

# CHEMEHUEVI

*A Grammar and Lexicon*

BY

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# INTRODUCTION

## 0.1 *The People*

The Chemehuevi Indians currently number somewhat over three hundred. They reside primarily in the eastern portions of San Bernardino and Riverside Counties in California, and on the Arizona bank of the Colorado River near Parker. Their current homeland is considered to be Chemehuevi Valley, at the eastern edge of the Mohave Desert in Southern California. Officially this area has only recently been returned to the Chemehuevis; from about 1940 to 1970 the tribe was not legally recognized by the Bureau of Indian Affairs. Currently many members are moving back to Chemehuevi Valley as part of an attempt to rebuild and reorganize the tribe.

The Chemehuevis actually migrated into California fairly recently, being the last major wave of Great Basin Indians to travel south.<sup>1</sup> The time of their move apparently coincides roughly with their first entrance into recorded history, some time in the late seventeen hundreds. Within the next hundred years they wandered as far west as the Tehachapi Mountains.

Bands living at Twentynine Palms and along the Colorado River apparently did some farming; however, by and large the Chemehuevis were seed-gatherers and small-game hunters. They enjoyed a rich oral tradition and highly structured tribal life. Territorial rights and clan membership were defined in songs each Chemehuevi youth inherited from his father. The three major song cycles were known as the Mountain Sheep, Deer, and Salt Songs.

In addition to basket making, the Chemehuevis were apparently well-known for their practice of "visiting" (constantly being out) which they do to this day. In the past, Indian agents responsible for various bands would on occasion lose

<sup>1</sup>For notes to Section 0, see p. 196.

them for years.

The Chemehuevi language is part of the branch of Southern Numic languages, consisting additionally of Southern Paiute, Ute and Kawaiisu. The Numic languages as a whole comprise what was formerly termed the Plateau Shoshonean branch of Uto-Aztecan.

Mary Hanks Molino, my principal informant, was born in Chemehuevi Valley in 1916. She remembers as a child having few playmates, the older children from the families around her being "away at school." During the cotton season her father would travel down to Parker to work, returning at season's end with staples for the family and frequently candy for the children. It was a two-day walk from Parker to Chemehuevi Valley; the night before his return the family would spot the glow of his campfire in the distant hills.

The Indians in the valley planted cotton on the bank of the Colorado, relying on the annual flooding of the river. In 1940 Parker Dam was built, and Lake Havasu which resulted covered the eastern portion of the valley. By this time the Hankses had moved down to Parker. Most of the family live now in what is known as 'Hanks' Village', a few miles south of Parker.

When she was older Mary was sent by train to the Indian School in Riverside, from which she graduated in the thirties.

Mary's father was a possessor of the Bird Song, since he belonged to that moiety. In addition he sang the Salt Song<sup>2</sup> at funerals in Parker for many years, being the last head singer in that area. Mary's brothers inherited the Bird Song, but never learned it.

## 0.2 Previous Work

Very little has been published on the Chemehuevi language to date. A few words and notes are recorded in Kroeber's *Notes on Shoshonean Dialects of Southern California* (1909). One of the more closely related languages, Southern Paiute, is extensively documented in Sapir's *Southern Paiute, A Shoshonean Language* (1930). Some linguists consider Chemehuevi to be a dialect of Southern Paiute -- the two are certainly mutually intelligible. The two languages differ with respect to several phonological rules. A considerable amount of vocabulary has diverged, as have portions of the tense-aspect system. Each language has a subset of personal pronouns the other lacks. Syntactic constraints seem to differ somewhat, to the extent that such constraints can be inferred



from Sapir's data.

Sapir's work has been extremely useful, although its concentration is on morphology and phonology rather than syntax. Most subsequent analyses of Southern Paiute have used Sapir's data and many of his generalizations.

The most exhaustive work previously done on Chemehuevi was that attributed to John P. Harrington in the early part of this century. Harrington sent his wife Carobeth to Parker, Arizona to begin an extensive collection of Chemehuevi data and texts. Carobeth later divorced Harrington and married her Chemehuevi informant, George Laird. The results of her fieldwork and Harrington's subsequent data and notes currently reside in the National Anthropological Archives in the Smithsonian Institution.<sup>3</sup>

Recently Carobeth Laird has written an exhaustive ethnographic description of the Chemehuevis which includes numerous detailed glossaries and brief notes on phonology and morphology.<sup>4</sup> Most of the material at the Smithsonian has not yet surfaced in print. Further publications by C. Laird are eagerly awaited.

Linguistic fieldwork on Chemehuevi has also recently been done by Pamela Munro, and her findings have appeared in several papers.<sup>5</sup>

### 0.3 *Organization and Theoretical Framework*

This grammar is organized into two parts: section one deals with phonology, section two with syntax.

For the phonological analysis of Chemehuevi I am using a generative approach, such as is outlined in Chomsky and Halle's *Sound Pattern of English*, Harms' *Introduction to Phonological Theory*, and others. However my analysis differs from the standard approach in two respects. It has been pointed out that for many languages several so-called morpheme structure conditions must be restated as phonological rules, for example sequence constraints which apply across morpheme boundaries as well as within morphemes. Stating these rules twice results in an obvious loss of generality. Therefore I am following instead the convention of marking these morpheme structure rules as "persistent" rules, meaning they can reapply as feature-changing rules in the phonological component.

The second departure is that instead of taking advantage of extrinsic rule ordering in writing phonological rules, I have chosen to complicate individual rules somewhat wherever that

has eliminated the need for ordering. With the possible exception of one problematic rule, this turns out to be rather easily accomplished.

In the syntax section I use what are known as the Standard and Extended Standard Theories<sup>6</sup> as a point of departure, employing a model which assumes a syntactic level of "deep structure" independent of the level of semantic representation. However, the model I adopt places restrictions on the types of transformational rules allowed in a grammar. In an effort to curtail the excessive power (or "weak generative capacity") which exists in transformational models, I have chosen an approach similar to that used by Jackendoff (1972) and Shopen (1972), among others. Each proposes heavy constraints on the transformational component and an increased burden on lexical redundancy rules, output conditions, and rules of semantic interpretation. Most of the task of relating sentence types is thereby placed in the lexical and interpretive components.

In brief, the only types of transformations I make use of are rules of permutation. No rules of deletion or addition of material are permitted. This entails the following:

a) Clauses where a noun phrase is pronominalized are generated originally with a pronoun, rather than via a rule of "pronominalization." Each pronoun constitutes a separate entry in the lexicon.

b) Clauses where a noun phrase is missing or "understood" (such as in participial, nominalized and imperative constructions) are generated in the deep structure without the NP node, rather than resulting from a deletion rule.

c) Conjoined constituents (to the extent that they occur) are generated as just that; e.g., conjoined NPs or VPs, not as reductions of conjoined sentences.

d) Passives without agents are generated with the surface subject in deep structure subject position.

e) Compounds and nominalizations cannot be formed transformationally, but must be assembled in the lexicon.

f) Attributive adjectives do not arise from "reduced relative clauses" but originate in the NP in which they occur. Similarly, possessives are generated directly as modifiers.

g) The semantic functions of noun phrase arguments

are assumed to be specified in the lexical entries for each verb, rather than in the phrase structures.

Arguments in favor of the lexicalist approach have been extended to cover entirely productive morphological processes (in Jackendoff (1975), Halle (1973) and Shopen (op. cit.)). The result of this extension is that even such things as noun inflection and verb paradigms appear to be better handled in the lexicon by entering separately all inflectional and derivational forms of a stem. (Since irregularities must be marked anyway, including the regularities as well adds no extra "cost" if they can be stated in a series of lexical redundancy rules.) Transformational rules of concord and agreement are eliminated by allowing inflected forms to be inserted freely, constrained only by rules of interpretation and output conditions (one of which will discard as "uninterpretable" any sentence which for any reason interpretive rules fail to account for).

Examples of lexical entries and redundancy rules are given in Appendix A. Each entry is assumed to include references to all redundancy rules which apply to it. The cost of referring to each rule is roughly proportional to the relative number of exceptions to the rule (exceptions being lexical items which *could* undergo the rule as written but do not).

In many cases portions of lexical rules relating to morphology and semantics are split up into two separate rules when such a separation results in greater generality for each subpart.

For a more detailed explanation of the theoretical model sketched here, see Press (1975).

#### 0.4 Key to Symbols and Terms

I am following conventions adopted in Chomsky and Halle (1968) and Harms (1968), unless otherwise noted.

- MM Mary Hanks Molino (principal Chemehuevi informant).
- # Word-boundary.
- + Morpheme-boundary.
- C Represents any consonant, glide, or *r*, i.e., replaces  
 $\left. \begin{array}{l} \{ [+cons] \} \\ \{ [-voc] \} \end{array} \right\}$
- C<sub>0</sub> Stands for a string of any number of consonants or none.

- V Represents only  $\begin{bmatrix} +\text{voc} \\ -\text{cons} \end{bmatrix}$  segments.
- N Represents any nasal consonant.
- C? Glottalized consonants, although analyzed as single segments, are written as a sequence of consonant + glottal stop.
- c = the affricate [ts].
- g In the syntax sections and in the lexicons the fricative  $\gamma$  is written as *g*.
- j = the palatal glide.
- ? = the glottal stop.
- // Slashes enclose underlying segments or morphemes when it is useful or important to distinguish them as such.
- [ ] Square brackets are similarly used for phonetic strings.
- x* When the status is irrelevant, or the level is intermediate, segments within the text are given simply in italics, as are Chemehuevi morphemes and strings. Segments, morphemes and strings in set-off examples are unmarked.
- \* Forms or sentences which are unacceptable in Chemehuevi are preceded by an asterisk.
- (X)\* = a string of any number of Xs (including none).

## Chemehuevi forms:

- X-Y Within words, morphemes are separated by dashes when necessary for clarification. In sections dealing with syntax, forms are given in a taxonomic phonemic transcription (i.e., rules of vowel deletion, consonant alternation are assumed to have applied, but backing of *k*, rounding of  $\eta$ , etc. are ignored). Stress is predictable and will not be indicated.

Because of the optionality of vowel - shortening and glottal stop deletion rules, morphemes may be transcribed inconsistently in different examples; e.g., *nukwi-vaa-n* run-fut-I,  $\sim$  *nukwi-va-n*.

- X $\sim$ Y X and Y are variants of the same form.

- X- A dash at the end of a word given in isolation indicates the word is a stem normally followed by suffixes. Therefore its final vowel is left undeleted in the cited form for the sake of clarity.
- Johni- Underlined Chemehuevi forms, or portions of forms, are borrowings from English, and are given in English orthography. They are pronounced essentially as in English, except for indicated modifications, such as the addition of stem-final vowels.

#### English glosses:

Following Chemehuevi strings, morpheme by morpheme translations are given in English with the equivalent of each morpheme being underlined. Within a word these morpheme equivalents are separated by dashes. Fluent translations are given in single quotes.

Glosses in brackets, e.g., run[mom], are actual features (e.g., "momentaneous") on the stem; the same glosses without brackets are separate morphemes, e.g., eat-mom /tika-nu/.

#### Abbreviations used in glosses:

- A = /-ʔa/~/-a/, enclitic morpheme with possible copular or focusing function, discussed in section 2.2251.
- abs = absolutive (derivational) suffix on noun stems.
- anim = animate agreement marker, or feature [+anim].
- cont = continuative aspect marker, /-niʔi/.
- du = dual, [-several] [-singular]. Two only.
- dur = verb stem feature or verb suffix indicating non-momentaneous (or "durative") aspect; i.e., [-mom].
- fut = future tense, marked by /-vaa/ or /-mpaa/.
- habit ~ptc = "habitual aspect" marker, not a true aspect, but a special use of the subject relativization participle ending.
- imp ~mom = momentaneous aspect marker used to form imperatives of some verbs.
- inan = inanimate, [-anim].

- intr = intransitive, [-tran].
- K = third person inanimate (invisible) postfix pronoun, used as copular or other auxiliary element, (section 2.225), or in place of the subject pronoun you[sing].
- mom = any of several verb suffixes indicating momentaneous aspect. As a feature on a verb stem, [+mom] marks the verb as inherently momentaneous.
- neg = negative morpheme; /-wai ~ wa?a/ or /-apa/, depending on syntactic properties of stem.
- nml = nominalizer suffix on verbs; /-na/ or /-pʰ/.
- not = negative adverb optionally co-occurring in sentence with negative markers given above. The adverb may be omitted, but the suffixes may not.
- ob = oblique case marker. Normally /-a ~ -ja/ on nouns, /-ku/ on numbers, postpositions.
- pass = passive (agentless) suffix on verbs, /-tʰ/.
- perf = perfect, or completed action. Marked by /-kai/, verb suffix, or /-caa/, enclitic (or both).
- pl = plural, specifically [-singular]. (i.e., a cover term for dual and several.)
- plob = agreement suffix marking (on verb) plural object. (Not the same as pl(ob); see X(ob) below.)
- p/p = present/past; a verb tense suffix /-ka/ which can translate either as present or past.
- pres = present tense, marked by /-jʰ/ for most verbs.
- ptc = participle ending; /-tʰ/ is used for participles arising from subject relativization (see section 2.33); /-na/ is used for those arising from object relativization (so-called "passive" participles.)
- Q = interrogative morpheme; /urʰʰ/, enclitic /-raa/, or glottal stop (see section 2.24.)

rem	= remote past tense suffix, / -pɨgai /.
result	= resultative, difficult to distinguish from perfect marker, since it is also / -kai/. Means 'being in the state of having ---ed'; can co-occur with perfect.
sev	= several, [+several] ([-singular]); includes three or more.
sing	= singular, [+singular] ([-several]).
subord	= subordinating morpheme, / -gai ~ -ju /, / -gu /, / -ci /, or / -ka /, attached to verb in subordinate clause.
tran	= transitive; any verb taking one or more objects (without postpositions).
<u>X(ob)</u>	= oblique ending added to X, but deleted by vowel-deletion rule. Stem-final vowel on X surfaces.

Pronouns are not glossed with all the relevant features, unless needed for clarity, e.g., *tam* would be glossed simply as we; for complete translation, see charts in sections on pronouns or lexicon. Since postfix forms in general are not marked for case in Chemehuevi, they are simply translated according to the semantics, e.g., I vs. me, etc. Third-person pronoun glosses vary freely between personal pronouns and demonstrative pronouns, since they are equivalent in Chemehuevi. Thus, *maŋ* will be glossed variously as he, she, that one, or that.

Similarly suffixes which represent more than one feature, e.g., / -?umɨ / plural-animate agreement marker on verbs, may frequently be glossed only as pl or anim (depending on what the example is intended to illustrate).

Terms used in text:

affix: includes bound morphemes which are associated with a particular stem class, e.g., occur only with verbs. "Suffix" is used for post-stem affixes, "prefix" for pre-stem affixes.

enclitic: used in somewhat more restricted sense than normal: refers to bound morphemes which, if they show up in a sentence, must be attached to the first word.

All enclitics in Chemehuevi are postclitic, i.e., are attached after the stem rather than before.

oblique case: the only non-nominative case in Chemehuevi is referred to as "oblique". It is used both for possessor and object nouns. Postpositions attached to nouns are attached directly to the bare stem (which could be considered the nominative, except that some absolutes, etc., are deleted before postpositions). For motivation for not calling postpositions "cases", see section 2.23.

POSSESSABLE: used for nouns which can be overtly possessed in the sentence. Animals, for example, are not possessable in Chemehuevi, unless compounded with pet. There are two overlapping subgroups of POSSESSABLE nouns: POSSESSED (nouns which in fact have an overt possessor in the sentence) and INHERENTLY POSSESSED (nouns which are expected to be possessed, though not always inalienably, e.g., territory, foodstore; when an overt possessor is present these nouns augment their stem with a special suffix. See section 2.211.)

(Features in capitals are meant to be informal representations of semantic information which must be accounted for in an as yet unspecified way.)<sup>7</sup>

postfix: includes bound morphemes often referred to as "enclitic" in other sources; unlike normal suffixes, they may appear on (almost) any word in the sentence, without regard to the type of stem. Most notable examples are the bound forms of pronouns, which attach to nouns, verbs, postpositions, adverbs, conjunctions and modifiers, anywhere in the sentence. They are not restricted to the first word in the sentence, the only difference between them and enclitics.

root: any lexical category stem stripped of all derivational affixes; a single morpheme. Compounds consist of two or more roots.

stem: that portion of a word to which inflectional affixes are added, i.e., the root plus any derivational affixes.

word: defined phonologically; the domain of the stress rules and the final vowel-deletion rule. When there is



any doubt, I use the latter as the criterion. Word boundaries must be inserted in a string before the phonological rules can apply. I assume all bound morphemes to be so marked in the lexicon, with a separate feature for enclitics.

The only postfixes seem to be the bound pronouns, so [+bnd, +pro] is used rather than introducing a third feature. It is the job of the syntactic component to position and order all morphemes correctly. Readjustment rules, at the end of the transformational cycle, insert word boundaries fairly straightforwardly.

Prefixes have to be distinguished from suffixes at some point; e.g., since many "free" morphemes are optionally prefixed to verbs, a general feature [pref], "prefix" is used, with most nouns being marked [\*pref] (obligatorily specified as + or -. In general, conventions regarding features used in Stockwell, Schachter, and Partee 1973 are followed here).

## SECTION I PHONOLOGY

### 1.1 *Phonetics*

The following phonetic segments appear in Chemehuevi:

(1) Consonants	p	t	k	k̠	q	ʔ	k <sup>w</sup>
		s	ɣ			h	
		c					
	β~v		ɣ				ɣ <sup>w</sup>
		r	(l <sup>1</sup> )				
	m	n	ŋ				ŋ <sup>w</sup>
	mʔ	nʔ	ŋʔ				
	w	j					
	wʔ	jʔ					

#### Consonant clusters

mp    nt    ŋk  
          nc    ŋkw

#### Vowels

i	ɨ	u	i:	ɨ:	u:
(æ)	a	o		a:	o:

#### Vowel clusters

ɨi	ia	aɨ
ui	ɨa	au
oi	ua	e <sup>i</sup> ~ a <sub>i</sub> ~ ɨ <sup>i</sup>
ai	oa	

#### Consonants

Stop consonants in Chemehuevi are unaspirated. The velar, *k*, is fronted (to *k̠*) after *i* and backed (to *q*) after *a* and *o*. There is only one affricate, *c* (pronounced [ts]), in this dialect (in contrast to Southern Paiute). Pamela Munro reports instances of *ç* in her informant's speech. Neither dialect of Chemehuevi contains *ʃ*.

<sup>1</sup>For notes to Section 1, see p. 196.

The fricative  $\gamma$  may show up voiceless when word-final, as in [*paranʔɿ̰*] Paiute, or in [*jajaɣ*] burst into tears! It seems to be in free variation with [ $\gamma$ ] in this environment.

The segment *l* appears in only a handful of loanwords. Most loans substitute *r* for *l*; the residue of unaltered loans probably varies from speaker to speaker. Thus, for MM, *volita* in Chemehuevi means marble, and *papiliv* paper, both from Spanish. On the other hand, *aporos* apple has lost the *l*. The second source of *l* in MM's dialect is its usage in baby-talk, where it frequently replaces *r*; e.g., *nɿluaciŋ* give me! for adult *nɿruaŋ*, and *kalɿciŋuʔ* sit! for *karɿŋuʔ*.

### Vowels

Although fronting of *a* to  $\text{æ}$  is common in Southern Paiute, it is rare in this dialect of Chemehuevi. The only clear case I've found where *a* is fairly consistently fronted in rapid speech is in /*tɿrawiʔi* / dash off, showing up as [*tɿræwiʔ*]. (Here, *a* is sandwiched between two high vowels.)

The diphthong  $e^i \sim a_i \sim \text{ɿ}_i$  arises only from an underlying *i* following a sequence of *a* plus a back consonant, as in /*pahiju*/ three [*pahe<sup>i</sup>j*], /*jaʔijɿ* / dead [*jaʔ<sup>a</sup>ijɿ*], and /*jaaqivɿɿ*/ brought [*jaaq<sup>ɿ</sup>ivɿɿ*].

### 1.2 Lexical Representation

The above segments can be reduced to the set of underlying segments given in Table I, which gives the distinctive feature specifications. Note that each vowel is listed twice; the second group being marked [-voiced]. These "voiceless" vowels never surface in MMs dialect of Chemehuevi, though they are omnipresent in the Harrington-Laird material (as well as in Southern Paiute). Their sole purpose in this analysis is to trigger a particular phonological rule--see discussion under P1, p. 26. The distribution of these vowels is given in morpheme structure rules 31 and 32 below.

Morpheme structure rules (MSRs) are assumed to be unordered, applying wherever and whenever they can. The following MSRs specify segmental redundancies in lexical entries in Chemehuevi:

$$\text{MSR 1} \quad \left[ \begin{array}{c} +\text{cons} \\ +\text{voc} \end{array} \right] \rightarrow \left[ \begin{array}{c} +\text{cnt} \\ -\text{nasal} \\ +\text{cor} \\ -\text{back} \end{array} \right]$$



(Fills in predictable features for the segment /ɾ/.)

$$\text{MSR 2} \quad [-\text{cons}] \quad \longrightarrow \quad \begin{bmatrix} -\text{nasal} \\ -\text{cor} \\ -\text{ant} \end{bmatrix}$$

(Glides and vowels are all nonnasal, nonanterior, and noncoronal.)

$$\text{MSR 3} \quad [+cor] \quad \longrightarrow \quad [+ant]$$

(There are no underlying palatals in Chemehuevi.)

$$\text{MSR 4} \quad \begin{bmatrix} +\text{cons} \\ -\text{cor} \\ -\text{ant} \end{bmatrix} \quad \longrightarrow \quad \begin{bmatrix} +\text{hi} \\ +\text{back} \end{bmatrix}$$

(Velar consonants (not including glides) are high and back.)

$$\text{MSR 5} \quad [+ant] \quad \longrightarrow \quad [-hi]$$

(Anterior consonants are not high.)

$$\text{MSR 6} \quad [+nasal] \quad \longrightarrow \quad [-cnt]$$

(Nasal consonants are considered to be stops, i.e., noncontinuants.)

$$\text{MSR 7} \quad \begin{bmatrix} -\text{cons} \\ \{+\text{hi}\} \\ \{+\text{voc}\} \end{bmatrix} \quad \longrightarrow \quad [+cnt]$$

(Marks all vowels and the glides /w, j/ as continuants.)

$$\text{MSR 8} \quad \begin{bmatrix} -\text{hi} \\ -\text{voc} \end{bmatrix} \quad \longrightarrow \quad [-\text{back}]$$

(All nonhigh consonants and glides are also nonback.)

$$\text{MSR 9} \quad [-\text{back}] \quad \longrightarrow \quad [-\text{rnd}]$$

(Nonback segments are never round.)

$$\text{MSR 10} \quad [+nasal] \quad \longrightarrow \quad [-\text{rnd}]$$

(Nasals are never round, i.e., there is no /ɳw/.)

$$\text{MSR 11} \quad \begin{bmatrix} -\text{cons} \\ -\text{voc} \\ +\text{back} \end{bmatrix} \quad \longrightarrow \quad [+rnd]$$

(The only back glide /w/ is also round.)

$$\text{MSR 12 } \left\{ \begin{array}{l} [+voc] \\ [+cons] \\ [-nasal] \\ [-cons] \\ [-hi] \end{array} \right\} \longrightarrow [-glot]$$

(Everything except the nasals and /w, j/ is nonglottalized; i.e., all vowels, all nonnasal consonants, and the nonhigh glides, /h, ʔ/.)

$$\text{MSR 13 } \left[ \begin{array}{l} -voc \\ +cons \\ -nasal \end{array} \right] \longrightarrow [-son]$$

$$\text{MSR 14 } \left\{ \begin{array}{l} [+voc] \\ [-cons] \\ [+nasal] \end{array} \right\} \longrightarrow [+son]$$

(Vowels, glides, r and nasals are sonorant, all other segments are not.)

$$\text{MSR 15 } \left[ \begin{array}{l} -son \\ +cnt \end{array} \right] \longrightarrow [+del rel]$$

(v, γ, γw, and s are [+del rel].)

$$\text{MSR 16 } \left\{ \begin{array}{l} [+son] \\ [-cnt] \\ [-cor] \end{array} \right\} \longrightarrow [-del rel]$$

(nasals, glides, vowels, p, k, kw, are [-del rel]. t, c are lexically marked for this feature.)

$$\text{MSR 17 } \left\{ \begin{array}{l} [-cnt] \\ [-nasal] \\ \left[ \begin{array}{l} -voc \\ [+cor] \\ [-hi] \\ [-cons] \end{array} \right] \end{array} \right\} \longrightarrow [-voiced]$$

$$\text{MSR 18 } \left\{ \begin{array}{l} [+voc] \\ [+cons] \\ [+nasal] \\ [+hi] \\ [+son] \\ [+cons] \\ +cnt \\ [-cor] \end{array} \right\} \longrightarrow [+voiced]$$

(The consonant *r*, nasals, high sonorants, and non-coronal continuant consonants are voiced. All other segments are voiceless, except vowels, which can be either voiced or voiceless.)

MSR 19  $\left\{ \begin{array}{l} [-\text{del rel}] \\ [+voiced] \end{array} \right\} \longrightarrow [-\text{strid}]$

MSR 20  $\left[ \begin{array}{l} +\text{del rel} \\ -\text{voiced} \end{array} \right] \longrightarrow [+strid]$

(*c* and *s* are strident. All other segments are not.)

MSR 21  $\left[ \begin{array}{l} +\text{voc} \\ -\text{cons} \end{array} \right] \longrightarrow [-\text{stress}]$

(Vowels are originally unstressed.)

Many of the above segmental MSRs are persistent; i.e., can be used to specify redundant features in the output of phonological rules. These include MSRs 1, 4-9, 11, 12, 14-16, 19 and 20.

Table II, on the following page, gives the full specifications of the underlying segments as filled in by the above rules.

Sequential redundancies are specified by the following morpheme structure rules:

MSR 22  $[+\text{seg}] \longrightarrow \left[ \begin{array}{l} +\text{voc} \\ -\text{cons} \end{array} \right] / \left\{ \begin{array}{l} \overline{\quad} + \\ \left\{ \begin{array}{l} [+cons] \\ [-voc] \end{array} \right\} \\ \left[ -\text{nasal} \right] \text{---} \end{array} \right\}$

(All morphemes end in vowels. Except for nasals, all consonants (including *r* and glides) must be followed by a vowel, i.e., clusters of nonnasal consonants are prohibited.)

MSR 23  $[-\text{cons}] \longrightarrow [-\text{voc}] / \left[ \begin{array}{l} +\text{voc} \\ -\text{cons} \end{array} \right] \left[ \begin{array}{l} +\text{voc} \\ -\text{cons} \end{array} \right] \left[ \begin{array}{l} +\text{voc} \\ -\text{cons} \end{array} \right] \text{---}$

(The maximum string of vowels in a morpheme is three; if a nonconsonantal segment follows, it can only be a glide. Otherwise only [+cons] segments or morpheme boundaries may follow.)





$$\text{MSR 24 } \left\{ \begin{array}{l} [-\text{voc}] \\ [+cons] \end{array} \right\} \rightarrow \left[ \begin{array}{l} +cons \\ -voc \\ -cnt \\ -nasal \end{array} \right] / [+nasal] \text{ \_\_\_\_}$$

(Any nonvowel after a nasal must be *p*, *t*, *k*, *kw*, or *c*.)

$$\text{MSR 25 } [+nasal] \rightarrow \left[ \begin{array}{l} \alpha\text{cor} \\ \beta\text{ant} \\ \gamma\text{hi} \\ \delta\text{back} \end{array} \right] / \text{\_\_\_\_} \left[ \begin{array}{l} +cons \\ \alpha\text{cor} \\ \beta\text{ant} \\ \gamma\text{hi} \\ \delta\text{back} \end{array} \right]$$

(Nasals in nasal plus obstruent clusters are always homorganic.) (Persistent rule.)

$$\text{MSR 26 } \left[ \begin{array}{l} +\text{voc} \\ -\text{cons} \\ \left\{ \begin{array}{l} +\text{hi} \\ +\text{rnd} \end{array} \right\} \\ +\text{back} \end{array} \right] \rightarrow \left[ \begin{array}{l} \alpha\text{hi} \\ \beta\text{rnd} \\ \gamma\text{back} \end{array} \right] / \left[ \begin{array}{l} +\text{voc} \\ -\text{cons} \\ \left\{ \begin{array}{l} +\text{hi} \\ +\text{rnd} \end{array} \right\} \\ \alpha\text{hi} \\ \beta\text{rnd} \\ \gamma\text{back} \end{array} \right] \left( \left[ \begin{array}{l} -\text{cons} \\ -\text{cnt} \end{array} \right] \right) \text{\_\_\_\_}$$

(Sequences of two vowels are restricted as follows:

*a* or *i* can follow any vowel.

*ɪ*, *u* or *o* can only follow themselves (i.e., forming long vowels) or *a*. (\**ao* is prohibited in the next rule.)

This is a persistent rule, e.g., whenever *u* follows a vowel other than *a* it assimilates: / *upaa* / *in*

> *kani-ipa* 'in the house'

*ma-upa* 'in that'

/ *tika-vii-uka* / *eat-past-it* → *tika-vii-ik*

This rule seems to apply across intervening glottal stops, possibly since glottal stops are optionally deletable (see P26). E.g.:

/ *nukwi-jɪ-ʔumɪ* / *run-pres-pl* → *nukwi-jɪ-ʔɪm*

$$\text{MSR 27 } \left[ \begin{array}{l} +\text{voc} \\ -\text{cons} \\ -\text{hi} \end{array} \right] \rightarrow [-\text{rnd}] / \left[ \begin{array}{l} -\text{cons} \\ -\text{hi} \\ -\text{rnd} \end{array} \right] \text{\_\_\_\_}$$

(The sequence *\*ao* is unpermissable.)

