPD 2	CIDSP 1
				CDSP 3	CSDP 2
		TSP 2	STP 1	CTSP 1	
		TPS 2	TSTP 1	CTPS 1	
		MSP 2	SMP 2	CSMP 1	
		PMS 1			
		ISP 8			
		CSP 5	CPS 2		
		DOP 7	PDO 2	OTDP 1	IDOTP 1
		DPO 5	DOPO 1	IODP 2	IDOPO 1
		ODP 8		CDOP 2	CODP 1
				CDPO 2	
		OP 20	TOP 1	IOPT 1	CITOP 1
		PO 14	TPO 2	CTOP 2	
			MOP 1		
			IOP 14	CIOP 2	
			IPO 2		
			COP 7		
			CPO 2		
		DP 13S	DTP 5	DTPT 1	CTDP 2
	PD 2	TDP 5	TDPT 1		
	DPD 2	DPT 3			
		MDP 5	MDPM 1	CMDP 1	
		DMP 1			
		IDP 6		CIDP 1	
		CDP 8	CPD 1		
	TP 32	CTP 4		CTPM 1	
	PT 1				
	MP 7	IMP 1			
	PM 1	CMP 4	CPM 1		
	IP 16	CIP 2			
	CP 17				

CHART 7.—P1 Clause Types

PA 22	SPA 4	SDPA 1	CSPDA 1		
		DSPA 1			
		ISPA 1			
		IPAS 1			
		OSPA 2			
	OPA 3	ODPA 1	TDPAO 1	CTDPAO 1	
		DODPA 1	CODPA 1	CIDOPA 1	
		TOPA 1			
		OTPA 1			
		IOPA 3			
		IPAO 1	CIOPA 1		
	DPA 9 PDA 1 DPDA 1	DTPA 1			
		DPAT 2			
		IDPA 6			
	IPAD 1				
TPA 3	ITPA 1				
MPA 1	IPAM 1				
	CMPA 3				
IPA 8	CIPA 1				
CPA 3					

CHART 8.—*P2 Clause Types*

In spite of some freedom of order in the arrangement of slots within the clause there are definite restrictions on their distribution. Considering the slots in the order that they are introduced in the charts following the P slot, the following observations can be made.

The A slot always follows the P slot, usually contiguously. There are a few occurrences, though, of a D slot intervening between the P and A slots (PDA, DPDA and CSPDA).

The S and O slots may each occur either preceding or following the P slot. The S slot and, to a lesser extent, the O slot occur with greater frequency preceding than following the P slot. These slots are generally contiguous to the P slot or separated from it by one another, but occasionally a D, T, or M slot may intervene as in the sequences SDP, OTDP, DSMP, etc.

Most commonly the D slot occurs immediately preceding the P slot or separated from it by an S or O slot, or less frequently by a T or M slot. When not occurring in this position it immediately follows the P slot, or there may be two D slots in the clause, as in the sequences DSDP, DSPD and MDPD.

The distribution of the T and M slots is comparable to that of the D slot. They generally precede, but sometimes immediately follow, the P slot. When preceding the P slot they may be separated from it by an S, O, D, T or M slot.

There are only two interrogative clauses in the text, but such clauses are more common in ordinary conversation than this sampling would indicate. An interrogative clause consists uniformly of an I slot followed by an S slot:

<u>I</u>	<u>S</u>
há·di	dʷá·mí
where	eagle
<i>Where is the eagle?</i>	

INDEPENDENT VERSUS DEPENDENT CLAUSES

Most clauses are independent clauses and as such may stand alone as full sentences. A dependent clause, on the other hand, never occurs in isolation but is closely linked to a contiguous independent clause. Three types of dependent clauses are identified in the text:

1. Prepositional clauses:

diʷ bónísdé n̄ə *It was down here on the west side.*

2. Clauses introduced by a C slot filled by *gu* and:

gu ʷískA ʷeu ʃu čáʷáubənaiʷi *And he put one of them in (his pocket).*

3. Clauses introducing or closing a quotation:

dʷéin̄etA ʷeu dʷá·mí *The eagle said.*

Clauses introduced by *gu* differ from those introduced by other connectives in that they presuppose a preceding clause to which they are linked:

<u>O</u>	<u>D</u>	<u>P</u>	<u>C</u>	<u>O</u>	<u>D</u>	<u>P</u>
du ʷískA	ʷeu hé·ýá	cá·ca·dʷani	gu	du ʷískA	ʷeu hé·ýá	tíšá·tí·sé
this one	with it	he breathes	and	this one	with it	he has power
<i>With one he breathes and with the other he has power.</i>						

Clauses introduced by ʷésgəskʷ or other connectives, on the other hand, may stand alone as independent clauses:

<u>C</u>	<u>T</u>	<u>P</u>	<u>M</u>
ʷésgəskʷ	na	čápaši	kúimí
but	yet	dark	slightly
<i>But it was still a little dark.</i>			

SUPRACLAUSE STRUCTURE

In this section the clause will be examined within the context of longer stretches of speech. Certain elements will first be described which are not considered to be an integral part of any clause. This will be followed by a consideration of the position of dependent clauses within larger syntactic units.

FRAGMENT UTTERANCES

Certain words or short sequences of words occur both in narrative and in conversation which may be spoken in isolation, but which are

meaningless apart from the context in which they are spoken. The fragment may be semantically dependent on the immediate linguistic context or on the non-linguistic context.

Fragment utterances are most commonly exclamations or short answers to questions. They do not occupy a definable slot within a clause or larger unit and are themselves too brief for syntactic analysis. The following are examples of the 103 fragment utterances occurring in the text:

ha·	Yes.
hiñá	O.K.
he	What?
?eu he	Is that so?
mə· na ʃu	Let's go!
hawí·	Here!
wó·?é	Thanks.

COMPLEX SENTENCES

The narrative text on which this analysis is based consists, for the most part, of a series of independent clauses, each of which is in itself a complete structural unit. Since each independent clause is a complete sentence and is, in general, relatively brief, a Santa Ana narrative appears highly fragmented as compared with English.

There are in the text two types of complex sentences, each composed of an independent clause with one or more dependent clauses. The first type of complex sentence is composed of an independent clause followed by one or more dependent clauses of the type introduced by the connective *gu*. There are 43 sentences of this type in the text, including the following example:

independent clause	dependent clause
?ai ʃu ?e ?iska čá?áucáyuca	gu ?iska ?eu ʃu čá?áubənai?ɪ
one he broke it	and one he put it in
<i>Then he broke one and put one in (his pocket).</i>	

The second type of complex sentence is composed of an independent clause preceded or followed by one or more prepositional clauses. There are 27 occurrences of this type of sentence in the text, including the following examples:

independent clause	dependent clause
?e ʃu ?e ʃu si yúku zùku ?eu sandiyá·ku	?ai dí?ái pákaciʃu
back away he went St. James	there gully
<i>Then St. James went away again into the gully.</i>	

dependent clause	dependent clause	dependent clause
dúwé· dʷídi nə ʕí·ná	díʔ bónísdé nə	kúdaiskə̀ə díʔái
this way north down river	here west side down	round-top there

independent clause	
díʔái dʷá·ʔáʉʔu háçəze·za	gu ɛ́aukui·ʃanu
there they lived man	and his wife

On the west side of the river flowing from the north at Roundtop Mesa there lived a man and his wife.

QUOTATIONS

Of the three types of dependent clauses described on page 139, two occur as parts of the complex sentences discussed above. The third type is that which introduces or closes a quotation and is ordinarily translated by such expressions as *he said, he said to him, etc.* The occurrence of these clauses closely parallels the English equivalents in that they may precede or follow the quotation, or they may be omitted entirely.

quotational clause	independent clause
ʃu ʔe ʃu ʔe d̥áçkuyA	ʃu náiziʔ si
he said to him	will lie I
<i>Then he said to him, "I am going to lie down."</i>	
fragment utterance	quotational clause
ʔe ʃu ʔe ʃu hińá	dʷéińetA ʔeu sandiyá·ku
O.K.	he said St. James
<i>"O.K.," said St. James.</i>	

Quotations are sometimes preceded and followed by dependent quotational clauses:

quotational clause	fragment	quotational clause
ʃu ʔe ʔeu dʷá·mí ʔe ɛ́áza	hińá	dʷéińetA
eagle he said	O.K.	he said
<i>Then the eagle said, "O.K."</i>		

Constructions such as these are not regarded as complex sentences because dependent quotational clauses may be linked not only to a single fragment or independent clause but, in extended quotations, to a whole series of sentences, some of which may themselves be complex.

APPENDIX 1. VERB PARADIGMS

TRANSITIVE VERB PRIMARY PARADIGMS

CLASS A

INDICATIVE

sfukàica	<i>I hit him</i>
şú-kàica	<i>you hit him</i>
gú-kàica	<i>he hit him</i>
zfukàica	<i>he (4th person) hit him</i>
şáukàica	<i>I hit you</i>
dʷú-kàica	<i>you hit me</i>
sgú-kàica	<i>he hit me</i>
gúzú-kàica	<i>he hit you</i>

HORTATIVE

káukàica	<i>let me hit him</i>
pú-kàica	<i>hit him</i>
píukàica	<i>let him hit him</i>
ǀfukàica	<i>let him (4th person) hit him</i>
şáukàica	<i>let me hit you</i>
gú-kàica	<i>hit me</i>
núzó-kàica	<i>let him hit me</i>
zó-kàica	<i>let him hit you</i>

NEGATIVE

zázi sgú-kàica	<i>I didn't hit him</i>
zázi şú-kàica	<i>you didn't hit him</i>
zázi gú-kàica	<i>he didn't hit him</i>
zázi zfukàica	<i>he (4th person) didn't hit him</i>
zázi şáukàica	<i>I didn't hit you</i>
zázi dʷú-kàica	<i>you didn't hit me</i>
zázi sdʷú-kàica	<i>he didn't hit me</i>
zázi gúzú-kàica	<i>he didn't hit you</i>

NEGATIVE HORTATIVE

bâ-mí- nfukàica	<i>let me not hit him</i>
bâ-mí- sgú-kàica	<i>don't hit him</i>
bâ-mí- píukàica	<i>let him not hit him</i>
bâ-mí- ǀfukàica	<i>let him (4th person) not hit him</i>
bâ-mí- şáukàica	<i>let me not hit you</i>
bâ-mí- gú-kàica	<i>don't hit me</i>
bâ-mí- núzó-kàica	<i>let him not hit me</i>
bâ-mí- sdʷú-kàica	<i>let him not hit you</i>

DUBITATIVE

túkàica	<i>maybe I hit him</i>
çú-kàica	<i>maybe you hit him</i>
dʷú-kàica	<i>maybe he hit him</i>
dfukàica	<i>maybe he (4th person) hit him</i>
záukàica	<i>maybe I hit you</i>
dʷú-kàica	<i>maybe you hit me</i>
túzú-kàica	<i>maybe he hit me</i>
dʷúzú-kàica	<i>maybe he hit you</i>

FUTURE HORTATIVE

ba núkàica	<i>let me hit him (in the future)</i>
ba çú-kàica	<i>hit him</i>
ba píukàica	<i>let him hit him</i>
ba ǀfukàica	<i>let him (4th person) hit him</i>
ba záukàica	<i>let me hit you</i>
ba dʷú-kàica	<i>hit me</i>
ba núzó-kàica	<i>let him hit me</i>
ba dʷúzú-kàica	<i>let him hit you</i>

CLASS B

INDICATIVE

sèkU	<i>I bit him</i>
şàkU	<i>you bit him</i>
gàkU	<i>he bit him</i>
çàkU	<i>he (4th person) bit him</i>
şàkU	<i>I bit you</i>
çàkU	<i>you bit me</i>
skàkU	<i>he bit me</i>
góžàkU	<i>he bit you</i>

HORTATIVE

kàkU	<i>let me bite him</i>
pàkU	<i>bite him</i>
pèkU	<i>let him bite him</i>
ǀpèkU	<i>let him (4th person) bite him</i>
şàkU	<i>let me bite you</i>
kàkU	<i>bite me</i>
nóžàkU	<i>let him bite me</i>
žàkU	<i>let him bite you</i>

NEGATIVE

zázi sgàkU	<i>I didn't bite him</i>
zázi šàkU	<i>you didn't bite him</i>
zázi gàkU	<i>he didn't bite him</i>
zázi chàkU	<i>he (4th person) didn't bite him</i>
zázi šàkU	<i>I didn't bite you</i>
zázi chàkU	<i>you didn't bite me</i>
zázi scàkU	<i>he didn't bite me</i>
zázi góžàkU	<i>he didn't bite you</i>

NEGATIVE HORTATIVE

bâ-mf. nèkU	<i>let me not bite him</i>
bâ-mf. sgàkU	<i>don't bite him</i>
bâ-mf. pèkU	<i>let him not bite him</i>
bâ-mf. pèkU	<i>let him (4th person) not bite him</i>
bâ-mf. šàkU	<i>let me not bite you</i>
bâ-mf. kàkU	<i>don't bite me</i>
bâ-mf. nóžàkU	<i>let him not bite me</i>
bâ-mf. scàkU	<i>let him not bite you</i>

DUBITATIVE

tèkU	<i>maybe I bit him</i>
çàkU	<i>maybe you bit him</i>
dʷàkU	<i>maybe he bit him</i>
tàkU	<i>maybe he (4th person) bit him</i>
çàkU	<i>maybe I bit you</i>
çàkU	<i>maybe you bit me</i>
tóžàkU	<i>maybe he bit me</i>
dʷóžàkU	<i>maybe he bit you</i>

FUTURE HORTATIVE

ba nèkU	<i>let me bite him (in the future)</i>
ba çàkU	<i>bite me</i>
ba pèkU	<i>let him bite him</i>
ba pèkU	<i>let him (4th person) bite him</i>
ba çàkU	<i>let me bite you</i>
ba çàkU	<i>bite me</i>
ba nóžàkU	<i>let him bite me</i>
ba dʷóžàkU	<i>let him bite you</i>

CLASS C

INDICATIVE

čí-zúWA	<i>I paid him</i>
ší-zúWA	<i>you paid him</i>
zí-zúWA	<i>he paid him</i>
šáizúWA	<i>I paid you</i>
čúizúWA	<i>you paid me</i>
skúizúWA	<i>he paid me</i>
gódí-zúWA	<i>he paid you</i>

HORTATIVE

káizúWA	<i>let me pay him</i>
pí-zúWA	<i>pay him</i>
ǀí-zúWA	<i>let him pay him</i>
šáizúWA	<i>let me pay you</i>
kúizúWA	<i>pay me</i>
nódí-zúWA	<i>let him pay me</i>
dí-zúWA	<i>let him pay you</i>

NEGATIVE

zázi sdʷí-zúWA	<i>I didn't pay him</i>
zázi ší-zúWA	<i>you didn't pay him</i>
zázi zí-zúWA	<i>he didn't pay him</i>
zázi šáizúWA	<i>I didn't pay you</i>
zázi čúizúWA	<i>you didn't pay me</i>
zázi scí-zúWA	<i>he didn't pay me</i>
zázi gódí-zúWA	<i>he didn't pay you</i>

NEGATIVE HORTATIVE

bâ-mf. ní-zúWA	<i>let me not pay him</i>
bâ-mf. sdʷí-zúWA	<i>don't pay him</i>
bâ-mf. ǀí-zúWA	<i>let him not pay him</i>
bâ-mf. šáizúWA	<i>let me not pay you</i>
bâ-mf. kúizúWA	<i>don't pay me</i>
bâ-mf. nódí-zúWA	<i>let him not pay me</i>
bâ-mf. scí-zúWA	<i>let him not pay you</i>

DUBITATIVE

ťí-zúWA	<i>maybe I paid him</i>
čí-zúWA	<i>maybe you paid him</i>
dí-zúWA	<i>maybe he paid him</i>
çáizúWA	<i>maybe I paid you</i>
čúizúWA	<i>maybe you paid me</i>
tódí-zúWA	<i>maybe he paid me</i>
dʷídí-zúWA	<i>maybe he paid you</i>

FUTURE HORTATIVE

ba ní-zúWA	<i>let me pay him (in the future)</i>
ba cí-zúWA	<i>pay him</i>
ba ǀí-zúWA	<i>let him pay him</i>
ba çáizúWA	<i>let me pay you</i>
ba čúizúWA	<i>pay me</i>
ba nódí-zúWA	<i>let him pay me</i>
ba dʷídí-zúWA	<i>let him pay you</i>