MSR 28  $\begin{bmatrix} -\text{voc} \\ +\text{hi} \end{bmatrix} \longrightarrow [-\text{rnd}] / \text{ \_\_\_\_ } [+ \text{rnd}]$

(Sequences of *\*wo*, *\*wu*, *\*kwo*, *\*kwu* are forbidden.)

MSR 29  $\begin{bmatrix} -\text{voc} \\ -\text{cons} \\ +\text{hi} \end{bmatrix} \longrightarrow [+ \text{back}] / \text{ \_\_\_\_ } [-\text{back}]$

(*\*ji* is an unpermissible sequence.)

MSR 30  $\begin{bmatrix} +\text{cor} \\ -\text{son} \end{bmatrix} \longrightarrow [+ \text{del rel}] / \text{ \_\_\_\_ } [-\text{back}]$

(*\*ti* is an unpermissible sequence.)

MSR 31  $\begin{bmatrix} +\text{voc} \\ -\text{cons} \end{bmatrix} \longrightarrow [-\text{voiced}] / \text{ \_\_\_\_ } +$

MSR 32  $\begin{bmatrix} +\text{voc} \\ -\text{cons} \end{bmatrix} \longrightarrow [+ \text{voiced}] / \text{ \_\_\_\_ } [+ \text{seg}]$

(MSR 32 is persistent, MSR 31 is not. See rule P1 for discussion.)

### 1.3 Phonological Rules

#### 1.3.1 Analysis of Consonants

The clusters *kw* and *ɣw* are treated as single phonological segments since *w* does not cluster with nonvelars. (Also, there are no parallel clusters with *j*.) The cluster *ɲw* arises in Chemehuevi only from an underlying *ɲ* following the vowel *u*.

One of the most complex aspects of Chemehuevi phonology is the behavior of nonglide consonants in medial position, particularly after morpheme boundaries. These consonants behave almost identically in Southern Paiute, and for that language many analyses have been proposed. Most are potentially applicable to Chemehuevi as well, and were considered in some detail in Press (1975).<sup>2</sup>

The situation is as follows:

- (a) The consonants *v*, *r*, *ɣ*, *ɣw*, and the nasal clusters never occur word-initially (in either language; Southern Paiute has the same underlying segments as Chemehuevi except for */h/*).
- (b) Word-internally these occur in two situations:

(i) morpheme-initially, where for most morphemes the voiced continuants given in (a) above alternate with the stop series and the nasal cluster series. In each case the preceding morpheme usually determines (in some way) the following consonant series.

(ii) morpheme-internally, where except for a few situations, these consonants don't alternate at all.

In Southern Paiute the word-internal stop series shows up in some cases as geminate stops, the distribution with respect to single stops being predictable on the basis of stress. (Sapir called this series the "geminated" series, the nasal clusters he called "nasalized" and the voiced continuants "spirantized.")

The alternations in Chemehuevi are tabulated in (2) below, the differences in Southern Paiute are as noted:

(2)	stop series (a)	voiced continuant series	nasal cluster series
	p	v	mp
	t	r	nt
	k	γ	ηk
	kw	γw	ηkw
	c	c <sup>h</sup> nc	nc
	s	s	s
	m	w <sup>(b)</sup>	m <sup>(c)</sup>
	n	n	n
	η	η	η

(a) When non-word-initial, these consonants ("geminate series") occur as geminates before an unstressed vowel segment in So. Paiute.

(b) ηw in So. Paiute.

(c) Nasals in this series are long in So. Paiute.

Examples of these morpheme-initial alternations are given in (3) below; morpheme-internal examples, where they don't alternate, follow in (4):

(3) In a-g the first morpheme (/na/ or the reduplicating morpheme) triggers a following voiced continuant:

a. /na +	punikai/	---	navunika
	<u>reflexive</u>	<u>see</u>	<u>see oneself</u>

b.	/na + tika/	---->	narika-
	<u>reflex</u> <u>eat</u>		<u>eat oneself</u>
c.	/na + koa/	---->	nayoa-
	<u>reflex</u> <u>cut</u>		<u>cut oneself</u>
d.	/REDUP + kwiiyanti/	---->	kwiywiiyant
	pl <u>left-handed one</u>		<u>left-handed ones</u>
e.	/na + cikwi/	---->	nancikwi- <sup>3</sup>
	<u>reflex</u> <u>cut</u>		<u>cut oneself</u>
f.	/na + mavoa/	---->	nawavoa- ^namavoa-
	<u>reflex</u> <u>cover</u>		<u>cover oneself</u>
g.	/na + win?oyi/	---->	nawin?oyi-
	<u>reflex</u> <u>shave</u>		<u>shave oneself</u>

The same verb stems show up with stops after morphemes like / pɨŋka /:

h.	/pɨŋka + punikai/	---->	pɨŋkapunika
	<u>keep on</u> <u>look</u>		<u>keep on looking</u>
i.	/pɨŋka + tika/	---->	pɨŋkatika-
	<u>keep on</u> <u>eat</u>		<u>keep on eating</u>

The first morphemes below trigger nasal clusters in the stems following:

j.	/nɨ + po?otu?i/	---->	nɨmpo?otu?i-
	<u>person</u> <u>teach[tran]</u>		<u>teach [intr]</u>
k.	/juhu-γai + tɨ/	---->	juhuyant
	<u>fat-be</u> <u>ptc</u>		<u>being fat</u>
l.	/nɨ + kuu/	---->	nɨŋkuu-
	<u>person</u> <u>bury[tran]</u>		<u>bury [intr]</u>
m.	/nɨ + kwɨhɨ/	>	nɨŋkwɨɨtu?ikat
	<u>person</u> <u>catch</u>		<u>policeman</u>
			<u>(person-catcher)</u>

- (4) Nonalternating internal occurrences of consonants in (2) above: (second syllable consonant)

a.	/opi/	<u>mesquite bean</u>
b.	/otavi/	<u>sand</u>
c.	/tika/	<u>eat</u>
d.	/cikwi/	<u>cut</u>

e.	/kaaci/	<u>rat</u>
f.	/asiv̄i/	<u>skin</u>
g.	/kam̄i/	<u>jack-rabbit</u>
h.	/t̄iv̄aci/	<u>wolf</u>
i.	/t̄ir̄inav̄i/	<u>root</u>
j.	/n̄iγari/	<u>wind</u>
k.	/uγwi/	<u>smell</u>
l.	/t̄impi/	<u>rock</u>
m.	/tant̄iici/	<u>northerner</u>
n.	/punku/	<u>pet</u>
o.	/oncia/	<u>fox</u>
p.	/nankwaru?u/	<u>metal</u>

In Press (1975) I argued in favor of a feature analysis rather than a segmental approach for consonantal alternation in Chemehuevi. Such a feature analysis involves listing in the lexical representation of each morpheme one of three rule features. Each of these features triggers some phonological change in the immediately following consonant. Morpheme-internal instances of the voiced continuants and nasal clusters are considered to be present in the underlying forms.

Thus, for example, the first (or left-hand) morphemes in (3) above would have lexical representations something like the following:

(5)	na	<u>self</u>
	[+s]	
	p̄iŋka	<u>keep on</u> <sup>4</sup>
	[+g]	
	n̄i	<u>person</u>
	[+n]	

For mnemonic purposes, the feature symbols used are keyed to Sapir's terms (spirantizing, geminating, nasalizing) even though his labels are not entirely appropriate.

The rules for consonant alternations in this analysis are assumed to be:

(6)	i	$\left[ \begin{array}{l} -\text{son} \\ -\text{strid} \end{array} \right]$	-->	$\left[ \begin{array}{l} -\text{cnt} \\ -\text{voiced} \end{array} \right]$	/	[+g] _____
-----	---	--	-----	---	---	------------



c. kari-	<u>sit</u>
kakari-	<u>sit</u> [momentaneous]

Whether the reduplicated syllable "spirantizes" or not is unpredictable in the two languages. (Nasalization seems to be triggered only by the presence of a nasal in the stem, e.g., /*t̃mpi*/ rock, [ *t̃nt̃mp* ] rock [pl]; /*kani*/ house, [kaŋkan] house [pl].) The consonant series is not entirely determined by the function of the reduplicated syllable; "iterative" reduplication "spirantizes" the stem-initial consonant in (a) above, but not in (b). Nor does it reflect the second syllable consonant series; the medial consonant of the stem in (c) is a voiced continuant, but the first syllable does not "spirantize" itself upon reduplication.

In the present analysis nonalternating morphemes are given underlying forms as if they alternated, e.g., /*ka*/ durative, /*ka*/ plural, and /*k̃*/ indirective, but are each marked as obligatorily undergoing the appropriate rule in (6) above. Following Harms (1968), I am adopting the notation and convention that [+SDRi] means "meets the structural description of rule (i)" and therefore undergoes it, whether a [+g] actually precedes or not. This feature [+SDRi] is therefore in the lexical representation of /*ka*/ plural, and similar features are associated with the other invariant morphemes. (Each is redundantly specified with minus rule features for the other rules.)

Handling each of the other morphological problems mentioned would be done by adjusting these morphological features, rather than the straight insertion or deletion of phonological segments.

Reduplication must unfortunately be handled by marking each stem for which type of reduplicating morpheme it takes (just as nouns must be marked for which plural suffix they take). Thus far these forms would be

CV-	CV-	and	CV- <sup>5</sup>
[+redup]	[+redup]		[+redup]
[+g]	[+s]		[+n]

with the following phonological rule:

$$(8) \quad C V \rightarrow C_1 V_1 / \left[ \begin{array}{c} \text{---} \\ +\text{redup} \end{array} \right] C_1 V_1$$

(For more detailed discussion of reduplication, see rule P3, in section 1.33.)

1.32 *Analysis of Vowels*

Vowel length in Chemehuevi must be assumed to be distinctive in order to predict stress. The converse analysis would not be as simple; given the positions of primary and secondary stresses in a word, one could predict the lengths of the vowels, but the rule would be much more complex. In addition, diphthongs must be taken to be underlying, and since they always count as "long" vowels for the purposes of stress, redundancy rules would have to be included in the grammar, which would be unnecessary in a grammar predicting stress from vowel length.

Long vowels are analyzed as clusters (vowel sequences), rather than as single vowels with the feature [+long]. This makes minor rules of lengthening and shortening a bit less simple, but the stress-assignment and vowel-deletion rules are then considerably easier to write.

1.33 *Rules*

None of the phonological rules for Chemehuevi require the assumption of a cycle. Furthermore, extrinsic ordering is unnecessary. They are written with the understanding that to obtain the correct output they must be permitted to apply (and reapply) whenever they can. The only rule which poses problems for this approach is P1, which as it is written requires an extra feature on vowels specifically to prevent reapplication of this rule.

The following phonological rules are used to derive phonetic forms in Chemehuevi. Explanation follows each rule:

P1            V     --> Ø /    V        C<sub>o</sub>    \_\_\_ #  
               [-voiced]            [+voiced]

(All final vowel segments are deleted, one per word. (MSR 31 insures that final vowels at this point are in fact "voiceless".) E.g., /moa/ --> mo father, /pac# / --> pac daughter, and /nukwivaa/ --> nukwiva will run. (Note that since phonetically long vowels are analyzed as clusters they are merely shortened.)

In Press (1975) the form of this rule was:

[+voc] --> Ø / \_\_\_ #

Since this rule could, through reiteration, delete an entire vowel string, e.g., /moa/ --> mo --> m, it presented one of the few major obstructions to dispensing



with extrinsic rule ordering altogether. By introducing a switching feature<sup>6</sup> to trigger this rule, it can be written to prevent reapplication to its own output (and to the output of P2.) The persistent MSR 32 continues to voice any remaining voiceless vowels at this point.

$$P2 \quad \emptyset \quad \text{-->} \quad \left[ \begin{array}{c} V \\ \alpha F \\ +\text{voiced} \end{array} \right] / \# C \text{ --- } \left[ \begin{array}{c} V \\ \alpha F \end{array} \right] (C) \#$$

(This rule lengthens (geminate) short monosyllables, including those affected (or created) by vowel deletion (rule P1). E.g., father is actually phonetically [mo:] when unsuffixed, daughter is [pa:ta:]. The notation [αF] is used as shorthand to mean "agrees in all features" except [voiced] here.)

$$P3 \quad C V \langle V \rangle \text{ -->} C_1 V_1 \langle V_1 \rangle / \left[ \overline{+\text{redup}} \right] C_1 V_1$$

(The reduplication morphemes copy all features of the first consonant and vowel of the stem.<sup>7</sup> All stems are here analyzed as consonant-initial, though not all morphemes are, e.g., /-a/ oblique case. Forms like [ʔa:pa:] boy could have been analyzed as /a:pa:ci/ with the word-initial glottal stop predictably inserted by a phonological rule. However, since I am treating reduplication as an underlying prefixed morpheme, there would be no elegant way of inserting the second ʔ in, e.g., [ʔa:ʔa:pa:] boy[pl]. Indeed the problem is the same for a vowel-initial stem prefixed by any morpheme. If one were to posit such a rule, one would have to prevent it from inserting ʔ before the oblique case marker, e.g., in /ʔa:pa:ci + a/ -->[ʔa:pa:ci] \* [ʔa:pa:ciʔ].)

$$P4 \quad V \text{ -->} [1 \text{ stress}] / \# C_0 V C_0 \text{ ---} \\ [-\text{stress}]$$

(Primary stress is assigned to the second vowel segment in a word, e.g., *puŋku'-n* dog-my 'my dog'.)

$$P5 \quad V \text{ -->} [2 \text{ stress}] / \left\{ \begin{array}{l} [1 \text{ stress}] \\ [2 \text{ stress}] \end{array} \right\} C_0 V C_0 \text{ ---} \\ [-\text{stress}] \quad \left\{ \begin{array}{l} [1 \text{ stress}] \\ [2 \text{ stress}] \end{array} \right\} C_0 [-\text{stress}] C_0 \text{ ---}$$



$$P9 \quad \begin{bmatrix} +nasal \\ -cor \\ +ant \end{bmatrix} \rightarrow \begin{bmatrix} -nasal \\ -cons \\ -ant \\ +hi \\ +back \end{bmatrix} / [+s] \text{ \_\_\_}$$

(*m* → *w* after "spirantizing" morphemes.)<sup>10</sup>

$$P10 \quad \emptyset \rightarrow N / N V \text{ \_\_\_} \begin{bmatrix} +strid \\ +s \\ -cnt \end{bmatrix}$$

(After "spirantizing" morphemes which end in a nasal plus vowel, *c* becomes *nc*. E.g., section 1.31 (3e).)

$$P11 \quad \emptyset \rightarrow N / [+n] \text{ \_\_\_} \begin{bmatrix} -son \\ -cnt \end{bmatrix}$$

(*p*, *t*, *k*, *kw*, *c* become *mp*, *nt*, *ŋk*, *ŋkw*, *nc* respectively, after "nasalizing" morphemes.)

$$P12 \quad V \rightarrow [-nasal] / \text{ \_\_\_} \begin{bmatrix} -nasal \\ -cons \end{bmatrix}$$

(Vowels which might have been nasalized by rule P18 are denasalized in cases where *m* → *w* by rule P9.

$\begin{bmatrix} -nasal \\ -cons \end{bmatrix}$  includes both *w* and preceding vowels, to

denasalize the whole preceding string.)

$$P13 \quad \left\{ \begin{matrix} k \\ q \end{matrix} \right\} \rightarrow \underset{\grave{a}}{k} / [-back] (N) \text{ \_\_\_}$$

(*k* or *q*, preceded by *ŋ* or not, is fronted to  $\underset{\grave{a}}{k}$  after *i*. E.g., /*punika*/ see → [*puni $\underset{\grave{a}}$ k*].)

$$P14 \quad h \rightarrow \emptyset / V \text{ \_\_\_} \\ [+stress]$$

(*h* is usually deleted after stressed syllables, as the following examples illustrate:

/puhagai/	> puhága-nt	<u>doctor</u>
<u>have power</u>		
	> pu-vúaga-ntim	<u>doctors</u>
	> na-vúaga-nump	<u>medicine</u>
/kwíhi/	> ni-ŋkwíi-tui-kat	<u>policeman</u>
<u>catch</u>		

/waha/ + /hokontɨ/ → wahá-okont very-big  
very            big

P15 ai → aa / \_\_\_\_ [active ptc]

(The diphthong ai becomes simply long a in several morphological environments in Chemehuevi, most notably before the "active" participle ending /-tɨ / ( ~ -rɨ ~ -ntɨ ~ -cɨ ). This affects, for example, perfective /-kai/, and remote past /-pɨgai/, which with the participle ending become -kaa-nt and -pɨgaa-nt respectively. The verb /-gai/ (have, be, suffixed to noun stems) becomes -gaa-nt with the participle ending, e.g., /juhugai/ fat, juhugaant is fat.)<sup>11</sup>

P16  $\left\{ \begin{matrix} \underline{k} \\ \bar{k} \\ k \end{matrix} \right\}$  → q / [-high] (N) \_\_\_\_

( $\underline{k}$  or  $\bar{k}$ , whether preceded by  $\eta$  or not, are backed to q after the non-high vowels a and o, regardless of what follows. Example: /tɨka- $\eta$ u-aka /, eat-imp-that → [tɨka $\eta$ uaq].)

P17  $\left[ \begin{matrix} -\text{voc} \\ +\text{back} \end{matrix} \right]$   $\xrightarrow{\text{opt}}$  [+round] /  $\left\langle \begin{matrix} \langle \text{v} \rangle \\ \left[ \begin{matrix} \text{ahi} \\ \text{arnd} \end{matrix} \right] \end{matrix} \right\rangle$  u (N) \_\_\_\_

(This changes k,  $\eta$ ,  $\eta k$ , and  $\gamma$  to  $k^w$ ,  $\eta^w$ ,  $\eta k^w$  and  $\gamma^w$  respectively, following u only if u can't then assimilate to a preceding i,  $\bar{i}$  or o (via the persistence of MSR 26); i.e., u must follow u or a if it follows a vowel at all. This rule is optional--the same form uttered twice in succession will alternate between e.g., k and  $k^w$ . Example: /u $\eta$ a-ja /, he-ob → [una $j$  ~ u $\eta^w$ aj].)

P18  $\left[ \begin{matrix} +\text{voc} \\ -\text{cons} \end{matrix} \right]$  → [+nasal] / \_\_\_\_ [+nasal]

(Vowels are nasalized before nasal consonants. E.g., hiimp → [hiimp̃] what.)

P19  $\left[ \begin{matrix} -\text{voc} \\ +\text{nasal} \end{matrix} \right]$   $\xrightarrow{\text{opt}}$   $\emptyset$  / [+nasal] \_\_\_\_ C

(This optionally deletes nasals in clusters, after vowel-nasalization has had an opportunity to apply.

Whether the rule applies, and the degree to which it applies, depends on several things, including the nature of the vowel (*i* seems to trigger it more than *a*, for example), the position relative to stress (nasals are deleted less after stressed vowels than unstressed ones), and whether the cluster is word-final or followed by a vowel (nasals seem to be retained more often when the cluster is word-final.)

Example:  $\tilde{h}iimp \xrightarrow{\text{opt}} [\tilde{h}iip]$  what.)

P20  $a \xrightarrow{\text{opt}} aw / \_\_\_ (N) kw \#$

(See next rule.)

P21  $kw \xrightarrow{\text{opt}} k / aw (N) \_\_\_ \#$

(Final clusters of  $\eta k^w$  or  $k^w$  optionally spread or shift their glide back to the preceding segment, if that segment is an *a*. Example:

$/kani-ipat\ddot{i}-mana\eta k^w a/$  house-inside-from,  $\rightarrow [kaniipati\ddot{i}mana\eta kw \sim kaniipati\ddot{i}mana^w \eta kw \sim kaniipati\ddot{i}mana^w \eta k].$ )

P22  $\gamma \xrightarrow{\text{opt}} [-voice] / \_\_\_ \#$

(This rule optionally devoices word-final  $\gamma$ . See section 1.1 for examples.)

P23  $a \xrightarrow{\text{opt}} [-back] / \dots \begin{bmatrix} +voc \\ -back \end{bmatrix} \dots$

(This rule is to account for  $a \rightarrow \text{æ}$  in words like  $[t\ddot{i}r\text{æ}wi?] < /t\ddot{i}rawi?i/$  dash off. (There are not enough examples of this to further specify the environment.))

P24  $i \xrightarrow{\text{opt}} \ddot{i}i / q \_\_\_$

(After the backed velar, *i* is partially assimilated to  $\ddot{i}i$ , i.e., given a back onglide. Example:

$/jaaki / \xrightarrow{\text{(P16)}} jaaqi- \xrightarrow{\text{(P24)}} [jaaq\ddot{i}i-]$  bring.)

P25  $i \xrightarrow{\text{opt}} \begin{Bmatrix} \epsilon^i \\ e^i \\ a^i \end{Bmatrix} / a \begin{bmatrix} -voc \\ -cons \\ -hi \end{bmatrix} \_\_\_$

(*i* is partially lowered, and sometimes backed, after *a* plus one of the glides *h* and *?*. Examples:

/pahiju/ --> [pahe<sup>i</sup>j]

three

/ja?i-jɨ/ --> [ja?a<sup>i</sup>j ~ ja?ε<sup>i</sup>j].)

dead-pres

P26 ? <sup>opt</sup> --> ∅ / V \_\_\_ V

(In rapid speech ? is frequently dropped intervocal-  
ically; e.g., / tɨka-tu?i-vɨɨ/ 'caused to eat' →  
[ tɨka-tui-vɨ].) <sup>12</sup>

P27 V <sup>opt</sup>  
[αF] --> ∅ / V \_\_\_ [+seg]  
                  [ αF  
                  [ 2 stress ]

(When a long vowel does not contain primary stress,  
it is optionally shortened. (If the first vowel in  
the sequence wasn't assigned secondary stress by P5,  
it was by P6). E.g.,

tɨka-vaa-nt --> [tɨka-va-nt].)

eat-fut-ptc

## SECTION 2

# SYNTAX

### 2.1 *Phrase Structure Rules*

1. S ----> { S S (S)\*  
(CONJ) (NP) (SUBORD) VP (Q) }
2. SUBORD ----> (NP) (VP)
3. NP ----> { NP NP  
(D) (NUM) (N) (D) (PP) (PTC) (D)  
(NP) NOM  
PRO }
4. PP ----> NP POST
5. PTC ----> S
6. D ----> { NP  
POSS }
7. POSS ----> NP
8. NOM ----> VP
9. VP ----> ( { PP } )\* { (S) (NP)\* (V) } (K)  
{ ADV }

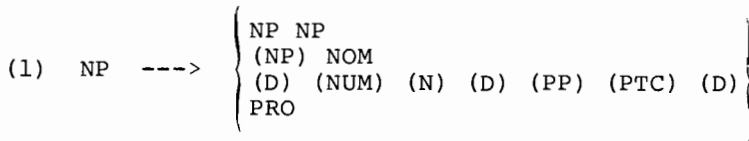
These rules will be discussed in the sections to follow.

I adopt the convention that when all symbols in an expansion are parenthesized, one or more must be included.

### 2.2 *Simple Sentences*

#### 2.2.1 *Noun Phrases*

The phrase structure rule expanding noun phrases in Chemehuevi is as follows:



The first line is to accommodate subject "copy-pronouns," explained on p. 120, section 2.4. The symbol D is expanded to  $\left\{ \begin{array}{l} POSS \\ NP \end{array} \right\}$ , where POSS is the source of possessive noun phrases (which are in the oblique case) modifying the head noun N in (1) above, and NP (from D) is the node to which third person pronouns attach when used as "demonstrative adjectives." Three nodes for D are provided because, although movement rules allow still more orders, up to three can appear in a single NP. (See section 2.214 on possessives and demonstratives.)

NUM stands for numeral, which modifies the head N and agrees with it in case.

PP is postpositional phrase, and is among other things a source of NP conjunction (see sections 2.23 on postpositions, 2.31 on conjunction).

PTC is expanded to S, the source of relative clauses (which are always participles in Chemehuevi--see section 2.33). Participles may be used without head nouns, thus the N in (1) above must be optional.

(NP) NOM is the source of all nominalizations, with or without "subjects." (See section 2.34.)

PRO is the source for all pronouns.

#### 2.211 *Derivation of Nouns*

Simple nouns consist of proper nouns, pronouns, or common nouns. Common nouns usually consist of just a noun stem, but often are derived from a root (nominal or otherwise) plus some sort of derivational affix. The most common of these affixes is the set of "absolutive" suffixes, found throughout the Uto-Aztecan family. Absolutes are peculiar in that they attach to roots which are already noun roots, and furthermore, most of them delete when the noun is compounded (as the first member) or possessed (whether the possessor is a postfix or not).<sup>1</sup> Most absolutes have lost whatever semantic significance they once might have had. Since relatively few noun roots also function as verb roots, there is little if any functional load

<sup>1</sup>For notes to Section 2, see p. 197.





/-pɨ/ e.g.,	/sawa-pɨ/	sawap	<u>arrow-weed</u>
		sawa-kan	'arrow-weed house'
	/tɨvi-pɨ/	tɨvip	<u>earth, ground</u>
		tɨvi-tɨkawʔi-c	'turning into dirt'
/-vɨ/ e.g.,	/maha-vɨ/	mahav	<u>tree</u>
		maha-ʔiga-n	'my tree-plant'
	/wana-vɨ/	wanav	<u>web</u>
		wana-ʔuŋ	'his web'
/-mpɨ/ e.g.,	/aso-mpɨ/	asomp	<u>salt, alkaline</u>
		aso-kama-ga	'tasting salty'

These could constitute four separate absolutives (/ci, cɨ, pi, pɨ/; the variants -mpi, -vi, etc., are predictable from the "spirantizing" and "nasalizing" features on the stem, see section 1.31). The only semantic generalizations one might make on the basis of my data are that animate nouns tend to take only the absolutives /ci/ and /vi/; /ci/ being apparently restricted to this class.<sup>3</sup>

Absolutives on most nouns in the oblique case are followed by the normal oblique marker /-a ~ -ja/, as in (4) below:

- (4) punku-ci-a-n tana-vɨ  
dog-abs-ob-I kick-past 'I kicked the dog'

Plurals of nouns with absolutives retain them when the plural suffix is added:

- (5) sɨnaʔav coyote sɨnaʔavi-m coyote-pl  
 sigɨpic lizard sigɨpici-w lizard-pl

Absolutives seem to be retained when postpositions are added, even when the latter function as verbs (see section 2.23 on postpositions). Examples:

- (6) oho-v bone oho-vɨ-wa? 'with a bone'  
 punku-c dog punku-ci-wa? 'with a dog'  
 tusu-p flour tusu-tɨkawʔi-c 'turning into flour'

		tusu-pi-want	'part of (=post-position) the flour'
tivi-p	<u>earth</u>	tivi-pi-va?an	'on the ground'
puŋku-c	<u>dog</u>	puŋku-ci-rua-ŋ	'Give the dog!' (-tua = <u>towards</u> )

Some derivational suffixes regularly cause deletion of the absolutive:<sup>4</sup>

- (7) tavu-c hare tavu-ruac 'bunny' (hare-offspring, diminutive suffix, probably from *tua-*, son, plus /-ci/, diminutive)

Some nouns occur with two absolutives in a row, as in:

- (8) /muhu-mpi-ci/ muhumpic owl  
 { muhu-mpi-tikaw?i-c }  
 { muhu-ntikaw?i-c } 'turning into an owl'

The overall situation with absolutives is actually not quite as simple as the above examples suggest. Some nouns optionally appear without the absolutive in non-compounded, non-possessed environments. Others may include the absolutive in compounds or possessed forms, e.g., /aŋaa-vi/ aŋaav ant, aŋaa-rɪkaw?i-c ~ aŋaa-vi-rɪkaw?i-c 'turning into an ant'; /ukwi-vɪ/ ukwiv charcoal, ukwi-rɪkaw?i-c 'turning into charcoal', but ukwi-vɪ-n 'my charcoal'. Some nouns have a choice of absolutives (usually only in the nominative--one seems preferred with the oblique case), e.g., kwihi-p ~ kwihi-v smoke, soo-g (=absolutive?) ~ soo-v lungs. Other nouns have two different meanings in the nominative depending upon whether the absolutive is included or not. The oblique case of these nouns, however, does include the absolutive and can be translated both ways, e.g., /wici?aa/ wing, /wici?aa-vɪ/ feather, but /wici?aa-vɪ-a/ wing, feather in the oblique case. (Similarly, /tuku?aa/ flesh, /tuku?aa-vi/ edible meat, both /tuku?aa-vi-a/ in the oblique case.)

These facts strongly suggest that absolutives are extremely susceptible to relexicalization. For many nouns the absolutives are considered part of the stem in some environments, but not in others. (I am, for the sake of the discussion, calling a suffix an absolutive if it deletes in any



ijaavi-mp	<u>grapevine</u>	<	/ijaavi/ <u>grapes</u>
hu?upi-v	<u>squawbush</u>	<	/hu?upi/ <u>squawbush</u> <u>berry</u>

c. /-v±/ language (added to tribenames)

e.g., ajata-v	<u>Mojave lang.</u>	<	/ajata/ <u>Mojave</u>
haiku-v	<u>English</u>	<	/haiku/ <u>whiteman</u>

d. /-p±/ old, abandoned

e.g., kani-p	<u>abandoned house</u>	<	/kani/ <u>house</u>
--------------	------------------------	---	------------------------

e. /-v±/ skin, material

e.g., punku-v	<u>wool</u>	<	/punku/ <u>domesticated</u> <u>animal, sheep</u>
tihija-v	<u>deerhide</u>	<	/tihija/ <u>deer</u>

A handful of suffixes which are associated in one way or another with "possession" but which otherwise seem to make no semantic contribution are given in (10). They are apparently restricted to nouns which are inalienably or inherently possessed.<sup>7</sup> The first three of these suffixes require the presence of an overt possessor in the sentence.