CLASS D

INDICATIVE

čìudi	<i>I gave it to him</i>
šìudi	<i>you gave it to him</i>
zìudi	<i>he gave it to him</i>
šàudi	<i>I gave it to you</i>
dʷùdi	<i>you gave it to me</i>
sgùdi	<i>he gave it to me</i>
gódludi	<i>he gave it to you</i>

HORTATIVE

kàudi	<i>let me give it to him</i>
pìudi	<i>give it to him</i>
plìudi	<i>let him give it to him</i>
šàudi	<i>let me give it to you</i>
gùdi	<i>give it to me</i>
nódludi	<i>let him give it to me</i>
dludi	<i>let him give it to you</i>

NEGATIVE

zázi sdʷìudi?	<i>I didn't give it to him</i>
zázi šìudi?	<i>you didn't give it to him</i>
zázi zìudi?	<i>he didn't give it to him</i>
zázi šàudi?	<i>I didn't give it to you</i>
zázi dʷùdi?	<i>you didn't give it to me</i>
zázi sdʷùdi?	<i>he didn't give it to me</i>
zázi gódludi?	<i>he didn't give it to you</i>

NEGATIVE HORTATIVE

bâ-mf- ñludi	<i>let me not give it to him</i>
bâ-mf- sdʷludi	<i>don't give it to him</i>
bâ-mf- plìudi	<i>let him not give it to him</i>
bâ-mf- šàudi	<i>let me not give it to you</i>
bâ-mf- gùdi	<i>don't give it to me</i>
bâ-mf- nódludi	<i>let him not give it to me</i>
bâ-mf- scùdi	<i>let him not give it to you</i>

DUBITATIVE

tlìudi	<i>maybe I gave it to him</i>
čìudi	<i>maybe you gave it to him</i>
dlìudi	<i>maybe he gave it to him</i>
čàudi	<i>maybe I gave it to you</i>
dʷùdi	<i>maybe you gave it to me</i>
tédìudi	<i>maybe he gave it to me</i>
dʷídludi	<i>maybe he gave it to you</i>

FUTURE HORTATIVE

ba ñludi	<i>let me give it to him (in the future)</i>
ba čìudi	<i>give it to him</i>
ba plìudi	<i>let him give it to him</i>
ba čàudi	<i>let me give it to you</i>
ba dʷùdi	<i>give it to me</i>
ba nódludi	<i>let him give it to me</i>
ba dʷídludi	<i>let him give it to you</i>

TRANSITIVE VERB SECONDARY PARADIGMS

REFLEXIVE

INDICATIVE

šàku	<i>I bit myself</i>
šàku	<i>you bit yourself</i>
káʔàku	<i>he bit himself</i>

HORTATIVE

káʔàku	<i>let me bite myself</i>
čàku	<i>bite yourself</i>
páʔàku	<i>let him bite himself</i>

NEGATIVE

zázi skáʔàku	<i>I didn't bite myself</i>
zázi šàku	<i>you didn't bite yourself</i>
zázi káʔàku	<i>he didn't bite himself</i>

NEGATIVE HORTATIVE

bâ-mf- ñàku	<i>let me not bite myself</i>
bâ-mf- skáʔàku	<i>don't bite yourself</i>
bâ-mf- páʔàku	<i>let him not bite himself</i>

DUBITATIVE

táʔàku	<i>maybe I bit myself</i>
čáʔàku	<i>maybe you bit yourself</i>
čáʔàku	<i>maybe he bit himself</i>

FUTURE HORTATIVE

ba ñàku	<i>let me bite myself (in the future)</i>
ba čáʔàku	<i>bite yourself</i>
ba páʔàku	<i>let him bite himself</i>

PASSIVE

INDICATIVE		HORTATIVE	
ská'águñe	<i>I was bitten</i>	né'èguñe	<i>let me be bitten</i>
šá'águñe	<i>you were bitten</i>	zá'águñe	<i>be bitten</i>
čá'águñe	<i>he was bitten</i>	pé'èguñe	<i>let him be bitten</i>
NEGATIVE		NEGATIVE HORTATIVE	
zázi scá'águñe	<i>I wasn't bitten</i>	bâ-mí. né'èguñe	<i>let me not be bitten</i>
zázi šá'águñe	<i>you weren't bitten</i>	bâ-mí. scá'águñe	<i>don't be bitten</i>
zázi čá'águñe	<i>he wasn't bitten</i>	bâ-mí. pé'èguñe	<i>let him not be bitten</i>
DUBITATIVE		FUTURE HORTATIVE	
té'èguñe	<i>maybe I was bitten</i>	ba né'èguñe	<i>let me be bitten (in the future)</i>
čá'águñe	<i>maybe you were bitten</i>	ba čá'águñe	<i>be bitten</i>
tá'águñe	<i>maybe he was bitten</i>	ba pé'èguñe	<i>let him be bitten</i>

INTRANSITIVE VERB PARADIGMS

CLASS 1-1

INDICATIVE		HORTATIVE	
sfuyá	<i>I skinned it</i>	káuyá	<i>let me skin it</i>
šúyá	<i>you skinned it</i>	púyá	<i>skin it</i>
gúyá	<i>he skinned it</i>	pí'yúyá	<i>let him skin it</i>
NEGATIVE		NEGATIVE HORTATIVE	
zázi sgúyá	<i>I didn't skin it</i>	bâ-mí. káuyá	<i>let me not skin it</i>
zázi šúyá	<i>you didn't skin it</i>	bâ-mí. sgúyá	<i>don't skin it</i>
zázi gúyá	<i>he didn't skin it</i>	bâ-mí. pí'yúyá	<i>let him not skin it</i>
DUBITATIVE		FUTURE HORTATIVE	
túyá	<i>maybe I skinned it</i>	ba nuyá	<i>let me skin it (in the future)</i>
čúyá	<i>maybe you skinned it</i>	ba čúyá	<i>skin it</i>
d'úyá	<i>maybe he skinned it</i>	ba pí'yúyá	<i>let him skin it</i>

CLASS 1-3

Class 1-3 verbs are inflected like those of Class 1-1 except that allomorph 114H occurs in the second person hortative:

ʔəská *drink it*

CLASS 1-16

INDICATIVE		HORTATIVE	
šikU	<i>I am located</i>	káku	<i>let me be located</i>
šáku	<i>you are located</i>	žáku	<i>be located</i>
gáku	<i>he is located</i>	pí'íkU	<i>let him be located</i>
NEGATIVE		NEGATIVE HORTATIVE	
zázi sgáku	<i>I am not located</i>	bâ-mí. káku	<i>let me not be located</i>
zázi šáku	<i>you are not located</i>	bâ-mí. sgáku	<i>don't be located</i>
zázi gáku	<i>he is not located</i>	bâ-mí. pí'íkU	<i>let him not be located</i>

DUBITATIVE

tíʔíkU *maybe I am located*
 çákU *maybe you are located*
 dʔákU *maybe he is located*

FUTURE HORTATIVE

ba ñíkU *let me be located (in the future)*
 ba çákU *be located*
 ba píʔíkU *let him be located*

CLASS 1-17

INDICATIVE

šfuyá.ñE *we skinned it*
 şúyá.ñE *you all skinned it*
 gúyá.ñE *they skinned it*

HORTATIVE

ńfuyá.ñE *let us skin it*
 púyá.ñE *skin it (you all)*
 píyúyá.ñE *let them skin it*

NEGATIVE

zázi sgúyá.ñE *we didn't skin it*
 zázi şúyá.ñE *you all didn't skin it*
 zázi gúyá.ñE *they didn't skin it*

NEGATIVE HORTATIVE

bâ-mí. ńfuyá.ñE *let us not skin it*
 bâ-mí. sgúyá.ñE *don't skin it (you all)*
 bâ-mí. píyúyá.ñE *let them not skin it*

DUBITATIVE

tíyúyá.ñE *maybe we skinned it*
 çúyá.ñE *maybe you all skinned it*
 dʔúyá.ñE *maybe they skinned it*

FUTURE HORTATIVE

ba ńfuyá.ñE *let us skin it (in the future)*
 ba çúyá.ñE *skin it (you all)*
 ba píyúyá.ñE *let them skin it*

CLASS 1-18

Class 1-18 verbs are inflected like those of Class 1-17 except that allomorphs 104Q and 105Q occur in the first person hortative and negative hortative:

stúyá.ñE *let us two skin it*

CLASS 2-23

INDICATIVE

sózâ.ʔAPE *we ate*
 gózâ.ʔAPE *you all ate*
 gâ.ʔAPE *they ate*

HORTATIVE

nózâ.ʔAPE *let us eat*
 zâ.ʔAPE *eat (you all)*
 pâ.ʔAPE *let them eat*

NEGATIVE

zázi sgâ.ʔAPE *we didn't eat*
 zázi gózâ.ʔAPE *you all didn't eat*
 zázi gâ.ʔAPE *they didn't eat*

NEGATIVE HORTATIVE

bâ-mí. nózâ.ʔAPE *let us not eat*
 bâ-mí. sgâ.ʔAPE *don't eat (you all)*
 bâ-mí. pâ.ʔAPE *let them not eat*

DUBITATIVE

tózâ.ʔAPE *maybe we ate*
 dʔózâ.ʔAPE *maybe you all ate*
 dʔâ.ʔAPE *maybe they ate*

FUTURE HORTATIVE

ba nózâ.ʔAPE *let us eat (in the future)*
 ba dʔózâ.ʔAPE *eat (you all)*
 ba pâ.ʔAPE *let them eat*

CLASS 2-24

Class 2-24 verbs are inflected like those of Class 2-23 except that allomorphs 104M and 105M occur in the first person hortative and negative hortative:

šâ.ʔAbe *let us two eat*

CLASS 3-27

INDICATIVE		HORTATIVE	
sgúwa-sa	<i>I am sick</i>	núzúwa-sa	<i>let me be sick</i>
gúzúwa-sa	<i>you are sick</i>	zúwa-sa	<i>be sick</i>
zíwa-sa	<i>he is sick</i>	píwa-sa	<i>let him be sick</i>
NEGATIVE		NEGATIVE HORTATIVE	
zázi sd'íwa-sa?	<i>I am not sick</i>	bâ-mí- núzúwa-sa	<i>let me not be sick</i>
zázi gúzúwa-sa?	<i>you are not sick</i>	bâ-mí- sd'íwa-sa	<i>don't be sick</i>
zázi zíwa-sa?	<i>he is not sick</i>	bâ-mí- píwa-sa	<i>let him not be sick</i>
DUBITATIVE		FUTURE HORTATIVE	
túzúwa-sa	<i>maybe I am sick</i>	ba núzúwa-sa	<i>let me be sick (in the future)</i>
d'úzúwa-sa	<i>maybe you are sick</i>	ba d'úzúwa-sa	<i>be sick</i>
díwa-sa	<i>maybe he is sick</i>	ba píwa-sa	<i>let him be sick</i>

CLASS 4-3

INDICATIVE		HORTATIVE	
slukAI	<i>I am satisfied</i>	kàukAI	<i>let me be satisfied</i>
šúkái	<i>you are satisfied</i>	?úkái	<i>be satisfied</i>
kúkái	<i>he is satisfied</i>	piúkái	<i>let him be satisfied</i>
NEGATIVE		NEGATIVE HORTATIVE	
zázi skúkái	<i>I am not satisfied</i>	bâ-mí- kàukAI	<i>let me not be satisfied</i>
zázi šúkái	<i>you are not satisfied</i>	bâ-mí- skúkái	<i>don't be satisfied</i>
zázi kúkái	<i>he is not satisfied</i>	bâ-mí- piúkái	<i>let him not be satisfied</i>
DUBITATIVE		FUTURE HORTATIVE	
tiukAI	<i>maybe I am satisfied</i>	ba niukAI	<i>let me be satisfied (in the future)</i>
čúkái	<i>maybe you are satisfied</i>	ba čúkái	<i>be satisfied</i>
čúkái	<i>maybe he is satisfied</i>	ba piúkái	<i>let him be satisfied</i>

CLASS 4-5

INDICATIVE		HORTATIVE	
sízðca	<i>I ran</i>	kízðca	<i>let me run</i>
šízðca	<i>you ran</i>	tízðca	<i>run</i>
kízðca	<i>he ran</i>	pízðca	<i>let him run</i>
NEGATIVE		NEGATIVE HORTATIVE	
zázi skízðca	<i>I didn't run</i>	bâ-mí- kízðca	<i>let me not run</i>
zázi šízðca	<i>you didn't run</i>	bâ-mí- skízðca	<i>don't run</i>
zázi kízðca	<i>he didn't run</i>	bâ-mí- pízðca	<i>let him not run</i>
DUBITATIVE		FUTURE HORTATIVE	
tízðca	<i>maybe I ran</i>	ba nízðca	<i>let me run (in the future)</i>
čízðca	<i>maybe you ran</i>	ba čízðca	<i>run</i>
čízðca	<i>maybe he ran</i>	ba pízðca	<i>let him run</i>

CLASS 5-2

INDICATIVE		HORTATIVE	
síwí-teYA	<i>I worshiped</i>	kúwí-teYA	<i>let me worship</i>
şúwí-teYA	<i>you worshiped</i>	ćúwí-teYA	<i>worship</i>
kúwí-teYA	<i>he worshiped</i>	púwí-teYA	<i>let him worship</i>
NEGATIVE		NEGATIVE HORTATIVE	
zázi skúwí-teYA	<i>I didn't worship</i>	bâ-mí. kúwí-teYA	<i>let me not worship</i>
zázi şúwí-teYA	<i>you didn't worship</i>	bâ-mí. skúwí-teYA	<i>don't worship</i>
zázi kúwí-teYA	<i>he didn't worship</i>	bâ-mí. púwí-teYA	<i>let him not worship</i>
DUBITATIVE		FUTURE HORTATIVE	
tíwí-teYA	<i>maybe I worshiped</i>	ba níwí-teYA	<i>let me worship (in the future)</i>
ćúwí-teYA	<i>maybe you worshiped</i>	ba ćúwí-teYA	<i>worship</i>
ćúwí-teYA	<i>maybe he worshiped</i>	ba púwí-teYA	<i>let him worship</i>

CLASS 5-8

INDICATIVE		HORTATIVE	
súpe	<i>I ate</i>	kúpe	<i>let me eat</i>
şúpe	<i>you ate</i>	ćúpe	<i>eat</i>
kúpe	<i>he ate</i>	púpe	<i>let him eat</i>
NEGATIVE		NEGATIVE HORTATIVE	
zázi skúpe	<i>I didn't eat</i>	bâ-mí. kúpe	<i>let me not eat</i>
zázi şúpe	<i>you didn't eat</i>	bâ-mí. skúpe	<i>don't eat</i>
zázi kúpe	<i>he didn't eat</i>	bâ-mí. púpe	<i>let him not eat</i>
DUBITATIVE		FUTURE HORTATIVE	
túpe	<i>maybe I ate</i>	ba núpe	<i>let me eat (in the future)</i>
ćúpe	<i>maybe you ate</i>	ba ćúpe	<i>eat</i>
dúpe	<i>maybe he ate</i>	ba púpe	<i>let him eat</i>

CLASS 5-9

Class 5-9 is inflected like Class 5-8 except that allomorphs 104G and 105G occur in the first person hortative and negative hortative:

núwátâ-nízañe *let us work*

CLASS 5-10

Class 5-10 differs from Classes 5-8 and 5-9 in that it takes allomorphs 104M and 105M in the first person hortative and negative hortative:

şútâ-nízañã *let us two work*

CLASS 6-3

INDICATIVE

sê-ni *I walked*
 şâ-ni *you walked*
 kâ-ni *he walked*

NEGATIVE

zázi skâ-ni *I didn't walk*
 zázi şâ-ni *you didn't walk*
 zázi kâ-ni *he didn't walk*

DUBITATIVE

tê-ni *maybe I walked*
 çâ-ni *maybe you walked*
 câ-ni *maybe he walked*

HORTATIVE

kâ-ni *let me walk*
 ?â-ni *walk*
 pê-ni *let him walk*

NEGATIVE HORTATIVE

bâ-mf. kâ-ni *let me not walk*
 bâ-mf. skâ-ni *don't walk*
 bâ-mf. pê-ni *let him not walk*

FUTURE HORTATIVE

ba nê-ni *let me walk (in the future)*
 ba çâ-ni *walk*
 ba pê-ni *let him walk*

CLASS 7-13

INDICATIVE

sáza *I said*
 góçaza *you said*
 káza *he said*

NEGATIVE

zázi skáza *I didn't say*
 zázi góçaza *you didn't say*
 zázi káza *he didn't say*

DUBITATIVE

táza *maybe I said*
 dʷóçaza *maybe you said*
 çáza *maybe he said*

HORTATIVE

káza *let me say*
 záza *say*
 páza *let him say*

NEGATIVE HORTATIVE

bâ-mf. káza *let me not say*
 bâ-mf. skáza *don't say*
 bâ-mf. páza *let him not say*

FUTURE HORTATIVE

ba náza *let me say (in the future)*
 ba dʷóçaza *say*
 ba páza *let him say*

CLASS 7-15

INDICATIVE

ša *it is mine*
 gózá *it is yours*
 ka *it is his*
 şa *you are mine*

NEGATIVE

zázi ská *it isn't mine*
 zázi gózá *it isn't yours*
 zázi ka *it isn't his*
 zázi şa *you aren't mine*

DUBITATIVE

ta *maybe it is mine*
 dʷózá *maybe it is yours*
 ça *maybe it is his*
 çá *maybe you are mine*

HORTATIVE

ña *let it be mine*
 za *let it be yours*
 pa *let it be his*
 şa *be mine*

NEGATIVE HORTATIVE

bâ-mf. ña *let it not be mine*
 bâ-mf. ská *let it not be yours*
 bâ-mf. pa *let it not be his*
 bâ-mf. şa *don't be mine*

FUTURE HORTATIVE

ba ña *let it be mine (in the future)*
 ba dʷózá *let it be yours*
 ba pa *let it be his*
 ba çá *be mine*

CLASS 8-14

INDICATIVE

śúdʷaši	<i>I fasted</i>
gúzúdʷaši	<i>you fasted</i>
gáudʷaši	<i>he fasted</i>

NEGATIVE

zázi sgáudʷaši	<i>I didn't fast</i>
zázi gúzúdʷaši	<i>you didn't fast</i>
zázi gáudʷaši	<i>he didn't fast</i>

DUBITATIVE

túʷúdʷaši	<i>maybe I fasted</i>
dʷúzúdʷaši	<i>maybe you fasted</i>
dʷáudʷaši	<i>maybe he fasted</i>

HORTATIVE

kúʷúdʷaši	<i>let me fast</i>
zúdʷaši	<i>fast</i>
páudʷaši	<i>let him fast</i>

NEGATIVE HORTATIVE

bâ·mí·kúʷúdʷaši	<i>let me not fast</i>
bâ·mí·sgáudʷaši	<i>don't fast</i>
bâ·mí·páudʷaši	<i>let him not fast</i>

FUTURE HORTATIVE

ba núudʷaši	<i>let me fast (in the future)</i>
ba dʷúzúdʷaši	<i>fast</i>
ba páudʷaši	<i>let him fast</i>

CLASS 9-11

INDICATIVE

śáudi	<i>I planted</i>
śáudi	<i>you planted</i>
káʷáudi	<i>he planted</i>

NEGATIVE

zázi skáʷáudi	<i>I didn't plant</i>
zázi śáudi	<i>you didn't plant</i>
zázi káʷáudi	<i>he didn't plant</i>

DUBITATIVE

táʷáudi	<i>maybe I planted</i>
çáʷáudi	<i>maybe you planted</i>
čáʷáudi	<i>maybe he planted</i>

HORTATIVE

káʷáudi	<i>let me plant</i>
čáudi	<i>plant</i>
páʷáudi	<i>let him plant</i>

NEGATIVE HORTATIVE

bâ·mí·káʷáudi	<i>let me not plant</i>
bâ·mí·skáʷáudi	<i>don't plant</i>
bâ·mí·páʷáudi	<i>let him not plant</i>

FUTURE HORTATIVE

ba náudi	<i>let me plant (in the future)</i>
ba çáʷáudi	<i>plant</i>
ba páʷáudi	<i>let him plant</i>

CLASS 9-12

Class 9-12 verbs differ from those of Class 9-11 in that allomorphs 104N and 105N occur in the first person hortative and negative hortative:

śáudiñā *let us two plant*

CLASS 10-6

INDICATIVE

sí·baʷtu	<i>I slept</i>
ší·baʷtu	<i>you slept</i>
zí·baʷtu	<i>he slept</i>

NEGATIVE

zázi sdʷí·baʷtu	<i>I didn't sleep</i>
zázi ší·baʷtu	<i>you didn't sleep</i>
zázi zí·baʷtu	<i>he didn't sleep</i>

HORTATIVE

káibaʷtu	<i>let me sleep</i>
ʷí·baʷtu	<i>sleep</i>
píʷí·baʷtu	<i>let him sleep</i>

NEGATIVE HORTATIVE

bâ·mí·káibaʷtu	<i>let me not sleep</i>
bâ·mí·sdʷí·baʷtu	<i>don't sleep</i>
bâ·mí·píʷí·baʷtu	<i>let him not sleep</i>

DUBITATIVE

tf-ba?tu	<i>maybe I slept</i>
cf-ba?tu	<i>maybe you slept</i>
df-ba?tu	<i>maybe he slept</i>

FUTURE HORTATIVE

ba ní-ba?tu	<i>let me sleep (in the future)</i>
ba cf-ba?tu	<i>sleep</i>
ba pí?í-ba?tu	<i>let him sleep</i>

CLASS 10-7

INDICATIVE

éikupawa	<i>I chopped</i>
šikupawa	<i>you chopped</i>
zikupawa	<i>he chopped</i>

HORTATIVE

kákupawa	<i>let me chop</i>
pikupawa	<i>chop</i>
pikupawa	<i>let him chop</i>

NEGATIVE

zázi sd'fikupawa	<i>I didn't chop</i>
zázi šikupawa	<i>you didn't chop</i>
zázi zikupawa	<i>he didn't chop</i>

NEGATIVE HORTATIVE

bâ-mí· kákupawa	<i>let me not chop</i>
bâ-mí· sd'fikupawa	<i>don't chop</i>
bâ-mí· pikupawa	<i>let him not chop</i>

DUBITATIVE

ťikupawa	<i>maybe I chopped</i>
čikupawa	<i>maybe you chopped</i>
đikupawa	<i>maybe he chopped</i>

FUTURE HORTATIVE

ba níkupawa	<i>let me chop (in the future)</i>
ba čikupawa	<i>chop</i>
ba pikupawa	<i>let him chop</i>

CLASS 10-21

INDICATIVE

sikupawañe	<i>we chopped</i>
šikupawañe	<i>you all chopped</i>
zikupawañe	<i>they chopped</i>

HORTATIVE

nikupawañe	<i>let us chop</i>
pikupawañe	<i>chop (you all)</i>
pikupawañe	<i>let them chop</i>

NEGATIVE

zázi sd'fikupawañe	<i>we didn't chop</i>
zázi šikupawañe	<i>you all didn't chop</i>
zázi zikupawañe	<i>they didn't chop</i>

NEGATIVE HORTATIVE

bâ-mí· nikupawañe	<i>let us not chop</i>
bâ-mí· sd'fikupawañe	<i>don't chop (you all)</i>
bâ-mi· pikupawañe	<i>let them not chop</i>

DUBITATIVE

tikupawañe	<i>maybe we chopped</i>
čikupawañe	<i>maybe you all chopped</i>
đikupawañe	<i>maybe he chopped</i>

FUTURE HORTATIVE

ba nikupawañe	<i>let us chop (in the future)</i>
ba čikupawañe	<i>chop (you all)</i>
ba pikupawañe	<i>let them chop</i>

CLASS 10-22

Class 10-22 verbs are inflected like those of Class 10-21 except that allomorphs 104P and 105P occur in the first person hortative and negative hortative:

stikupawaña *let us two chop*

CLASS 11-25

INDICATIVE

sódèkU *we went*
gódèkU *you all went*
zèkU *they went*

NEGATIVE

zázi sd'èkU *we didn't go*
zázi gódèkU *you all didn't go*
zázi zèkU *they didn't go*

DUBITATIVE

tádèkU *maybe we went*
d'ídèkU *maybe you all went*
dèkU *maybe they went*

HORTATIVE

nódèkU *let us go*
dèkU *go (you all)*
pèkU *let them go*

NEGATIVE HORTATIVE

bâ-mí. nódèkU *let us not go*
bâ-mí. sd'èkU *don't go (you all)*
bâ-mí. pèkU *let them not go*

FUTURE HORTATIVE

ba nódèkU *let us go (in the future)*
ba d'ídèkU *go (you all)*
ba pèkU *let them go*

CLASS 11-26

Class 11-26 verbs differ from those of Class 11-25 in that they occur with allomorphs 104O and 105O in the first person hortative and negative hortative:

sté'èyu *let us two go*

CLASS 12-27

INDICATIVE

sgâ-nawañi *I am mean*
gózá-nawañi *you are mean*
čâ-nawañi *he is mean*

NEGATIVE

zázi sčâ-nawañi *I am not mean*
zázi gózá-nawañi *you are not mean*
zázi čâ-nawañi *he is not mean*

DUBITATIVE

tózá-nawañi *maybe I am mean*
d'ózá-nawañi *maybe you are mean*
tâ-nawañi *maybe he is mean*

HORTATIVE

nózá-nawañi *let me be mean*
zá-nawañi *be mean*
pè-nawañi *let him be mean*

NEGATIVE HORTATIVE

bâ-mí. nózá-nawañi *let me not be mean*
bâ-mí. sčâ-nawañi *don't be mean*
bâ-mí. pè-nawañi *let him not be mean*

FUTURE HORTATIVE

ba nózá-nawañi *let me be mean (in the future)*
ba d'ózá-nawañi *be mean*
ba pè-nawañi *let him be mean*

CLASS 13-28

INDICATIVE

skùikAI *I lay down*
gódikAI *you lay down*
čikAI *he lay down*

NEGATIVE

zázi sčikAI *I didn't lie down*
zázi gódikAI *you didn't lie down*
zázi čikAI *he didn't lie down*

HORTATIVE

nódikAI *let me lie down*
dikAI *lie down*
pikAI *let him lie down*

NEGATIVE HORTATIVE

bâ-mí. nódikAI *let me not lie down*
bâ-mí. sčikAI *don't lie down*
bâ-mí. pikAI *let him not lie down*

DUBITATIVE

tédikAI	<i>maybe I lay down</i>
dʷídikAI	<i>maybe you lay down</i>
tíkAI	<i>maybe he lay down</i>

FUTURE HORTATIVE

ba nédikAI	<i>let me lie down (in the future)</i>
ba dʷídikAI	<i>lie down</i>
ba píkAI	<i>let him lie down</i>

CLASS 14-4

INDICATIVE

sí-ça	<i>I did it</i>
ší-ça	<i>you did it</i>
čí-ça	<i>he did it</i>

HORTATIVE

káiça	<i>let me do it</i>
pí-ça	<i>do it</i>
píʔí-ça	<i>let him do it</i>

NEGATIVE

zázi sčí-ça	<i>I didn't do it</i>
zázi ší-ça	<i>you didn't do it</i>
zázi cí-ça	<i>he didn't do it</i>

NEGATIVE HORTATIVE

bá-mí. káiça	<i>let me not do it</i>
bá-mí. sčí-ça	<i>don't do it</i>
bá-mí. píʔí-ça	<i>let him not do it</i>

DUBITATIVE

tí-ça	<i>maybe I did it</i>
čí-ça	<i>maybe you did it</i>
tí-ça	<i>maybe he did it</i>

FUTURE HORTATIVE

ba ní-ça	<i>let me do it (in the future)</i>
ba cí-ça	<i>do it</i>
ba píʔí-ça	<i>let him do it</i>

CLASS 14-19

INDICATIVE

ší-za-ńe	<i>we did it</i>
ší-za-ńe	<i>you all did it</i>
čí-za-ńe	<i>they did it</i>

HORTATIVE

ńí-za-ńe	<i>let us do it</i>
pí-za-ńe	<i>do it (you all)</i>
píʔí-za-ńe	<i>let them do it</i>

NEGATIVE

zázi sčí-za-ńe	<i>we didn't do it</i>
zázi ší-za-ńe	<i>you all didn't do it</i>
zázi cí-za-ńe	<i>they didn't do it</i>

NEGATIVE HORTATIVE

bá-mí. ńí-za-ńe	<i>let us not do it</i>
bá-mí. sčí-za-ńe	<i>don't do it (you all)</i>
bá-mí. píʔí-za-ńe	<i>let them not do it</i>

DUBITATIVE

tíʔí-za-ńe	<i>maybe we did it</i>
čí-za-ńe	<i>maybe you all did it</i>
tí-za-ńe	<i>maybe they did it</i>

FUTURE HORTATIVE

ba ńí-za-ńe	<i>let us do it (in the future)</i>
ba cí-za-ńe	<i>do it (you all)</i>
ba píʔí-za-ńe	<i>let them do it</i>

CLASS 14-20

Class 14-20 verbs differ from those of Class 14-19 in that they take allomorphs 104Q and 105Q in the first person hortative and negative hortative:

sí-za-ńe *let us two do it*

APPENDIX 2. TEXT ⁷

D P S D
dí?ái¹ şu ?e hau?² / dá?áçri³ sandiyá.ku⁴ / ?ai şu ?e şu há.di⁵
 there near he arrived St. James where

S I P C
čí.ná⁶ d^yó.tá.ma⁷ / zázi⁸ ?íte⁹ d^yúrn¹⁰ / şu ?e tá¹¹
 river it is full not able to he crosses thus

P D O
şu çúidá. ?anikuya¹² / dúké.¹³ d^yi¹⁴ / şu ?eu şu sózánáisd^yuşE¹⁵
 he was asking that way up Our Father

P I D O
çúidá. ?anikuya¹² / gúwa.¹⁶ ?éza¹⁷ dúké.¹³ ku¹⁸ çici¹⁹ gó.tá.ma²⁰
 he was asking how at least that way south water it is full

P A D O
núrn²¹ gúnE²² / ?e şu ?e yúsi²³ n^ə²⁴ ?eu²⁵ d^yá.mí²⁶
 will cross he from there down eagle

D P D P
?eu şu ?e yúsi²³ n^ə²⁴ / tágúyañE²⁷ / şu ?e hau?² dúwáçri²⁸ /
 from there down he was sent near he approached

P I fragment P P
şu ?e ?e dácıkuya²⁹ / zi³⁰ háidí³¹ ýu.³² / há.³³ / d^yéineta³⁴ / şáciPa³⁵ /
 he said to him what which maybe yes he said I need you

I P A fragment P S
ýu.³² n^fud^yá.wa³⁶ / çu³⁷ / şu ?e hê.mé.³⁸ / d^yéineta³⁴ / ?eu²⁵d^yá.mí²⁶ /
 maybe will be of use you all right he said eagle

fragment P D A D
şu ?e hiñá³⁹ ?égu⁴⁰ / nódé?èyu⁴¹ / dísi⁴² ku¹⁸ / súzú. ?u⁴³ / há.di⁵
 O.K. then will go there south we two where

S D P A S
hiçá.ntri⁴⁴ d^yá.má⁴⁵ / ?eu ?ai hau?² / nódé?èyu⁴¹ / súzú. ?u⁴³ / gasí.ki⁴⁶
 giant his home near will go we two king

O P P A
káu^kui⁴⁷ / ?eu tu⁴⁸ zíwiça⁴⁹ / ?eu şu níyéiba.n^ətri⁵⁰ / súzú. ?u⁴³ /
 his wife he lost will look for we her

⁷ Superior numbers in Indian text are explained on pages 163-164.