(10) a. /-wa/ (added to many body parts and plant parts, though not to all of them.)

e.g.,	{ <u>pa±-wa-n</u> <u>ni±ni pa±-w</u> }	'my blood'	<	/pa±-pi/ <u>blood-abs</u>
	huvaa-wa-uk	'its sap'	<	/huvaa/ <u>sap</u>
	kuca-wa-uk	'its ashes'	<	/kuca-pi/ <u>ashes-abs</u>

(an example which is not a body part is:)

tivi-wa-n	'my land'	<	/tivi-pi/ <u>ground-abs</u>
-----------	-----------	---	--------------------------------

(To the extent that the last example in (a) is interpretable as "territory," one could still make the generalization that

all the above noun stems are "normally" possessed, except when used with their absolutes.)

- b. /-ʔaa/ (also added to body parts, with distribution distinct from /-wa/. There are still many body parts which take neither.)

e.g., sagwi-ʔaa-n 'my guts' < /sagwi-vi/  
guts-abs

pavonʔokwicɨ asi-ʔa 'watermelon rind'  
< /asi-vɨ/  
skin-abs

naŋka-ʔaa-ik 'its leaf' < /naŋka-vɨ/  
leaf-abs

c.f. naŋka-vɨ-n 'my leaf'  
(not part of my body)

- c. /-akaa/ (added to body parts, kinship terms, objects which also normally have to "belong" to something or someone.)

e.g., juʔu-akaa-v 'one's leg' < /juʔu/  
leg

e.g., moa-akaa-v 'someone's father' < /moa/  
father

pipisoʔo-akaa-m 'their children'  
< /pi-pisoʔo-ci/  
pl-child-abs

The suffix /-akaa/ normally co-occurs with the suffix /-vi/ 'someone's' (see (d) below), though a few examples exist (e.g., 'children') with a true possessive pronoun. All the examples I have obtained with -akaa are in the nominative; in oblique cases it deletes leaving only the -vi or possessive suffix.

- d. /-vi/ (unlike all the above, this is added to nouns normally possessed which do not have an overt possessor in the sentence, since it is itself interpretable as a possessor.)

e.g., juʔu-v 'someone's leg' < /juʔu/  
leg

niwi-ʔaa-v 'someone's body' < /niwi/  
body

This suffix is difficult to distinguish from an absolute in many cases, since it can as easily be translated, e.g., 'a leg'.



like know, they usually translate as action completed prior to the tense of the main verb, as in (12):

- (12) a. John Anni ivani?i-pi-a-uŋ putucuga-vi  
John Ann(ob) be here-nml-ob-her know-past  
 'John knew Ann had been here.'
- b. John Anni ivani?i-pi-a-uŋ ha?isutu?i-vi  
John Ann(ob) be here-nml-ob-her like-past  
 'John liked Ann('s) having been here.'

(compare with the following example without an embedded "subject":)

- c. ni-i-k nukwi-pi ha?isutu?i-c  
I-K run-nml(ob) like-habit  
 'I like running.'

I consider these nominalizations all to have originated in the phrase structure as simple N, and in the case of (12a,b) as a possessed noun, D + N. The different types of -pi are morphologically the same, though their exact semantic contributions differ. (It may be that (12a,b) can also be interpreted as 'result of VERBing' and differ from the examples in (11) in that the latter are "concrete," the former "abstract.") For rules relating these forms see L7-L10, Appendix A.

Other less productive nominalizing suffixes are listed in (13) below, along with examples of each.

- (13) a. /-numpi/ instrument THING WITH WHICH ONE VERBS  
 e.g., kusa?a-nump 'frying pan'  
fry-instrument  
 tavi-nump 'hammer'  
hit-instrument  
 pa-jua-nump 'bucket'  
water-carry-instrument  
 (See section 2.224 on object-prefixation.)
- b. /-tiaa/ place PLACE FOR VERBING  
 e.g., havi-tia 'bed'  
lie-place



- |          |                              |                                      |
|----------|------------------------------|--------------------------------------|
|          | <u>kari-tia</u>              | 'chair'                              |
|          | <u>sit-place</u>             |                                      |
|          | <u>tika-tia</u>              | 'table (anyplace<br>one eats)'       |
|          | <u>eat-place</u>             |                                      |
| c. /-ci/ | PERSON WHO (REGULARLY) VERBS |                                      |
| e.g.,    | <u>tapica-c</u>              | 'lawman (one who<br>ties people up)' |
|          | <u>tie-one</u>               |                                      |
|          | <u>tupunua-c</u>             | 'Negro'                              |
|          | <u>dark-one</u> <sup>9</sup> |                                      |
| d. /-pi/ |                              |                                      |
| e.g.,    | <u>tika-p</u>                | 'foodstore, food'                    |
|          | <u>eat-suffix</u>            |                                      |
|          | <u>nina-p</u>                | 'basket'                             |
|          | <u>basket-weave-suffix</u>   |                                      |

The suffix in (d) seems to translate variously as 'what one VERBs' and 'result of VERBing', depending on the stem.

(For participles used as nouns, see section 2.33.)

### Compounds

Compounding is very common in Chemehuevi, some types being extremely productive. Examples of noun + noun compounds are given in (14) below: (For deletion of absolutes see section 2.211.)

- (14) a. naga-vun̄kuc 'domesticated mountain sheep'  
mt. sheep-pet
- papawa-mpi 'she-bear'  
bear-female
- b. wa?arovi-mpagap 'horseshoe'  
horse-shoe
- c. kukwa-t̄ikat̄ia 'wooden table'  
wood/stick-table
- pa-r̄i?asi-t̄iwap 'window'  
water-freeze-closing (pa-r̄i?asi- is used for  
'glass'.)
- d. kaiva-kuvaj?a 'mountain top'  
mountain-top

Noun forms also result from verb + noun compounds, as in the following: (For adjectives as verbs see section 2.214, p. 56.)

- (15) aṅka-gan            'red house'  
       red-house  
       aṣ-nṣw            'young person'  
       new-person

Examples of lexical redundancy rules specifying compounds are given in Appendix A, L11-17.

Compounds resulting in verbs are discussed in section 2.221 below.

#### 2.212 *Pronouns*

The independent pronoun system in Chemehuevi can be described with the following features: person (I, II, III), number (singular, dual, several), exclusivity (vs. inclusivity of addressee), proximity (here, visible, invisible) and animateness. These combine to give the following independent personal pronouns (cited in underlying form):

(16)		SING	DUAL	SEVERAL	
			tami	tawṣ	INCLUSIVE
I		nṣṣ/nṣṣni	nṣmi		EXCLUSIVE
II		ṣmi	mṣmi		
	(anim)	iṅa maṅa uṅa	imṣ mamṣ umṣ		here visible invisible
III	(inan)	icṣ/ika/i- marṣ/maka/ma- urṣ/uka/u-			here visible invisible

The first person singular has two possible stems, the second being the suppletive form used in oblique cases (namely with the accusative-possessive /-a ~ -ja/). Either stem can be used with postpositions, e.g., nṣṣ-wa?i- ~ nṣṣni-wa?i- 'with me';

*ni-rua- ~ ni-ni-cua-* 'give me'. (For postpositions as verbs, see section 2.23.) The third person inanimate pronouns have three series of stems, and use the third series (*i-*, *ma-*, *u-*) only with postpositions. The second series are the suppletive forms used with the oblique suffix.

First person inclusive is the only category utilizing the dual-several contrast. If it were not for the fact that the distinction occurs outside the pronoun system as well, one might be able to dispense with it here, breaking down */tami/* and */taw-i/* as [I-sg + II-sg] vs. [I-sg + {II-pl  
II-sg + III}], respectively. */n-mi/* could be viewed as [I-sg + III].

The number feature undergoes further syncretism in the set of inanimate pronouns, where no number distinction is marked overtly at all. Semantically, however, inanimate things may be understood to be singular, dual or plural--when an inanimate subject or object is dual or plural, the number suffixes on the verb reflect this.

The proximity features, relevant only to third-person pronouns, are not really three points in a distance spectrum. "Here" means both visible and close to the speaker (within, say, arms' reach). "Visible" means some distance away (actually, any distance, beyond arms' reach, as long as it is within sight of the speaker) and "invisible" means out of sight, whatever the distance. There is no indefinite, unmarked pronoun as there is in Southern Paiute (*aŋa*, *am-i*, *ar-i*, "indefinite" third person sg, pl, inanimate, respectively (Sapir p. 177).)

All third person pronouns are in fact demonstrative pronouns and may also function as demonstrative adjectives (modifying nouns--see section 2.214). In addition, each form may occur with an optional prefix */hu-/*, whose contribution to the meaning, if any, is not yet determined. *hu-* may be prefixed whether the pronoun is used as a pronoun or modifier, whether it occurs alone or in a postpositional phrase (e.g., *hu-?u-va*, there), and even with postpositional verbs (e.g., *hu-?uva-ni?i-v-i*, 'was being there'). Furthermore, *hu-* shows up (optionally) on words derived from third person pronoun roots, either transparently, as in the series *i-cu?a-*, *ma-ru?a-*, *u-ru?a-*, 'resembling this, that, that (invis)', respectively, or not transparently, as in the verbs based on *mai-*, say, which historically seems to be derived from *ma-*. Thus, one finds

*hu-mai-*, alongside *mai-*, and *hu-mai--ni-*, alongside *mai--ni-*, think. Sapir makes no mention of such a prefix in Southern Paiute, though Harrington and Munro both find copious examples in their Chemehuevi dialects.

For oblique cases of independent pronouns, see discussion of noun inflection in general, section 2.213. (All forms take /-a/ in the oblique case, except those whose final stem vowel is -a, which take /-ja/.

Each of these pronoun forms is entered in the lexicon with the feature [+pro]. In the case of 1st and 2nd person, a strict subcategorization feature,  $-[{}^D[NP[ ]]]$ , prevents their insertion under a NP node directly dominated by a D node, since they cannot be used as demonstratives. As NPs all pronoun forms except the first two stem variants of the inanimate pronouns may be inserted immediately before a postposition. For the inanimates, /*ici*/, /*mar*/, /*ur*/, /*ika*/, /*maka*/, and /*uka*/ all are marked  $-[ ]_{Post}$ ; the forms *i-*, *ma-*, and *u-* are marked  $+ [ ]_{Post}$ .

The forms with *hu-* also constitute separate entries. For the redundancy rule relating them to the bare stem forms, see L18 in Appendix A.

#### Postfix pronominal forms

All personal pronouns have postfix forms which can be used in place of their independent forms (usually not in addition to them, but see section 2.4). The following table gives the underlying forms of each:

(17)		SING	DUAL	SEVERAL	
I		-nV	-rami	-raw $\ddagger$	INCLUSIVE
				-n $\ddagger$ mi	EXCLUSIVE
II		-ukV ~ -?	-wV		subject
		-mV	-w $\ddagger$ mV		object
III	(anim)	-i $\eta$ a		-im $\ddagger$	here
		-a $\eta$ a		-am $\ddagger$	visible
		-u $\eta$ a		-um $\ddagger$	invisible
	(inan)		-ika		here
			-aka		visible
		-uka		invisible	

In general the choice of whether to use the independent forms or the postfix forms depends on what in the sentence is considered "new information" and what is "old information." The normal way to respond to the question, 'Who ate?' would be *maŋ tɬka-vɬ* 'He ate', for example, where a response to 'What did he do?' would be *tɬka-vɬ-aŋ*, 'He ate'. The emphasis is apparently rather mild; in isolation (out of discourse context) the two forms alternate freely for most elicited sentences. There are in addition two or three stronger devices for focusing and emphasizing constituents. In Southern Paiute (and for Pamela Munro's Chemehuevi informant) some of the distinction in proximity is lost in the postfix forms (Sapir p. 183). If the theory here is correct, it is easy to see why--when the referent is understood, the demonstrative aspect of the pronoun is less needed. (When the pronoun is even more de-emphasized, it can be dropped altogether, though in isolation such sentences are re-judged "incomplete.")

The second person postfixes are somewhat irregular. In non-imperative sentences (for imperatives, see section 2.26) when you [singular] is the subject, it almost always uses */-ukV/* for the postfix form. This morpheme may be historically from the third person inanimate invisible postfix (Sapir and Harrington both allude to it, but Sapir's examples do not include this particular usage; for other uses of this postfix, see section 2.225); however, since there is no synchronic motivation for calling it such, I will not. Due to various morpheme order constraints, no postfix or enclitic may ever follow */-ukV/* in a word, therefore it is impossible to tell what the final vowel is (synchronically).

When you [singular] is the object, its postfix form is */-mV/* (again, since nothing ever follows it, the vowel never shows up).

When you [plural] is the subject, the postfix form is */-wV/*. When you [plural] is the object, the postfix form seems to be */-wɬmV/*, although for MM the independent form is almost always used for some reason.

There is an alternate form for the subjective you [singular], namely */-ʔ/* (glottal stop), which is used consistently in imperatives but also occasionally in non-imperatives as well. MM always seems to prefer */-ukV/* in non-imperatives, but will often

accept /-?/, occasionally volunteering it (largely in interrogative sentences). In Harrington's data the opposite was true--the subjective postfix usually being -? and only occasionally *-ukə*; hence I would assume the glottal stop to be the older form, now being replaced by /-ukV/.

No other pronominal postfixes reflect a case distinction.

Lexical entries for all second person pronoun forms are given in E5, Appendix A.

The first person singular postfix also has an indeterminate vowel, since it too is last in any sequence of suffixes, enclitics, and postfixes. One might wonder how both first-person and second-person pronominal postfixes can be constrained to be last in a series, since postfixes may attach to each other. In fact, there is also a strong constraint in MM's dialect of Chemehuevi which forbids first- and second-person postfix pronouns from co-occurring in the same word. (For more on pronominal postfix sequences, see section 2.4.)

Historically, the final vowel in /-nV/ was *i*. All these final vowels are recoverable from Harrington's material, since his informant did not delete final vowels, but only devoiced them.

The inclusive first person forms both begin with *r*, or more accurately /t/. (The forms are marked for obligatorily undergoing the "spirantizing" rule--features on preceding morphemes are prevented from affecting it.)

These postfix forms are separately listed in the lexicon with the feature  $\left[ \begin{array}{l} +\text{pro} \\ +\text{bnd} \\ -\text{prefix} \end{array} \right]^{10}$ . (The full pronoun forms in the previous section are actually marked [*\*prefix*] since all nouns and pronouns can appear prefixed to certain verbs.) For the lexical rule specifying the redundancy between the independent and bound pronoun forms, see L19, Appendix A.

The correct positioning of these bound forms with respect to other words and morphemes is handled in the transformational component and by output conditions.

In addition to personal pronouns, there are interrogative pronouns, treated in section 2.242; a relative pronoun, discussed in section 2.33; and a reflexive-reciprocal morpheme, discussed below.

Reflexive-reciprocal morpheme

In sentences where the verb can be interpreted either reflexively or reciprocally, a prefix /na-/ is added to the verb. (Derived from this is a non-bound morpheme *nahump* which translates as oneself in such sentences as 'I myself saw him' or 'He did it himself', but this is generally emphatic rather than "reflexive." Examples of *na-* are given in (18) below:

- (18) a. maŋ na-wavo?a-mpɪ  
           he self-cover-past  
           'He covered himself'
- b. nɪ na-nukwi-tu?i-j  
           I self-run-cause-pres  
           'I am making myself run'
- c. im na-ju?a-ka-vɪɪ-m  
           these self-carry-sev-past-pl  
           'They carried each other/themselves'
- d. nɪ { pa?a-ntɪ-m } na-mai-vɪ  
           { pa?a-j }  
           I { tall-habit-anim } self-say-past  
           { tall-pres }  
           'I said I was tall'
- e. Ann Johni na-ha?ɪsutu?i-ŋu-tu?i-vɪ  
           Ann John(ob) self-like-mom-cause-past  
           'Ann made John like her/himself'

Reflexivization seems to occur in a greater number of environments in Chemehuevi than in English, as shown in examples (18d) and (18e) (first meaning) above. I will return to these below.

Example (18c) illustrates the fact that sentences with plural subjects are ambiguous as to whether the action was reflexive or reciprocal. Frequently *na-* is reduplicated when the subject is plural, as in (19) below;

- (19) na-na-goi-ka-vɪɪ-?ɪm  
           self-self-kill-sev-past-they  
           'They killed themselves/each other'

Even when reduplicated, the sentence is still ambiguous.

When the subject is a semantically "conjoined" noun phrase

arising from a postpositional phrase using /-wai/ with (see section 2.31), the action is still ambiguous, as in (20):

- (20) maŋ mamɨ-wa na-na-goi-ka-vɨɨ-m  
he them-with self-self-kill-sev-past-pl  
 'He and they killed themselves/each other'

However, semantically conjoined subjects which use /-gajaa/ (section 2.31) result in non-ambiguous sentences; nouns to which -gaja has been added are translated more as 'and noun, too' and are not thought of as accompanying the subject in the action. (In section 2.31 I propose that the source of noun + gaja is in a subordinate clause.) Therefore, verbs with na- translate only as reflexive. Example:

- (21) John aipaci-gaja na-gukwi-vɨɨ-m  
John boy-too self-shoot-past-pl  
 'John and the boy each shot themselves/\*shot each other'

Examples (18b) and (18e) both involve the causative /-tuʔi/ which is treated as a transitivizing verb suffix attached in the lexicon (see section 2.223, pp. 66, 67.) The extra NP argument which the verb takes (as a result of becoming causative) can create yet another kind of ambiguity; in (18e) na- is coreferential either with John or Ann.

In other words, na- "replaces" an object under identity with the subject or with another object. An even clearer example (although the sentence is somewhat contrived) is given in (22) below:

- (22) nɨɨ-k maŋa-j na-maga-mpɨ  
I-K he-ob self-give-past  
 'I gave {him to myself  
 myself to him  
 him to him(self)}'.

Here na- can replace an indirect object as well as a direct, resulting in the three-way ambiguity.

The example in (18d) above involves one of a small number of verbs which allow non-nominalized sentential clauses (see section 2.34). The embedded verb in such clauses is a finite one (or a participle used predicatively--see section 2.225),



and the embedded subject is usually in the nominative case.

The reflexivization in (18d) is optional; the sentence is synonymous with:

- (23) *nii-k paʔã-ji-an mai-vi*  
I-K tall-pres-I say-past  
 'I said I was tall.'

Nonetheless the existence of examples where the verb is reflexive means the interpretive rule regarding *na-* must be expanded to include coreference between subject and embedded subject.

In the lexicon *na-* could be considered either an intransitivizing prefix or a simple pronoun, inserted into the tree like any other object and being prefixed to the verb by a general object-prefixation process (see section 2.224).

The evidence for determining whether it is a pronoun or not is not overwhelming. Since *na-* is obligatorily prefixed even to verbs which normally do not allow object prefixation, one might argue that it is not. However, the fact that its source (or reference) can be either in the matrix sentence or in an embedded clause (example (18d) above) might be somewhat easier to account for if *na-* is treated as a pronoun. Furthermore, like nouns in general, *na-* can be found as the prefixed object of a postposition, as in:

- (24) *na-vinʔapa-aka-aŋ juna-mpɪ*  
self-behind-them-he put-past  
 'He put them down behind himself.'

(where *na-* is the object of behind).

Reciprocal *na-* is also found in the form *na-ma-*, 'together', (lit. with each other) as in the following examples:

- (25) a. *na-ma-ʔim nukwi-vii-m*  
recip-with-they run-past-pl  
 'They ran together.'
- b. *ni na-ma-ntua-um co-kwipa-tuʔi-vi*  
I recip-with-toward-them head-hit-cause-past  
 'I bashed them together.'

- c. Ann Johni Margareti na-ma?a-k punikai-vi  
Ann John(ob) Margaret(ob) recip-with-ob see-past  
 'Ann saw John and Margaret together.'

I tentatively propose that *na-* be analyzed as a pronoun (with the features [+pro, +reflex]). All pronouns are insertable under any NP node; *na-*, however, must be restricted from insertion under a D since it cannot modify another noun, either as a possessor or as a demonstrative. Nor can it ever function as the subject of the main clause (such a reading will be excluded by the interpretive rules).

When the subject (or whatever *na-* is coreferential with) is semantically plural, *na-* is interpreted either reflexively or reciprocally (i.e., two readings are assigned it). Sentences with singular subjects "conjoined" with the suffix *-gaja* will be given only a reflexive reading.

#### The reflexive possessor /-vɨ/

Any object noun which is possessed by a third person subject of the sentence is postfixed by a reflexive possessor pronoun morpheme, /-vɨ/, as in:

- (26) maŋ kani-a-v punikai-vɨ  
he house-ob-own see-past  
 'He saw his (own) house.'

/vɨ/ is marked in the lexicon as:

$$\left[ \begin{array}{l} +\text{pro} \\ +\text{reflex} \\ +[\text{Poss}[\_\_\_]] \end{array} \right]$$

(i.e., it can only be inserted as a possessive).

#### 2.213 *Inflection of Nouns*

##### Case

The nominative case in Chemehuevi is unmarked; i.e., represented by the noun stem, including any absolutive suffixes on the root. This case is used for the (non-conjoined) subjects of matrix sentences, the subjects of embedded clauses with a small number of embedding verbs (see section 2.34), the (non-conjoined) objects of imperatives (both direct and indirect objects),<sup>11</sup> and nouns given in isolation.

The oblique case suffix is /-a/, for most nouns ending in vowels other than -a. The latter take the suffix /-ja/ in the oblique case. There is a borderline area of nouns ending in -ɨ which varies--some always take /-a/, some always take /-ja/, and a few can take either. In addition there are one or two non-productive oblique case suffixes; the small number of nouns which take them must be lexically marked. The only one of these suffixes which MM has given is /-na/ (exemplified below), though Harrington lists a couple others. The oblique case is used for all objects in non-imperative sentences (both direct and indirect, as long as no postposition is adjoined), for objects of postpositions when the latter are suffixed to a modifier of the noun rather than the noun itself, for possessor nouns ("genitive" case), and for subjects of embedded clauses.

Examples of oblique case endings are given in (27):

(27)	a.	/sapɨ/	saap	<u>belly</u> [nom]
		/sapɨ+a/	sapɨ	<u>belly</u> (ob)
	b.	/huna/	huun	<u>badger</u> [nom]
		/huna+ja/	huna-j	<u>badger-ob</u>
	c.	/tawa/	taaw	<u>tooth</u> [nom]
		/tawa + {ja na}/	tawa-n ~ tawa-j	<u>tooth-ob</u>

The bare noun stem (with no case marking) is used when prefixed to verbs, when the first member of a compound, or when postpositions are directly attached; however, if the postposition of which it is an object is attached instead to an accompanying demonstrative, the noun takes an oblique ending. (For behavior of absolutes, see section 2.211).

### Number

There are three productive plural markers in Chemehuevi; the suffixes /-wɨ/ and /-mɨ/ (limited to animate nouns), and reduplication. Some animate nouns use both reduplication and a suffix to form the plural. A few differentiate between dual and several by adding a suffix for two or more, and reduplicating in addition for three or more. In general, though, the plural markers do not differentiate dual from several. (Number agreement on verbs, however, does.)

Inanimate nouns, when they have plural forms at all, use



- (30) a. tivaci-wi            wolf-pl(ob)  
           /tivaci-wi-a/  
       b. poo?avi-mi        flea-pl(ob)  
           /poo?avi-mi-a/

Redundancy rules for inflectional suffixes of case and number are given in Appendix A, L20-L26.

#### 2.214 Modifiers

##### Demonstratives

As stated in section 2.212 above, all third-person personal pronouns are also demonstratives, and may be used as modifiers of other (nonpronoun) nouns. As such they either precede or follow the noun they modify, or both for added emphasis.

Examples:

- (31)  $\left\{ \begin{array}{l} i\eta \text{ aipac} \\ \text{aipac } i\eta \\ i\eta \text{ aipac } i\eta \end{array} \right\}$         'This boy'

Demonstratives agree with their head nouns in case as well as number and animacy:

- (32) a. maηa-j    aipaci  
           that-ob   boy(ob)        'That boy'  
       b. ic    wii                    '{ This knife }'  
           this   knife                { These knives }  
       c. umi        puusi-wi  
           those(ob) cat-pl(ob)    'Those cats'

When modifying other nouns demonstratives cannot be post-fixed to anything. When they immediately follow their head noun, however, they appear in somewhat different phonological forms, shown in (33) below:

(33)	Full pro (prenominal dem)	post-nominal dem	postfix pro
anim	iη maη uη	iη aη uη	-iη -aη -uη
inan	ic mar ur	ic ar ur	-ik -ak -uk

Whereas the animate series suggests these post-nominal forms are equivalent to the postfix pronoun forms, the inanimate series shows they cannot be. Instead they seem to be related to the full pronoun forms by a phonological process deleting initial *m*, a process which shows up in a few other sporadic (and frozen) instances in the language.

This consonant deletion does suggest an affix-like character for these post-nominal demonstratives. A further argument for perhaps calling them postfixes concerns a word-order constraint requiring subject postfix pronouns to attach to the first word in the sentence (see section 2.4). Noun + demonstrative is the only exception in the language to this constraint. Bound subjects attach to a post-nominal demonstrative rather than to the noun itself, e.g.,

- (34) a. aipaci aŋa-ja-n kwipa-vɨ  
           boy(ob) that-ob-I hit-past  
           'I hit that boy.'
- b. \*aipaci-a-n aŋa-j kwipa-vɨ

However, in two crucial tests post-nominal demonstratives look very much like words, not suffixes: (1) Enclitics, which are absolutely constrained to appear on the first "word" in the sentence, always precede post-nominal demonstratives, i.e., attach to the head noun. In general enclitics come last in a series of affixes and postfixes. (2) Phonological rules, the most manifest being final vowel deletion, treat demonstratives as separate words--e.g., the final vowel in /aipaci/ boy, is protected by any affix, postfix, or enclitic, but not by a demonstrative: aipac aŋ, 'that boy'.

Since I consider the vowel-deletion rule the most crucial argument I propose calling post-nominal demonstratives separate words rather than affixes, making the appropriate modifications on the subject constraint.

### Adjectives

Adjectives are essentially equivalent to verbs; as modifiers they, like all other verbs can appear in participle form. They precede or follow the head noun, with which they agree in case and number:

- (35) a.  $\left\{ \begin{array}{l} \text{pa?a-nt}\ddot{\text{i}}\text{-m aipac} \\ \text{aipac pa?a-nt}\ddot{\text{i}}\text{-m} \end{array} \right\}$  nukwi-j  
 $\left\{ \begin{array}{l} \text{tall-ptc-anim boy} \\ \text{boy tall-ptc-anim} \end{array} \right\}$  run-pres  
 'The tall boy is running.'
- b. aipaci-w pa?a-ka-r\ddot{i}-m nukwi-ka-j\ddot{i}-?im  
boy-pl tall-sev-ptc-anim run-sev-pres-pl  
 'The tall boys are running.'
- c. n\ddot{i} a\eta kaga-r\ddot{i} wihi puni-v\ddot{i}  
I red-ptc(ob) knife(ob) look-past  
 'I looked at the red knife.'

Adjectives differ from nonadjective verbs in several respects:

(i) The verb suffix /-?um\ddot{i}/ (which loses its ? after the participle ending, allowing the u to assimilate and thus delete) is primarily a [+anim] agreement marker. For nonadjective verbs  $\left[ \begin{array}{l} +V \\ -Adj \end{array} \right]$ , whether finite or participles, the suffix is added only if the subject (or head noun) is in addition [-sing]. For adjectives  $\left[ \begin{array}{l} +V \\ +Adj \end{array} \right]$ , the same is true when they are used as finite verbs. However, when adjectives are in participle form they add /-?um\ddot{i}/ for any animate noun, whether singular or plural:

- (36) a. ma\eta  $\left\{ \begin{array}{l} \text{t}\ddot{\text{i}}\text{ka-r} \\ \text{*t}\ddot{\text{i}}\text{ka-r}\ddot{\text{i}}\text{-m} \end{array} \right\}$  a\eta saaronci  
he  $\left\{ \begin{array}{l} \text{eat-ptc} \\ \text{*eat-ptc-anim} \end{array} \right\}$  that one beer(ob)  
 hivi-sua-\eta  
drink-finish-mom  
 'The eating one drank up the beer.'  
 (t\ddot{i}ka- = [-Adj])
- b. ma\eta  $\left\{ \begin{array}{l} \text{pa?a-nt}\ddot{\text{i}}\text{-m} \\ \text{*pa?a-nt} \end{array} \right\}$  a\eta saaronci  
he  $\left\{ \begin{array}{l} \text{tall-ptc-anim} \\ \text{*tall-ptc} \end{array} \right\}$  that one beer(ob)  
 hivi-sua-\eta  
drink-finish-mom  
 'The tall one drank up the beer.'  
 (pa?a- = [+Adj])

- c. maŋ { paʔa-j  
\*paʔa-jɪ-ʔim }  
he { tall-pres  
\*tall-pres-anim }  
'He [that one] is tall.'

(For further examples of /-ʔumɪ/ on finite verbs, see section 2.226 on verb agreement.) The above holds as well for participles used predicatively--see section 2.225.

(ii) Nonadjective verbs must co-occur with a demonstrative when modifying a noun; adjectives need not:

- (37) { \*nukwi-c } aipac paʔa-j  
{ nukwi-c aŋ }  
  
{ \*run-ptc  
run-ptc that } boy tall-pres  
'That running boy is tall.'

(iii) When used predicatively (see section 2.225), participialized nonadjectives require the enclitic K in the sentence, participialized adjectives do not.

Participle forms may be used as nouns themselves, non-adjectives, however, require a co-occurring demonstrative:

- (38) a. { \*nukwi-c } wiʔiku-vɪ  
{ nukwi-c aŋ }  
  
{ \*run-ptc  
run-ptc that } fall-past  
'The running one fell.'  
  
b. paʔa-ntɪ-m wiʔiku-vɪ  
tall-ptc-anim fall-past  
'The tall one fell.'