$\overbrace{\text{su } ?e \text{ ?eu } d^y\acute{a}\text{-mí}^{26}}^{\text{S}}$ $\overbrace{?e \text{ } \acute{c}\acute{a}za^{51}}^{\text{P}}$ / $\overbrace{hi\acute{n}\acute{a}^{39}}^{\text{fragment}}$ / $\overbrace{d^y\acute{e}i\acute{n}e\acute{t}\acute{a}^{34}}^{\text{P}}$ /
 eagle he said O.K. he said

$\overbrace{\text{su } ?e \text{ dúwé.}^{52} \text{ ?égu}^{40}}^{\text{fragment}}$ / $\overbrace{\text{su} / \acute{s}\acute{e}t\acute{I}d^y\acute{a}^{53} \text{ ?ai } d^y\acute{i}^{14}}^{\text{D}}$ / $\overbrace{\acute{c}\acute{u}g\acute{u}y\acute{a}^{54}}^{\text{P}}$ / $\overbrace{\text{su } ?e \text{ ?ai } d^y\acute{i}^{14}}^{\text{D}}$
 this way then my back up sit up

$\overbrace{\acute{c}\acute{u}g\acute{u}y\acute{a}^{55}}^{\text{P}}$ $\overbrace{?eu^{25} \text{ sandiy\acute{a}\cdot ku}^4}^{\text{S}}$ / $\overbrace{\text{su } ?e \text{ dísi}^{42} \text{ ku}^{18}}^{\text{D}}$ $\overbrace{\text{su } ?e \text{ su } d^y\acute{a}\text{?ái}y\acute{u}^{55}}^{\text{P}}$ /
 he sat St. James there south they flew

$\overbrace{\text{su } ?e \text{ } d^y\acute{i}^{14}}^{\text{D}}$ $\overbrace{d\acute{e}?\acute{e}y\acute{u}^{57}}^{\text{P}}$ / $\overbrace{\text{su } ?e \text{ } d^y\acute{i}^{14} \text{ há}\text{-}d\acute{i}^5}^{\text{D}}$ $\overbrace{\text{su } d\acute{e}?\acute{e}\text{-}ya\text{?atane}^{58}}^{\text{P}}$ /
 up they went up where they were going

$\overbrace{\text{su } ?e \text{ su } d^y\grave{u}ka\acute{c}\acute{a}^{59}}^{\text{P}}$ / $\overbrace{?ai \text{ } \acute{n}\acute{o}^{24} \text{ ?eu}^{25}}^{\text{D}}$ $\overbrace{\acute{c}\acute{a}\text{?á}\text{-}s\acute{t}\acute{i}\text{-}\acute{c}\acute{a}^{60} \text{ hig\acute{a}\text{-}nt\acute{r}\acute{i}^{44}}^{\text{S}}$ /
 he saw it down his city giant

$\overbrace{\text{su } ?e \text{ su } d^y\grave{u}ka\acute{c}\acute{a}^{59}}^{\text{P}}$ / $\overbrace{\text{su } ?e \text{ } \acute{c}\acute{e}c\acute{i}^{61} \text{ su } \text{ hig\acute{a}\text{-}nt\acute{r}\acute{i}^{44}}^{\text{S}}$ / $\overbrace{d^y\acute{a}\text{-}m\acute{i}^{26}}^{\text{O}}$ $\overbrace{\acute{c}\acute{a}d^y\acute{a}\text{-}\acute{s}\acute{e}^{62}}^{\text{P}}$ /
 he saw it also giant eagle his

$\overbrace{\text{su } ?e \text{ su } \acute{c}\acute{a}\text{?á}ud^y\acute{u}^{63}}^{\text{P}}$ / $\overbrace{\text{su } ?e \text{ su } d^y\acute{i}^{14}}^{\text{D}}$ $\overbrace{d\acute{i}g\acute{a}\text{-}nikuya^{64}}^{\text{P}}$
 he knew up he was looking

$\overbrace{\acute{c}\acute{e}c\acute{i}^{61} \text{ hig\acute{a}\text{-}nt\acute{r}\acute{i}^{44} \acute{c}\acute{a}d^y\acute{a}\text{-}\acute{s}\acute{e}^{62}}^{\text{S}}$ / $\overbrace{\text{su } ?e \text{ su } ?eu \text{ hig\acute{a}\text{-}nt\acute{r}\acute{i}^{44} \acute{c}\acute{a}d^y\acute{a}\text{-}\acute{s}\acute{e}^{62} d^y\acute{a}\text{-}m\acute{i}^{26}}^{\text{S}}$
 also giant his giant his eagle

$\overbrace{\text{su } ?e \text{ } d^y\acute{u}\text{-}\acute{s}\acute{c}\acute{e}c\acute{a}^{65}}^{\text{P}}$ / $\overbrace{\text{su } ?e \text{ hig\acute{a}\text{-}nt\acute{r}\acute{i}^{44}}^{\text{S}}$ $\overbrace{\acute{c}\acute{a}k\acute{a}^{66}}^{\text{P}}$ / $\overbrace{\text{su } ?e \text{ } d^y\acute{u}i\acute{n}\acute{a}^{10}}^{\text{P}}$
 he cried out giant he heard he came out

$\overbrace{hig\acute{a}\text{-}nt\acute{r}\acute{i}^{44}}^{\text{S}}$ $\overbrace{\text{su } ?e \text{ ?eu } du^{67} d^y\acute{a}\text{-}m\acute{i}^{26}}^{\text{O}}$ $\overbrace{?e \text{ } \acute{t}\acute{a}\text{?á}\text{ñeyawa}^{68}}^{\text{P}}$ / $\overbrace{hi\acute{n}\acute{a}^{39} \text{ ?égu}^{40}}^{\text{fragment}}$ /
 giant this eagle he was commanded O.K. then

$\overbrace{\acute{c}\acute{u}\text{-}was\acute{i}^{69}}^{\text{P}}$ / $\overbrace{\text{su } ?e \text{ } \acute{c}\acute{a}\text{?á}u\text{-}was\acute{i}^{70}}^{\text{P}}$ $\overbrace{?eu \text{ } d^y\acute{a}\text{-}m\acute{i}^{26}}^{\text{S}}$ / $\overbrace{\text{su } ?e \text{ su } hau?^2}^{\text{D}}$
 attack he attacked eagle near

P	P	S
su dáʔácinu. ⁷¹ /	ʔai su čáwáinIYA ⁷² /	ʔe su ʔeu sandiyá.ku ⁴
he arrived	they fought	St. James

O	P
hisgai ⁷³	dʔáuču ⁷⁴ /
knife	he had

ʔeu su ʔe su hé.yá.ši su ʔe ʔeu du higá.ntɪ čádʔá.še.ši dídʔáwA/díʔai
with it this giant his (eagle) he stabbed there
su ʔe su čáʔaudapɛ.dʔanu / su ʔe yúwé. nə su ʔe dʔú.za.čA ʔeu du
they killed him this way down he fell this

higá.ntɪ dʔá.mí čádʔá.še / su ʔe ʔáisí su ʔe su déʔèyU / su ʔe su
giant eagle his there they went

há.di nə yúwé. su ʔe nódéʔèyU ʔeu ʔai há.di higá.ntɪ dʔá.mA
where down this way will go where giant he dwells

sčáʔá.sti.čA / ʔáisí dʔá.mA / su ʔe ʔai bendá.na dʔáwizañIšU / ʔeu
city there he dwells window he was there

ʔáisí dʔi dʔá.mí su ʔe čúgúYA / su ʔe ʔeu sandiyá.ku čéci su yúkU
there up eagle he sat St. James also away

nə čúgúyanu. / su ʔe ʔáisí dʔi čúgúYA / su ʔe ʔeu du sandiyá.ku
down he sat there up he sat this St. James

dʔá.mí háwé. tíyú.zé.yáne ʔe dáciKUYA / dísí ba čúyú.kAMI/
eagle this way he lead he said to him here future wait for me

há.né dúkÉ. kàigá / su ʔe hiná dʔéineta ʔeu dʔá.mí /
let me there look O.K. he said eagle

su ʔe yúkÉ. su ʔe háwé. ša dígá.nikUYA ʔeu sandiyá.ku / yúkÉ.
that way this way around he looked St. James that way

háwé. dígá.nikUYA / háwé. bendá.na ša nə čínésɛ / su ʔe zázi
this way he looked this way window around down he peered not

ʔíte dʔúbənu. / ʔégəskU ʔeu sai dáʔá.ʔA zi čímAsčéičA.ši / ʔeu
able to be entered but all it is shut thing iron with

su ʔe ta su ʔe ʔeu ʔai há.di / hauʔ dáʔáci ʔeu ʔai há.di čaukui.šanu
thus where near he came where his wife

gasí.kɪ ʔai dʔáku / su ʔe ʔeu dʔá.še ʔe su ʔe dišAčA / su ʔe
king she was her name he called

čáiskó·?əçAI ?eu gasí·KI čáukui-šanU / he dʷéinétA / šU ?e ?eu
 she turned king his wife what she said
 šáiyéiba·tE híšU / gózá·zó ?eu skúyanikUYA dúwé· si ?údi·ye /
 I look for you you your husband he told me this way back to get
 šU ?e ?e dʷéinétA / ?eu he / ?égu gúwá· sa níumə si / higá·nti
 she said all right then how back will I giant
 get out
 ?á·á·táwi yúké· yU? há·di dʷákU / ?eu nu· ká·á·tEYA /
 key that way there where it is only he has
 zázi hínu ská·á·tEYA / gúwá· ?égu sa níú·mə / šU ?e ?eu gasí·KI
 not I I have how then back will get out king
 čáukui-šanU ?e čáza / dúwái dúsi né·éér gu kúimí há·eU mǎgu/
 his wife she said this way will come he in a little while
 há·yéi ba há·di čúisgumAŠA / dúsi zá·á·cinU· / ?e šU há·wíná náudʷU
 somewhere
 there future hide back he arrives right away will know
 gu / šU ?e hiná dʷéinétA / šU ?e ?eu si yúkU zùdʷU šU yú·ái há·di
 he O.K. he said back away he went there somewhere
 čúisgumAŠA / šU ?e šU dúwé· šU si čá·ničAdʷAYA / ?ésgəskU nə kášanU·/
 he hid this way back he was coming but down he stepped
 šU ?e šU há·á·ci· wákəwəkədʷA / šU ?emí šU čá·á·udʷU / mmm dʷéinétA /
 earth it shook already he knew he said
 hau di? zi gákU / dʷéinétA ?eu higá·nti / šU ?e ?eu gasí·KI
 who here thing he is he said giant king
 čáukui-šanU ?e čáza / zázi há·di hau gákU gu zázi há·di hau
 his wife she said not somewhere who he is and not somewhere who
 ská·á·tišaniguyanə·di / šU ?e ?eu gasí·KI čáukui-šanU higá·nti
 we talk to each other king his wife giant
 ?e dácikUYA / mí·ná·šásbanašumanU· / ýU· dʷídičáyumA /
 she said to him let me I wash your head maybe you are tired
 mí·ná·šásbanašumanU· / šU ?eyú· mé·é· nýúú·di·i·CA çU ráwá· /
 let me I wash your head maybe thus will rest you good
 gu ní·ba·?tU çU / šU ?e hiná ?égu / dʷéinétA ?eu higá·nti / šU ?e ?eu šU
 and will sleep you O.K. then he said giant

čá?áuwɪspa-ziwita ?ai du gasí-kɪ čáukui-šanu / šu ?e šu háikʷ šu
 she made suds this king his wife when
 tá?ásbanašumanɛ / ?eu du higá-nɪ ?eu tá?ásba našumanɛ /
 his head was washed this giant his head was washed
 šu ?e šu dí-ba?tu / šu ?e ?eu du gasí-kɪ čáukui-šanu šu ?e ?eu
 he slept this giant his wife
 dʷúbéuca sandiyá-kʷ / dúwé. šu gàiɪ si ?i-ma / šu zí-ba?tu / šu ?e
 she called St. James this way come on back come he sleeps
 ?eu ?ai šu ?e díube-ta / šu ?eu yúké. kú-tí ?e zùpe. / yú?ái há-di
 she told him there mountain go there where
 dʷi ?eu dʷáwá?A / ?áisí cá-cadʷA ?eu / gu ?eu ?áisí dʷáwínuska-tɪ /
 up he kept them there he breathes and there his hearts
 dʷú-mí. ?áisí dʷáwínuska-tɪ / du ?iska ?eu hé-ýá cá-ca-dʷani /
 two there his hearts this one with it he breathes
 gu du ?iska ?eu hé-ýá tíšá-tɪ-šé / šu ?e ?eu ta ?ai tá?àbe?eɛ
 and this one with it he has power thus he was told
 ?eu du sandiyá-kʷ / du dʷasí-kɪ čáukui-šanu ?e čáza / ?ésgaskʷ ?ai
 this St. James this king his wife she said but there
 gáukʷ mû-kaiça / ?ai čâ-nawaɪ mídʷu. / ?eu ?ai gúwa-sdʷu / šu ?e ?eu
 he has mountain lion he is mean very there he watches
 sandiyá-kʷ ?e čáza / hê-mé. ?e zû-ne si / šu ?e sa dʷúɪnənu. /
 St. James he said all right will go I back he left
 šu ?e ?ai šu ?e šu ?eu dʷá-mí tíyú-zé-yáne / ?ai šu ?e čá?àtišaniguyaɲ /
 eagle he lead they talked together
 šu ?e ?e dácɪkuya dʷá-mí/dúwé. ?égu šu na šu sté?èyʷ / šu ?e sa
 he said to him eagle this way then let's go let's go back
 dʷi čúgúyanu. / šu ?e ?áisí yúké. dʷa?áiʷ yú?ái há-di ?eu čú-tí /
 up he sat there that way they flew there where mountain
 šu ?e há-di nə zíyá. bə nə čúgúyaɲ di?-dʷanu šu ?e šu / ?ésgaskʷ
 where down below west down they sat here but
 šu ?e ?emí dí-ýùkača kau? zi mû-kaiça / šu ?emí dí-ýùkača /
 already he saw them something mountain lion already he saw them
 šu ?e šu ?ai šu yúkʷ nə čúgúya ?eu sandiyá-kʷ / šu ?e ?áisí ha.
 away down he sat St. James from there east

nú-yú·ká-ni/?e zùd^yU/şu ?e şu d^yùkača ?eumû·kaiça/ hau? şu há-ni
 himself he walked he went he saw him mountain lion near from the
 east
 čâ-ničad^yaya / şu ?eu yu? zi kúçayawane me· / ka házânI d^yi gá?Aşúné
 he was walking there thing he was mad like his hair up it stood
 ?e şu ?e/háwé·čâ-ni/şu ?e şu ?emí sandiyá·ku čéçI şu há·k^yU d^yáwizá·ñI
 this he walked already St. James also ready he had
 way prepared
 hişgai-şi / şu ?e ?işgawa ?ai şu ?e şu čú^yd^yad^yI / şu ?e ?eu díube?ene
 knife both they fought she told him
 du gasî·ki čâukui-şanu ?eu ?áisi d^yû·mí· gáwínuska·ti-şé / ?e şu ?e
 this king his wife there two his hearts
 şu ?e čá?âudanu· mû·kaiça / ?ai şu ?e d^yi čútíká·şa / şu ?e ?ai
 he killed it mountain lion up he climbed
 d^yû·?ùkača ?eu náwi?íkâ háwé· d^yi d^yá?âku / ?ai şu ?e ?iska
 he saw them eggs this way up they sat one
 čá?áuçáyUCA gu ?iska čá?aubənaimanu· / şu ?e yúsi ñə zùd^yU /
 he broke it and one he put in his pocket from there down he went
 şu ?e ?ai háusá dá?áci / ?eu ?ai há·di si díyû·kâMI / d^yá·mí hé·yá
 back he arrived where back he waited eagle with it
 čâ-ničad^yayane / şu ?áisi sa d^yi čúgúyanu· / şu ?e şu yúsi dé?èyU /
 he was going there back up he sat from there they went
 ?éşgæsku şu ?emí yu? ?e gúwa· gasî·ki čâukui díube?ene / şu ?emí
 but already there how king his wife she told him already
 hiçá·ntI şu díwa·sa yu? ?e / şu ?e háusá dá?áci / ?ai şu ?e ñə
 giant he was sick there back he arrived down
 čúgúyanu· şu ?e şu / şu čéçI díyû·kâMI gasî·ki čâukui-şanu / şu ?e
 he sat also she waited king his wife
 háusá dá?áçinu· / şu ?e şu diubéUCA şu ?e / şu gâiti dúwé· ?úpæ /
 back he arrived she called him come on this way enter
 dáçikuya / şu gâiti há·né / ?a si çiyùce / ha· d^yéiñeta /
 she said to him come on question back you brought yes he said
 si çiyùce / háwí· / şu ?e ?ai tá?âudi?-d^yanu / şu ?e yúké· ?eu
 back I brought here it was given there
 ?işgawa ?e dé?èyU şu / şu díwa·sa / şu ?e şu ?e dáçikuya /
 both they went he was sick he said to him
 d^yi şánásçái ?e pî·ça / dáçikuya / şu ?e ta d^yi tí·zane / şu ?e
 up your head do it he said to him thus up he did

?ai nə dʷùsčáçica ?eu / ?u ?e ?ai tá?ámudʷuzañe ?eu du higá·nti/
 down he burst he was killed this giant
 ?u ?e ?u gasí·kɪ čáukui-ʃanu gu sandiyá·ku ?u yúwé· / ?u ?e ?áisí
 king his wife and St. James this way there
 dʷi ?ísgawa čúgúyañədi--dʷanu / ?u ?e ?áisí sa dèku há·di gasí·kɪ
 up both they sat there back they went were king
 dʷá·má / ?u ?e sandiyá·ku kámákə gasí·kɪ tíwakúičə / háidí
 he lived St. James his daughter king he married which one
 gasí·kɪ díyá·?áni-šé / tá yúpé· sčA /
 king he promised thus story

FREE TRANSLATION

St. James arrived at the ocean and was not able to cross. So he asked God how he might cross the ocean. Then an eagle was sent down from above.

The eagle approached and said, "What is it?" "Yes," he said, "I need you. Maybe you will be of use." "All right," said the eagle. "O.K., then, we will go south to the giant's house. The king lost his wife. We are going to look for her." "O.K.," said the eagle, "come sit on my back." Then St. James got on. Then they flew south and up they went. As they were flying up there they saw the giant's city down below. The giant also had an eagle and he knew what was happening.

The giant's eagle looked up and cried out. Then the giant heard and came out. "O.K., attack!", he commanded his eagle. So the eagle attacked. When he came near they began fighting. St. James had a knife and with it stabbed the giant's eagle. They killed the giant's eagle and down he fell! Then they went down to the city where the giant lived. The eagle perched on the window of the giant's house and St. James got off and sat down. Then St. James said to the eagle who had taken him there, "Wait for me here. Let me look around." "O.K.," said the eagle.

So St. James looked around this way and that. He peered through the window but he could not get in. It was shut with iron bars. Then he came to where the king's wife was. He called her name and she turned around. "What is it?" she said. "I'm looking for you.

Your husband told me to come and get you." "All right," she said, "but how will I get out? The giant has the only key somewhere. I don't have any. How will we get out, then? He will come back in a little while. Hide somewhere. When he comes back he will know right away what is going on." "O.K.," he said, and he went and hid somewhere. The giant was coming back and as he stepped the earth shook. He already knew, and he said, "Hmmm! Who is here?" Then the king's wife said, "Nobody is here and there is nobody talking with me." The king's wife then said to the giant "Let me wash your head. Maybe you are tired. Let me wash your head and then maybe you will rest well and go to sleep." "O.K., then," said the giant. Then the King's wife made suds. When his head was washed the giant went to sleep. Then the king's wife called to St. James, "Come here; he is asleep." Then she told him, "Go to the mountains. He keeps them there. There he breathes and there he has his two hearts. He breathes with one, and with one he has power." Thus it was told to St. James. The king's wife said, "But he has a mountain lion there watching who is very mean." Then St. James said, "All right, I'll go." So he left and talked with the eagle who had led him. Then the eagle said to him, "Come on, let's go." So he got back on and they flew away to the mountains. Then they landed down on the west side, but the mountain lion had already seen them.

Then St. James got off and walked on eastward alone. The mountain lion saw him and approached from the east. He was mad and his hair stood up as he approached. St. James had his knife ready and the two of them fought. The king's wife had told him where the two hearts were, so he killed the mountain lion and climbed up. He saw two eggs sitting there. Then he broke one of them, put one in his pocket and climbed back down.

Then he arrived back where the eagle was waiting. He got back on and from there they returned according to the instructions of the king's wife. The giant was already sick when he got back and dismounted. The king's wife, too, was waiting. "Come on in," she called to him, "did you bring it back?" "Yes," he said, "here it is." And he gave it to her. Then they both went to the sick one. He said to him, "Lift up your head." Then he lifted it up and burst. So the giant was killed. Then the king's wife and St. James got on the eagle and they went back to the king's house. And St. James married the king's daughter that he had promised to him. That is the story.

EXPLANATION OF NUMBERS IN TEXT

1. Preposition, *there*.
2. Preposition, *near*.
3. Verb, *he arrived*. Affix 123G + stem, -áʔáçr.
4. Referential, *St. James*. From Spanish *Santiago*.
5. Preposition, *where, somewhere*.
6. Referential, *river*.
7. Verb, *it is full*. Affix 123A + stem, -ó-ḷá + affix 403.
8. Modal, *not*.
9. Modal, *able to*.
10. Verb, *he emerged* or, in this context, *he crosses over*. Affix 123A + stem, -úḿḿ.
11. Connective, *thus*.
12. Verb, *he was asking*. Affix 123C + stem, -úidá.ʔA + affix 401B.
13. Preposition, *that way*.
14. Directional, *up*.
15. Verb, *our father*. Affix 101G + stem, -ánáisdʔu + affix 501I.
16. Interrogative, *how?*
17. Modal, *at least*.
18. Directional, *south*.
19. Referential, *water*.
20. Verb, *it is full*. Same as 7 but with affix 121A instead of 123A.
21. Verb, *will emerge or cross over*. Same as 10 but with affix 201B instead of 123A.
22. Verbal auxiliary, third person subject with condition suffix.
23. Preposition, *from there, from afar*.
24. Directional, *down*.
25. Particle which in certain contexts adds emphasis to other words.
26. Referential, *eagle*.
27. Verb, *he sent*. Affix 123H + affix 302B + stem, -águya + affix 502A.
28. Verb, *he approached*. Affix 123B + stem, -úwáçr.
29. Verb, *he said to him*. Affix 123G + stem, -áčikuyA.
30. Interrogative, *what?*
31. Interrogative, *which?*
32. Modal, *maybe*.
33. Exclamation, *yes*.
34. Verb, *he said*. Affix 123A + stem, -áineḷA.
35. Verb, *I need you*. Affix 141B + stem, -léḷpa.
36. Verb, *will be of use*. Affix 201B + stem, -úḍʔá-waʔ.
37. Verbal auxiliary, second person subject.
38. Exclamation, *all right, that will do*.
39. Exclamation, *O.K.*
40. In some contexts a connective; here part of an exclamatory phrase.
41. Verb, *will go* (dual subject). Affix 201G + stem, -éʔèyu.
42. Preposition, *there*.
43. Verbal auxiliary, first person dual subject.
44. Referential, *giant*. From Spanish *gigante*.
45. Verb, *he lives, his house*. Affix 123A + stem, -á.ḿA.
46. Referential, *king*. From Spanish *cacique*. May be alternatively analyzed as a verb consisting of affix 121A + stem, -así-kr.
47. Verb, *his wife*. Affix 121D + stem, -áukui.
48. Particle which modifies meaning of following verb.
49. Verb, *he did it*, or, in this context with the particle *tu*, *he lost*. Affix 121G + stem, -íwiçA.

50. Verb, *will look for* (dual subject). Affix 201D + stem, -íy'èipa + affix 501B.
51. Verb, *he said*. Affix 123D + stem, -áza.
52. Preposition, *this way*.
53. Verb, *my back*. Affix 101E + stem, -átid^va.
54. Verb, *sit* (imperative). Affix 114D + stem, -úgúya.
55. Verb, *he sat*. Same as 54 but with affix 123C instead of 114D.
56. Verb, *they two flew*. Affix 123A + stem, -á?áiy'v.
57. Verb, *they two went*. Same as 41 but with affix 123G instead of 201G.
58. Verb, *they were going*. Affix 123G + stem, -é?é-ya?atA + affix 402B.
59. Verb, *he saw him (or it)*. Affix 123A + stem, -ùkačA.
60. Verb, *his city*. Affix 123D + stem, -á?á-sti-čA.
61. Particle, *also*.
62. Verb, *his* (referring to a living animal). Affix 123D + stem, -ád^vá-še.
63. Verb, *he knew*. Affix 123F + stem, -áud^vv.
64. Verb, *he was looking*. Affix 123G + stem, -ígá + affix 401B.
65. Verb, *he cried out*. Affix 123A + stem, -ú-sčèca.
66. Verb, *he heard*. Affix 123C + stem, -áká.
67. Pronoun, *this one*.
68. Verb, *he was commanded*. Affix 123H + affix 302A + stem, -áhèya + affix 502G.
69. Verb, *attack* (imperative). Affix 114D + stem, -áuwasi.
70. Verb, *he attacked*. Same as 69, but with affix 123F rather than 114D.
71. Verb, *he arrived*. Affix 123G + stem, -a?áčr + affix 602.
72. Verb, *they fought*. Affix 123C + stem, -áwáihya.
73. Referential, *knife*.
74. Verb, *he had*. Affix 123A + stem, -áučv.

APPENDIX 3. VOCABULARY

UNINFLECTED WORDS

- | | |
|--|---|
| 1. ?a <i>interrogative particle</i> | 43. ?úkú-yámi <i>carriage</i> |
| 2. ?ai <i>there</i> | 44. ?ú-káyáwí <i>towel, handkerchief</i> |
| 3. ?áičásti <i>mattress, mat</i> | 45. ?ú-má-ci <i>help, assistance</i> |
| 4. ?áčíni <i>house</i> | 46. ?ú-mú-ci <i>gun</i> |
| 5. ?ádàuší <i>cooking pot</i> | 47. ?ú-síwísdʒáúni <i>rope</i> |
| 6. ?á-dʒá-ní <i>lether</i> | 48. ?ú-skáici <i>bell</i> |
| 7. ?áugubá?akáci <i>nail</i> | 49. ?úšá-ça <i>sun</i> |
| 8. ?ánámáti <i>seat</i> | 50. ?ú-tá-ní <i>basket</i> |
| 9. ?ánáizáni <i>lamp</i> | 51. ?úwàka <i>baby, doll</i> |
| 10. ?áné. <i>tasty</i> | 52. ?úwáistáni <i>bowl</i> |
| 11. ?á-sá <i>large bowl</i> | 53. ?ú-wísgíci <i>match</i> |
| 12. ?áisi <i>thcre</i> | 54. ?úyáumbúmcí <i>drum</i> |
| 13. ?áiscázáni <i>trousers</i> | 55. ?úzásti <i>drill</i> |
| 14. ?ášaní <i>grass</i> | 56. ?á-ró. <i>hot (in reference to the weather)</i> |
| 15. ?ášaní <i>wheat</i> | 57. ba <i>future hortative particle</i> |
| 16. ?á?á-táwí <i>key</i> | 58. bá-bá <i>grandparent</i> |
| 17. ?á-wá-ní <i>grinding stone, metate</i> | 59. bàti <i>whitewash</i> |
| 18. ?e <i>and</i> | 60. bē-raka <i>toad</i> |
| 19. ?eu <i>narrative particle and emphasisizer</i> | 61. bíší-ná <i>purple</i> |
| 20. ?égu <i>then, therefore</i> | 62. bí-šú <i>bee</i> |
| 21. ?emí <i>already</i> | 63. bíyá. <i>tilted, lopsided</i> |
| 22. ?ésgòskú <i>but</i> | 64. búmú-ná <i>torso, ribs</i> |
| 23. ?ibáni <i>Cholla cactus</i> | 65. bú-ràika <i>butterfly</i> |
| 24. ?í-čánání <i>bark</i> | 66. búzúwísti <i>lightning</i> |
| 25. ?idʒawa <i>centipede</i> | 67. bə <i>west; bónámí westward</i> |
| 26. ?í-kani <i>vine</i> | 68. bəžá-ma <i>log</i> |
| 27. ?í?fná-ni <i>liver</i> | 69. càci <i>breath</i> |
| 28. ?ínáwí <i>flour</i> | 70. cèci <i>wall</i> |
| 29. ?isa <i>manure</i> | 71. cé-yá <i>first</i> |
| 30. ?isdúwa <i>arrow</i> | 72. cína <i>turkey</i> |
| 31. ?isgawa <i>both</i> | 73. cúski <i>fox</i> |
| 32. ?iska <i>one</i> | 74. čá-pí <i>fly</i> |
| 33. ?išá-ni <i>meat</i> | 75. čé-bóná <i>bitter</i> |
| 34. ?išá <i>porcupine</i> | 76. čéwasčá <i>stew</i> |
| 35. ?ísaŋi <i>lard</i> | 77. číci <i>water, juice</i> |
| 36. ?íte <i>able to</i> | 78. čí-ga <i>locust</i> |
| 37. ?íyá-ni <i>life</i> | 79. čínhasčéiča <i>iron</i> |
| 38. ?ú-basdʒáni <i>legging</i> | 80. čísdí?ini <i>honey</i> |
| 39. ?úbéwí <i>food</i> | 81. číyáuzáni <i>adobe brick</i> |
| 40. ?ú-bó-ná <i>needle</i> | 82. čá-dʒa <i>side</i> |
| 41. ?ú-dídʒúwísti <i>saddle</i> | 83. čámá <i>tomorrow</i> |
| 42. ?úgupáwani <i>ax</i> | 84. čèci <i>also</i> |

85. čémi *three; čémiya three times*
86. čí-ná *river*
87. čánámí *bat*
88. čáyâ-ni *shaman*
89. čí-ríga *hawk*
90. dabónuska *horned toad*
91. dá-ni *squash, pumpkin*
92. dápaci *corpse*
93. dáwáça *moon, month*
94. dèşu *place*
95. di? *here*
96. dí?ái *there*
97. dísi *from here*
98. dí-skámá *cornhusk*
99. díya *dog*
100. du *this, this one*
101. dúké. *that way*
102. dúwimíši *stocking*
103. dúwé. *this way*
104. dʷá-dʷu *bobcat*
105. dʷá-mí *eagle*
106. dʷá-na *four*
107. dʷáná *jackrabbit*
108. dʷáné *deer*
109. dʷáwa *early*
110. dʷá-wí *gourd*
111. dʷáyaʷani *piñon nut*
112. dʷèici *piñon pine*
113. dʷi *up*
114. dʷídʷa *north*
115. dʷíní *above*
116. dʷú-bí *badger*
117. dʷú-mí. *two*
118. dʷúmó *brother*
119. dʷú-ya *twice*
120. dʷó-şa *elk*
121. gánami *beans*
122. gáisbişa *world*
123. gasgáuga *quail*
124. gáwici *seed*
125. gâ-yu *morning*
126. gu *and*
127. gu? *for, therefore*
128. gú-ʷu. *beaver*
129. gùci *firewood*
130. gúháya *bear*
131. gúkúmiši *eight*
132. gúmásáwá *cooking pot*
133. gúwa. *how*
134. gúyástí *basket*
135. ha. *east; há-námí eastward*
136. hai *where (destination)*
137. hau *who, someone*
138. hau? *near, suddenly*
139. háubá. *everybody*
140. hábání *oak*
141. há-bí *feather*
142. háʷáci, háʷáci. *land, earth*
143. háú *how much, how many, few*
144. háʷáčanani *tooth*
145. háççæ *man*
146. hádáwini *navel*
147. há-di *where, somewhere*
148. háídí *which, what*
149. hádʷani *soapweed*
150. há-ka-ka *fir*
151. háikámí *once*
152. há-ka-ni *fire, hot coals*
153. háké. *that way*
154. há-ku *ready*
155. háiku *when*
156. há-ma-ni *leg, thigh*
157. há-mi *tobacco*
158. há-múčuni *toe*
159. há-múşa-ni *beard*
160. háma. *long ago*
161. há-ma-ni, há-maʷani *hail*
162. hámasdíʷini *hand, finger*
163. há-me. *ice*
164. háná-mi *naked*
165. há-ni. *pine*
166. hánu *people*
167. há-né *hortative particle*
168. háščá *yucca*
169. hásiʷini *foot*
170. hàsgəni *bone*
171. háʷá-sti-ça *town, city*
172. há-şuwimí *shoe, moccasin*
173. há-tawe *pollen*
174. háwe. *snow*
175. háwizana *stalk*
176. háwái *there*
177. háwé. *this way*
178. háwí. *here, take it*
179. háʷáwí-čánani *claw, fingernail*
180. há-wíná *quickly, immediately*
181. háyaçi *awl*
182. háýéi *there*
183. há-záni *hair*
184. há-zəni *onion*
185. he *that one*
186. hé-mé. *all right, enough*
187. hénati *cloud*
188. héyadʷi *turtle*
189. héyáşi *fog, mist*
190. hé-yá *with (instrumental)*