(For ordering of demonstratives with respect to participles, see section 2.4 on Word Order.)

### Numerals

Numerals modifying nouns show agreement in case by the addition of the nominative suffix /-ju/ or the oblique suffix /-ku/ as in the following examples:



- (39) waha-j kaiv pa?a-j  
two-nom mountain tall-pres  
 'Two mountains are high.'  
 Ann waha-k timp̄i punikai-v̄i  
 Ann two-ob stone see-past  
 'Ann saw two stones.'

Numerals, like adjectives, add /-ʔum̄/ whenever the noun they are modifying is animate:

- (40) waha-ju-m aipaci-w nukwi-j̄i-ʔim̄  
two-nom-anim boy-pl run-pres-pl  
 'Two boys are running.'  
 Ann waha-ku-m̄i aipaci-w̄i punikai-v̄i  
 Ann two-ob-anim(ob) boy-pl(ob) see-past  
 'Ann saw two boys.'

Note that the surfacing of the last vowel in *waha-ku-m̄i* (last example above) indicates the presence of an underlying final /-a/ oblique case suffix, attached rather redundantly to the animate marker.

### Possessives

Possessive modifiers are always in the oblique case and are unaffected by the case of the possessed noun. These modifiers may be common nouns (which can themselves be modified), proper nouns or pronouns. In the first two instances the possessor must precede the head noun, as well as any adjectives (participles) modifying the head. If the possessor is a pronoun it has two possible positions: in full form it precedes the head and all other modifiers, in postfix form it attaches directly to the head (never to another modifier). Pronouns may occur concurrently in both positions (if coreferential) and postfix pronouns may co-occur with common and proper noun possessors (if coreferential). Examples:

- (41) a.  $\left. \begin{array}{l} \text{n̄īni tuu} \\ \text{tua-n} \\ \text{n̄īni tua-n} \end{array} \right\} \text{iva-ni?i-j}$   
my son-my here-cont-pres  
 'My son is here.'

- b. owasiaka-r pampin?i-in kac iva-wa?  
yellow-ptc pot - his not here-neg  
 ina-j owasiaka-r pampin? kac iva-wa?  
his-ob yellow-ptc pot not here-neg  
 'His yellow pot is gone.'
- c. mar pampin?i-n hipiki-j  
that pot-my holey-pres  
 'That pot of mine has a hole.'
- d. pavi-a-n naro?o-on ankaga-j  
brother-ob-my shirt-his red-pres  
 'My brother's shirt is red.'
- e. ni-i-k {wihi-a-un } puni-kai-vi  
           {una-j wihi }  
I-K {knife-ob-his } see-result-past  
           {his-ob knife(ob) }  
 'I saw his knife.'
- f. ni-i-k maṇa-j piso?oci puni-kai-vi  
I-K him-ob child(ob) see-result-past  
 'I saw {his child }  
           {that child } .'

Note that when the head noun is also oblique and agrees in number and animacy with the possessor, the sentence is ambiguous. (For further discussion see section 2.4.)

As in other Uto-Aztecan languages there are certain restrictions on what kinds of common nouns may be possessed. In section 2.211 nouns which normally must be possessed were discussed, such as body parts and kin-terms. Animals cannot be directly possessed without first being compounded with /-punku/ pet. With the verb /-gai/ have (which is bound), pet is attached as a verb prefix. Examples:

- (42) a. niini tuku-punku-n  
my mountain lion-pet-my  
 'my {mountain lion},  
       {cat } ,
- b. ni-i-k waha-ku-mi wa?arovi-mi  
I-K two-ob-anim(ob) horse-pl(ob)

pun̄ku-wī-ga-nt  
pet-pl-have-ptc

'I have two horses.'

Plants are generally not possessable unless compounded with /-īgap̄i/ plant (cultivated, not wild). An exception is /hawi/ corn, perhaps because it is understood to be "cultivated."

In contrast to English, which uses possessive constructions for a large variety of things other than ownership, Chemehuevi seems to use these constructions more restrictively. For example possessor nouns are not used with bare nouns to mean the "maker" of the object, thus to say 'Her coffee is always bitter' one must say:

- (43) {kuupi-cu-na-aŋ } utusamp mohara-t  
 { \*kuupi-aŋ }  
 { coffee-make-ptc-she } always bitter-ptc  
 { \*coffee-her }

'The coffee she makes is always bitter.'

## 2.22 Verb Phrases

### 2.221 Derivation of Verbs

Verb stems in Chemehuevi can either be monomorphemic or derived from other lexical categories by the addition of various suffixes. Most of the former are roots which are exclusively verbal, though there are a few sets of roots which have more than one lexical category assigned to them, most notably the postpositions (which with tense-aspect markers are verbs, as bare stems are postpositions). A small number of verb roots are also noun roots, e.g., taŋa knee, taŋa kick; similarly a number of adverbs when suffixed with tense-aspect markers become verbs: kwaŋ away, kwaŋ go away.  
 [+Adv] [+V]

Verb stems derived in part from nouns include various productive types of compounds (for example, most verbs allow their object to be prefixed--see section 2.224 below). They also include nouns suffixed with bound morphemes, which on the basis of their semantics could be viewed as compounds too. (Synchronically the question of whether a morpheme is a stem or affix is probably not entirely decidable, especially for



e.g., kani-gai-  
house-have  
 'have a house'

ha?iti-na?incici-gai-  
good -girl -be  
 'be a good girl'

- b. /-tu ~ -tu?i/ make (These may be two separate suffixes, though they vary freely when suffixed to nouns. /-tu?i/ is used as a causative suffix with verb stems and then does not alternate with /-tu/.)

e.g., wihi- $\left\{ \begin{array}{l} \text{cu-} \\ \text{cu?i-} \end{array} \right\}^{12}$   
knife-make  
 'make a knife'

- c. /-tu?a/ become (Also used with verb (adjective) stems to mean turn X.)

e.g., wa?arovi-cu?a-  
horse -become  
 'become a horse'

By and large adjectives are equivalent to verbs in Chemehuevi, i.e., their stems take normal tense-aspect suffixes. The subclass of adjective stems comprising color terms<sup>13</sup> is somewhat of an exception in that they must be first suffixed either with /-tu?a/ become or a special stative suffix /-ka/, used only with this class apparently. When augmented in this manner the resulting stem behaves like any other verb with respect to tense-aspect markers. Color roots appear without these suffixes when used in compounds, e.g., aŋka-gan red-house.

#### 2.222 Features on Stems

Verb stems in Chemehuevi are inherently marked in the lexicon for transitivity (co-occurrence with NP arguments other than the subject) and aspect ("momentaneousness"). The former is incorporated in the overall syntactic co-occurrence feature assigned to the verb, e.g., +<sub>VP</sub> [ ( {  $\left. \begin{array}{l} \text{PP} \\ \text{Adv} \end{array} \right\} \right)^* \text{ ___} ]$  for intransitive verbs (e.g., nukwi- run), and +<sub>VP</sub> [ ( {  $\left. \begin{array}{l} \text{PP} \\ \text{Adv} \end{array} \right\} \right)^* \text{ NP ___} ]$

or +<sub>VP</sub> [ ( { <sup>PP</sup> } ) \* NP NP \_\_\_ ] for transitive verbs with one and two objects respectively (e.g., *parigi-* wash, and *maga-* give). Verbs which allow elliptical objects, such as *tika-* eat, simply have those NPs in parentheses. In contrast, there are a small number of verbs with both transitive and intransitive meanings where the latter is not ellipsis of the former, e.g., *kwipa-* which means to hit when with an object but fall without. For these, two separate lexical entries are assumed. (See E3, Appendix A.) (Since both the meanings and the syntactic environments differ, they may as well be treated as separate (though homophonous) verbs.)

The aspect "momentaneous" is a feature on each verb stem which essentially dictates what other tense-aspect markers the verb may co-occur with. (Also which subordinating suffixes they take.) Semantically, "momentaneous" verbs are usually inceptive or are accomplished instantaneously. A few stems may be used with either aspectual meaning, and will be specified [*\*mom*].

Examples of these specifications:

- (47) a. *tika-*            eat  
          [-*mom*]
- b. *tirawi?i-*        dash off  
          [+*mom*]
- c. *kwih?-*            catch  
          [\**mom*]

Portions of the paradigms which are affected by the [*mom*] feature are as follows (the suffixes referred to will be discussed in turn below):

- A. [+*mom*] verbs cannot take the present tense suffix, /-*j*/. Instead [+*mom*] verbs may take a zero present tense suffix which [-*mom*] (or "durative") verbs may not take. (This results phonetically in the loss of the stem-final vowel; see section 1.33 on phonology.) E.g.:

- (48) a. *man* { *tirawi?*  
          { \**tirawi?i-j* }  
  
          *he* { *dash off-∅*  
          { \**dash off-pres* }  
  
          'He { *dashes off*  
          { \**is dashing off.* } ,

- b. man { \*nukw  
nukwi-j }
- he { \*run-∅  
run-pres }
- 'He runs/is running.'

- B. [+mom] verbs cannot take the aspect (or quasi-aspect) markers /-ni?i/ (continuous activity), or /-kar±/, sit (while Vb-ing). E.g.:

- (49) man { \*t±rawi?i-ni?i-v±  
nukwi-ni?i-v± }
- he { \*dash off-cont-past  
run-cont-past }
- 'He { \*was dashing off.  
was running. }.'

- C. [+mom] verb stems take a zero suffix in the imperative (with same phonetic results as above). [-mom] verb stems add /-nu/ in the imperative (see section 2.26 on imperatives). E.g.:

- (50) a. { t±rawi?i-?  
\*t±rawi?i-ηu-? }
- { dash off-you  
\*dash off-imp-you } 'Dash off!
- b. { \*nukwi-?  
nukwi-ηu-? }
- { \*run-you  
run-imp-you } 'Run!'

- D. [-mom] verbs form subordinate gerunds in /-gai/; [+mom] verbs in /-ci/. E.g.:

- (51) a. { tirawi?i-c  
\*tirawi?i-ga }
- 'dashing off(?)/having dashed off'
- b. { \*nukwi-c  
nukwi-ga }
- 'running'

### 2.223 Verb Suffixes

Suffixes may be added to verb stems to accomplish the following:

- a) change the inherent specification (transitivity, etc.)
- b) mark aspects, tenses, voice and "mood"
- c) mark number agreement

The inherent specification of a verb stem may be switched by adding suffixes like */-ŋkɨ/* (transitivizer or benefactive) or */-tuʔi/*, cause, both of which allow the addition of one object (oblique case with no postpositions) to whatever number already may co-occur with the verb. (The passive suffix */-tɨɨ/* could be included here as an intransitivizer, but is discussed separately in section 2.25.)

Examples:

- (52) */ŋkɨ/*: a. *nɨɨ-k mavacigi-vɨ*  
I -K clap-past  
 'I clapped.'  
*nɨɨ-k maŋa-j mavaciki-ŋkɨ-vɨ*  
I-K him-ob slap-tran-past  
 'I slapped him.'  
 (*k/g* alternation has to do with change in momentaneousness.)
- b. *maŋ puusi-cu kijasui-ka*  
he cat-at smile-result  
 'He's smiling at/toward the cat.'  
*maŋ puusi kijasui-ŋkɨ-ka*  
he cat (ob) smile-tran-result  
 'He's smiling at the cat.'
- /-tuʔi/*: c. *nɨɨ-k nukwi-vɨ*  
I-K run-past  
 'I ran.'  
*nɨɨ-k maŋa-j nukwi-tuʔi-vɨ*  
I-K he-ob run-cause-past  
 'I made him run.'
- d. *nɨɨ-k Johni tukuavi maga-vɨ*  
I-K John(ob) meat(ob) give-past  
 'I gave John meat.'



nɪɪ-k Johni puusi      tukuavi  
 I-K John(ob) cat(ob) meat(ob)  
 maga-tuʔi-vɪ  
give-cause-past  
 'I made John give the cat meat.'

The feature [momentaneous] may be changed by modifying the stem in the following ways:

(53) 1) internal stem change:

Some verbs "spirantize" some of their internal consonants to form the durative ([-mom]) counterpart of their stem.

Examples:

	[-mom]	[+mom]
a.	mavika- <u>feel</u>	mapika- <u>touch</u>
b.	ijavaga- <u>be afraid</u>	ijapaka- <u>get a scare</u>

2) reduplication:

Verbs such as *kari-* sit; *wɪni-* stand; *havi-* lie; (as well as the suppletive forms for plural subject) form the [+mom] counterparts by reduplicating the first syllable.

	[-mom]	[+mom]
a.	kari- <u>sit [sing]</u>	ka-kari- <u>sit down [sing]</u>
b.	jɪwi- <u>sit [pl]</u>	jɪ-jɪwi- <u>sit down [pl]</u>

3) suffix /ŋu/.

A large number of verbs regularly form their momentaneous counterparts by adding the suffix /-ŋu/.

a.	taviʔi-j <u>hit-pres</u>	taviʔi-ŋu- 'start-to hit'
b.	mucu-j <u>be strong-pres</u>	mucu-ŋu- 'get strong'

4) suffix /-ku/:

Several verbs become momentaneous by suffixing /-ku/.

- |    |  |  |
|----|--|--|
| a. | wɨʔi-vɨ<br><u>fall-past</u><br>'was falling' | wɨʔi-ku-vɨ<br><u>fall-mom-past</u><br>'fell' |
| b. | puca-ka<br><u>be full-result</u>             | puca-ku-ka<br>'has filled [result]'          |

All the constraints on momentaneous verbs noted above apply to verbs with momentaneous suffixes.

In addition to momentaneousness, verbs can be marked for several other aspects. Some verb-verb compounds will be included in this category when the second member has aspectual rather than coordinate significance. The following list gives examples and illustrations of the various aspectual suffixes, and tenses with which they co-occur:

- (54) a. (continuative) /-niʔi/ (co-occurs with past /-vɨʔ/, pres /-jɨʔ/, fut /-vaa/; results in durative verb.)

e.g.,

tɨka- <u>eat</u>	tɨka-niʔi- 'be eating while doing something else'
jawi- <u>carry</u>	jawi-niʔi- 'hold'
uni- <u>be</u> (e.g., location)	uni-niʔi- 'belong (somewhere)'

- b. (iterative) reduplication of first syllable, together with glottalization of second syllable; i.e., formation of the iterative could be viewed as: CV<sub>1</sub>CV<sub>2</sub> → CV<sub>1</sub>-CV<sub>1</sub>CV<sub>2</sub>-ʔV<sub>2</sub>. (co-occurs with whatever tenses the stem does, i.e., does not affect [mom] feature.)

e.g.,

puni- <u>look</u>	pu-mpuniʔi- 'look repeatedly'
ukwi- <u>smell</u>	u-ʔukwiʔi- 'sniff around'

- c. (perfective) /-maʔaku/ finish (co-occurs with past /-vɨʔ/, perfect (enclitic) /-caa/. Changes aspect to [+mom]; cannot take pres /-jɨʔ/ or imp /-ŋu/.)

e.g.,

n<sub>i</sub>ca t<sub>i</sub>ka-ma?ak  
I-perf eat-finish  
 'I have finished eating.'

n<sub>i</sub> t<sub>i</sub>ka-ma?aku-v<sub>i</sub>  
I eat-finish-past  
 'I finished eating.'

- d. (perfective) /-ma<sub>i</sub>/ finish (co-occurs with past /-v<sub>i</sub><sub>i</sub>/.)

e.g.,

n<sub>i</sub> t<sub>i</sub>ka-ma<sub>i</sub>-gi-ga  
I eat-finish-come-pres  
 'I came to finish eating.'

n<sub>i</sub> kac t<sub>i</sub>ka-ma<sub>i</sub>-v<sub>i</sub><sub>i</sub>-wa  
I not eat-finish-past-neg  
 'I didn't finish eating.'

- e. (perfective) /-kai ~ -kwai ~ -ŋkwai/ have -en  
 (co-occurs with pres /-j<sub>i</sub>/, past /-v<sub>i</sub><sub>i</sub>/, pres ∅.)

e.g.,

mava-aka-aŋ waci-ŋkwa  
there-it-he put-perf  
 'He has put it there.'

- f. (resultative) /-kai/ (co-occurs with ∅ pres, past /v<sub>i</sub><sub>i</sub>/, pres /-j<sub>i</sub>/, past /-mp<sub>i</sub><sub>i</sub>/, fut /-vaa-/ , /-mpaa/.)

e.g.,

n <sub>i</sub> puni-v <sub>i</sub>	n <sub>i</sub> puni-kai-v <sub>i</sub>
<u>I look-past</u>	<u>I look-result-past</u>
'I looked.'	'I saw.'

- g. (cessative) /-maupa/ stop (does not take /-ŋu/ in imper; makes verb [+mom].)

e.g.,

kac t<sub>i</sub>ka-maupa-?ap  
not eat-stop-neg  
 'Don't stop eating!'

tika-maupa-ka-j  
eat-stop-pl-you[pl imp]  
 'Stop eating (to several)!'

- h. (usitative) /-mi/ used to (co-occurs with pres /-jɨ/, past /-mpɨɨ/, cannot be used in future.)

e.g.,

utusampa-n tika-mi-mpɨ  
always -I eat-used to-past  
 'I always used to eat.'

- i. (continuative) /-karɨ/ sit (with durative verbs only)

e.g.,

nɨ puni-karɨ-j aipaci  
I look-sit-pres boy(ob)  
 'I watch the boy.'

(Similarly with verbs stand, lie.)

- j. (motionals) /-gi/ come to (/ -gi-voro/ for plural subject); /-waʔi/ go to (/ -voro/ for plural subject).

e.g.,

hivi-gi-mpaa-n  
drink-come to-fut-I  
 'I will come to drink.'

- k. (others) /-maga/ try to  
           /-suawagai/ want to  
           /-musu/ be unable to; try in vain to  
           /-tɨtuʔani/ seem to  
           /-tɨvicu/ ask to; want to

e.g.,

nɨ tika-suawagai-vɨ  
I eat-want - past  
 'I wanted to eat.'

"Tenses" are temporal suffixes (or enclitics) which can co-occur with other suffixes but not with each other. They in general follow aspect suffixes and precede postfix pronouns,

nominal and participle suffixes, etc. The following list includes all such suffixes in Chemehuevi:

(55)	/-jʒ/	present
	/-vʒʒ/	past
	/-mpʒʒ/	past
	/-vaa/	future
	/-mpaa/	future
	/-ka/	present/past
	/-caa/	perfect (enclitic)
	/-pʒ-gai/	remote past
	∅	present

Which of these suffixes a verb can take is by and large determined by the momentaneous feature on the stem. E.g., /-jʒ/ present does not attach to [+mom] stems. In the case of the two past suffixes /-vʒʒ/ and /-mpʒʒ/, the determination is partly phonological and partly semantic. Some morphemes require one or the other--a stem's requirement may be overridden by what an intervening suffix allows. In other cases, e.g., for the entire class of adjectives, the choice of past tense reflects a meaning change: Adj-vʒ means 'was Adj', Adj-mpʒ means 'got Adj'.

The following suffixes could be classified as "modals," signifying unreal action, or action contrary to fact:

(56) a. /-guu/ would

e.g., nʒ tʒka-gu

I eat-would

'I would eat.'

e.g., tʒrawiʔi-guu-n ʒmi-gai-j

dash off-would-I you-be-subord

'If I were you I would run.'

b. /-guu-pʒ/ should

e.g., nʒ tʒka-guup

I eat-should

'I should eat.'

c. /-ŋkuu/ could

e.g., nʒ tʒka-ŋku

I eat-could

'I could eat.'

e.g., paa-gaa-ku-n      navaki-ṅku  
water-be-subord-I swim-could  
 'If there were water I could swim.'

d. /-ṅkuu-pi/    could

e.g., navaki-ṅkuupi-gaisapa-ʔaṅ,  
swim-could-though-he  
 kac uni-suawaga  
not do-want

'He could swim but he doesn't want to.'

These suffixes occur with no tense.

#### 2.224 Object Prefixation

As illustrated in (44) above, most verbs may optionally prefix their object. The fact that a noun is prefixed is evidenced by shifting of stress on the verb, by mutation of the verb-initial consonant (with some nouns), by changes in the position of postfixed subject (see section 2.4 on Word Order) and for most nouns, loss of the absolutive suffix.

With verbs which are normally non-bound (i.e., which do not require object-prefixation) inflectional markers, such as plural suffixes or oblique case endings, are omitted from the noun. If an object is plural, the tendency is not to prefix it unless the fact that it is plural is otherwise overtly shown in the sentence (independent modifiers exhibiting plural agreement for example, or the inclusion of the plural-object suffix /-tu/ on the verb--see section 2.226 on agreement).

Verbs which require object-prefixation, e.g., postpositions and the quasi-compounds in (46) above, do co-occur with plural suffixes on the noun (though oblique markers are still omitted):

(57) a. ni-i-k waha-ku-mi      puṅku-wi-gaa-nt  
           I -K two-ob-pl(ob) dog-pl-have-habit  
 'I have two dogs.'

c.f. ni-i-k waha-ku-mi    { puṅku-ci-wi kwipa-vi }  
                                   { \*puṅku-(ci)-wi-kwipa-vi }  
           I -K two-ob-pl(ob) dog-abs-pl(ob) hit-past  
 'I hit two dogs.'

Some verb-object combinations do not occur in prefixed form, e.g.,

- (58) maŋ puŋku-ci kɨʔi-vɨ  
he dog-abs(ob) bite-past  
 \*maŋ puŋku-kɨʔi-vɨ  
 'He bit the dog.'

It may be that possible combinations (with prefixed objects) are determined by such things as the frequency or plausibility of the semantic association (as is true for compounds in general).

Rather than assembling all possible object-verb compounds in the lexicon (as was done for noun-noun and verb-noun compounds), I propose that every noun simply be entered twice in the lexicon, in prefix and non-prefix form. This is needed anyway for nouns with absolutes (section 2.211) and furthermore seems to be the simplest way of handling examples where the object is modified, as in (57a) above.

Either form of a noun can be inserted under any N node. (The two forms of the same noun will not co-occur in a verb phrase.) If a [+prefix] noun is positioned immediately before the verb originally or by a permutation transformation (see section 2.4) a compound is created. If a [+prefix] noun is left stranded in the sentence, or a verb requiring object-prefixation ends up with no [+prefix] object to its left, the sentence will be discarded.

The redundancy rule relating prefix to non-prefix noun forms is given in L28, Appendix A. Prefix forms are always interpreted as oblique (e.g., for the purposes of modifier agreement), though they never occur with an overt oblique case marker.

#### 2.225 *The Enclitic K and the Habitual*

Semantically there is one other aspect marker occurring frequently in Chemehuevi, namely the habitual, which behaves syntactically quite differently from the suffixes discussed in 2.223. The habitual suffix is actually the active participle ending /tɨ/, described in section 2.33 below.<sup>14</sup> Examples of /-tɨ/ (/v -rɨ v -cɨ v -ntɨ/) with various tenses are given in (59); with no tense suffix the verb translates in the present:

- (59) a. nɪɪ-k nukwi-c  
I-K run-ptc  
 'I run.'
- b. Johni-k utusamp mucu-ntɪ-m, aɪvi-aŋ jumʔiga-j  
John-K always strong-ptc-anim, now-he weak-pres  
 'John is always strong, (but) right now he's weak.'
- c. tɪka-vaa-ntɪ-k nɪ  
eat-fut-ptc-K I  
 'I will eat.'
- d. nɪɪ-k utusamp tɪka-mi-nt  
I-K always eat-usit-ptc  
 'I used to eat all the time.'
- e. nɪɪ-k pawa-pɪgaa-nt  
I-K swell-rem past-ptc  
 'I used to swell (e.g., from liver disease).'

The habitual (participle) suffix differs from true tense-aspect suffixes in that it requires, for nonadjective verbs, the enclitic *-uk*<sup>15</sup> to appear in the sentence, as in the following example:

- (60) {nɪɪ-k } tɪka-r  
 { \*nɪ }  
I-K eat-ptc  
 'I eat.'

With adjective-verbs *-uk* is optional:<sup>16</sup>

- (61) { aipac } paʔa-ntɪ-m  
 { aipaci-k }  
 { boy } tall-ptc-anim  
 { boy-K }  
 'The boy is tall.'

For this reason *-uk* (which Harrington associated with the third-person inanimate invisible postfix pronoun, but which I will refer to simply as K for these usages) might be related to some kind of copular verb. Indeed it replaces the verb be in predicate nominative constructions such as:



(62)  $\left\{ \begin{array}{l} \text{n}\ddot{\text{i}}\text{-k} \\ \text{*ni} \end{array} \right\}$  nainc

I-K girl  
'I am a girl.'

K also seems to be used in focusing the subject of the sentence, such as in cleft constructions (involving the subject: 'It was John who cut the wood') or in responses to questions like 'Who caught the fish?' (For further discussion of K see section 2.4.) However K also co-occurs with normal finite verbs. In such cases it generally seems to contribute very little semantically; the subject may be somewhat focused, but not as strongly as in the cleft sentences:

(63)  $\left\{ \begin{array}{l} \text{n}\ddot{\text{i}} \\ \text{n}\ddot{\text{i}}\text{-k} \end{array} \right\}$  nukwi-j

I-(K) run-pres  
'I am running.'

With K attached to the first word in the sentence, the participle verb form is the only type of predicate which permits the subject to occur in non-initial position (first in the sentence, or postfixed to the first word; see section 2.4 on word order). It is also the only verb form which, like predicate nominatives, does not allow its subject to postfix to it, thus:

(64) a. nukwi-j $\ddot{\text{i}}$ -a $\eta$   
run-pres-he  
'He is running.'

b. pag $\ddot{\text{i}}$ ci-ja-uk ma $\eta$  tika-r  
fish-ob-K he eat-ptc  
'He eats fish.'

but

c. \*pag $\ddot{\text{i}}$ ci-ja-uk tika-ri-a $\eta$   
fish-ob-K eat-ptc-he

As I will suggest in section 2.33 these verbs might simply be thought of as somewhat like headless relatives (though not entirely equivalent to them.<sup>17</sup> Note that as main predicates, even nonadjective participles do not co-occur with demonstrative

pronouns). I will still call them participles then, allowing participles to be inserted directly under the VP node. Participles of nonadjective verbs are lexically marked as requiring co-occurrence with K (which I would generate optionally in the VP) when they are used predicatively (i.e., when directly dominated by a VP node).

2.2251 *The Enclitic A, /-a/*

Frequently postfixed pronouns appear in a curious augmented form, as shown in (65) below. As with examples elsewhere in this monograph the spurious element is glossed as A (and shows up with or without a glottal stop):

- (65) a. aʔvi-a-n navakʔ-j  
           now-A-I swim-pres  
           'I am swimming now.'
- b. haʔʔju-ʔa-n  
           well - A -I  
           'I am well.'
- c. kacu-ʔa-ram haʔʔju-waʔ  
           not-A-we well-neg  
           'We are not well.'
- d. taŋa-vʔ-a-iŋ John Anni  
           kick-past-A-he John Ann(ob)  
           'John kicked Ann.'
- e. navakʔ-ŋu-ca-su-a-n  
           swim-mom-perf-again-A-I  
           'I am swimming again.'
- f. waha-ku-a-n totoci-vʔ punikai-vʔ  
           two-ob-A-I head-pl(ob) see-past  
           'I saw two heads.'
- g. kacu-a-iŋa-n mamʔ maga-vʔ-wa  
           not-A-him-I them(ob) give-past-neg  
           'I didn't give him to them.'
- h. kacu-a-ra-ʔum nukwi-ka-va-wa  
           not-A-Q-they run-pl-fut-neg  
           'Won't they run?'

Exactly what this element represents is unclear. The Harrington material includes an abundance of examples; in his notes he calls it "thematic" or "declarative -ʔa-" and finds no particular meaning for it. (It is also found in Sapir's Southern Paiute data.)

The distribution of /-ʔa/ ~ /-a/ may be characterized as follows:

1. It must appear on the first word in the sentence (if it appears at all.)
2. It cannot attach to a subject noun stem. (No clear examples with oblique nouns have been found, possibly since A is indistinguishable from oblique /-a/.)
3. When it appears it is always followed by a subject postfix pronoun (which is also restricted to the first word in the sentence). Other postfix pronouns or enclitics may intervene, as in the last two examples in (65) above.
4. It cannot co-occur with K in the same sentence.

These facts become more intriguing when compared with the distribution of K in the previous section. One might venture to hypothesize that A and K are variants of one copular-like morpheme, the choice being determined by whether the subject is full or bound. The usage of A and K interacts with the syntax of the rest of the sentence to effect various degrees of emphasis ranging from a simple copular function all the way to clefting. It is possible that K is used when the subject is focused (albeit mildly), and A is used for focusing any other constituent (sentence-initial).

The distribution of A seems to be a bit more constrained than that of K; A tends to co-occur with the present *-j* (sometimes with a past tense meaning) more easily than with the past *-vʔ*. It is found much more frequently with the first person singular pronoun than with any other subject.

#### 2.226 *Verb Agreement*

Verbs in Chemehuevi agree in number with their subjects, and optionally with their objects. There are two suffixes which refer to the number of the subject. /-ʔumʔ/ is added to

the verb for two or more (only if animate), and follows tense suffixes. However, it is omitted if any postfixed pronouns are attached as well. Thus, for the nonsingular subjects in (b), (c) and (d) below, *-ʔum* is added only in (b):

- (66) a. maŋ nukwi-j  
           he run-pres  
           'He is running.'
- b. mam nukwi-jɨ-ʔim  
           they run-pres-pl  
           'They [two] are running.'
- c. nukwi-jɨ-ʔam  
           run-pres-they  
           'They [two] are running.'
- d. wii hononoʔo-j(ɨ-ʔim)  
           knives fall-pres(-\*pl)  
           'The knives [two] are falling.'