191. hínʉ *I, we*
 192. hińá *all right*
 193. hí-sčí *sunflower*
 194. hiŋgai *knife*
 195. hístiya-ni *arrowhead, spearhead*
 196. híʉ *you*
 197. híwá *now, today*
 198. híyaka-čE *domestic animal*
 199. híyá-ni *road, path*
 200. híyá-wá *doorway, road*
 201. hízáʔai *tree, cottonwood*
 202. hí-zani *seed*
 203. hú-bóni *saliva*
 204. hú-ʔùga *dove*
 205. hùséní *wool*
 206. hùškani *yucca fruit, banana*
 207. húšá-ci *cotton*
 208. húwaka *sky*
 209. húwanáʔani *eye*
 210. húwi-ni *milk*
 211. hóčaskáwa *willow*
 212. kádʔA *behind; kádʔámá. back-ward*
 213. kásáiti *summer, year*
 214. ká-tídʔá *clean, pure*
 215. kínáti *green corn*
 216. kiwá *plant*
 217. ku *south; kúwámí southward*
 218. kú-kA *winter*
 219. kúpéstʉca *lightning*
 220. kúwe-ʔE *sweet*
 221. kó-ci *antelope*
 222. káci *ten*
 223. káucigái *maybe*
 224. káka-dʔi *square, plaza*
 225. kákana *wolf*
 226. kámaska *spider*
 227. káni *cedar*
 228. kánani *heat of sun*
 229. kásdʔá-čE *rainbow*
 230. káwina *moss*
 231. kú-, kúwi *woman, female*
 232. kúimí *slightly, a small amount*
 233. kúša *last night*
 234. kú-tí, čú-tí *mountain*
 235. kú-yáu *old woman*
 236. kúyáiti *game animal*
 237. mai *almost*
 238. mágó- *girl*
 239. má-nu- *a long time*
 240. mářéu *tortilla*
 241. másá-ni *leaf*
 242. màša *light*
 243. máyuku *nine*
 244. múščiča *buffalo*
 245. múši *soapweed*
 246. mídʔu- *very*
 247. mí-ná *hortative particle*
 248. mú-kaičA *mountain lion*
 249. mó-dé- *boy*
 250. máʔáci *blood*
 251. mádai *ball*
 252. màidʔana *seven*
 253. màgəri *evil*
 254. máka *dipper*
 255. má-ní *word*
 256. má-šáwi *buzzard*
 257. me- *like, similar to*
 258. mé-wa *mud*
 259. mé-ziči *large*
 260. mí-čE *clay*
 261. mí-ča *hummingbird*
 262. mídá *moth*
 263. mí-ga *others*
 264. mína *salt*
 265. míščai *ashes*
 266. místi *alkali*
 267. na *yet*
 268. náce- *new*
 269. náčE *food, lunch*
 270. náwáiyA *middle-aged*
 271. ná-yá *under*
 272. náizá *thank you (women's speech)*
 273. nu- *only, itself*
 274. nú-bəda *alone*
 275. núwáiná *separate*
 276. núya *night*
 277. nú-yú- *oneself*
 278. nó-ʔóca *rubber*
 279. nóti *prairie dog*
 280. nau *many*
 281. náwiʔika *egg*
 282. nə *down*
 283. pánači *lung*
 284. pá-ni *bag*
 285. peséčuru *bedbug*
 286. pé-ša *jackrabbit*
 287. pétá-ná *cornmeal*
 288. pičE *buckskin*
 289. pí-nu- *fancy, fine*
 290. pířářá *flag*
 291. píščánani *skin, hide*
 292. ráwá- *good*
 293. rədʔA *rabbit*
 294. rí-pA *goose*

295. rî-wagañi *fat*
 296. ró-skíši *small*
 297. sa *back, return to previous location*
 298. sai *all*
 299. saiču *day*
 300. sá-wáka *money, metal*
 301. séka *sure*
 302. si *again, return to present location*
 303. sí·ʔi *ant*
 304. sí-dʷA *squirrel*
 305. sinani *flesh*
 306. síyañā *mouse*
 307. súwá *yesterday*
 308. sèci *wrongdoing*
 309. sóna *middle*
 310. sbíga *woodpecker*
 311. sbí-ná *chicken*
 312. sbú-ná *jug*
 313. scái *last*
 314. scá-ná *meadowlark*
 315. scápaka *twilight*
 316. scári *grasshopper*
 317. scáwá *popcorn*
 318. scázó- *fast*
 319. scírá *crow*
 320. scísa *six*
 321. scúmu *wild honey*
 322. scúyú-ná *mosquito*
 323. scúzuwí *stinkbug*
 324. sdíri-ná *seashell*
 325. sdú-ná *mushroom*
 326. sgá-waši *rat*
 327. sgamaré- *lizard*
 328. skáçā *frog*
 329. skàsku, kàsku *bighorn sheep*
 330. skú-ná *blackbird*
 331. skú-yu *giant*
 332. skóri-ná *flour*
 333. skáʔá-dʷu *bullsnake*
 334. skàši *fish*
 335. skúrú-ná, skú-rúná *peas*
 336. skərí-na *wagon*
 337. spáʔáci *mockingbird*
 338. spérá-ná *plate*
 339. spíníni *dwarf corn*
 340. spúrú-ná *chickenpox*
 341. stú-na *autumn*
 342. stó-ci *straight*
 343. šaska *roadrunner*
 344. šá-witi *parrot*
 345. ši-buʔukú *cotton boll*
 346. šidʷita *star*
 347. šina- *louse*
 348. šú-dá *goose*
 349. šúku *corner*
 350. šú-mu- *corpse*
 351. šúrúyē *bluebird*
 352. šúwimi *turquoise*
 353. šáñá *scattered*
 354. šá-naŷa *slow*
 355. šu *narrative particle*
 356. šúci- *raw*
 357. šúguçáci *cross, crucifix*
 358. šúmákawái *right hand*
 359. šumi *already*
 360. šúisi *bluejay*
 361. šúwi- *snake*
 362. šúyáná *around*
 363. šúzú-na *coyote*
 364. tá-ma *five*
 365. tíyé- *far*
 366. ta *thus*
 367. íi-çā *springtime*
 368. ʔú-báyáñi *fireplace*
 369. wádʷuʔuni *pottery*
 370. wágoni *dress, shirt*
 371. wá-ni *smoke*
 372. wá-si *bird snare*
 373. wáşu-ci *dust*
 374. wá-wá *medicine*
 375. wá-wáizōni *root*
 376. we *that one*
 377. wísdʷá-ka *bow*
 378. wó-ʔé *thank you (men's speech)*
 379. wábú-sčā *eagle down*
 380. wábóni *abalone shell*
 381. wá-çini *tongue*
 382. wáisi *bowl*
 383. wá-yuša *duck*
 384. wínuska *heart*
 385. wí-sga *robin*
 386. wíši-ni *nose*
 387. wíspi *cigarette*
 388. yáʔái *sand*
 389. yábáši *corn silk*
 390. yásbusi *cottonwood cotton*
 391. yé-tu *mesquite*
 392. yuʔ *yonder*
 393. yúʔái *there*
 394. yúbó *worm*
 395. yúdá-çā *windstorm*
 396. yúké- *that way*
 397. yúku *away*
 398. yúpé-sčā *story, legend*

399. yúsi <i>from there</i>	412. yú-sbi-ni <i>shoulder</i>
400. yúwé. <i>this way</i>	413. yú-skúrná <i>corn cob</i>
401. yá-bí <i>staff of office</i>	414. za <i>no</i>
402. yá-ěfni <i>shelled corn</i>	415. záúčú <i>field</i>
403. yá-ka <i>ripe corn</i>	416. záčva <i>plains, desert</i>
404. yâuni <i>stone</i>	417. zâsdima <i>grinding box</i>
405. yâsbuzani <i>brains</i>	418. záwini <i>old</i>
406. yâuşadı <i>sand</i>	419. zázi <i>not</i>
407. yá'áwâ-ni <i>intestines</i>	420. zê-ni <i>talkative</i>
408. yáwastí <i>stick</i>	421. zi <i>what, something</i>
409. yâ-yu <i>crippled</i>	422. zíkúsd'áwi <i>bridge</i>
410. yu. <i>expression of doubt</i>	423. ziná <i>again</i>
411. yû-ni <i>song</i>	424. zâici <i>rabbit club</i>

VERBS

Verbs are listed alphabetically by the verb core. The stem or stems based on each core follow, together with the stem classification. See "Verb Classes" for an outline of stem classification and "Stem Variants" for an explanation of notations identifying stem variants.

425. -a *to be*. -a(?) Singular, Class 11-25 intransitive. -ê.ʔE-şutɪ Dual, Class 11-26 intransitive. -â.ʔA Plural, Class 11-25 intransitive.
426. -a *to have, to possess*. -a Singular, Class 7-15 intransitive. -â.ʔá Dual, Class 2-24 intransitive. -áʔâ-şE Plural, Class 2-23 intransitive.
427. -ʔA *to be closed*. -áʔá.ʔA Singular, Class 10 intransitive.
428. ʔésU—A *to sneeze*. Type B, singular, Class 1-1 intransitive.
429. -ʔU *to give a flat or long object*. -âuʔU Irregular transitive.
430. -ʔU *to dwell*. -âuʔU Singular, Class 8-14 intransitive. -á.ʔâuʔU Dual, Class 2-24 intransitive.
431. -bái *to sleep*. -i-bái Singular, Class 10-6 intransitive. -áʔáibái Dual, Class 2-24 intransitive. -éʔé-baiʔ-şɪ Plural, Class 11-25 intransitive.
432. -bá-bá *grandparent, a man's mother's mother or father's father*. -ábá-bá Singular, Class 7-15 intransitive.
433. -bádʔu *to awake, get someone out of bed*. -i-bádʔu(?) Class C4 transitive.
434. -baʔtu *to sleep*. -i-baʔtu Singular, Class 10-6 intransitive. -áʔáibaʔtu Dual, Class 2-24 intransitive. -éʔé-baʔtu Plural, Class 11-25 intransitive.
435. -báya *to light a fire*. -fbáyA Singular, Class 10-7 intransitive. -fbáyA-ñE Dual, Class 10-22 intransitive. -fbáyA-ñE Plural, Class 10-21 intransitive.
436. -be *to tell*. -ù/âbe(?) (-v-) Class A1 transitive.
437. -béuca *to call*. -ù/âbéuca Class A1 transitive.
438. -be-ta *to ask*. -ù/âbe-ta (-v-) Class A8 transitive.
439. -bí *to get wood*. -úbí Singular, Class 5-8 intransitive.
440. bí-ri—añ *to be smooth*. Type B, singular, Class 1 intransitive.
441. -bíya *sister-in-law*. -ábíya Singular, Class 7-15 intransitive.
442. -bu-ci *to be frightened*. -ùbu-ci Singular, Class 13-28 intransitive.
443. bú-pu—añ *fresh, cool*. Type B, singular, Class 1 intransitive.
444. búşU—A *to have an odor*. Type B, singular, Class 1-1 intransitive.

445. -bónaca *to sew*. -áubónaca Singular, Class 5-8 intransitive.
446. -bənaiʔɪ *to put in a bag*. -áubənaiʔɪ Singular, Class 9-11 intransitive.
447. bəʔóʔi—ɪ *winding, zigzag*. Type B, singular, Class 10 intransitive.
448. cá.—A *to breathe*. Type B, singular, Class 1-1 intransitive.
449. -cɪkuyA *to say to*. -áčɪkuyA Singular, Class 10-7 intransitive.
450. -čayawa *to be angry*. -účayawa (future -účayawa) Singular, Class 5-8 intransitive. -účayawa-ńɛ Dual, Class 5-10 intransitive. -áʔá.čayawa-ńɛ Plural, Class 5-9 intransitive.
451. čáyú—ɪ *to be broken*. Type B, singular, Class 10 intransitive.
452. -čáyuca *to break*. -áʔáučáyuca Singular, Class 5-8 intransitive.
453. -čê-naca *to chew*. -áʔáučê-naca Singular, Class 5-8 intransitive.
454. -čɪ *to arrive*. -áʔáci Singular, Class 10-7 intransitive. -áʔáci Dual, Class 2-24 intransitive.
455. -čídʷusta *to think, to worry*. -účídʷusta Singular, Class 5-8 intransitive.
456. -čɪ-ku *to be guilty*. -ú.čɪ-ku Singular, Class 3-27 intransitive.
457. -čɪpa *to need, to want*. -účɪpa Singular, Class 3-27 intransitive. Transitive forms conforming to Class B based on the stem -čɪpa also occur for first and second person objects.
458. -čɪʂu *water well*. -áʔá.čɪʂu Singular, Class 1-1 intransitive.
459. -čéçaca *to cut*. -áʔáučéçaca Singular, Class 5-8 intransitive.
460. -ča *to rain*. -áča Singular, Class 4 intransitive.
461. -ča *to fall*. -úča Singular, Class 5-8 intransitive. -áča-ńɛ Dual, Class 5-10 intransitive.
462. -čańɪ *to stand*. -óčańɪ Singular, Class 1-3 intransitive.
463. -čɪ-ni *to dance*. -áčɪ-ni Singular, Class 1-3 intransitive.
464. -čɪńɪ *yellow*. -ú.čɪńɪ Singular, unclassified intransitive. kú.čɪńɪ *it is yellow*.
465. čú.—A *to belch*. Type B, singular, Class 1-1 intransitive.
466. -čʷ *to have in a bag*. -ú.čʷ Singular, Class 8-14 intransitive. -ú.ʔùčʷ Dual, Class 2-24 intransitive. -ú.wàčʷ Plural, Class 2-23 intransitive.
467. -č̣a *tooth*. -áʔáč̣a Singular, Class 10-6 intransitive.
468. -č̣a *to be hot*. -á.č̣a Singular, Class 1-3 intransitive.
469. -č̣áiʔɪ *to close the eyes*. -óʔóč̣áiʔɪ Singular, Class 5-8 intransitive.
470. -č̣áwa *to steal*. -ú.č̣áwa Singular, Class 5-8 intransitive.
471. -č̣áyum̄A *to be tired*. -úč̣áyum̄A Singular, Class 13-28 intransitive.
472. -č̣a *animal's horn*. -áča Singular, Class 10 intransitive.
473. -č̣a *to build a house*. -á.ʔača Singular, Class 9-11 intransitive.
474. -č̣a *to do*. -ɪ.č̣a Singular, Class 14-4 intransitive. -ɪ.ʔa-ńɛ Dual, Class 14-20 intransitive. -ɪ.ʔa-ńɛ Plural, Class 14-19 intransitive.
475. -č̣a *to happen*. -áʔáič̣a Singular, Class 9 intransitive.
476. -č̣ɛ *house*. -áčɛ Singular, Class 4 intransitive. -áʔá.č̣ɛ Plural, Class 2-23 intransitive.
477. -č̣ɛka *to smoke*. -áčɛka Singular, Class 5-8 intransitive.
478. -dá.ʔA *to ask for something*. -úidá.ʔA Singular, Class 5-8 intransitive.
479. -dáʔáú *grandparent, woman's father's father or mother's mother*. -ádáʔáú Singular, Class 7-15 intransitive.
480. dáʔáwa—A *to boil*. Type B, singular, Class 1 intransitive.
481. -di *to plant*. -áudi(?) Singular, Class 9-11 intransitive. -áudi-ńɛ Dual, Class 9-12 intransitive. -á.wá-di-ńɛ Plural, Class 5-9 intransitive.
482. -di *to give a bulky object*. -údi(?) Class D3 transitive.
483. -dí-na *to be covered*. -ʔdí-na(?) Singular, Class 13-28 intransitive.

484. -dī-ša *to feed*. -i/ádī-ša(?) Class C1 transitive.
485. -dī-ye *to get, to fetch*. -údí-ye Singular, Class 1-3 intransitive.
486. -dùdʷA *to hang something*. -ídùdʷA Singular, Class 10-7 intransitive.
487. -dʷA *to catch*. -i/ádʷA(?) Class C3 transitive.
488. -dʷA *to descend*. -ádʷA (-ádʷA) Singular, Class 1-3 intransitive.
489. -dʷá. *to possess an animal*. -'ádʷá. or -'ádʷá.še Singular, Class 7-15 intransitive.
490. -dʷádʷI *to fight*. -úđʷádʷI Plural, Class 5-9 intransitive.
491. -dʷaši *to fast*. -úđʷaši Singular, Class 8-14 intransitive. -ú.ʔùđʷaši Dual, Class 2-24 intransitive. -ú.đʷádʷaši Plural, Class 2-23 intransitive.
492. -dʷáWA *to stab*. -i/ádʷáWA Class C1 transitive.
493. -dʷá.wa *to be helpful*. -úđʷá.wa(?) Singular, Class 1-1 intransitive.
494. -dʷU *to cost*. -ídʷU Singular, Class 14 intransitive.
495. -dʷU *to arrive*. -é.dʷU Plural, Class 11-25 intransitive.
496. -dʷU *to know, to be aware of*. -áúđʷU Singular, Class 9-11 intransitive.
497. -dʷúMI *to remember*. -ú./á.dʷúMI Class B6 transitive.
498. -dʷúmiçA *to learn*. -áúđʷumiçA Singular, Class 5-8 intransitive.
499. -dʷúmiçUWI *to forget*. -ú./á.dʷúmiçUWI Class B4 transitive.
500. -dʷúMā *man's brother*. -ádʷúMā Singular, Class 7-15 intransitive.
501. -dʷuši *to be afraid*. -úđʷuši Singular, Class 13-28 intransitive.
502. dʷə—áNI *to be lazy*. Type B, singular, Class 1-1 intransitive.
503. -gá *to look*. -ígá (-ikA) Singular, Class 10-6 intransitive.
504. -gúYA *to sit*. -úgúYA Singular, Class 5-8 intransitive. -úgúYA-nā Dual, Class 5-10 intransitive.
505. -gúYA *to place, to send, to sell*. -i/ágúYA Class C1 transitive.
506. -góçati *to blossom*. -ágóçati Singular, Class 1 intransitive.
507. háU—A *to yawn*. Type B, singular, Class 1-1 intransitive.
508. -hima *to believe*. -úhima Singular, Class 3-27 intransitive.
509. -ká. *to hear*. -áká. Singular, Class 4-3 intransitive.
510. káyú—I *to be broken*. Type B, singular, Class 10 intransitive.
511. -kái *to be full, satisfied*. -úkái (-úkAI) Singular, Class 4-3 intransitive.
512. -kai *to lie down*. -ikAI (fut. -igai) Singular, Class 13-28 intransitive.
513. -kačA *to see*. -ù/àkačA (-v-) Class A2 transitive.
514. -kazi *to heal*. -ú/ákazi(?) Class A4 transitive.
515. -kU *to bite*. -àkU Class B1 transitive.
516. -kU *to go*. -èkU Plural, Class 11-25 intransitive.
517. -kU *to be located*. -ákU (-ikU) Singular, Class 1-16 intransitive.
518. -ku-mi *to bring*. -àiku-mi(?) Class D3 transitive.
519. -kupAWA *to chop*. -ìkupAWA Singular, Class 10-7 intransitive. -ìkupawa-nā Dual, Class 10-22 intransitive. -ìkupawa-nē Plural, Class 10-21 intransitive.
520. -kUYA *to do*. -èkUYA (fut. -éguya) Singular, Class 11-25 intransitive.
521. kó—áNI *to be red*. Type B, singular, Class 1-1 intransitive.
522. -ká *mouth*. -i.ká Singular, Class 10-7 intransitive.
523. -káica *to hit*. -ú./á.káica Class A1 transitive.
524. -káYA *to wipe*. -ú.káYA Class A7 transitive.
525. -kí-ni *friend*. -áukí-ni Singular, Class 7-15 intransitive.
526. -kui *wife*. -áukui Singular, Class 7-15 intransitive.
527. -kúicA *man's sister*. -ákúicA Singular, Class 7-15 intransitive.
528. -kúmíná *string*. -úkúmíná Singular, Class 4 intransitive.
529. -kúrú-ná *kidney*. -áukúrú-ná Singular, Class 7-15 intransitive.
530. kúRA—I *smoke, billowing dust*. Type B, singular, Class 10 intransitive.

531. -ma *to go*. Unclassified intransitive, occurring only in the hortative mode.
ʔi-ma *go*.
532. -ma· *thigh*. -â·ma· Singular, Class 4-3 intransitive.
533. -ma-ci *to be true*. -âima-ci Singular, unclassified intransitive. kâima-ci
it is true.
534. -mâkα *daughter*. -âmâkα Singular, Class 7-15 intransitive.
535. -mâ-zâni *to help*. -û·mâ-zâni(?) Class D3 transitive.
536. -mú·ca *to thunder*. -âumú·ca Singular, Class 9 intransitive.
537. -múčv *toe*. -â·múčv Singular, Class 4-3 intransitive.
538. -mudʷca *to kill*. -û/âmudʷca Class A1 transitive.
539. múřa—i *dented*. Type B, singular, Class 10 intransitive.
540. -múša *beard*. -â·múša Singular, Class 10-6 intransitive.
541. -mómó *grandfather, grandchild*. -âumómó Singular, Class 7-15 intransitive.
542. -mó-ti *son*. -âmó-ti Singular, Class 7-15 intransitive.
543. -mâ *house, to dwell*. -â·mâ Singular, Class 8-14 intransitive. -âʔâ·mâ
Dual, Class 2-24 intransitive.
544. -mâci *waist*. -ûmâci Singular, Class 4-3 intransitive.
545. -mâ-dʷa *to pick fruit*. -ûm/mâ-dʷa Singular, Class 5-8 intransitive.
546. -mâ·pa *palm of hand*. -âmâ·pa Singular, Class 1-1 intransitive.
547. -mâsdi *hand, finger*. -âmâsdi(?) Singular, Class 4-3 intransitive.
548. -mâ *to leave, emerge*. -ûmâ Singular, Class 1-3 intransitive. -û·mâ
Dual, Class 2-24 intransitive. -ê·mâ Plural, Class 11-25 intransitive.
549. -na *eye*. -â·na Singular, unclassified intransitive. kâ·na *his eye*.
550. -na· *to be cloudy*. -ina· Singular, Class 10 intransitive.
551. -načai *stomach*. -û·načai Singular, Class 4-3 intransitive.
552. -náđʷwi *to light a fire*. -ânáđʷwi(?) Singular, Class 10-7 intransitive.
-ânáđʷwi-mâ Dual, Class 10-22 intransitive. -ânáđʷwi-mê
Plural, Class 10-21 intransitive.
553. -námâti *seat, nest*. -ânámâti Singular, Class 7-15 intransitive.
554. -nâmâca *to stop, rebuke*. -û/â·nâmâca Class A1 transitive.
555. -násgái *head*. -ânásgái Singular, Class 1-1 intransitive.
556. -nâta *to buy*. -înâta Singular, Class 10-7 intransitive.
557. -nata *to cook*. -âinata Singular, Class 9-11 intransitive.
558. -nawañi *to be mean*. -â·nawañi Singular, Class 12-27 intransitive.
559. -náwe *man's mother's brother, sister's son*. -â·náwe Singular, Class 7-15
intransitive.
560. -nâ·ya *mother, aunt*. -ânâ·ya Singular, Class 7-15 intransitive.
561. -ni *to know, be acquainted with*. -û/âni(?) Class B5 transitive.
562. -ni *to go, to walk*. -â·ni Singular, Class 6-3 intransitive.
563. -nâ·ca *to pull*. -û·nâ·ca Singular, Class 1-1 intransitive.
564. -náisdv *father, father's brother*. -ânâisdv Singular, Class 7-15 in-
transitive. -ânâisdv-še Plural, Class 2-23 intransitive.
565. -náza *to be healthy*. -ûn/naza(?) Singular, Class 5-8 intransitive.
-ûn/nazaʔa-nâ Dual, Class 5-10 intransitive.
566. -nêsa *to look, to peer*. -în/nêsa Singular, Class 4-5 intransitive.
567. -nêta *to say*. -âinêta Singular, Class 1-3 intransitive.
568. -ñi *body*. -înî Singular, Class 14-4 intransitive.
569. -ñùti *lower leg*. -âunùti Class 1-1 intransitive.
570. -pâniustv *to be thirsty*. -îpâniustv Singular, Class 10-7 intransitive.
-âîpâniustv Dual, Class 2-24 intransitive. -âîyâpâniustv Plural,
Class 2-23 intransitive.
571. -pâñi *to be dry*. -î·pâñi Singular, Class 13-28 intransitive.

572. -pasdʷU *to be tied*. -àpasdʷU Singular, Class 7-13 intransitive.
573. -paʃi *to be dark*. -àpaʃi Singular, Class 6 intransitive.
574. -pe *to eat*. -ùpe Singular, Class 5-8 intransitive. -à.ʔape Dual, Class 2-24 intransitive. -à.ʔape Plural, Class 2-23 intransitive.
575. péta—A *to be cracked*. Type B, singular, Class 1 intransitive.
576. -pi *forehead*. -ùpi Singular, Class 1-1 intransitive.
577. písčA—I *flat, spread out*. Type B, singular, Class 10 intransitive.
578. -púca *to blow*. -ùpúca Singular, Class 1-1 intransitive.
579. -pə *to enter*. -ùpə Singular, Class 1-3 intransitive.
580. -pákaca *to touch*. -ù/ápakaca Class A1 transitive.
581. -sa *difficult*. -áusa Singular, Class 6 intransitive.
582. -sé *to draw water*. -áusé Singular, Class 5-8 intransitive.
583. -sípa *eyelash*. -ísipa Singular, Class 14-4 intransitive.
584. -sukUCA *to kick*. -ù/ásukUCA Class A1 transitive.
585. -suñeʔesta *to teach*. -i/ásuñeʔesta(·) Class D1 transitive.
586. -sbíca *to whistle*. -ùsbíca Singular, Class 1-1 intransitive.
587. -sbóça *to string beads*. -ùsbóça Singular, Class 5-8 intransitive.
588. -sčèca *to squeal, make an animal noise*. -ùsčèca Singular, Class 1-3 intransitive.
589. sčú—A *to swallow*. Type B, singular, Class 1-1 intransitive.
590. sčúʃU—A *to cough*. Type B, singular, Class 1-1 intransitive.
591. -sdi *foot*. -ásdi(?) Singular, Class 4-3 intransitive.
592. sdú.—I *bowl-shaped*. Type B, singular, Class 10 intransitive.
593. -sdʷa *to suck*. -i-sdʷa Singular, Class 10-6 intransitive.
594. -sdʷiri *to be brown*. -ùisdʷiri Singular, Class 6 intransitive.
595. -sgúçuci *to drool, slobber*. -i-sgúçuci Singular, Class 13-28 intransitive.
596. -sguñáša *to hide*. -ùisguñáša Singular, Class 5-8 intransitive.
597. -ska *to drink*. -àska Singular, Class 1-3 intransitive. -àska Dual, Class 2-24 intransitive. -àska-ta Plural, Class 2-23 intransitive.
598. skási—I *to be hard*. Type B, singular, Class 10 intransitive.
599. skúru—I *spherical*. Type B, singular, Class 10 intransitive.
600. -skó.ʔəçai *to turn around*. -àiskó.ʔəçai Singular, Class 5-8 intransitive.
601. skóri—I *round*. Type B, singular, Class 10 intransitive.
602. -spika *to paint*. -i-spika Singular, Class 10-7 intransitive.
603. -spaca *to push*. -íspaca Class C1 transitive.
604. -spáákaca *to knock at the door*. -ùspáákaca Singular, Class 1-1 intransitive.
605. -staya *to be cold*. -áistaya (future -áisdaya) Singular, Class 1 intransitive.
606. -staya *to be breezy*. -èstaya (future -èsdaya) Singular, Class 10 intransitive.
607. -sti *to give a liquid*. -i/ásti(?) Class D3 transitive.
608. -sti-ça *city, town*. -áʔá.sti-ça Singular, Class 7-15 intransitive.
609. -stU *to die*. -ùstU Singular, Class 4-3 intransitive.
610. -ša *to step*. -áša Singular, Class 5-8 intransitive.
611. -ša *to close*. -áʔá.ša Singular, Class 10-7 intransitive.
612. -še *name*. -á.še Singular, Class 1-1 intransitive.
613. -šé *to be white*. -ášé Singular, Class 1-1 intransitive.
614. -ši *knee*. -áši Singular, Class 1-1 intransitive.
615. -šf-ci *to be hospitable*. -á.šf-ci Singular, Class 8-14 intransitive.
616. -šu *to be wet*. -ášu Singular, Class 1-3 intransitive.
617. šúku—I *square*. Type B, singular, Class 10 intransitive.

618. šúpa—A *to spit*. Type B, singular, Class 1-1 intransitive.
619. -šáça *to name, to call ones name*. -išáça (-v-) Class C1 transitive.
620. šár—A *torn*. Type B, singular, Class 1 intransitive. šár—I *torn*.
Type B, singular, Class 10 intransitive.
621. šúwī—I *crooked*. Type B, singular, Class 10 intransitive.
622. -ta *to kill*. -àuta Singular, Class 9-11 intransitive. -àuda-pæ Dual,
Class 9-12 intransitive. -á-wàta-wa Plural, Class 5-9 intransitive.
623. -tâ-niça *to work*. -útâ-niça Singular, Class 5-8 intransitive. -útâ-niça-næ
Dual, Class 5-10 intransitive. -úwâtâ-niça-næ Plural, Class 5-9
intransitive.
624. -tidʷa *back*. -(á)tidʷa Singular, unclassified intransitive. kátidʷa *his
back*.
625. -tigu *to remove many objects*. -útigu Singular, Class 1-1 intransitive.
626. -tika-ša *to climb*. -útika-ša Singular, Class 5-8 intransitive.
627. -tikuya *to cry*. -àtikuya (future. -àtiguya) Singular, Class 1-3 in-
transitive.
628. -tiša *to talk to* -àtiša Class A2 transitive.
629. -tu-ni *to know*. -ùtu-ni Singular, Class 4-3 intransitive.
630. -tá *to put in, to write down*. -ítá Singular, Class 10-7 intransitive.
631. -tá *to be full*. -ó-tá Singular, Class 1-3 intransitive.
632. -tá *to test, try*. -ú/á-tá Class A1 transitive.
633. -tá *to step on*. -î-tá(.) Class C2 transitive.
634. -tá *to open*. -áʔâ-tá Singular, Class 10-7 intransitive.
635. -tâdʷi *to stand up*. -ó-tâdʷi Singular, Class 1-3 intransitive.
636. -ti *to give a granular substance*. -í/áti(?) Class D3 transitive.
637. -tu-dʷu *fence*. -â-tu-dʷu Singular, Class 10 intransitive.
638. -wáçašaya *to stir*. -úwáçašaya Singular, Class 1-1 intransitive.
639. wáka—a *to spill*. Type B, singular, Class 10-7 intransitive.
640. -wakuiça *to marry*. -úwakuiça Singular, Class 13-28 intransitive.
641. -wa-sa *to be sick*. -úwa-sa(?) Singular, Class 3-27 intransitive.
642. -wasi *to attack, pick a fight*. -áwu-si Singular, Class 9-11 intransitive.
643. -wa-sdʷu *to watch, guard*. -úwa-sdʷu Singular, Class 1-3 intransitive.
644. -wawi *face*. -úwawi Singular, unclassified intransitive. kúwawi *his
face*.
645. -wi *neck*. -áwi Singular, Class 1-1 intransitive.
646. -wiçi *chest*. -áwiçi Singular, Class 1-1 intransitive.
647. -wičá-ça *to listen to*. -ú/áwičá-ça Class A1 transitive.
648. -wísbæta *to loosen, untie*. -úwísbæta Singular, Class 1-1 intransitive.
649. -wiskæ *blue, green*. -úwiskæ Singular, Class 6-3 intransitive.
650. -wístiye *to be happy*. -íwístiye(?) Singular, Class 3-27 intransitive.
651. -wíškuya *to scold*. -úwíškuya Class A2 transitive.
652. -wí-za *neck*. -áwí-za Singular, Class 1-1 intransitive.
653. wæka—A *to move, shake*. Type B, singular, Class 1-1 intransitive.
654. -wá *to kill (plural object)* -úw/wá Singular, Class 5-8 intransitive.
655. -wáci *to approach*. -úwáci Singular, Class 3-27 intransitive.
656. -wáci *to have a turn*. -ú-wáci Singular, Class 3-27 intransitive.
657. -wáçi *tongue*. -áwá-çi Singular, Class 4-3 intransitive.
658. -wádʷa *to gather something*. -íwádʷa(?) Singular, Class 10-7 intransitive.
659. -wákæ *to dress*. -úw/wákæ Singular, Class 5-8 intransitive.
660. -wânæ *to go hunting*. -úw/wânæ (future -úwá-ne.) Singular, Class
5-8 intransitive.
661. -wásdá *to be sour*. -áwásdá Singular, unclassified intransitive. káwásdá
it is sour.