(*-ʔum* is used for both singular and plural animate subjects if the verb is an adjective; see section 2.214.)

For three or more (i.e., [+several] as opposed to just [-sing]) the suffix */-ka/* is added to the verb, whether the subject is animate or not. This suffix precedes tenses. Examples:

- (67) a. mam nukwi-ka-jɨ-ʔim  
           they run-sev-pres-pl  
           'They [all] are running.'
- b. wii hononoʔo-ka-j  
           knives fall-sev-pres  
           'The knives [all] are falling.'

When the verb is suffixed with */-ka/*, the [-sing] marker *-ʔum* is optional; e.g., (67a) could have been just *mam nukwi-ka-j*.

When the object of the verb is three or more (i.e., [+several]) a suffix */-tu/* is added, preceding tenses (ordered optionally before or after */-ka/*, if there is one). Example:

- (68) nɨ mamɨ puni-tu-kai-vɨ  
           I them see-plob-result-past  
           'I saw them.'

A small number of verbs have suppletive stems for marking plurality. These stems are used with non-singular subjects if the verb is intransitive, or with non-singular objects if the verb is transitive:

- (69) a. maŋ karɿ-j  
           he sit-pres  
           'He is sitting.'
- b. mam jɿwi-jɿ-ʔim  
           they sit-pres-pl  
           'They [two] are sitting.'
- c. mam jɿwi-ka-jɿ-ʔim  
           they sit-sev-pres-pl  
           'They [all] are sitting.'
- (70) a. nɿ maka-j wacɿ-mpɿ  
           I that-ob put-past  
           'I placed that.'
- b. nɿ maka-j juna-mpɿ  
           I those-ob put-past  
           'I placed those [two].'
- c. nɿ maka-j juna-tu-mpɿ  
           I those-ob put-plob-past  
           'I placed those [all].'

In imperative sentences, /-ka/ is added to the verb only if the second-person subject (whether overt or not) is three or more. The suffix /-tu/ is added only if the object is [+sev], despite the fact the latter is in the nominative case. -ʔum is not used at all.

In sentences with "passive" participles (actually object-relativizations), /-ka/ reflects the number of the subject of the relative clause--what on the surface looks like an "agent" (see section 2.33):

- (71) puusi-k nɿmi jaki-ka-kai-n  
       cat-K us(ob) bring-sev-perf-ptc  
       {'The cat was brought by us [all].'  
       {'The cat was what we [all] brought.'}

(-ʔum again, does not occur.) Similarly if the subject of the

above sentence (the understood object of the relative) is plural, the plural stem of (transitive) bring is used:

- (72) puusi-wi-k nimi ju?aki-ka-kai-n  
cat-pl-K us(ob) bring-sev-perf-ptc  
 'The cats were brought by us [all].'

When the causative suffix */-tu?i/* is added to a verb, */-ka/* is suffixed if either the subject or the object (i.e., semantic subject of the "embedded" verb) is [+sev]:

- (73) ni-i-k mam-i tika-ka-tu?i-v-i  
I-K them(ob) eat-sev-cause-past  
 'I made them [all] eat.'

Since causative verbs are assumed to be listed separately in the lexicon (i.e., treated just like any other suffixed verbs--see L29, Appendix A) rather than to be higher verbs, this complicates the output conditions and interpretive rules relating to number agreement.

#### 2.227 Semantic Imperatives

The suffix */-v-i-i/* (normally past tense; see section 2.223) may be used with a future, semantically imperative meaning if the subject is second person. Syntactically or morphologically, sentences with *-v-i* have nothing in common with imperatives (see section 2.26) though they can translate as 'you must (verb)' or even '(verb)!' Objects are in the oblique case, and the plural subject enclitic is */-w-i/* (used in indicative sentences), not *\*/-ja/* (used in syntactic imperative sentences--section 2.26). Such sentences are ambiguous (or homophonous) with the normal past tense interpretation.

- (74) a. kani?i-wa?i-v-i-i-w  
visit-go-past-you[pl]  
 { 'You went and visited.' }  
 { 'You must go and visit.' }
- b. kacu-k aipaci puni-v-i-i-wa  
not-you boy(ob) see-past-neg  
 { 'You didn't see the boy.' }  
 { 'You are not to see the boy.' }

- c. niim orangei      tika-vi  
       you orange(ob) eat-past  
       {'You ate an orange.'  
       {'You're to eat the orange.'}

MM suggests these differ from true imperatives in that the latter are more immediate, whereas examples with the past-tense suffix are somewhat more "future" in intent, commanding something to be done after the speaker leaves, for example.

The future tense suffix *-va* may also be used with somewhat of an imperative meaning. Again, such sentences translate more as 'you're to (eat).' However this usage is not restricted to second-person if the habitual (participle--see section 2.225) ending is added:

- (75) ni-k uni-va-nt  
       I-K do-fut-ptc  
       {'I'm going to do it!'}  
       {'I'm to do it!'}

Pamela Munro's informant (1974a) gives normal, full imperative translations for this suffix (*-va*) in such sentences (second person).<sup>19</sup> She points out that the objects are in the accusative case, by contrast with true imperative constructions, and that the negative suffix after *-va* is the *-wa?* used with indicative verbs. As for the subjects, her sentences are of two types: those with *-k* on the first word (negative *kacu-* in her examples), which she analyzes as subject-less, and those with *-?* on the first word (e.g., the object) which is, in fact, a second-person singular (nominative) pronoun enclitic.

For MM, *-k* replaces second-person subjects in any kind of sentence except true imperatives (see section 2.212). Therefore these sentences are not structurally different from normal futures, and are ambiguous for her. The enclitic *-?* is normal for MM in true imperatives, and is rare in other kinds of constructions. The examples Munro gives with *-?* and *-va* co-occurring are ungrammatical for MM.

### 2.23 *Postpositional Phrases*

There are two kinds of postpositions in Chemehuevi: those

which can be used as verbs and those which cannot. The former may be optionally suffixed with normal tense-aspect markers and be interpreted as verbs of location or motion (depending on the postposition stem). Without tense-aspect markers these same postpositions co-occur with normal verbs of location or motion and behave more adverbially in the sentence. In either case their objects (or appositive pronouns) are always prefixed to the postposition stem.

Stems of this first type (all, including the compound stems, optionally verbs) are given in (76) below, with examples of each:

- (76) a. /-vaa/                    at/on (location)  
           tĩmp i-vaa-ni?i-j  
           rock this-at-cont-pres  
           'The rock is { here }  
                           { on this }.'
- b. /-vaa-ntua/                onto (motion)/at  
           haga-vaa-ntua-ca-uŋ tĩrawi?i-kwa?  
           what-at-toward-perf-he dash-away  
           'Where did he run off to?'
- c. /-upa?a/                    in (location)  
           pagĩc paa-upa? uni-kai-vĩ  
           fish water-in be-result-past  
           'The fish was in the water.'
- d. /-upa?a-tua/                into (motion)  
           kani-a-n ma-upa?a-tu nukwi-vĩ  
           house-ob-I that-in-to run-past  
           'I ran into that house.'
- e. /-va?a-na/                    on top of (location)  
           ma-va?ana-vii-ĩk  
           that-on-past-it  
           'It was on that.'
- f. /-va?a-ntua/                onto/on top of (motion)<sup>20</sup>  
           mahavĩ ma-va?a-ntua-ŋ  
           tree(ob) that-on-to-imp  
           'Get on top of that tree!'



- g. /-ruka/                    under (location)  
       wii pagɨci        uŋa-ruk        uni-ka  
       knife fish(ob) that-under be-result  
       'The knife is under the fish.'
- h. /-ruka-tua/                under (motion)  
       tɨkatɨaa-ruka-tua-ŋu?  
       table-under-to-imp-you  
       'Go under the table!'
- i. /-vin?apa/                 behind (location)  
       i-vin?apa-uk        uni-kai-vɨ  
       this-behind-it be-result-past  
       'It was behind this.'
- j. /-vin?apa-cua/             behind (motion)  
       mahavɨ        ma-vin?apa-cu    tɨrawi?  
       tree(ob) that-behind-to dash  
       'Run behind that tree!'
- k. /-tua/                      towards (motion)  
       nɨ-rua-aŋ        kijasui-ka  
       I-toward-he smile-result  
       'He's smiling at me.'  
       maŋa-rua-ŋu-ik  
       he-toward-imp-it  
       'Give him this!'

(Note that for location, using the postposition as verb, or using the verb be instead, seems to make little difference in the meaning, cf. (76e) and (76i) above.)

All the above stems are listed in the lexicon as  $\left[ \begin{array}{l} +\text{post} \\ +\text{V} \end{array} \right]$  to allow insertion under either node. Furthermore, they are all [+bnd] since they require objects to be attached. Most non-compound stems are marked [-motion], whereas those compounded with /-tua/ (and /-tua/ itself) are [+motion]. (See L30, Appendix A.) (The specification of this feature essentially dictates what type of verb the postpositional phrase co-occurs with.) A few postpositions do not compound at all and may be used with both verbs of motion and location, e.g., /-vajɨwi/ beside, which is also [-V] (cannot be a verb--I know

of no examples of non-verb postpositions which can compound with /-tua/, and /-waʔi/ with (accompaniment), which can be a verb. These postpositions are lexically marked [\*motion]; corresponding forms with /-tua/ simply do not exist in the lexicon.

Postpositions which cannot be used as verbs are marked  $\left[ \begin{smallmatrix} +\text{post} \\ -\text{V} \end{smallmatrix} \right]$ . However they share the rest of their syntactic behavior with the stems in (76); e.g., they append their objects (or appositives). These stems are listed and exemplified in (77):

- (77) a. /-vajiwi/ beside
- huu { \*wihi-vajiwi-vi }  
 { wihi-vajiw uni-kai-vi }
- arrow knife-beside be-result-past  
 'The arrow was beside the knife.'
- mahavi ma-vajiw kwa-i-ŋ  
tree(ob) that-beside go-imp  
 'Go beside the tree!'
- b. /-wa/ with (instrument)
- uŋ wihi-w tukuavi cikwi-vi  
he knife-with meat(ob) cut-past  
 'He cut the meat with a knife.'
- c. /-wanʔku/ from
- John aipaci-wanʔ pagici ijiŋi-ŋkwa  
John boy-from fish(ob) steal-perf  
 'John stole the fish from the boy.'
- d. /-mantia/ ~ /-wantia/ some of/part of
- puusi-wi-a-n umi-wanti puni-kai-vi  
cat-pl-ob-I those-some see-result-past  
 'I saw some of those cats.'
- e. /-vacii/ about
- himpii-vacii-a-uk nonosi-ga  
what-about-A-you dream-pres  
 'What were you dreaming about?'

- f. /-manan̄kwa/ from  
 maŋ jaʔi-ŋucik t̄iɡ̄i-manan̄kw  
he die-about to hunger-from  
 'He is dying of hunger.'  
 kani-ipaʔa-t̄i-manan̄kwa-ca-n t̄rawiʔ  
house-in-ptc-from-perf-I dash  
 'I ran (out) from inside the house.'

Note that objects of postpositions do not take the oblique marker /-a/ if they are prefixed to the postposition.<sup>21</sup>

## 2.24 Interrogatives

### 2.241 Yes-No and Alternative Questions

Yes-No questions in Chemehuevi are formed by the addition of the enclitic /-raa/ to the first word in the sentence. Examples in (78) below demonstrate that this can be verb, noun, or adverb. (Since I am using "?" as "glottal stop," question marks will be "??", representing intonation contours<sup>22</sup> associated with questions.)

- (78) a. Anni-ra t̄mi paḡici maga-j ??  
Ann-Q you(ob) fish(ob) give-pres  
 'Did Ann give you a fish?'
- b. t̄ika-j̄i-ra-ʔaŋ aipac aŋ ??  
eat-pres-Q-he boy that  
 'Is the boy eating?'
- c. utusampa-ra-ʔuk maŋ navaki-r ??  
always-Q-K he swim-habit  
 'Does he swim all the time?'
- d. kacu-ra-ʔ t̄ika-vaa-wa ??  
not-Q-you eat-fut-neg  
 'Aren't you going to eat?'

In Yes-No questions, the present and past tenses fall together, present tense -j being used for both. Past -v̄ is prohibited in questions, though frequent use of the preterite enclitic -ca is made.

The enclitic -ra co-occurs with other tense suffixes, and precedes suffixed pronouns. (Its positioning is handled by transformational rules.)

I have been unable to obtain any obvious alternative questions in Chemehuevi (or alternative statements for that matter, see section 2.31). In order to ask something like 'Is he here or there?' in Chemehuevi, one simply asks two Yes-No questions in succession, as in (79):

- (79) ivani-jɨ-ra-ʔuŋ ??    uvani-jɨ-ra-ʔuŋ ??  
here-pres-Q-he            there-pres-Q-he  
 'Is he here?'                'Is he there?'

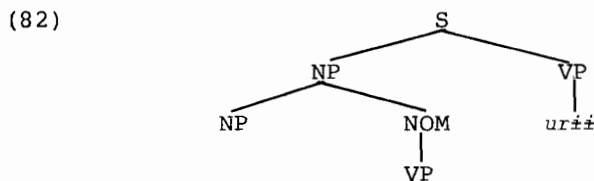
Another question type involves a final glottal stop suffix which, when suffixed onto single-word utterances, has the effect of questioning just that constituent, as though raising it as a possible answer to a previous question. Again, one can approximate an alternative question by questioning two such constituents, though the meaning is still not exclusively disjunctive. Examples: (This -ʔ not only protects the stem-final vowel, it phonetically lengthens it.)<sup>23</sup>

- (80) a. haŋ tɨka-j ??    Anni-ʔ ??  
who eat-pres            Ann-Q  
 'Who's eating? {Ann? }'  
                               {Is it Ann?}'
- b. haŋ uni-vaa-nt ??    ɨmii-ʔ ??    nɨʔi-ʔ ??  
who do-fut-hab            you-Q            I-Q  
 'Who's to do it?        You?                I?'
- c. hagaka-ja-ʔ    iva-ntɨ-n            haʔɨsutui-j ??  
which-ob-you at here-ptc-nml like-pres  
 'Which one do you like?'  
  
ika-ja-ʔ ??                    maka-ja-ʔ ??  
this one-ob-Q                that one-ob-Q  
 This one?                      That one?'

There is one other type of interrogative that semantically functions as a Yes-No question, namely the predicate *urɨɨ*, which translates something like 'is it still the case that ...'. This either precedes or follows a clause consisting of a subject in the oblique case and a nominalized verb. The verb must contain the suffix /-su/, meaning still or too. Due perhaps to the semantics of the "higher" verb the clause cannot be in the past tense. Examples:

- (81) a. *urɪɪ ɪmi nukwi-na-s ??*  
           Q you(ob) run-nml-still  
           'Are you still running?'
- b. *urɪɪ tɪka-ni?i-va-na-su-?um ??*  
           Q eat-cont-fut-nml-still-you(ob)  
           'Will you still be eating?'
- c. *tɪka-na-su-?uŋ urɪɪ ??*  
           eat-nml-still-him Q  
           'Is he still eating?'

For these I assume a structure such as the following: (See E4, Appendix A, for a proposed lexical entry for *urɪɪ* and other interrogatives.)



(For the frequent shifting of clauses to a position after the verb, see section 2.4.)

#### 2.242 Information Questions

Information questions are full sentences in which one constituent is being questioned. Unlike English, Chemehuevi has the same word order in declarative and interrogative sentences. There is a somewhat greater tendency to front the questioned constituent, but all order constraints are strictly adhered to (see section 2.4). The following is a list of interrogative forms (given in underlying form) in Chemehuevi:

- |      |                   |                                  |
|------|-------------------|----------------------------------|
| (83) | <i>himpɪ</i>      | <u>what</u> [-anim] [*concrete]  |
|      | <i>haŋa</i>       | <u>who</u> [+human]              |
|      | <i>hini</i>       | <u>who/what</u> [+anim] [*human] |
|      | <i>hanoko</i>     | <u>when</u>                      |
|      | <i>haga-ka-ja</i> | <u>which</u>                     |
|      | <i>haga-vaa</i>   | <u>where</u> (loc)               |
|      | <i>haga-rua</i>   | <u>whither</u>                   |

(similarly for other postpositions)

hanopai	<u>how many</u>
haga-ru?a	<u>how</u>
haga-ru?a-gai	<u>why</u>
haga-ni	<u>why/how</u>
haga-ni-gai	<u>why</u>

The following are WH-verb forms (discussed below):

hania	<u>say what/say how</u>
haga-ni	<u>do what</u>

(As with Yes-No questions, the past tense suffix *-v#* is prohibited.) Examples:

- (84) a. himp*ɨ*-a-uŋ poʔo-j  
what-ob-he write-pres  
 'What did he write?'
- b. *ɨ*ɨm haŋ  
you who  
 'Who are you?'
- c. hanoko-ca-uŋ t*ɨ*rawi?i-kwa  
when-past-he dash-away  
 'When did he run off?'
- d. haga-vaa-ntua-ca-uŋ t*ɨ*rawi?i-kwa  
where-at-towards-past-he dash-away  
 'Where did he run off to?'
- e. hagarua-j*ɨ*-?  
how -pres-you  
 'How are you?'
- f. *ɨ*ɨm hagaruaga kac t*ɨ*ka-wa-t  
you why not eat-neg-ptc  
 'Why aren't you eating?'
- g. hagan mai-ka-t  
how say-p/p-pass  
 'How is it said? (How do you say...)'
- h. tugump ar hagan maʔaka-t  
sky that how paint-pass  
 'What color is the sky?'

- i. haganigai-iŋ Ann nukwi-va  
why -she Ann run-fut  
 'Why is Ann going to run?'
- j. hagani-ŋu-ca-uŋ  
do what-mom-past-he  
 'What did he do?'
- k. hania-ka-uŋ = hania-uŋ mai-k  
say what-p/p-he = say what-he say-p/p  
 'What did he say?'
- l. himp hania-ti-j  
what say what-pass-pres  
 'What was said?'
- m. hani tɪnia-ti-j  
how tell-pass-pres  
 'How was it told (what manner, speaking, writing, etc.)?'

The last few examples illustrate some of the peculiarities of the questioned verb forms. *hania-* can take normal verb suffixes and behave exactly as the main verb in the question, or unsuffixed it can function as the object of the verb *mai- say*, (but not of *tɪnia- tell*) of *nija- name*, and according to Pamela Munro (p.c.) of *hear*, *mean*, *cry about*, and *dream*. As a verb, note that *hania-* itself can take an object, *himp* (84 l). Elsewhere it is used adverbially, e.g., in (84 m) above.

The verb *do what* could be identical to, or the source of, the adverb */haga-ni-(gai)/*. The suffix */-gai/* is a common subordinator (like-subjects, concurrent time), and the adverb could be translated as 'doing what, ...' e.g., 'What did he do to cut it?' for 'How did he cut it?'. In other instances where it appears with tenses (with the "main" verb subordinate), one could think of the translation as 'What was he doing cutting it?' for 'Why did he cut it?'

Morphologically, one might add that the suffix */-ni/* in */haga-ni/* is most certainly relatable to *uni- do* (cf. Sapir, p. 209). (It also might be that the */-ru?a/* in */haga-ru?a-gai/* is the stem *be*, and that this adverb, too, probably comes from a verb, *being how*.)

Indirect questions may be formed using the same forms.

Example:

- (85) kacu-uka-n putucuga-wa Anni mam̄  
not-it-I know-neg Ann(ob) them(ob)  
 himp̄ maga-tu-kai-n  
what(ob) give-plob-perf-ptc  
 'I don't know what Ann gave them.'

#### 2.243 Tag Questions

Tag questions are very straightforward in Chemehuevi. Any sentence (except another question) may end in a tag, which is always /h̄inaa/.<sup>24</sup> Examples:

- (86) a. iva-ni?i-j̄i-aŋ, h̄inaa ??  
here-cont-pres-he, tag  
 'He's here, isn't he?'  
 b. ic kac ha?i-ju-wa, h̄inaa ??  
this not good-pres-neg, tag  
 'This isn't good, is it?'

/h̄inaa/ may also be added to imperatives:

- (87) huvitu-ŋu-?, h̄inaa ??  
sing-imp-you, tag  
 'Sing, {huh? }  
 {won't you?}'

#### 2.25 Passives

There are two kinds of constructions in Chemehuevi which can translate as passives in English. Transitive verbs to which a suffix /-t̄ī/ has been added become passive in meaning but may not co-occur with an overt agent. These are discussed below. To express an agent in a sentence where the "object" is in the nominative, one must use a participial construction with the agent in the accusative, the verb being participialized by the addition of the suffix /-na/. Strictly speaking, these latter constructions may be related to headless object relative clauses, and are discussed in section 2.33 below.

The suffix /-t̄ī/ could be viewed simply as an intransitivizer. Verbs with -t̄ī take a full range of tenses, as



illustrated in (88) below. All such examples are judged ungrammatical if an agent noun is introduced.

- (88) a. *tukuav cikwi-tii-j*  
meat cut-pass-pres  
 'The meat is being cut.'
- b. *samita?ap tika-tii-vi*  
bread eat-pass-past  
 'The bread was eaten.'
- c. *pagic tika-tii-va*  
fish eat-pass-future  
 'The fish will be eaten.'

The only surface expression of an implied agent shows up in the number agreement marking on the verb. Recall that when the underlying subject of a verb is three or more in number /-ka/ is suffixed to the verb stem (see section 2.226). In a passive sentence in which the implied agent is plural, whether or not the surface subject is, /-ka/ shows up on the verb, as in (89):

- (89) *tukuav tika-tii-ka-j*  
meat eat-pass-pl-pres  
 'The meat is being eaten by many.'

Compare this with the interpretation of /-ka/ with /-tu?i/ causatives, section 2.226. The cases with /-tiii-ka/ require the same complication in the interpretive rules.

L31 in Appendix A gives the redundancy rule relating passive verbs to the corresponding active verb stems.

## 2.26 Imperatives

The following surface features signal syntactic imperatives<sup>25</sup> in Chemehuevi:

A. Verbs which are inherently durative add /-nu/ to the stem (or stem + any affixes except tense). Verbs which are inherently momentaneous add nothing. Verb stems which can be used either momentaneously or duratively add  $\emptyset$  or /-nu/ respectively (depending on the meaning assigned to the stem). Examples: (For /-?/ see D below.)

- (90) a. nukwi- run [-mom]  
 nukwi-ηu-? run!
- b. t̄irawi?i- dash off [+mom]  
 t̄irawi?i-? dash off!
- c. suwaka- breathe [\*mom]  
 { suwaka-ηu-? breathe! }  
 { suwaka-? take a breath! }

No tense suffixes occur in (syntactic) imperatives.

B. Objects of the verb which are normally marked oblique are in the nominative case in imperatives. This includes "direct" as well as "indirect" objects, but does not include objects of postpositions. (For postpositions as verbs, see section 2.23.) Examples:

- (91) a. aipac wampakwic punikai-tu?i-η  
boy scorpion see-cause-imp  
 'Show the boy the scorpion!'
- b. mahav̄i mawa-ntua-η  
tree(ob) on there-toward-imp  
 'Get onto the tree!'

C. Word order constraints on surface subjects seem to apply to the nominative objects of imperatives. Either the object occurs sentence-initially, or it (or a copy pronoun) is attached as an enclitic to the first word.<sup>26</sup> For double-object verbs the two (nominative) objects occur in first and second position. The enclitic K (see section 2.225) cannot occur in an imperative sentence. Examples:

- (92) a. t̄ika-ηu-ja-aη paḡic aη  
eat-imp-pl-him fish that  
 'Eat [dual] that fish!'
- b. kacu-aη taw̄i-wai-tu?i-?ap  
not-him us-with-cause-neg  
 'Don't let him [come] with us!'

D. In singular imperatives the subject you shows up either in full form /*mi*/, as a postfix /-?/ (second person singular nominative), as both, or not at all. Apparently the full form

is added to the sentence only for emphasis. For all imperatives, whether the postfix *-ʔ* occurs (or nothing does) depends strictly on the word-order in the sentence. First, *-ʔ* (like normal subject postfixes; see section 2.4) must attach to the first word in the sentence. However (in MM's dialect) *-ʔ* can only attach to verbs. Furthermore, it cannot co-occur with other postfix pronouns on the same word. Therefore, in a sentence with an object, which must also occur first in the sentence, *-ʔ* is destined not to show up. In any sentence in which it can occur, it must.

Examples of singular imperatives:

- (93) a. *iim nukwi-ŋ* (\**iim nukwi-ŋu-ʔ*)  
you run-imp  
 { 'Run!' }  
 { 'You run!' }
- b. *nukwi-ŋu-ʔ* (\**nukwi-ŋ*)  
run-imp-you(sg)  
 'Run!'
- c. *ic hivi-ŋ* (\**ic hivi-ŋu-ʔ*) (\**icu-ʔ hivi-ŋ*)  
this drink-imp  
 'Drink this!'
- d. *tika-ŋu-ʔ* *iim*  
eat-imp-you(sg) you  
 'Eat!'

E. For plural imperatives (dual or more) the enclitic form of the subject is */-ja/*. This, too, is constrained to suffixation on the first word, but that word may be a verb, noun, or adverb. */-ja/* may co-occur with enclitic pronouns on the same word. Plural imperative sentences may also use the full pronoun form, in this case *mim*. As in the case of the singular, the two forms of you may co-occur if the full form is not sentence-initial, since */-ja/* cannot attach to *mim*.<sup>27</sup>

- (94) a. *mim man tika-ka-ŋ*  
you[pl] all eat-pl-imp  
 'All of you, eat!'

- b. *mano-j tika-ka-η*  
all-you[pl] eat-pl-imp  
 'All of you, eat!'
- c. *icu-j huvitu-η*  
this-you[pl] sing-imp  
 'Sing (dual) this!'  
 (compared with *ic huvitu-η* for singular)
- d. *huvitu-ka-ηu-ja-ik*  
sing-pl-imp-you[pl]-this  
 'Sing [pl] this!'
- e. *aivi-j navaki-ka-η*  
now-you[pl] swim-pl-imp  
 'Swim [pl] now!'

F. Negative imperatives are formed by the inclusion of the negative *kac* in the sentence, and the suffixation of *-?ap* directly onto the verb stem. No */-ηu/* appears in negative imperative sentences. Examples:

- (95) a. *kac huvitu-?ap*  
not sing-neg  
 'Don't sing!'
- b. *kacu-j huvitu-ka-?ap*  
not-you[pl] sing-pl-neg  
 'Don't sing (pl)!'

G. Imperatives of passive verbs are formed just as in declaratives, with the suffix *-tʰ* and no agent. Examples with agents (i.e., participial constructions, see section 2.33) have not been obtained in imperatives, perhaps due to problems with the semantics. Examples:

- (96) *kac kwikwipa-tʰ-?ap*  
not beat-pass-neg  
 'Don't be beaten!'

(Lexical entries for all the second person pronouns are given in E5, Appendix A.)

Imperative sentences in which full and bound subject forms co-occur will be handled in section 2.4 on word order.

## 2.27 Negation

Sentences are negated by the addition of a negative suffix (usually on the main verb), together with the somewhat optional inclusion of a negative marker /*kacu*/ within the clause. Examples contrasting negative and affirmative sentences are given in (97) below:

- (97) a. *tika-vaa-an*  
eat-fut-he  
 'He will eat.'  
*kacu-an tika-vaa-wa?*  
not-he eat-fut-neg  
 'He won't eat.'
- b. *pagic tika-tii-vi*  
fish eat-pass-past  
 'The fish was eaten.'  
*pagic kac tika-tii-vii-wa?*  
fish not eat-pass-past-neg  
 'The fish was not eaten.'

With most tense-aspect markers the negative suffix /-*wa?i*/ is used, preceding any habitual (participle) suffix (which changes -*wa?i*- to -*wa?a*-; see P 15, p. 30), animate plural marker, and subordinating suffix, but following most others.

The present tense /-*jɨ*/ does not co-occur with a negative suffix. Either it deletes or the semantics of negation are such that the  $\emptyset$  present suffix (normally used with momentaneous verbs) is required instead. In any case, simple sentences in the present tense are negated by adding /-*wa?i*/ to the verb stem:

- (98) *aivi-?a-n navaki-j*  
now -A-I swim-pres  
 'I am swimming now.'  
*aivi-?a-n kac navaki-wa?*  
now-A-I not swim-neg  
 'I'm not swimming now.'

In a few cases the form of the negative suffix is -*ʔa* (either from /-*ʔai*/ or /-*ʔaa*/). These include its use as a suppletive form of /-*gai*/ have, be, and following the suffix

*/-guup±/* should, where it seems to require the habitual suffix as well. Examples of *-ʔa* contrasted with *-ga* are shown in (99):

- (99) a. *ɪɪm kac samʔapɪ-ʔa*  
you not rug-have[neg]  
 'You don't have a rug.'  
*ɪɪm kac samʔapɪ-ʔa-t*  
you not rug-have[neg]-habit  
 'You don't have a rug.'
- b. *maŋ pupui-ga*  
he eye[pl]-have  
 'He has eyes.'  
*maŋ pupui-ga-nt*  
he eye[pl]-have-habit  
 'He has eyes.'

The following table lists co-occurrences of the negative suffix with other verb suffixes (all given in underlying form with final vowels intact). V indicates verb stem, N = noun stem.

On nouns, adverbs, and certain kinds of nonfinite verb stems the negative suffix is */-ʔapa/* (in a few cases */-waʔapa/*). Verb stems take */-ʔapa/* in the imperative (where it replaces */-nu/*, or requires the  $\emptyset$  imperative suffix) and in object relativization ("passive" with overt agent constructions). Examples:

- (100) a. *nɪ-ʔɪk aipac*  
I-K boy  
 'I am a boy.'  
*nɪ-ʔɪk kac aipaci-ʔap*  
I-K not boy-neg  
 'I am not a boy.'
- b. *kac naataika-ʔap*  
not everyday-neg  
 'not every day'
- c. *kac tɪka-ʔapa-s*  
not eat-neg-too  
 'Don't eat too!'

Table I

	<u>Affirmative</u>	<u>Negative</u>
present	V - jɪ	V - waʔi
present	V - ∅	V - waʔi
past	V - vɪɪ	V - vɪɪ-waʔi
past	V - mpɪɪ	V - mpɪɪ-waʔi
future	V - vaa	V - vaa-waʔi
future	V - mpaa	V - mpaa-waʔi
present/past	V - ka	V - waʔi
fut + habit	V - vaa-ntɪ	V - vaa-waʔa-tɪ
fut + habit	V - mpaa-tɪ	V - mpaa-waʔa-tɪ
habit/ptc	V - tɪ	V - waʔa-tɪ
usitative + pres	V - mi-jɪ	V - mi-waʔi
usitative + past	V - mi-mpɪɪ	V - mi-mpɪɪ-waʔi
modal	V - guu	V - guu-waʔi
modal	V - guu-pɪ	V - guu-pɪ-ʔaa-tɪ
momentaneous	V - ŋu	V - ŋu-waʔi
know how to	V - paki-gaa-ntɪ	V - paki-ʔaa-tɪ
subord	V - gai	V - waʔi-ju <sup>a</sup>
have	N - gai	N - ʔaa
have + habit	N - gaa-ntɪ	N - ʔaa-tɪ
Adj (color) + be	A - ka	A - ka-waʔi
Adj + become	A - tuʔa	A - tuʔa-waʔi

<sup>a</sup>For -gai → -ju see p. 108.

kacu-j tika-ka-?ap  
not-you[pl] eat-pl-neg  
 'Don't eat [pl]!'

- d. kac tavisampa-ti-?ap  
not true-ptc-neg  
 'That's not true.'

tavisampa-ti-k  
true - ptc - K  
 'That's true.'

- e. mar-i-k kacu-n tika-kai-na-?ap  
that-K not-I eat-perf-ptc-neg  
 'That's not what I ate.'

In some instances the suffix *-?ap* (or *-wa?ap*) apparently replaces the participle (object relativization) suffix:

- (101) a. taw?aci-k Johni kac kwikwipa-na-?ap  
man-K John(ob) not hit-ptc-neg  
 'The man wasn't beaten by John.'

but:

- b. ijav wagataci-wi kac tika-ka-gupi-ap  
grapes frog-pl not eat-pl-should-neg  
 'Grapes shouldn't be eaten by frogs.'

- c. pusi-k piso?oci kac puni-va-wa?ap  
cat-K child(ob) not see-fut-neg  
 'The cat won't be seen by the child.'

c.f.:

pusi-k piso?oci kac puni-va-wa?a-t  
cat-K child(ob) not see-fut-neg-habit  
 'The cat won't see the child.'

In colloquial speech *kac* is often left out of the sentence; the negative suffixes, however, are still obligatory:

- (102) Johni-k nini punkuci tika-tui-vii-wa?  
John-K me(ob) dog(ob) eat-cause-past-neg  
 'John won't let me feed (or eat) the dog.'



nainci-?apa-ra-?uk iim  
girl-neg-Q - K      you  
 'Aren't you a girl?'

The negative *kac* can appear almost anywhere in the sentence, as long as constraints on the order of other morphemes are met (see section 2.4). With respect to syntactic rules *kac* seems to behave much like an adverb and is therefore labeled as such in the lexicon.

In elliptical sentences (or sentence fragments) *kac* can show up with tenses suffixed to it:

(103) kacu-va-an  
       not-fut-she  
 'No, she won't.'

## 2.28 Adverbs

In the phrase structure rules presented here adverbs all originate in the verb phrase. There seems to be no syntactic motivation for distinguishing between sentential and verb phrase adverbs in Chemehuevi; both appear to enjoy the same freedom of movement (or position) within the sentence.

Adverbs are of two types; those which are prefixed to verbs and those which are free morphemes in the sentence. There is no obvious semantic distinction between these two classes, exemplified below:

(104) a. nii-k utusamp navaki-mi-nt  
           I-K    always swim-usitative-habit  
 'I always used to swim.'  
           Dino nahumpa-ik tigu?uni-suawaga  
           Dino himself-this cook-want  
 'Dino wants to cook this himself.'  
           nii-k suuv tika-va  
           I-K    maybe eat-fut  
 'Maybe I'll eat.'  
           miga?i-n pa?a-j  
           very-I    tall-pres  
 'I am very tall.'

- b. nii-k ono-tika-ma?aku-c  
I-K just-eat-finish-subord[mom]  
 'I just finished eating.'
- piŋka-nukwi-vii-n  
keep on-run-past-I  
 'I kept on running.'
- nii-k aa-gari-vi  
I-K quietly-sit-past  
 'I sat quietly.'
- ic waha-oko-nt  
this very-big-ptc  
 'This is very big.'
- nii-k waha-tika-mpi  
I-K almost-eat-past  
 'I almost ate.'

Free adverbs can have postfixed pronouns and enclitics attached to them and can usually occur anywhere in the clause (subject to constraints discussed in section 2.4).

Many adverbs have corresponding verb stems which take normal tense-aspect suffixes, such as given in (105) below:

- (105) a. pahiku-tavapici-n kwai tika-mpa  
three-days-I away eat-fut  
 'I'll eat in three days.'
- kwai-ŋu-?  
away-imp-you  
 'Go away!'
- b. nii-k pitan tika-vi  
I-K fast eat-past  
 'I ate fast.'
- nii-k pitan-r-i-m  
I-K fast-ptc-anim  
 'I am fast.'

These stems seem to be limited to the free morpheme type adverbs.

Some morphemes which translate into adverbs in English function somewhat like aspectual markers in Chemehuevi, e.g.,

/-su/ still, too:

- (106) kacu-a-n nukwi-wa?i-s  
not-A-I run-neg-still  
 'I'm not still running.'  
 nukwi-mpa-su-n  
run-fut-still-I  
 'I'm going to run too.'

Since it is difficult to draw a line between suffixes with adverbial and suffixes with aspectual meaning, morphemes like /-su/ are treated as aspect markers (part of the verb paradigm) rather than adverbs generated in the phrase structure.

The suffix /-nii/ like occasionally shows up on many adverb stems with little or no semantic contribution:

- (107) a.  $n\ddot{i}\ddot{i}\text{-k} \left\{ \begin{array}{l} \text{sampav} \\ \text{sampava-ni} \end{array} \right\}$  nukwi-v $\ddot{i}$   
I-K quietly run-past  
 'I ran quietly.'  
 b. piikaju-n tika-va  
later - I eat-fut  
 'I'll eat later.'  
 c.f.  
 piikaju-ci-ni  
later-dim-like  
 'a little later.'  
 c.  $\left\{ \begin{array}{l} \text{suupi-n} \\ \text{suupi-ni-n} \end{array} \right\}$  tika-va  
 $\left\{ \begin{array}{l} \text{maybe-I} \\ \text{maybe-like-I} \end{array} \right\}$  eat-fut  
 'Maybe I'll eat.'

This suffix is also found on adjective (verb) stems to form complements of sensory verbs like smell, look, taste, etc.:

- (108) huvav  $\ddot{i}c\ddot{i}\text{-ni}$  kama-j  
soup bad-like taste-pres  
 'The soup tastes bad.'

pa?a-ni-a-uk tɨwawaga-vɨ  
tall-like-A-it sound-past  
 'That sounded loud.'

nɨi-k ɨvi-ni tɨgai-vɨ  
I-K bad-like act-past  
 'I acted bad.'

A less productive suffix found on a handful of adverbs is /-su/ (whose meaning is unclear) illustrated below:

- (109) namɨ-su-n tɨka-vɨ  
first-?-I eat-past  
 'At first I was eating.'
- sɨ?ipi-a-n ɨka-j aɨvi-s ugwikai-mpa  
flower-ob-I this-ob now-? sniff-fut  
 'I'm going to sniff this flower in a moment.'

## 2.3 Complex Sentences

### 2.31 Conjunction, Coordination

Conjunction in Chemehuevi is very limited. Two clauses may be coordinated by juxtaposition under a single sentence-intonation curve without requiring a conjunction. If the subjects of the clauses are identical and the actions are not concurrent, a clausal connector /*haita-*/ (listed in the lexicon as a conjunction) may be used, with the meaning then or after that.<sup>28</sup> Single sentences may contain *haita-* but presuppose prior discussion of the subject. The subject in fact must be postfixed to the adverb, indicating that presupposition and focus play a role in determining whether a pronoun is to be free or bound. (Of course the use of a pronoun at all presupposes the hearer knows the referent. The point is, a clause or sentence with *haita-* (or perhaps any clause with a postfix pronoun) cannot use the subject contrastively). Attaching the object pronoun to *haita-* does not satisfy the requirement; the subject must be attached as well:

- (110) a. *haita-uka-aŋ tɨka-mpɨ*  
then-it-he eat-past  
 'He ate it then.'

- b. \*maŋ haita-uk tika-mpɪ  
he then-it eat-past

There is some indication that *haita-* requires momentaneous action in the past rather than durative. Verbs which can take either the *-mpɪ* or *-vɪ* past tense endings (see section 2.223) must use *-mpɪ* when introduced by *haita-*.

Further examples of *haita-*:

- (111) a. navaki-ji-aŋ haita-uŋ tika-ji-s  
swim-pres-he then-he eat-pres-too  
 'He is swimming and eating, too.'
- b. niɪ-k samita?a-tika-vɪ haita-n waini  
I-K bread-eat-past then-I wine(ob)  
 hivi-vɪ-s  
drink-past-too  
 'I ate bread and then drank wine, too.'
- c. haita-uŋ tika- $\left\{ \begin{array}{l} mpɪ \\ *vɪ \end{array} \right\}$   
then-he eat-past  
 'He ate, then.'

Note that though the subjects are identical, no deletion is allowed in the second clause. (I don't know why the pronouns disagree in (111a); there seems to be a preference for an invisible subject after *haita-*.)

A second way to semantically conjoin verb-phrases is to subordinate one, using one of four subordinating suffixes (see section 2.32). To indicate the simultaneity of two actions, */-gai/* is used (for like subjects). E.g.:

- (112) Ann ijavi tika-ga pihivo?ovi hivi-vɪ-s  
Ann grapes(ob) eat-while milk(ob) drink-past-too  
 'Ann ate grapes and drank milk.'

(Note the frequent use of */-su/*, meaning too in the examples above; with *haita-* this may cement closer together two otherwise independent clauses, with */-gai/* it may help balance the subordinateness to imply more coordinateness.)

Subordination originates in the second line of the rule expanding S. SUBORD can be expanded simply to a VP. Verb forms

taken from the lexicon with the suffix */-gai/*, interpreted subordinately or coordinately, are inserted in the context SUBORD<sub>[VP[X\_\_]]</sub>.

There are two ways of semantically conjoining NPs. The first is a suffix */-gajaa/*, comparable to the verb suffix */-su/*, also meaning too, which is attached to nouns. (Like */-su/*, it apparently can attach to verbs as well but not in the presence of a second verb.) It can occur in a non-coordinate NP, as in (113a) below, but is frequently used with two overt NPs. Examples:

- (113) a. imi-gaja nukwi-ηu-s  
you-too run-imp-too  
 'You run, too!'
- b. Ann Johni nini-a-gaja punikai-vi  
Ann John(ob) I-ob-too see-past  
 'Ann saw John and me.'
- c. Ann Margaret una-gaja Johni punikai-vi-(-?im)  
Ann Margaret she-too John(ob) see-past-(pl)  
 'Ann and Margaret saw John.'

(In (113c) the verb is optionally marked "dual-subj.") *-gaja* is not a postposition, since case is marked on the noun stem to which it is attached (cf. section 2.23). This particular NP conjunction may be the Chemehuevi construction closest to syntactic coordination.

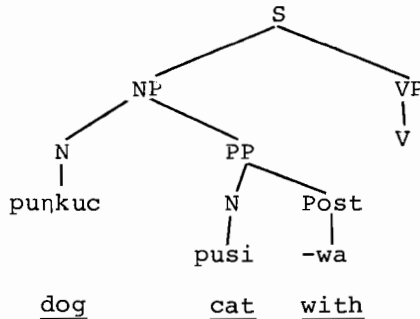
Since *-gaja* can occur on a non-conjoined noun, it is treated simply as a noun suffix (resulting in a noun). *N + gaja* can be inserted in the matrix sentence under any NP, whether under the SUBORD node or not. (Examples (113b) and (113c) above both use SUBORD as the source.) Nouns with either case suffixed with *-gaja* can be inserted freely under the SUBORD node; when an oblique noun appears, interpretive rules will translate it as "conjoined" with the object, when a nominative noun appears it is interpreted as conjoined with the subject.

The suffix *-gaja* never implies the NPs were "together" in the action, as shown in the following examples:

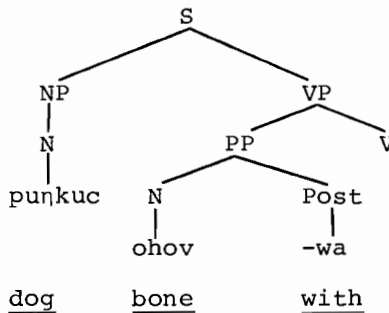


that there are two sources for the nominative instances of N + *wai*, as shown in (116):

(116) a.



b.



(116a) represents NPs semantically conjoined, both "acting together." (For direct objects, PP is embedded under the NP in the VP.) (116b) represents instead an adverbial use of N + *wai* (though it still means "accompaniment" as opposed to "instrument," a separate suffix). This then is not properly conjunction at all, either syntactically or semantically.

The coordinateness of two noun phrases may further be stressed by using 'both', as in the following example:

- (117) wahajugaisu-?um Ann Johni-wa nukwi-v*ii*-m  
both-they Ann John-with run-past-pl  
 'Both Ann and John were running.'

Disjunctive coordination is even more restricted in Chemehuevi. The following examples illustrate available ways to get around the lack of any syntactic or morphological 'or':



- (118) a. tami-want                    tigu?uni-va  
we[inclus]-some of cook-fut

{ 'Either you or I will cook.' }  
 { 'One of us will cook.' }

- b. Oder, suuv Ann, pipici-va  
Oder, maybe Ann, arrive-fut

{ 'Oder or Ann will come.' }  
 { 'Oder, maybe Ann, will come.' }

(For discussion of disjunction in questions, see section 2.241.)

There is no exact equivalent of the clausal connector 'but' in Chemehuevi, although there is a suffix */-gaisapa/* which added to verbs means something like (even) though. It is not clear where *-gaisap* comes from, but the result may be some sort of non-finite verb, perhaps a subordinate clause. In (119) below are given examples of *-gaisap* (<sup>v</sup> *-kaisap*) with and without a second clause. In the latter case the translation is more 'contrary to what you might think'. (Bear in mind that other non-finite verbs can show up as main verbs, see section 2.225.)

- (119) a. ni-i-k nukwi-gaisap

I-K    run-though

'I'm running (...I'm just resting a second!).'

- b. nanka-kaisapa?a-n

hear-though-I

'I hear (though he may not think so).'

- c. puni-kari-gaisapa?a-n kac humpait himpi

see-sit-though-I            not    any    what

puni-vi-wa

see-past-neg

'I watched, but I didn't see anything.'

('Though watching, I didn't see anything.')

- d. paa-ga-ku-n    navaki-nku hu?urua-gaisapa-n

water-be-subord-I    swim-could    be-though-I

kacu-gu

not-would

'If there were water I could swim, but I wouldn't.'

## 2.32 Subordination

There seem to be four major types of adverbial clauses in Chemehuevi, depending on whether the subject and tense match those of the main clause. For each possible situation there is a separate subordinating suffix on the embedded verb. These are given in (120) below, with examples of each in (121):

- |       |    |        |                 |   |
|-------|----|--------|-----------------|---|
| (120) | a. | /-gai/ | like-subjects   | contemperaneous<br>(durative) action              |
|       | b. | /-gu/  | unlike-subjects | contemporaneous<br>(durative) action<br>(~ /-ku/) |
|       | c. | /-ci/  | like-subjects   | momentaneous action                               |
|       | d. | /-ka/  | unlike-subjects | momentaneous action                               |

(There is a suppletive form for /-gai/, which is /-ju/ after any sequence -ai-.) The suffixes /-ci/ and /-ka/ by themselves refer to antecedent actions, but may occur with future -va to indicate 'being about to'.

- (121) a. John huvitu-ni?i-ga winimi-j  
John sing-cont-subord dance-pres  
 'John is singing and dancing.'  
 ('John is dancing while singing.')
- b. puṅkuci huvitu-g, aipac aṅ tika-vi  
dog(ob) sing-subord, boy that eat-past  
 'While the dog sang, the boy ate.'
- c. Ann iɰapaka-c tɰrawi?i-kwai-vi  
Ann be scared-subord dash-away-past  
 'Ann got scared and ran away.'  
 ('Ann ran off because she got scared.')
- d. niim jaga-ka-vi?i-m naga-vuṅkuci-wi  
we cry-sev-past-pl mountain sheep-pet-pl(ob)  
 kogo?i-ti-ka-k  
kill-pass-sev-subord  
 'We cried because the sheep were killed.'

(For /-gai/ → /-ju/ :)

- e. jaʔi-vi-n            navaki-kai-kai-j  
be tired-past-I swim-result-perf-subord  
 'I was tired because I swam.'

These clauses can be translated often as 'if' or 'because' as well as simply 'while' (for the contemporaneous suffixes), 'when' or 'in order to' (for the non-contemporaneous momentaneous suffixes). When an antecedent durative clause is subordinated, there seems to be a tendency to add the resultative (or perfective and resultative) suffix and thereby use the contemporaneous suffixes. In all cases the tense of the clause is relative to that of the main verb--e.g., /-gai/ is interpreted as past tense if the main verb is also past.

These clauses are generated with optional subjects<sup>30</sup> in the deep structure; verbs suffixed with /-gu/ and /-ka/ being marked for insertion in SUBORD<sup>[NP<sub>VP</sub>[ X\_\_ ] ]</sup>, those with /-gai/ and /-ci/ marked for SUBORD<sup>[VP [ X\_\_ ] ]</sup>. (Subjects in subordinate clauses which are coreferential with subjects in the main clause are obligatorily omitted in the surface structure.)

### 2.33 Participles (Relativization)

Relative clauses in Chemehuevi are equivalent to participial phrases. There are two participle endings, the active /-tʃ/ (with the usual variants /-ntʃ/, -rʃ/, -cʃ/), and what might be called the passive /-na/. The former is always used in subject-relativization, the latter in object-relativization. Sentences which on the surface translate as passive sentences with overt agents could be taken to be derived from sentences with headless relatives; relativization and agent-passivization therefore are not independent processes in Chemehuevi. Subject-relativization is illustrated in (122) below.

- (122) a. tʃiɪmp ar wiʔiku-ka-t pʃtiɪjant uruʔa-j  
rock that fall-p/p-ptc heavy be-pres  
 'That rock which fell was/is heavy.'  
 b. puusi-a-n sijaʔi-cʃ mavoʔa-mpʃ  
cat-ob-I cold-ptc(ob) cover-past  
 'I covered the cat which was cold.'

With some tenses /-tʰ/ is simply suffixed, e.g., future /-vaa/ becomes /-vaa-ntʰ/. Others, like the present tense, delete: /-jʰ-tʰ/ > /-tʰ/. Participles may not be formed from simple past -vʰ; perfective /-kai-tʰ/ > /-ka-ntʰ/ or remote past /-pʰ-gai-tʰ/ > /-pʰ-ga-ntʰ/ are used instead. (For ai → a, see section 1.33 under Phonology.) Note in (122b) that the verb, having become a participle, agrees in case with the noun it modifies. All active participles take /-a/ in the oblique case, which deletes word-finally (but protects the vowel in /-tʰ/.)

Participles do not always appear with a head noun on the surface. There are two situations where they show up without a head: (1) when the relative clause is the predicate nominative of an understood BE, resulting in the surface "habitual" aspect, and (2) when, for some verbs, the relative clause (in a transformational account) would be headless or modifying some sort of indefinite third-person pronoun ('one who'). The latter act like ordinary nouns and could be treated as such. In many cases the participles have probably been lexicalized (e.g., see words for teacher, doctor, policeman).

Examples of the "habitual" aspect:

- (123) a. nʰi-k utusamp tʰka-r  
           I-K always eat-ptc  
           'I always eat.'
- b. aipac paʰa-ntʰ-m  
           boy tall-ptc-anim  
           'The boy is tall.'

(See section on Adjectives, 2.214 for discussion of the animate suffix on verbs.)

Examples of headless subject relatives:

- (124) a. paʰa-ntʰ-m nukwi-j  
           tall-ptc-anim run-pres  
           'The tall one is running.'
- b. nʰi-k hoko-ntʰ-mʰi           kwʰhʰi-vʰ  
           I-K large-ptc-anim(ob) catch-past  
           'I caught a large one.'

In the case of object-relativization, the subject of the clause appears in the oblique case and could be considered to

be either agentive or possessive on the surface. (For arguments against the latter see section 2.34 under nominals.) The verb forms a participle by adding */-na/* with tense restrictions very much like */-t#/*. These, too, can appear without heads. When embedded under the predicate nominative of a missing BE they may be optionally translated either as passives with agents ('X was VERBED by Y') or as headless relatives ('X is what Y VERBED'). Examples of object-relativization are given below:

- (125) a. puusi-a-n punikai-v# mavo?a-kai-na-n  
cat-ob-I see-past cover-perf-ptc-I  
 'I saw the cat which I had covered.'
- b. waampakwic n#ni paka-mpa-n aipaci kwipa-v#  
scorpion I(ob) kill-fut-ptc boy(ob) sting-past  
 'The scorpion I'm going to kill stung the boy.'

The participle */-na/* takes a zero accusative ending. Headless object-relatives are shown in (126):

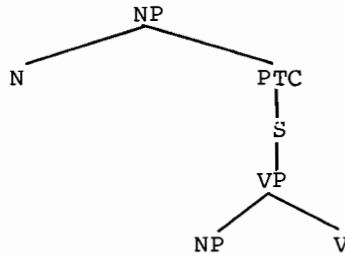
- (126) a. tukuavi-k Anni cikwi-mpa-n  
meat-K Ann(ob) cut-fut-ptc  
 {'The meat is what Ann is going to cut.'}  
 {'The meat will be cut by Ann.'}
- b. mari-k huvav t#ka-kai-na-n  
that-K soup eat-perf-ptc-I  
 {'That soup is what I ate.'}  
 {'That soup was eaten by me.'}
- c. ici-k t#ka-na-?in  
this-K eat-ptc-he  
 {'This is what he's eating.'}  
 {'This is being eaten by him.'}

(The enclitic K, or */-ukV/*, is very common with participles; see section 2.225.)

Participles are analyzed as sentential in origin, bearing in mind that the S-node optionally expands to a VP without a subject. (In main clauses this is needed as the source of, e.g., many imperatives.) The following structures, generated by the Phrase Structure rules in section 2.1, are taken

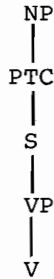
to be the sources of all participle constructions discussed above:

(127) a. Subject-relatives



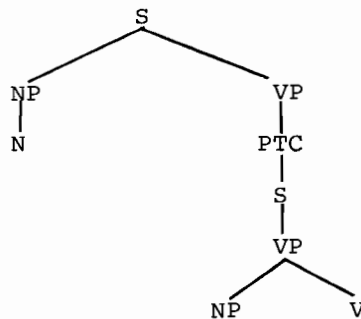
e.g., aipac pʉkuci tavi-ka-t  
boy dog(ob) hit-perf-ptc  
 'The boy who hit the dog.'

b. Headless subject-relatives



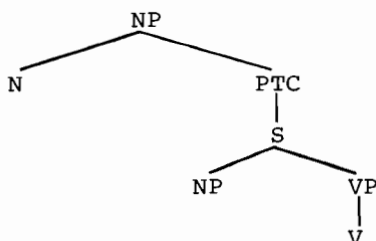
e.g., paʔa-nt  
tall-ptc  
 'The tall one [inan].'

c. Habitual aspect



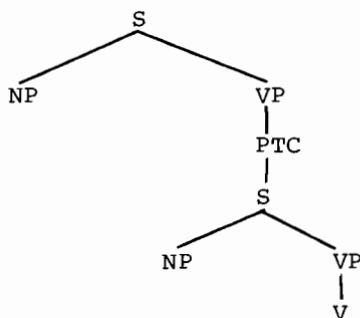
e.g., nii-k pagici tika-va-nt  
I-K fish(ob) eat-fut-ptc  
 'I will eat fish (generally).'

d. Object-relatives



e.g., puus niiini mavo?a-kai-n  
cat I(ob) cover-perf-ptc  
 'The cat which I covered.'

e. Passive with Agent



e.g., ici-k niiini tika-kai-n  
this-K I(ob) eat-perf-ptc  
 'This {is what I ate.' }  
       {was eaten by me.' }

### Postpositioned relativization

When the head noun is coreferential with the object of a postposition in the relative clause, the latter surfaces in the form of a special relative pronoun, /p±-/.

Verbs in postpositional relative clauses take the participle ending /-na/, as in object relative clauses, since in

both cases there is an embedded subject of the verb (distinct from the head noun). Examples:

- (128) a. wii tukuavi-a-n pi-w cikwi-kai-n kiwa-ga  
knife meat-ob-I Rel-with cut-perf-ptc edge-have  
 'The knife I cut the meat with is sharp.'
- b. John kahoni nopavi pi-ipa?a-tu-kai-n tana-va  
John box(ob) eggs(ob) Rel-in-plob-perf-ptc kick-fut  
 'John will kick the box the eggs are in.'
- c. tikatia puusi pi-vaan kari-kai-n jokoki-vi  
table cat(ob) Rel-on sit-perf-ptc collapse-past  
 'The table the cat sat on collapsed.'

/pi-/ refers to animate and inanimate nouns, and is oblivious to the function (in the main clause) of the noun phrase in which it is embedded.

Note the use of the postposition as verb, in (128b) (see section 2.23).

#### 2.34 Nominalization

In section 2.211 I discussed one form of nominalization which, though fairly productive, was somewhat idiosyncratic. The /-pi-/ forms given there seem to parallel English deverbal nouns such as amusement, theft, etc. Chemehuevi has an entirely productive nominalizing suffix /-na/ as well, corresponding more to the English -ing forms (amusing, stealing, etc.) The /-na/ forms constitute part of the paradigm of every verb in the lexicon. Unlike for /-pi-/, lexical redundancy rules involving /-na/ will be completely general.

Examples of nominalizations with /-na/, in subject and object positions, are given below:

- (129) a. ni-i-k nukwi-na-an putucuga-vi  
I-K run-nml-he know-past  
 'I knew he ran.'
- b. Anni-a-n tania-vi pipici-va-na-un  
Ann-ob-I tell-past arrive-fut-nml-he  
 'I told Ann he would come.'



- c. John Anni karit̃ia-j kiaw tana-kai-n  
John Ann(ob) chair-ob yesterday kick-perf-nml  
 putucuga-j  
know-pres  
 'John knows Ann kicked the chair yesterday.'
- d. kacu-a-n sumai-vi-wa tika-va-na-n  
not-A-I remember-past-neg eat-fut-nml-I  
 'I didn't remember to eat.'
- e. kani?i-wa?i-na-n ha?isuntui-j  
visit-go-nml-I like-pres  
 'I like going to visit.'
- f. kacu-a-uk t̃ivisampa-t̃i-ap Johni  
not-A-it true-ptc-neg John(ob)  
 puusi puni-kai-n  
cat(ob) see-result-nml  
 'It's not true that John saw the cat.'

Verbs with the suffix /-na/ translate in the present tense (relative to the tense of the main clause) if they have no tense suffix (/j̃/ is prohibited with /-na/). /-na/ co-occurs with future /-vaa/ and perfect /-kai/ (but not /-ṽj̃/); it follows tense-aspect markers and precedes postfix pronouns. Semantic subjects of these embedded verbs are in the oblique case. If coreferential with the subject of the main verb they are omitted (though for some verbs the omission is optional).

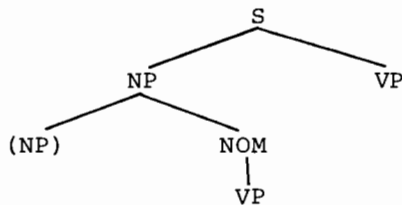
In many cases the difference in meaning between /-p̃j̃/ forms and /-na/ forms is not obvious. Compare for example (129e) above with (12c) in section 2.211; also (129c) above with (12a). Syntactically they differ in several respects, however. Forms with /-p̃j̃/ do not contain tense suffixes, and they take the oblique ending /-a/ when used as verb complements. Forms with /-na/ have no oblique case. /-p̃j̃/ forms seem quite noun-like in that their "subjects" behave like possessors, optionally appearing in full and postfix form simultaneously (e.g., (12a,b) in section 2.211). This is true of all normal possessive constructions (see section 2.214), (e.g., *ñĩni moo* ~ *moa-n* ~ *ñĩni moa-n* 'my father'). Forms with /-na/, however, do not allow this dual occurrence of their subject, as exemplified in (130) below.

Neither do finite verbs in main clauses (unless the word order is changed--see section 2.4).

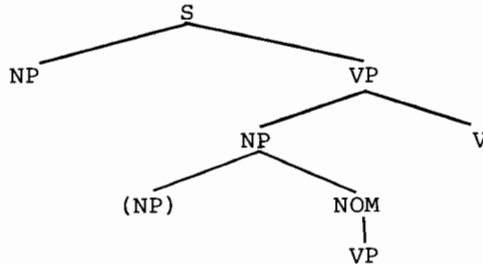
- (130) John putucuga-j {  
 nɪɪni tɪka-va-n  
 tɪka-va-na-n  
 \*nɪɪni tɪka-va-na-n }  
John know-pres (I(ob)) eat-fut-nml-(I)  
 'John knows I will eat.'