662. -wáti *man's male in-law*. -áwáti Singular, Class 7-15 intransitive.
663. -wí *child*. -á-wí Singular, Class 7-15 intransitive.
664. -wí-čá *claw, fingernail*. -á?áwí-čá Singular, Class 10-6 intransitive.
665. wínú—I *fast*. Type B, singular, Class 10-6 intransitive.
666. -wí?ša *to fall*. -ú-wí?ša Plural, Class 5-9 intransitive.
667. -wíši *nose*. -áwíši Singular, Class 1-1 intransitive.
668. -wí-teya *to worship*. -úw/wí-teya (future -úwí-deya) Singular Class 5-2 intransitive. -úw/wí-deya-pə Dual, Class 5-10 intransitive. -úw/wí-deya-wa Plural, Class 5-9 intransitive.
669. -yá *to skin an animal*. -úyá Singular, Class 1-1 intransitive. -úyá-ńə Dual, Class 1-18 intransitive. -úyá-ńə Plural, Class 1-17 intransitive.
670. -yá *to be born*. -iyá Singular, Class 14-4 intransitive.
671. -yaka *to burn something*. -áyaka Singular, Class 10-7 intransitive.
672. -yamastu *to be hungry*. -iyamastu Singular, Class 10-7 intransitive.
673. -yanikuya *to tell, command*. -i/áyanicuya Class C1 transitive.
674. yáta—I *to be weak*. Type B, singular, Class 10-6 intransitive.
675. -yá-ti *sharp*. -iyá-ti Singular, Class 13 intransitive.
676. -yu *hard*. -áyu Singular, Class 1-1 intransitive.
677. -yu *to go*. -é?èyü Dual, Class 11-26 intransitive.
678. -yú-kami *to wait for*. -i/áyú-kami Class D6 transitive.
679. -yütaya *heavy*. -áyütaya (future -áyütaya) Singular, Class 1-1
680. -yá-?A *to promise, to loan*. -iyá-?A Singular, Class 4-5 intransitive.
681. -yáška *to sweep*. -áy/yáška Singular, Class 5-8 intransitive.
682. -yéińa *to find*. -i/áyéińa Class C7 transitive.
683. -yéipa *to look for*. -i/áyéipa Class C2 transitive.
684. -yéišiya *to eat*. -ú-yéišiya Singular, Class 5-8 intransitive.
685. -yúćidvi-ca *to rest*. -úyúćidvi-ca Singular, Class 5-8 intransitive.
686. -yú-mi *arm*. -áyú-mi Singular, Class 1-1 intransitive.
687. -yùpi *ear*. -áyùpi Singular, Class 1-1 intransitive.
688. -yúška *tail*. -áyúška Singular, Class 1 intransitive.
689. -yú-spi *shoulder*. -áyú-spi Singular, Class 1-1 intransitive.
690. -yùta *to sing*. -úy/yùta Singular, Class 5-8 intransitive.
691. -za *to say*. -(á)za(?) Singular, Class 7-13 intransitive. -áza(?) Dual, Class 2-24 intransitive. -àzi?i-ya Plural, Class 2-23 intransitive.
692. -za?anikuya *to preach*. -úza?anikuya (future -úza?aniguya) Singular, Class 5-8 intransitive.
693. -záipə *shadow*. -ázáipə Singular, Class 1 intransitive.
694. -zá-?azi *to swim*. -ázá-?azi(?) Singular, Class 5-8 intransitive.
695. -zé-şu *to dream*. -ázé-şu Singular, Class 1-3 intransitive.
696. -zi *to lie down*. -àzi(?) Singular, Class 5-8 intransitive.
697. zù—ü (zù-n-) *to go*. Type B, singular, Class 1-1 intransitive.
698. -zúwa *to pay*. -i-zúwa(.) Class C1 transitive. -ázúwa(.) Singular, Class 5-8 intransitive.
699. -zá-čúwa *to awake*. -izá-čúwa Singular, Class 4-5 intransitive.
700. -za-čá *to fall*. -ú-za-čá Singular, Class 1-3 intransitive.
701. -zə *husband*. -á-zə Singular, Class 7-15 intransitive.
702. -zəca *to run*. -izəca Singular, Class 4-5 intransitive.

AFFIXES AND CLITICS

703. ?- Second person hortative. 114H
 704. -a- Reflexive-reciprocal. 301
 705. -á?a- Passive voice. 302A
 706. -á- Passive voice. 302B
 707. -?E Plural subject. 502K
 708. -?U Verbal auxiliary dual subject.
 709. c- Third person indicative and negative. 121J 122J
 710. c- Second person dubitative and future hortative. 113C 116C
 711. ci- Second person dubitative and future hortative. 113B 116B
 712. ċ- Third person indicative and negative. 121H 122H
 713. ċ- Fourth person subject with third person object, indicative and negative. 131B 132B
 714. ċi- Third person indicative and negative. 121I 122I
 715. ċi- First person indicative. 101B
 716. ċ- Third person dubitative. 123C
 717. čá? Third person dubitative. 123F
 718. -čAd^vAYA Continulative action. 401G
 719. č- Third person dubitative. 123D
 720. č- Second person hortative. 114D
 721. ču- Second person subject with first person object, indicative, negative, dubitative, and future hortative. 151B 152B 153B 156B
 722. ç- Second person dubitative and future hortative. 113A 116A
 723. čá? Second person dubitative and future hortative. 113D 116D
 724. ča- First person subject with second person object, dubitative, and future hortative. 143B 146B
 725. d- Third person dubitative. 123G
 726. d- Second person hortative. 114F
 727. -de Plural conditional. 601B
 728. -di Locative-instrumental clitic.
 729. di- Third person dubitative. 123B
 730. di- Fourth person subject with third person object, dubitative. 133A
 731. di- Second person hortative. 114G
 732. di- Third person subject with second person object, hortative. 174B
 733. -dika Locative-instrumental clitic.
 734. -dimi Benefactive.
 735. d^v- Third person dubitative. 123A
 736. d^va- Third person dubitative. 123E
 737. -d^vanu Narrative past tense clitic.
 738. -d^vé-mí Pluralizing clitic.
 739. -d^vI Dual subject. 501C
 740. d^víd- Second person dubitative and future hortative. 113F 116F
 741. d^vídi- Second person dubitative and future hortative. 113G 116G
 742. d^vídi- Third person subject with second person object, dubitative and future hortative. 173B 176B
 743. d^vu- Second person subject with first person object, indicative, negative, dubitative, and future hortative. 151A 152A 153A 156A
 744. d^vóž- Second person dubitative and future hortative. 113E 116E
 745. d^vóž- Third person subject with second person object, dubitative and future hortative. 173A 176A
 746. g- Third person indicative and negative. 121A 122A
 747. ga- Third person indicative and negative. 121E 122E

748. gu- Second person subject with first person object, hortative and negative hortative. 154A 155A
749. gód- Second person indicative and negative. 111F 112F
750. gódi- Second person indicative and negative. 111G 112G
751. gódi- Third person subject with second person object, indicative and negative. 171B 172B
752. góž- Second person indicative and negative. 111E 112E
753. góž- Third person subject with second person object, indicative and negative. 171A 172A
754. k- Third person indicative and negative. 121C 122C
755. k- First person hortative and negative hortative. 104C 105E
756. ka- First person hortative and negative hortative. 104A 105C
757. ká?- Third person indicative and negative. 121F 122F
758. ká?- First person hortative and negative hortative. 104D 105F
759. -kU Continuatve action. 401D
760. -kUYA Continuatve action. 401A
761. k̄- Third person indicative and negative. 121D 122D
762. k̄a- First person hortative and negative hortative. 104B 105D
763. k̄u- Second person subject with first person object, hortative and negative hortative. 154B 155B
764. -mA Remote state. 403
765. -mE Plural subject. 502E
766. -mi Benefactive.
767. -mí Direction toward.
768. -mōtI Dual subject. 501E
769. -m̄A Verbal auxiliary suffix.
770. -m̄ASA Plural subject. 502F
771. -m̄AŠUTI Dual subject. 501F
772. m̄é.- Augmentative.
773. -m̄E Plural subject. 502D
774. -m̄E Suffixed to place names to indicate inhabitants of that place.
775. -m̄i Benefactive.
776. -m̄α Dual subject. 501D
777. n- First person hortative, negative hortative, and future hortative. 104G 105G 106C
778. n- Future tense. 201A
779. -námí Direction toward.
780. -nani Nominalizer.
781. -ne Conditional. 601A
782. -nE Plural subject. 502B
783. -nE Unfulfilled action. 402B
784. ni- First person hortative, negative hortative, and future hortative. 104E 105A 106A
785. ni- Future tense. 201B
786. -ni Benefactive.
787. -ni Nominalizer.
788. -ni Direction from.
789. ní?- First person hortative, negative hortative, and future hortative. 104I 105I 106E
790. ní?- Future tense. 201E
791. -nikUYA Continuatve action. 401B
792. -nu. Conditional. 602

793. néd- First person hortative, negative hortative, and future hortative.
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794. néd- Future tense. 201G
795. nédi- First person hortative, negative hortative, and future hortative.
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 909. -ya Plural subject. 502L

LOANWORDS

910. ?amá-du *pillow*. Spanish *almohada*.
 911. ?arabigú. *apricot*. Sp. *albaricoque*.
 912. ?ará-ru *plow*. Sp. *arado*.
 913. ?arú-sa *rice*. Sp. *arroz*.
 914. ?ayuná. *lent, fast*. Sp. *ayunar*.
 915. ?isbá-ri *sword*. Sp. *espada*.
 916. ?isdú-pa *stove*. Sp. *estufa*.
 917. bagé-ta *leather*. Sp. *vaqueta*.
 918. bandé. *basin, tin cup*. Sp. *bandeja*.
 919. bá-ra *bullet*. Sp. *bala*.
 920. bâ-sa *drinking glass*. Sp. *vaso*.
 921. bendá-na *window*. Sp. *ventana*.
 922. bidabé. *beets*. Sp. *betabel*.
 923. bú-gi *buggy*.
 924. búiyasí *oxen*. Sp. *buey*.
 925. ba. *bread*. Sp. *pan*.
 926. bá-ni *cloth*. Sp. *pañó*.

927. bá-skv *feast, holy day.* Sp. *pascua*.
928. bá-šv *straw.* Sp. *paja*.
929. bèla *pear.* Sp. *pera*.
930. bicû-ti *pig.* Nahuatl *pitzotl*.
931. bisâ-ri *blanket, rug.* Sp. *pisar*.
932. bisgâ-ri *church officer.* Sp. *fiscal*.
933. blâ-sa *city.* Sp. *plaza*.
934. dâbû-pv *governor.* Zuni *ta-pu-pu*.
935. dá-sa *cup.* Sp. *taza*.
936. dasašû-na *taxes.* Sp. *tasación*.
937. dúdâci *priest.* Nahuatl *totatzin*.
938. dumî-kv *Sunday.* Sp. *domingo*.
939. dunabí. *automobile.* Sp. *automóvil*.
940. dʻé-nda *store.* Sp. *tienda*.
941. gayê-ta *biscuit.* Sp. *galleta*.
942. gagawâ-ti *peanut.* Sp. *cacahuate*.
943. gahé-ra *drummer.* Sp. *cajero* (?).
944. gahú-na *box.* Sp. *cajón*.
945. gamâ-tv *bed.* Sp. *cama* (?).
946. ganâ-sti *basket, nest.* Sp. *canasta*.
947. gané-ru *sheep.* Sp. *carnero*.
948. gapé. *coffee.* Sp. *café*.
949. gasí-ki *high priest, king.* Sp. *cacique*.
950. gâ-silu *jail.* Sp. *cárcel*.
951. gâ-šv *box.* Sp. *caja*.
952. gawá-yu *horse.* Sp. *caballo*.
953. gawiyâ-ra *herd of horses.* Sp. *caballada*.
954. gayawarî-sa *barn.* Sp. *caballeriza*.
955. gubê-nta *church.* Sp. *convento*.
956. gú-li *cabbage.* Sp. *col*.
957. gumunirá. *jail.* Sp. *comandancia*.
958. gunžú. *mattress.* Sp. *colchon*.
959. gurá. *corral.* Sp. *corral*.
960. guyá-ri *yoke, horse collar.* Sp. *collera*.
961. habú. *soap.* Sp. *jabón*.
962. higâ-nti *giant.* Sp. *gigante*.
963. hua *John.* Sp. *Juan*.
964. húibisi *Thursday.* Sp. *jueves*.
965. hú-runa *outdoor oven.* Sp. *horno*.
966. kasdî-ra *Mexican, Spanish-American.* Sp. *Castilla*.
967. kisá. *stew.* Sp. *guisado*.
968. lé-ba, ré-ba *coat.* Sp. *leva*.
969. lelû-sa *watch, clock.* Sp. *reloj*.
970. má-disi *Tuesday.* Sp. *martes*.
971. madí-ya *hammer.* Sp. *martillo*.
972. mé-guriši *Wednesday.* Sp. *miércoles*.
973. merigá-na *Anglo-American.* Sp. *americano*.
974. merû-ni *melon.* Sp. *melón*.
975. mé-sa *table.* Sp. *mesa*.
976. mê-strv *teacher.* Sp. *maestro*.
977. mísakái *church.* Sp. *misa* plus native -kái.
978. mú-la *mule.* Sp. *mulo*.
979. murâ-tv *Negro.* Sp. *mulato*.

980. mú-sa *cat.* Sp. *moza*.
 981. nabá-hu *pocket knife.* Sp. *navaja*.
 982. narán *orange.* Sp. *naranja*.
 983. nurá-si *peach.* Sp. *durazno*.
 984. nužuwé-nu *Christmas.* Sp. *Nochebuena*.
 985. regesú. *cream.* Sp. *requesón*.
 986. resá. *prayer.* Sp. *rezar*.
 987. reyá-tu *rawhide rope.* Sp. *reata*.
 988. rí-gu-si *rich.* Sp. *rico*.
 989. rú-ku *crazy.* Sp. *loco*.
 990. rú-ni-ši *Monday.* Sp. *lunes*.
 991. rusá-yu *beads.* Sp. *rosario*.
 992. sagisdá-na *sacristan.* Sp. *sacristán*.
 993. sandí-ya *watermelon.* Sp. *sandia*.
 994. sandiyá-ku *St. James.* Sp. *Santiago*.
 995. sá-waru *Saturday.* Sp. *sábado*.
 996. semí-tu *bread.* Sp. *semita*.
 997. serê-su *cherry.* Sp. *cereza*.
 998. sibi-yú. *bird.* Sp. *silbar*.
 999. sirawé. *plum.* Sp. *ciruela*.
 1,000. siyé-ta *chair.* Sp. *silleta*.
 1,001. sundá-ru *soldier.* Sp. *soldado*.
 1,002. wá-ga-ši *cow.* Sp. *vaca*.
 1,003. wani-šú. *harness.* Sp. *guarniciones*.
 1,004. wará. *something saved.* Sp. *guardar*.
 1,005. yé-nasí *Friday.* Sp. *viernes*.
 1,006. ži-ri *chili.* Sp. *chile*.
 1,007. žiriyú. *whip.* Sp. *chirrión*.

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