Forms in /-na/, therefore, will be treated as originating in the deep structure as VPs, embedded under a NOM node. The NOM itself, together with an optional "subject" is an NP. Structures for NOMs in subject and object position are given in (131a) and (131b) respectively:

- (131) a.



- b.



There are two verbs which are exceptions to the above generalizations on complements, namely, think, /mai--nii/, and say, /mai/ (which are related to each other). The clauses of these two verbs may be nominalized, but they may also contain normal finite verbs and nominative subjects instead. Examples illustrate this in (132) below:

- (132) a. pa?a-ji-aŋ aipac aŋ mai-ka-n  
tall-pres-he boy that say-p/p-I  
 'I say the boy is tall.'

- b.  $n\ddot{i}i$  kac mai-wa?i-ni John puusi puni-ka  
I not think-neg-like John cat(ob) see-result  
 'I don't think John saw the cat.'
- c.  $n\ddot{i}i$ -k  $\left\{ \begin{array}{l} \text{punkuc} \\ \text{punkuci} \end{array} \right\}$  ontokwa-r*i*-m mai-v*i*  
I-K  $\left\{ \begin{array}{l} \text{dog} \\ \text{dog(ob)} \end{array} \right\}$  brown-ptc-anim say-past  
 'I said the dog was brown.'
- d.  $n\ddot{i}i$ -k pa?a-nt*i*-m na-mai-ka-ni  
I-K tall-ptc-anim reflex-think-p/p-like  
 'I thought I was tall.'
- e. ha $\eta$  punkuc ontokwa-r*i*-m mai-k ??  
who dog brown-ptc-anim say-p/p  
 'Who said the dog is brown?'

These are not instances of direct quotation, since coreference in the embedded subject does not result in a first person pronoun (unless the main subject was first-person).<sup>31</sup>

These verbs are marked in the lexicon as optionally being inserted in:  $VP [X S X \_ X]$ . Most other verbs are negatively marked for this environment.

#### 2.4 Word Order

Sentence word order in Chemehuevi enjoys a fairly high degree of freedom. Many constituents of a sentence may be fronted, extraposed, or internally scrambled with no apparent change in meaning, or even focus, necessarily. However, word order is not totally free--Chemehuevi has only two syntactic cases, and numerous order constraints help keep ambiguity within tolerable limits.

In (133) below examples are given of simple sentences which demonstrate the range of word order possibilities. (For clarity I will use lower case terms in the schemata in (133) to indicate constituents which are postfixes.) Some general constraints are given in (134):

- (133) a. SUBJ VB  $n\ddot{i}i$  nukwi-v*i*  
I run-past  
 'I ran'



- maga-vi  
give-past  
 'I gave it to them yesterday.'
- o. ADV-subj OBJ VB OBJ kiawi-n maka-j maga-vi  
yesterday-I it-ob give-past  
 mamí  
them(ob)  
 'I gave it to them yesterday.'
- p. SUBJ OBJ ADV-obj VB nií maŋa-j kiawi-ak  
I him-ob yesterday-that  
 maga-vi  
give-past  
 'I gave that to him yesterday.'
- q. SUBJ OBJ-obj ADV VB nií maka-ja-aŋ kiaw  
I that-ob-him yesterday  
 maga-vi  
give-past  
 'I gave that to him yesterday.'
- r. OBJ-subj VB-obj pusi-a-aŋ maga-vi-n  
cat-ob-he give-past-me  
 'He gave me the cat.'
- s. ADV-obj-subj OBJ VB kiawi-ika-n maŋa-j  
yesterday-this-I him-ob  
 maga-vi  
give-past  
 'I gave this to him yesterday.'
- t. SUBJ VB-obj-obj ADV nií maga-vii-wa?i-ika-iŋ  
I give-past-neg-it-him  
 kac  
not  
 'I didn't give it to him.'

## (134) Constraints:

- a. SUBJECT, when free (i.e., unbound) must be first in the sentence. Putting it anywhere else in the above sentences results in an ungrammatical string.
- b. SUBJECT, when bound (i.e., postfixed), must be attached to the first word in the sentence. Attaching anywhere else makes it ungrammatical.
- c. VERB is either last in the sentence or next to the last. Only one full word may follow it, though there may be postfixed pronouns on the verb as well.
- d. Except for constraint (b), pronoun postfixes may appear anywhere in the sentence, on any lexical category, up to two in a row. (Three pronominal postfixes in a row, or two attached to a pronoun, are not allowed.) The one exception is that no pronominal postfixes may attach to the SUBJECT (free). Any personal pronoun may appear in either full or postfix form.

Sentences which are slightly less simple exhibit somewhat different constraints, largely with respect to the subject. One set of such sentences involves the use of a "copy" pronominal postfix, co-occurring (and agreeing) with the subject of the sentence. Any full (non-bound) subject, including proper nouns, common nouns or pronouns, may co-occur with a copy postfix on the first word in the sentence with no change in meaning. This postfix may attach to any type of constituent except the subject itself, which prohibits pronominal postfixes. Examples in (135) illustrate the use of this postfix.

- (135) a. nukwi-vii-n nii = nii nukwi-vi  
run-past-I I            I run-past  
 'I ran.'
- b. kacu-aŋ aipac aŋ nukwi-vii-wa  
not-he boy that run-past-neg  
 = aipac aŋ kac nukwi-vii-wa  
 'That boy didn't run.'
- c. wihi-a-uŋ niini maga-vi    John uŋ  
knife-ob-he me(ob) give-past John that  
 = John niini wihi maga-vi  
 'John gave me a knife.'

- d. pagɨci-a-uŋa-n maga-vɨ Ann uŋ  
fish-ob-she-me give-past Ann that  
 = Ann uŋ pagɨci niɨni maga-vɨ  
 'Ann [that one] gave me a fish.'

The constraints in (134) must now be amended as follows:

- (136) a. When the subject occurs in both full and bound form (both representing the same subject) in a sentence, the latter (i.e., postfix) obeys constraint (134b). The full subject form is free to appear anywhere in the sentence except sentence-initially. Constraint (134c) still holds--i.e., the subject (full) may come after the verb if no other full words do.
- b. The subject may not appear twice as a postfix or twice as a full noun.<sup>32</sup>

Since transformational rules may not create new material in the model adopted here, the slot for this copy-pro must be present in the deep structure. Thus the first line of the NP expansion rule is: NP → NP NP, where one of the NPs can have a postfix pronoun inserted under it.<sup>33</sup>

The next series of complications arises when modified nouns are considered. Expanded noun phrases enjoy some degree of freedom, e.g., adjectives (participles) and demonstratives may precede or follow the noun they modify, with no difference in meaning. However, constituents within a noun phrase may not be separated. With the exception of bound (postfix) pronouns and other affixes, nothing intrudes between modifier and noun. Examples with expanded NPs are given in (137) and (138), and constraints thereby entailed are listed in (139). (Demonstratives, which are equivalent to third-person pronouns (see section 2.214) have certain peculiarities of their own.)

(137) Expanded NPs (nominative case):

- a. niɨni moa-n = moa-n = niɨni moo  
my(ob) father-my  
 'my father'
- b. iŋ aipac = aipac iŋ  
this boy
- c. mar hokont karɨtɨa = hokont ar karɨtɨa  
that big chair big that chair

- d. aipaci aṇa-j wii = aipaci aṇa-j wihi-aṇ  
boy(ob) that-ob knife boy(ob) that-ob knife-his  
 'that boy's knife'
- e. maṇa-j juhuganti-mṣ nainci nagap  
that-ob fat-anim(ob) girl(ob) shawl  
 'that fat girl's shawl'
- f. owasiakar pampin?i-n = niini owasiakar pampin?  
gold pot-my my gold pot  
 'my gold pot'
- (138) a. waha-ku-a-n totoci-vṣ punikai-vṣ  
two-ob-A-I head-pl(ob) see-past  
 'I saw two heads.'
- b. puusi aṇa-ja-n maga-vṣ  
cat(ob) that-ob-I give-past  
 'I fed that cat.'
- c. nukwi-ka-aṇ aipac aṇ pa?anti-m aṇ  
run-pres-he boy that tall-anim that  
 [copy]  
 [pro]  
 'That tall boy is running.'

## (139) Constraints

- a. Only affixes or postfixes may intervene between a modifier and head noun.
- b. If a noun is followed by a demonstrative, any adjective modifying it is also followed by an identical demonstrative.<sup>34</sup>
- c. The constraint regarding pronominal postfixes on subjects is relaxed to allow possessive postfixes.
- d. Within a NP, a full possessive cannot immediately precede a demonstrative which is not its own, nor can it precede a noun immediately followed by a demonstrative, e.g., 'his knife' cannot be \*iṇa-j wii ic, or \*iṇa-j ic wii, only iṇa-j wii his-ob-knife.
- e. A possessive postfix attaches only to the head noun, never the modifying adjective or demonstrative.



- f. A full possessive must be first in the NP, i.e., unless it is a postfix it precedes all other modifiers as well as the head.
- g. A bound subject or subject copy-pro in a sentence beginning with an (object) noun followed by its own demonstrative, attaches to the demonstrative, not the noun. In all other cases, it attaches to the first phonological word of the sentence.
- h. The one-post-verbal word constraint must be relaxed to allow NPs with modified nouns, i.e., changed to allow one post-verbal constituent.

Postpositional phrases in Chemehuevi, like NPs, have fairly rigid internal structure, though like NPs and Advs they may scramble around in the sentence. Within the phrase the postposition is always attached either to the head noun itself or to an appositive pronoun stem (see section 2.23). The choice is optional, does not seem to reflect a meaning difference, and is independent of whether the head noun is modified or not. Examples of postpositional phrases follow in (140); the constraints are listed in (141) below:

- (140) a. kupa-ja-iŋ tikaŋa-va waci-mpa  
coffee-ob-he table-at put-fut  
 'He will put the coffee on the table.'
- b. ni-rua-aŋ kijasui-ka  
I-at-he smile-pres  
 'He's smiling at me.'
- c. wii pagici uŋa-ruk unika  
knife fish(ob) he-under is  
 'The knife is under that fish.'
- d. pagic maka-j pa-upa unika  
fish that-ob water-in is  
 'The fish is in that water.'
- (141) a. Nothing may intervene between the NP (object of the postposition) and postposition, or NP and pronoun plus postposition, except affixes (postfixes or enclitics).
- b. The postposition must be attached to the head noun or to an appositive pronoun stem (which agrees with the head noun and which, in the case of inanimates, is a special suppletive stem--see section 2.212).

- c. Nothing in the NP follows the postposition.
- d. All case suffixes are "deleted" from anything to which a postposition is affixed.

Interrogatives do not complicate matters at all. Yes-No questions are all formed by the enclitic *-ra*, which attached to any first word (co-occurring optionally with K, which it precedes). WH-questions substitute different interrogative pronouns for various constituents, including two different VP interrogative forms. They are frequently fronted, but so are the constituents they replace. In both kinds of interrogatives all the normal word-order constraints are neatly adhered to. Tag questions always consist simply of ending the sentence with *hinaa* (roughly equivalent to French *n'est-ce pas*). (See section 2.24.)

One more set of complications arises in simple sentences when the special enclitic marker, which is referred to here as K (phonologically /-ukV/; final vowel undeterminable), is introduced. K can optionally appear in almost any sentence, provided the word order is such that K's own constraints can be met. I am not certain exactly what K is; it is prohibited in imperatives, required in certain kinds of cleft sentences, obligatory in predicate nominative constructions with no overt copula, and obligatory with at least one aspect (which without K in the sentence is interpreted as an active participle). (See section 2.225.)

In this grammar I have somewhat arbitrarily assigned K to the verb-phrase. Its Deep Structure position (linear) is unimportant since a late transformation must move it (and all other enclitics) to a position immediately after the first "word" (or alternatively an output constraint must determine that that is where it is). Use of K is illustrated in (142), and constraints pertinent to it are given in (143):

- (142) a. *nii-k nukwi-vi*  
           I-K run-past  
           'I ran.'
- b. *ici-k wii*  
           this-K knife  
           'This is a knife.'

- c. pa?anti-mi-k aipac nukwi-j  
tall-anim-K boy run-pres  
 'The tall boy is running.'
- d. kacu-k nukwi-vi-wa  
not-K run-past-neg  
 'You didn't run.'
- e. tika-ri-k ni-i  
eat-habit-K I  
 'I eat.'
- f. pagici-ja-uk maŋ tika-mi-nt  
fish-ob-K he eat-past-habit  
 'He used to eat fish.'
- (143) a. If the main verb is HABITUAL<sup>35</sup> (present, past, or future), or if the subject is second-person (which is often deleted in a sentence with K),<sup>36</sup> then any word may appear first in the sentence with K attached to it. The subject NP is then free to (though not required to) move anywhere in the sentence.
- b. In all other sentences with K, K must be attached to the first word of the subject NP which, therefore, must be sentence-initial; i.e., K does not appear in the same sentence as a subject copy-pro or bound subject.

Complex sentences complicate the constraints on word-order in two ways: (1) "Embedded clauses" (including S, PTC, NOM, or SUBORD) may appear at the end of a sentence after the verb. (2) Some clauses show up at the beginning of a sentence in violation of the subject constraints. Most examples of this consist of complements of the two (related) verbs think and say, which may optionally appear in non-nominalized form. Whereas all other verb complements have subjects in the oblique case and verbs with nominalizing suffixes, the clauses of say and think can contain normal finite verbs and nominative subjects (as stated in section 2.34 above). These clauses (which I analyze as S, not NOM) may appear as a unit anywhere in the main sentence (except in the middle of another NP). Other than these, examples which violate subject constraints are extremely rare.<sup>37</sup> By and large, such violations are judged ungrammatical. Therefore, the original constraints (134a) and (134b) are amended as follows:

- (144) In a sentence with no K and no copy-pro, the subject is either first in the sentence or attached to the first word (plus postnominal Dem). The only exception in either case is that clauses dominated by S (or SUBORD) may precede in the sentence.

Other embedded clauses (namely NOMs, PTCs and SUBORDs) behave somewhat like NPs--the subject (non-nominative) remains contiguous to the (nominalized or participialized) verb, nothing intervening except the bound subject of the matrix sentence. Sentences in (145) demonstrate possible ordering in complex sentences:

- (145) a. nii-k Anni pipici-n putucuga-vi  
I-K Ann(ob) come-nml know-past  
 'I knew Ann came.'
- b. Anni-a-n pipici-va-n putucuga-j  
Ann-ob-I come-fut-nml know-pres  
 'I know Ann will come.'
- c. Anni-a-n tinia-vi pipici-va-na-un  
Ann-ob-I tell-past come-fut-nml-him  
 'I told Ann he would come.'
- d. pa?a-ji-an aipac an maika-n  
tall-pres-he boy that say-I  
 'I say that boy is tall.'
- e. pipici-va-na-n sumai-vi  
come-fut-nml-I remember-past  
 'I remembered to come.'
- f. puusi-a-n sija?i-ci mavo?a-mpi  
cat-ob-I cold-ptc(ob) cover-past  
 = puusi-a-n mavo?a-mpi sija?i-ci  
 'I covered the cat which was cold.'
- g. puusi-a-n punikai-vi mavo?a-kai-na-n  
cat-ob-I see-past cover-result-ptc-I  
 'I saw the cat (which) I covered.'
- h. tikatia puusi pi-vaan kari-kai-n  
table cat(ob) which-on sit-result-ptc

jokoki-vi  
collapse-past

'The table the cat sat on collapsed.'

Summary of constraints

1. In a sentence with no K and no copy-pro of the subject, the SUBJECT is first in the sentence, except that it may be preceded by clauses dominated by S or SUBORD.<sup>38</sup>
2. In a sentence with no K, a bound SUBJECT (whether it is a copy-pro or not) must be attached to the first word unless the sentence begins with noun plus demonstrative, in which case the bound subject is postfixed to the demonstrative. (Clauses dominated by S or SUBORD may precede the "first" word.)
3. The VERB, in addition to any affixes it may have, may be followed in the sentence by one and only one constituent, e.g., a NP, S, or Adv.
4. No more than two pronouns may appear together in a word as postfixes on another word or as a single postfix plus independent pronoun. (See end of this section for constraints on the order of these postfixes.)
5. No pronominal postfix (copy or otherwise) may attach to the (full) subject except for possessive pronouns modifying the subject.
6. Only one K can occur in a sentence, and it cannot co-occur with a bound subject in the main clause, whether copy-pro or not.
7. The same subject cannot occur bound twice in the same sentence; i.e., if there is a copy-pro, the subject itself must be full (unbound).
8. Nothing may intervene between a noun and its modifiers except enclitics and pronominal postfixes arising from other NPs.
9. If a noun is followed by a demonstrative, any adjective (participle) modifying it must also be followed by an identical demonstrative.
10. A full (unbound) possessive cannot immediately precede a demonstrative which is not its own (i.e., does not modify the possessive), nor can it immediately precede a noun which itself immediately precedes a demonstrative, within the same NP.
11. A possessive postfix attaches only to the head noun, never the modifying adjective or demonstrative.
12. A full possessive must be first in the NP; i.e., unless it is a postfix, it precedes all other modifiers as well as the head.

13. A postposition is affixed either to the head noun of its object, or to a pronominal stem agreeing with the head. In either case, nothing intervenes between the object NP of the PP and the postposition (or pro plus postposition).
14. A postposition always follows its entire object NP.
15. In a sentence with K, if the main verb is HABITUAL or if the subject is second-person the subject is not required to be sentence-initial.
16. K, like all enclitics, must be on the first phonological word of the sentence, with no exceptions.

### Analysis

The following transformation rules<sup>39</sup> introduce limited freedom in sentence order; output constraints will restrict the permissible orderings:

#### (146) Permutation rules

1. (NP)\* (SUBORD)  $\left\{ \begin{array}{l} \text{PP} \\ \text{Adv} \end{array} \right\}^*$  (S) (NP)\* (V)

SD:

SC:

(Notation used to indicate optional scrambling of all named constituents, with respect to each other. This rule scrambles everything between, but not including, Conj (=haita-) and Q. Ordering within each constituent is not affected.)

2.  $\left[ \begin{array}{l} +\text{pro} \\ +\text{bnd} \\ -\text{prefix} \end{array} \right] - \left\{ \begin{array}{l} \text{PTC} \\ \text{N} \\ \text{Num} \\ \text{D} \end{array} \right\}$

SD: 1

2

SC: 2 + 1

Cond: optional

(This rule allows postfix pronouns to intrude into NP constituents.) (May reapply, moving postfix anywhere in NP.)

3. <sup>NP</sup> [ X - N - Y - PTC (D) - ]

SD: 1 2 3 4 5

SC: 1 4 2 3 5

(Optionally reorders participle (plus demonstrative) to pronominal position.)



- B. Any S with  $\begin{bmatrix} +N \\ +nom \end{bmatrix}$  and no K must be:

$$S \left[ \left( \left\{ \begin{array}{l} S \\ \text{SUBORD} \end{array} \right\} \begin{array}{l} [NP \ VP] \end{array} \right) \left\{ \begin{array}{l} \begin{bmatrix} +NP \\ +nom \\ -bnd \end{bmatrix} \\ \begin{bmatrix} \{PTC\} \\ N \\ -nom \end{bmatrix} \\ V \\ Adv \\ N \text{ Post} \end{array} \right\} \left( \left\{ \begin{array}{l} [+bnd]* \\ D \end{array} \right\} \begin{array}{l} [+pro] \\ [-nom] \end{array} \right) \begin{array}{l} [+N] \\ [+nom] \\ [+bnd] \end{array} \right) \right] X$$

(Constraints #1,2)

- C. Any S which is  $S[X \ VP [X \ V \ X] \ X]$  must be:

$$S[X \ V \ ( \left\{ \begin{array}{l} K \\ [+bnd]* \end{array} \right\} ) \left( \left\{ \begin{array}{l} S \\ NP \\ Adv \\ Q \end{array} \right\} \right) ]$$

(Constraint #3)

- D. If there exists  $\begin{bmatrix} +N \\ +nom \\ -bnd \end{bmatrix} \begin{bmatrix} +pro \\ +bnd \\ -prefix \end{bmatrix}$ , then it must be:

$$\begin{bmatrix} +N \\ +nom \\ -bnd \end{bmatrix} D \left[ NP \left[ \begin{bmatrix} +pro \\ +bnd \\ -prefix \end{bmatrix} \right] \right]$$

(Constraint #5)

- E. No S may contain:

$$* \left\{ \begin{array}{l} K \\ [+nom] \\ [+bnd] \end{array} \right\} X \left\{ \begin{array}{l} K \\ [+nom] \\ [+bnd] \end{array} \right\}$$

(Constraints #6,7)

- F. No S may contain:

$$* \left\{ \begin{array}{l} NP [X \ N \ D [Pro] \ PTC] \\ NP [X \ PTC \ N \ D [Pro]] \end{array} \right\}$$

(Constraint #9)



G. No S may contain:

$$* \text{NP} [X \text{ D} [ \text{NP} [\alpha F] ] X \text{ D} [ \text{NP} [-\alpha F] ] X ]$$

where F = [vis], [sing], [anim] or [nom]

(Constraint #9)

H. No S may contain:

$$* \text{NP} [ \text{D} [\text{NP}] \text{N} \text{D} [\text{Pro}] X ]$$

(Constraint #10)

I. Any S which contains [+post] must be (for every post):

$$S [ X \text{ PP} [ X \left[ \begin{array}{l} +N \\ +\text{prefix} \end{array} \right] [+post] ] X ]$$

(Constraints #13, 14)

J. No S may contain:

$$* S [ \left[ \begin{array}{l} +\text{bnd} \\ -\text{prefix} \end{array} \right] X ]$$

K. No S may contain:

$$* [+imp] \dots K$$

L. Any S with K must be:

$$\left\{ \begin{array}{l} S [X [+nom] K X] \\ S [X \left\{ \begin{array}{l} \text{VP} [X \left[ \begin{array}{l} +V \\ +\text{HABIT} \end{array} \right] X] \\ \text{NP} [ \left[ \begin{array}{l} \text{II pers} \\ +\text{nom} \end{array} \right] ] \end{array} \right\} X] \end{array} \right\}$$

(Constraint #15)

M. Any NP containing  $\text{Poss} \left[ \begin{array}{l} \text{NP} \\ -\text{bnd} \end{array} \right]$  must be:

$$\text{NP} [ \text{D} [ \text{Poss} \left[ \begin{array}{l} \text{NP} \\ -\text{bnd} \end{array} \right] ] X ]$$

(Constraint #12)

N. Any NP containing  $\text{Poss} \left[ \begin{array}{c} \text{NP} \\ +\text{bnd} \end{array} \right]$  must be:

$$\text{NP} \left[ \text{X} \left[ \begin{array}{c} \text{N} \\ -\text{bnd} \end{array} \right] \text{D} \left[ \text{Poss} \left[ \begin{array}{c} \text{NP} \\ +\text{bnd} \end{array} \right] \right] \text{X} \right]$$

(Constraint #11)

O. No NP may contain:

$$* \text{NP} \left[ \text{X} \text{D} \left[ \text{Poss} \left[ \begin{array}{c} \text{NP} \\ \alpha\text{bnd} \\ \beta\text{F} \end{array} \right] \right] \right] \text{X} \text{D} \left[ \text{Poss} \left[ \begin{array}{c} \text{NP} \\ \alpha\text{bnd} \\ -\beta\text{F} \end{array} \right] \right] \text{X}$$

(Constraint #8 is met in the permutation rules 1, 2 and 4 in (146) above; rule 4 also takes care of constraint #16.)

### Postfix pronoun order

In the first part of this section it was observed that postfix forms of personal pronouns in Chemehuevi may attach to any word in the sentence (subject to various word-order constraints). When two such postfixes are found on a single word, a rigid order is maintained between them--that order being determined not by function (subject vs. object) but by such features as person, animacy, etc.

The following orderings and co-occurrence restrictions apply to such sequences of postfixes:

1. The maximum length of such a sequence is two, unless the word they are "attached" to (i.e., the first non-bound morpheme to the left) is a pronoun, in which case the sequence is limited to one.
2. First- and second-person pronouns may not co-occur (with each other or with themselves):

$$* \left\{ \begin{array}{l} \text{I} \\ \text{II} \end{array} \right\} \left\{ \begin{array}{l} \text{II} \\ \text{I} \end{array} \right\}$$

3. A third-person pronoun may not follow a first- or second-person pronoun:

$$* \left\{ \begin{array}{l} \text{I} \\ \text{II} \end{array} \right\} \text{III}$$

4. An inanimate pronoun may not follow an animate one:

\*an in

5. A third-person animate plural pronoun may not precede another third-person pronoun (plural or singular). In the case of pl-pl sequences, I see no evidence of

"number-dissimilation" in Chemehuevi<sup>40</sup>--they are simply blocked. The constraint is not applicable to inanimate pronouns, apparently since they never overtly reflect number. (However there have to be number features on them since they trigger number-agreement rules on verbs.)

6. Two 3rd-person pronouns may not differ in "visibility" (or "proximity"), which is actually a trinary feature.

Utilizing a template notation proposed by Perlmutter<sup>41</sup> for other languages, these constraints can be combined into a single positive matching filter:

(148)	III	III	III	{II} {I}
	αvis in	αvis {sing} { in }	αvis an	

This template consists of a strictly ordered string of "slots," with each slot representing a set of bound pronouns. A sentence may contain a sequence of these pronouns only if (a) no more than one is taken from each slot, and (b) the order matches the slot order in the template, or a subset of those slots. Any or all slot(s) may be left out of a sentence. Since the domain of the template (any continuous sequences of bound pronouns) is completely specified (no Xs or Ys) sentences with the wrong order of morphemes will not be able to slip through via the slot-optional condition.

In addition to this template there must be an output condition limiting the size of the sequence to two (or one, after a full pronoun), namely:

(149)	*	pro	pro	pro
			[+bnd]	[+bnd -prefix]

(Output Condition A, in (147).)

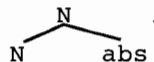
This says a string of three pronouns is prohibited (whether or not the first is bound) provided they are all in the same word; i.e., if the last pro were a prefix attached to some following stem and was preceded by a word-boundary we would not want the sequence to be thrown out.

## APPENDIX A

### *Lexical Redundancy Rules (selected examples)*

#### Formalism

Much of the format of these rules is borrowed from Jackendoff (1972) and Shopen (1972). <---> means "implies the existence of" and x represents the phonological string in common. Features such as [+Prefix] (marking the form used as the first member of a compound) and [+N] are syntactic; the feature +<sub>N</sub>[[N]+abs] is intended to show that in addition to the form being a N it has the internal structure



Subcategorial features like [+<sub>VP</sub>[(<sup>PP</sup>/<sub>Adv</sub>)\*\_\_]] state restrictions on what types of structures the entry can appear in, for this example the entry verb must be inserted in a VP with no objects. The subcategorial features in rules such as L29 state that the form with /-tu?i/ (in this case) co-occurs with one more NP than the form on the left.

The indices on the NPs in the syntactic environments are used to indicate that whatever selectional restrictions and semantic function are assigned to NP<sub>1</sub> on the left side of the rule will also be assigned to the NP in the NP<sub>1</sub> position on the right side. The semantic functions are determined by the individual lexical entries for each verb. (See Shopen, op. cit.)

Generalizations about aspects of the semantics of the entries are informally represented by capitalized strings like POSSESSED; I make no claims about the actual form (or formalism) such information should take.

For further discussion of features and terms, see section 0.4.

Rules

- L1 a.  $\begin{bmatrix} /x/ \\ +N \\ -Prefix \end{bmatrix} \longleftrightarrow$  b.  $\begin{bmatrix} /x + ci/ \\ +_N[[N]]+abs \\ -Prefix \end{bmatrix} \longleftrightarrow$  c.  $\begin{bmatrix} /x/ \\ +N \\ +Prefix \end{bmatrix}$
- L2 a.  $\begin{bmatrix} +N \\ POSSESSED \end{bmatrix} \longleftrightarrow$  b.  $\begin{bmatrix} +_N[[N]]+abs \\ UNPOSSESSED \end{bmatrix} \longleftrightarrow$  c.  $\begin{bmatrix} +N \\ +Prefix \\ *POSSESSED \end{bmatrix}$
- L3  $\begin{bmatrix} /x/ \\ +N \\ +Count \\ X \end{bmatrix} \longleftrightarrow \begin{bmatrix} /x + ci/ \\ +_N[[N]]+dim \\ +Count \\ LITTLE X \end{bmatrix}$
- L4  $\begin{bmatrix} /x/ \\ +N \\ X FRUIT \end{bmatrix} \longleftrightarrow \begin{bmatrix} /x + p\#/ \\ +_N[[N]]+plnt \\ X PLANT \end{bmatrix}$
- L5  $\begin{bmatrix} /x (+ abs)/ \\ +N \\ INHERENTLY POSSESSED \\ UNPOSSESSED \end{bmatrix} \longleftrightarrow \begin{bmatrix} /x + wa/ \\ +_N[[N]]+poss \\ INHERENTLY POSSESSED \\ POSSESSED \end{bmatrix}$
- L6  $\begin{bmatrix} /x (+ abs)/ \\ +N \\ POSSESSABLE \end{bmatrix} \longleftrightarrow \begin{bmatrix} /x + vi/ \\ +_N[[N]]+indef poss \\ UNPOSSESSABLE \end{bmatrix}$
- L7  $\begin{bmatrix} /x + p\#/ \\ +N \end{bmatrix} \longleftrightarrow \begin{bmatrix} /x/ \\ +V \end{bmatrix}$

L8  $\left[ \begin{array}{l} +N \\ +[(D [NP_1]) \_ (P NP_2)] \\ \text{CONCRETE RESULT} \\ \text{OF X-ING} \end{array} \right] \quad \langle \text{---} \rangle \quad \left[ \begin{array}{l} +V \\ +[NP_1 ((P)NP_2) \_] \\ X \end{array} \right]$

L9  $\left[ \begin{array}{l} +N \\ +[(D [NP_1]) \_ (P NP_2)] \\ \text{ABSTRACT RESULT} \\ \text{OF X-ING} \end{array} \right] \quad \langle \text{---} \rangle \quad \left[ \begin{array}{l} +V \\ +[NP_1 ((P)NP_2) \_] \\ X \end{array} \right]$

L10  $\left[ \begin{array}{l} +N \\ +[(D [NP_1]) \_ (P NP_2)] \\ \text{ACT OF X-ING} \end{array} \right] \quad \langle \text{---} \rangle \quad \left[ \begin{array}{l} +V \\ +[NP_1 ((P)NP_2) \_] \\ X \end{array} \right]$

L11  $\left[ \begin{array}{l} +_N [[N_1] + [N_2]] \\ X \text{ WHICH BELONGS TO Y} \end{array} \right] \quad \langle \text{---} \rangle \quad \left[ \begin{array}{l} +N_2 \\ X \end{array} \right]$   
 $\langle \text{---} \rangle \quad \left[ \begin{array}{l} +N_1 \\ Y \end{array} \right]$

L12  $\left[ \begin{array}{l} +_N [[N_1] + [N_2]] \\ X \text{ MADE OF Y} \end{array} \right] \quad \langle \text{---} \rangle \quad \left[ \begin{array}{l} +N_2 \\ X \end{array} \right]$   
 $\langle \text{---} \rangle \quad \left[ \begin{array}{l} +N_1 \\ Y \end{array} \right]$

L13  $\left[ \begin{array}{l} +_N [[N_1] + [N_2]] \\ X \text{ PART OF A Y} \end{array} \right] \quad \langle \text{---} \rangle \quad \left[ \begin{array}{l} +N_2 \\ X \end{array} \right]$   
 $\langle \text{---} \rangle \quad \left[ \begin{array}{l} +N_1 \\ Y \end{array} \right]$

L14	$\begin{bmatrix} /x + y/ \\ +_N [[N]+[N]] \end{bmatrix}$	$\longleftrightarrow$	$\begin{bmatrix} /x/ \\ +N \end{bmatrix}$
		$\longleftrightarrow$	$\begin{bmatrix} /y/ \\ +N \end{bmatrix}$
L15	$\begin{bmatrix} +_N [[N_1]+[N_2]] \\ X \text{ WHICH IS A Y} \end{bmatrix}$	$\longleftrightarrow$	$\begin{bmatrix} +N_1 \\ X \end{bmatrix}$
		$\longleftrightarrow$	$\begin{bmatrix} +N_2 \\ Y \end{bmatrix}$
L16	$\begin{bmatrix} /x + y/ \\ +_N [[V]+[N]] \end{bmatrix}$	$\longleftrightarrow$	$\begin{bmatrix} /x/ \\ +V \end{bmatrix}$
		$\longleftrightarrow$	$\begin{bmatrix} /y/ \\ +N \end{bmatrix}$
L17	$\begin{bmatrix} +N \\ X \text{ WHICH IS Y} \end{bmatrix}$	$\longleftrightarrow$	$\begin{bmatrix} +V \\ Y \end{bmatrix}$
		$\longleftrightarrow$	$\begin{bmatrix} +N \\ X \end{bmatrix}$
L18	$\begin{bmatrix} /x/ \\ +pro \\ IIIpers \end{bmatrix}$	$\longleftrightarrow$	$\begin{bmatrix} /hu + x/ \\ +pro \\ IIIpers \end{bmatrix}$
L19	$\begin{bmatrix} +pro \\ +bnd \\ \alpha prefix \end{bmatrix}$	$\longleftrightarrow$	$\begin{bmatrix} +pro \\ +bnd \\ -prefix \\ NONFOCUSED \end{bmatrix}$

L20	$\begin{bmatrix} /x/ \\ +N \end{bmatrix}$	<---->	$\begin{bmatrix} /x + a/ \\ +_N[[N]+ob] \\ -Prefix \end{bmatrix}$
L21	$\begin{bmatrix} /x/ \\ +N \\ +anim \end{bmatrix}$	<---->	$\begin{bmatrix} /x + w\dot{x}/ \\ +_N[[N] + pl] \\ +anim \end{bmatrix}$
L22	$\begin{bmatrix} /x/ \\ +N \\ +anim \end{bmatrix}$	<---->	$\begin{bmatrix} /x + m\dot{x}/ \\ +_N[[N] + pl] \\ +anim \end{bmatrix}$
L23	$\begin{bmatrix} /x/ \\ +N \end{bmatrix}$	<---->	$\begin{bmatrix} /x/ \\ +_N[[N] + pl] \end{bmatrix}$
L24	$\begin{bmatrix} /x/ \\ +N \end{bmatrix}$	<---->	$\begin{bmatrix} / CV + N[x]/ \\ [+redup] \\ +_N[[N] + pl] \end{bmatrix}$
L25	$\begin{bmatrix} +N \\ +sing \end{bmatrix}$	<---->	$\begin{bmatrix} +_N[[N] + pl] \\ -sing \end{bmatrix}$
L26	$\begin{bmatrix} +N \\ +sing \end{bmatrix}$	<---->	$\begin{bmatrix} +_N[[N] + pl] \\ +sev \end{bmatrix}$
L27	$\begin{bmatrix} /x/ \\ +V \\ -mom \end{bmatrix}$	<---->	$\begin{bmatrix} /x + nu/ \\ +_V[[V] + mom] \\ +mom \end{bmatrix}$



L28	$\left[ \begin{array}{l} /x/ \\ +N \\ -prefix \end{array} \right]$	$\longleftrightarrow$	$\left[ \begin{array}{l} /x/ \\ +N[[N] + ob] \\ +prefix \end{array} \right]$
L29	$\left[ \begin{array}{l} /x/ \\ +V \\ +^S [NP_1 \quad VP [X \_\_\_]] \end{array} \right]$	$\longleftrightarrow$	$\left[ \begin{array}{l} /x + tu?i/ \\ +V [[V]+caus] \\ +^S [NP \quad VP [X NP_1 \_\_\_]] \end{array} \right]$
L30	$\left[ \begin{array}{l} /x + tua/ \\ +[[post] + [post]] \\ + mot \end{array} \right]$	$\longleftrightarrow$	$\left[ \begin{array}{l} /x/ \\ +post \\ -mot \end{array} \right]$
		$\longleftrightarrow$	$\left[ \begin{array}{l} /-tua/ \\ +post \\ +mot \end{array} \right]$
L31	$\left[ \begin{array}{l} /x/ \\ +V \\ +[NP \quad VP [X NP_1 \_\_\_ X]] \\ X \end{array} \right]$	$\longleftrightarrow$	$\left[ \begin{array}{l} /x + tii/ \\ +V \\ +[NP_1 \quad VP [X \_\_\_ X]] \\ BE X-EN \end{array} \right]$

*Lexical Entries (selected examples)*

E1	a.	$\left[ \begin{array}{l} /puŋku/ \\ +N \\ -Prefix \\ \underline{dog} \\ POSSESSED \end{array} \right]$	b.	$\left[ \begin{array}{l} /puŋku+ci/ \\ +N [[N]+abs] \\ -Prefix \\ \underline{dog} \\ UNPOSSESSED \end{array} \right]$	c.	$\left[ \begin{array}{l} /puŋku/ \\ +N \\ +Prefix \\ \underline{dog} \end{array} \right]$
----	----	--	----	---	----	---

E2

- a.  $\left[ \begin{array}{l} \text{ } \\ \text{ } \\ \text{ } \end{array} \right]$   
 (no entry for  
 \* $\left[ \begin{array}{l} /ukwi/ \\ -Prefix \end{array} \right]$ .)
- b.  $\left[ \begin{array}{l} /ukwi-v\ddot{i}/ \\ +_N [[N]+abs] \\ -Prefix \\ \underline{charcoal} \end{array} \right]$
- c.  $\left[ \begin{array}{l} /ukwi/ \\ +N \\ +Prefix \\ \underline{charcoal} \end{array} \right]$

(These entries are related by a rule like L1 b-c but not by any of the subparts of L2 (a-b, b-c, c-a) since prefixation, not possession, seems to be the only parameter for determining the form of charcoal.)

- E3 a.  $\left[ \begin{array}{l} /kwipa/ \\ +_{VP} [ \{ \{ PP \} \} * NP \text{ ---} ] \\ \underline{hit} \end{array} \right]$
- b.  $\left[ \begin{array}{l} /kwipa/ \\ +_{VP} [ \{ \{ PP \} \} * \text{ ---} ] \\ \underline{fall} \end{array} \right]$

- E4  $\left[ \begin{array}{l} /-raa/ \\ +Q \\ +bnd \\ +encl \\ IS IT THE CASE \\ THAT \end{array} \right]$
- $\left[ \begin{array}{l} /ur\ddot{i}\ddot{i}/ \\ +V \\ +[_{NP} [NP NOM] \text{ ---}] \\ IS IT STILL THE CASE THAT \end{array} \right]$

- $\left[ \begin{array}{l} /h\ddot{n}aa/ \\ +Q \\ -bnd \\ RIGHT? \end{array} \right]$
- $\left[ \begin{array}{l} /-?/ \\ +Q \\ +bnd \\ +suffix \\ IS IT \end{array} \right]$

E5 a.  $\left[ \begin{array}{l} /i\dot{m}i/ \\ +pro \\ +sg \\ II\ pers \\ \alpha bnd \\ \alpha prefix \end{array} \right]$

b.  $\left[ \begin{array}{l} /m\dot{m}i/ \\ +pro \\ -sg \\ II\ pers \\ \alpha bnd \\ \alpha prefix \end{array} \right]$

c.  $\left[ \begin{array}{l} /i\dot{m}i + a/ \\ +pro \\ +sg \\ II\ pers \\ -bnd \\ -prefix \end{array} \right]$

d.  $\left[ \begin{array}{l} /m\dot{m}i + a/ \\ +pro \\ -sg \\ II\ pers \\ -bnd \\ -prefix \end{array} \right]$

e.  $\left[ \begin{array}{l} /-ukv/ \\ +pro \\ +sg \\ II\ pers \\ -imp \\ +bnd \\ -prefix \\ -suffix \end{array} \right]$

f.  $\left[ \begin{array}{l} /-wv/ \\ +pro \\ -sg \\ II\ pers \\ -imp \\ +bnd \\ -prefix \\ -suffix \end{array} \right]$

g.  $\left[ \begin{array}{l} /-mV/ \\ +pro \\ +sg \\ II\ pers \\ -imp \\ +bnd \\ -prefix \\ -suffix \\ +_N [[N]+ob] \end{array} \right]$

h.  $\left[ \begin{array}{l} /-w\dot{m}V/ \\ +pro \\ -sg \\ II\ pers \\ -imp \\ +bnd \\ -prefix \\ -suffix \\ +_N [[N]+ob] \end{array} \right]$

i.  $\left[ \begin{array}{l} /-?/ \\ +pro \\ +sg \\ II\ pers \\ +imp \\ +bnd \\ -prefix \\ -suffix \end{array} \right]$

j.  $\left[ \begin{array}{l} /-ja/ \\ +pro \\ -sg \\ II\ pers \\ +imp \\ +bnd \\ -prefix \\ -suffix \end{array} \right]$

(The co-occurrence feature [+imp] is used to mark those forms which appear as subjects of imperative verbs. For discussion of the other features, see sections 0.4 and 2.212.)

## APPENDIX B

# LEXICON

*Key to Symbols and Features (see also section 0.4)*

The following word lists are intended to be practical only. They are not intended to illustrate the theoretical "lexicon" assumed in the grammar, sketched in section 0.3 and Appendix A. The features used here often bear little relation to features discussed in the text, and the level of phonological representation in which these forms are given is not the underlying level proposed in section 1. In particular, primary stress is marked on these forms although entirely predictable. Consonant mutation across morpheme boundaries is assumed to have applied, as is nasal assimilation, *h*-deletion, and various rules of neutralization. Low-level rules such as vowel-nasalization are not presumed to have applied. All morpheme-final vowels are preserved in these forms, but are given in parentheses if they are ever actually deleted (i.e., if the morpheme can show up word-finally). "Voicelessness" is not otherwise marked. Forms are given with the underlying vowel lengths marked; thus a word like ['kaam] jack-rabbit is given as ka'm(±).

The first listing is alphabetized by Chemehuevi forms, followed by English translations in upper case. Symbols in brackets indicate whether the form is a noun, verb, adverb, postposition, suffix or interjection. Each Chemehuevi form is assigned a lexical entry number, also within the brackets. The second listing is identical to the first, but alphabetized by English gloss.

The third listing is by lexical entry number. Each entry contains features representing phonological, syntactic and semantic information regarding that particular morpheme.

Chemehuevi forms:

ɛ is alphabetized as e, i.e., between d and f.

ng = [ŋ]

nk = [ŋk]

X--Y = discontinuous verb stem which inserts tenses and/or aspect markers between X and Y.

X( ) = final vowel unknown.

Borrowings from English which are pronounced as in English are written in English orthography, with the exception of the addition of a final (deletable) vowel. Such words will have "=ENG" in their feature listing.

Features:

/XXX/YYY	=	XXX and YYY are variant forms of this entry.
see 1234,5678	=	entry numbers 1234 and 5678 are related to this form.
<SPAN	=	word borrowed from Spanish.
--N	=	stem is "nasalizing."
--S	=	stem is "spirantizing."
--G	=	stem is "geminating."
+ANIM	=	stem is animate.
+V	=	stem is also a verb stem (used on post-positions and adverbs).
+ENC	=	form is an enclitic.
+TRAN	=	verb may take at least one argument in the oblique case, without a postposition. (Without a +, TRAN means transitivity not yet determined.)
*TRAN	=	can be either +TRAN or -TRAN.
+S	=	verb may take a NOM as one of its NP arguments.
+S-INC	=	complement is incorporated into VP, does not show up in full sentence form.
-S-INC	=	verb may co-occur with full S in the VP.
+S-SUBJ	=	verb takes a NOM as its subject.
+V-PREF	=	verb or suffix must have a verb prefixed to it.

- +OBJ-PREF = verb must have one of its objects prefixed to it.
- 2-OBJ = verb may take two NP arguments in the oblique case (in addition to any postpositional phrases), or one in the oblique case and one NOM.
- +ANIM-SUBJ = requires an animate subject.
- +MOT = is a verb of motion.
- +VMOT = co-occurs with (requires) a verb of motion.
- +RESULT = verb form is in the "resultative"; i.e., includes the suffix /-kai/.
- 1419=-RESULT = entry number 1419 is the nonresultative form of this stem.
- +MOM = verb form is "momentaneous," either inherently or by some suffix.
- NGU=MOM = verb becomes momentaneous by the addition of /ŋu/.
- 1482=MOM = entry number 1482 is the momentaneous form of this (durative) stem.
- GA=DUR = verb becomes durative (i.e., [-mom]) by the addition of /-ga/.
- +CONT = verb may take the continuative suffix /-niʔi/.
- GA=GER = verb is subordinated by the /-gai/ suffix (i.e., is [-mom]).
- C=GER = verb is subordinated by the /-ci/ suffix (i.e., is [+mom]).
- NGU=IMP = verb forms the imperative by adding /-ŋu/.
- O=IMP = verb forms the imperative by adding a zero suffix. (O/NGU=IMP means the verb can take either suffix, depending on the meaning.)
- J=PRES = verb can take the present tense /-jʔ/.
- V=PAST = verb can take the /-vʔʔ/ past tense suffix.
- V/M=PAST = verb can take either the /-vʔʔ/ or the /-mpʔʔ/ past tense suffixes.
- KA=P/P = verb can take the present-past suffix /-ka/.
- T=HAB = verb forms participle in /-tʔ/ (as opposed to /-rʔ/, /-cʔ/, or /-ntʔ/, which are represented by R=HAB, etc.).

V=PROX	= form is specified as "visible" for the visibility feature (as opposed to "here" or "invisible," specified by H=PROX and I=PROX, respectively).
W=PL	= noun forms plural (two or more) by adding /-wɨ/.
A'--SEV	= noun (in this instance beginning with <i>ʔa-</i> ) forms "several" (three or more) by reduplicating first syllable. Reduplicated syllable is short and unstressed.
E'--W=PL	= noun forms plural by reduplicating first syllable and adding suffix /-wɨ/.
'NAA--PL	= noun (beginning with <i>na-</i> ) forms plural by reduplicating first syllable (first consonant and vowel); reduplicated syllable is long, however, and stressed.
(DAT=N-A)	= a semantically dative (NP) argument shows up as a noun in the oblique case.
(DAT=N-RUA)	= a dative argument shows up as a noun with /-rua/ attached.

## CHEMEHUEVI-ENGLISH

'aa- QUIETLY/STILL [A; 0330]	a'nka-ga RED [V; 1013]
'aaga- SECRETLY/STEALTHILY [A; 0331]	a'nka-sia-ka PINK [V; 1011]
'aaga-musi HIDE [V; 1376]	-?ap(a) NEG [S; 0452]
'aaga-wac̣i HIDE [V; 1377]	a'ṛịị IT'S HOT [I; 9009]
'aaj(a) TURTLE [N; 2248]	a'ṛịị-ni HOT [V; 1075]
'aaja-?asi-v(̣i) TURTLE-SHELL [N; 2616]	a'si-?a PEEL/SKIN/SHELL/FUR [N; 2054.7]
'aap(̣i) HORN [N; 2086]	a'si-ga SILVER [V; 1014]
'aaporos(i) APPLE [N; 2401]	a'si-v(̣i) RIND/PEEL/SKIN [N; 2054]
'aaroo I THINK [I; 8130]	a'si-vo?a PEEL/SKIN [V; 1411]
a'c(̣i) BOW/GUN [N; 2511]	a'somp(̣i) SALT/ALKALINE [N; 2597]
a'cit(a) WHEAT [N; 2427]	a'so-na SALT [V; 1514]
'ại-ga NEW/YOUNG [V; 1087]	ata'mup(i) CAR [N; 2524]
'ại-niw(̣i) YOUNG PERSON [N; 2134]	a'va?a- LOTS OF [A; 0603]
'ại-v(i) NOW/TODAY [A; 0261]	a'wa?ano WIDE [V; 1036]
'ại-vi-s(u) SOON/IN A MOMENT [A; 0264]	a'wavanṭi-m(̣i) SEVERAL [N; 2018]
-agav( ) IN [P; 0113]	-ca(a) PERFECT [ ; 5110]
'ago-mp(i) TONGUE [N; 2089]	ca'ga WEAVE/SEW [V; 1437]
'aipac(i) LITTLE BOY [N; 2102]	ca'gip( ) CLOSE/NEAR [A; 0240]
'aivac(i) YOUNG BOY [N; 2132]	ca'gip(a) NEAR [A; 0229]
a'jaampi	ca'?i GRAB [V; 1526]
LOVELY/PRETTY/DELICIOUS [V; 1056]	ca'?ikai HOLD BACK [V; 1382]
a'jaampi--ni(i) LOVELY [V; 1056.5]	ca'jokwin?a DISMANTLE/TEAR DOWN [V; 1554]
a'jaampi-tu?a--ni(i) LOVELY [V; 1056.4]	'cake(i) CAKE [N; 2517]
a'jat(a) MOHAVE [N; 2116]	ca'ki?(i) YOUNGER BROTHER [N; 2036]
a'ja-wa?i LOVE/RESPECT/ADMIRE [V; 1128]	ca'p̣ịkin?a TEAR [V; 1462]
a'j̣ịị IT'S COLD [I; 9008]	ca'pika?a SEW [V; 1436]
a'kagupic(i) COW-KILLER (WHITE) [N; 2219]	'car(i) CAR [N; 2523]
a'mpaga TALK/SPEAK [V; 1450]	ca-'wacug(u) DOG [N; 2223]
a'mpaga-p(̣i) LANGUAGE [N; 2830]	-c(̣i) (ABSOLUTIVE) [N; 5207]
a'mpaga-tu?i-ka-m(̣i) COUNCIL [N; 2135]	c̣ịg(a) DUCK [N; 2262]
a'ṇị OUCH [I; 9012]	c̣ị'p̣ịp̣ị?̣ị FLASH [V; 1551]
a'ngaav(i) ANT [N; 2201]	ci'- POINTED OBJECT- [N; 2587]
a'ngav(̣i) ARM [N; 2052]	-c(i) AFTER (SUBORDINATOR) [ ; 5132]
	-c(i) (ABSOLUTIVE) [N; 5208]
	-c(i) (DIMINUTIVE) [N; 5250]



- ci'auc(i) THIN [V; 1035]  
 ci'kapin?a CUT OFF [V; 1340]  
 ci'kavica CUT OFF [V; 1339]  
 ci'kwa?ica CUT/SLICE [V;  
 1338]  
 ci'kwɨ CUT [V; 1335]  
 ci'kwicui TURN [V; 1489]  
 ci'kwi-cui-nump(ɨ) KEY [N;  
 2564]  
 ci'pi COME OUT-SG [V; 1260]  
 ci'puru?(u) CUT/DICE [V;  
 1336]  
 ci'vunga COME OUT-PL [V;  
 1263]  
 co'- HEAD- [N; 2072]  
 co-'kwipa BUMP (HEAD)/HIT [V;  
 1311]  
 co'nok(a) SHRINK/CRAMP [V;  
 1331]  
 'coon?a SCRATCH [V; 1501]  
 'coowaa PICK [V; 1413]  
 co'pik(i) BRAIN [N; 2058]  
 ɨ'c(a) ROADRUNNER [N; 2259]  
 ɨ'cɨ-ni UGLY/BAD [V; 1058]  
 'ɨs(u) LONG AGO/ALREADY [A;  
 0254]  
 ɨ'ga PLANT/ENTER [V; 1357]  
 ɨ'ga-p(ɨ) PLANT [N; 2419]  
 ɨ'ga-p(ɨ) EVENING [N; 2803]  
 ɨ'ga-tua-nt WEST [A; 0224]  
 ɨi- BEFOREHAND [A; 0282]  
 'ɨiti-piw OLD [V; 1092]  
 ɨ'jingi STEAL [V; 1453]  
 ɨ'jinkat(ɨ) THIEF [N; 2130]  
 ɨ'koi SLEEP-PL [V; 1446]  
 ɨ'm(i) YOU-SG [N; 2005]  
 ɨ'nip(i) GHOST/SPIRIT [N;  
 2108]  
 ɨ'nipi-poromp(ɨ) OCOTILLO [N;  
 2414]  
 ɨ'ngapic(i) BABY [N; 2101]  
 ɨ'pii SLEEP-SG [V; 1445]  
 ɨ'pii-p(ɨ) SLEEP [N; 2828]  
 ɨ'sa-vɨc(i) OLD MAN [N;  
 2122]  
 ɨ'vi-j BAD [I; 9001]  
 ɨ'vi-ju--ni ILL/BAD [V;  
 1043]  
 ɨ'vi-maw?(ɨ) DESTROY [V;  
 1345]  
 ɨ'vi-ni BAD [V; 1043.5]  
 ɨ'vi-piwi-ni BAD [V; 1044]  
 ɨ'vi-suntu?i HATE [V; 1126]  
 ɨ'wa RAIN [V; 1425]  
 ɨ'wa-r(ɨ) RAIN [N; 2590]  
 ɨ'witu LONG TIME [A; 0260]  
 -gaa-va?(a) OVER [P; 0116]  
 -gaa-va?a-c( ) MORE THAN [P;  
 0195]  
 -ga(i) WHILE (SUBORDINATOR)
- [ ; 5130]  
 -ga(i) BE/HAVE [V; 1120]  
 -gaip(ɨ) FORMER [N; 5220]  
 -gai-sap(a) THOUGH [ ; 5169]  
 -gi COME TO-SG [V; 1911]  
 -gi-voro COME TO-PL [V;  
 1912]  
 -g(u) WHILE (SUBORDINATOR) [ ;  
 5131]  
 -gu(u) WOULD [ ; 5115]  
 -guu-p(ɨ) SHOULD [ ; 5116]  
 ha'?aɨ OH [I; 9011]  
 ha'?at-aiku(u) MEXICAN [N;  
 2115]  
 ha'?ɨ-c GOOD/FINE [I; 9005]  
 ha'?ɨ-c(i) GOOD [V; 1050.5]  
 ha'?ɨ-j GOOD/FINE [I; 9006]  
 ha'?ɨ-ju WELL/GOOD [V; 1048]  
 ha'?ɨ-p(ɨ) GOOD/NICE/FUN [V;  
 1049]  
 ha'?ɨ-suntu?i LIKE [V; 1127]  
 ha'?ɨ-tɨ- GOOD [V; 1050]  
 ha'?ɨ-tɨ-maɨ CLEAN/FIX [V;  
 1322]  
 ha'gakaja WHICH [A; 0207]  
 ha'ga-ni DO WHAT [A; 0212]  
 ha'ganiga(i) HOW/WHY [A;  
 0202]  
 ha'ga-ni?ing(u) WHY/HOW [A;  
 0201]  
 ha'ganis I WISH [I; 8140]  
 ha'ga-rua WHERE (MOTION) [A;  
 0206]  
 ha'ga-ruaga(i) WHY [A; 0208]  
 ha'ga-va WHERE (LOC) [A;  
 0204]  
 ha'ga-vaa-ntua WHERE (MOTION)  
 [A; 0205]  
 ha-'havi LIE (DOWN)-SG [V;  
 1283]  
 'haiku(u) WHITE-MAN/ENGLISH  
 [N; 2106]  
 'hainu 'hɨn HECK [I; 9015]  
 'haita THEN/AND THEN [A;  
 0402]  
 'haita (AND) THEN [A; 0402]  
 ha'ng(a) WHO [N; 2021]  
 ha'nga-sap(a) SOMEONE [N;  
 2023]  
 ha'ni(a) WHAT/HOW [A; 0209]  
 ha'nok(o) WHEN [A; 0203]  
 ha'no-pai-jujum(ɨ) HOW MANY  
 [A; 0210]  
 ha'no-pai-t(ɨ) HOW MANY [A;  
 0211]  
 ha'vi LIE-SG [V; 1275]  
 ha'vi-tɨa(a) BED [N; 2506]  
 ha'w?isi SNEEZE [V; 1539]  
 ha'wiv(i) CORN [N; 2407]  
 hɨ'?ɨ YES [I; 9013]

- 'hɨɨ- IN VAIN [A; 0307]  
'hɨɨ- JUST/IN VAIN [A; 0307]  
-hɨgac ( ) AGED [N; 5255]  
hɨ'naa TAG-Q/HUH? [A; 0200]  
hɨ'pɨki HOLEY/HAVE A HOLE [V;  
1023]  
hɨ'pɨki-c(ɨ) HOLE [N; 2562]  
hɨ'vɨ COME HERE [I; 9004]  
hɨ'vɨ CERTAINLY [I; 9003]  
hɨ'vɨgi-ca HOLEY/FULL OF HOLES  
[V; 1024]  
'hiimara?apɨc(i) SOMETHING  
[N; 2028]  
'hiiw(a) KIN/RELATIVE [N;  
2111]  
hi'mpa-jok ( ) FEW/A FEW [A;  
0606]  
hi'mp(ɨ) WHAT [N; 2020]  
hi'mpɨc(i) PLATE/DISH [N;  
2640]  
hi'mpɨ-sap(a) SOMETHING [N;  
2022]  
hi'ncum?i PINCH [V; 1414]  
hi'n(i) WHO/WHAT [N; 2024]  
hi'vi DRINK [V; 1350]  
'ho(a) BACK [N; 2053]  
ho'honono?o LOST-PL/FALL/DROP  
[V; 1352]  
ho'ko BIG [V; 1021]  
ho'koso?a-v(i) SPIDER [N;  
2255]  
ho'nono?o DROP-PL/FALL [V;  
1352.9]  
'hoora DIG [V; 1347]  
ho'paki-c(ɨ) HOLE [N; 2561]  
ho'paki-p(ɨ) HOLE [N; 2560]  
ho'va PULL OUT [V; 1418]  
ho'v(i) LUMBER [N; 2570]  
ho'vi MOULT [V; 1407]  
hu'cini?i POKE HEAD IN  
SOMEWHERE [V; 1487]  
hu'cip(a) OCEAN [N; 2623]  
hu'kump(ɨ) DUST [N; 2539]  
hu-'mai--ni SUSPECT [V;  
1112]  
hu'mpait(a) ANY [A; 0605]  
hu'n(a) BADGER [N; 2204]  
hu'pa UNTIE [V; 1472]  
hu'pa-ki UNTIE/COME UNTIED  
[V; 1545]  
'huu ARROW/BULLET [N; 2501]  
hu?up(i) SQUAW BUSH BERRY [N;  
2429]  
hu?upi-v(ɨ) SQUAW BUSH [N;  
2428]  
hu-'?urua-gai-sap(a) BUT [A;  
8120]  
hu'vacinoc(i) COW-KILLER [N;  
2218]  
hu'va-sa?ap(ɨ) JUICE/BROTH/SOUP [N;  
2514]  
hu'va-sa?ap(ɨ) BROTH/JUICE/FRUIT- [N;  
2514]  
hu'va-v(ɨ) JUICE/SAP/SOUP [N;  
2603]  
hu'va-v(ɨ) SAP/JUICE/SOUP [N;  
2603]  
hu'va-v(ɨ) SOUP/BROTH/JUICE  
[N; 2603]  
hu'vi-av(ɨ) SONG [N; 2826]  
hu'vi-tu SING [V; 1440]  
hu'vi-tu-nump(ɨ) RADIO/RECORD-PLAYER [N;  
2589]  
hu'wip(i) WASH/CANYON [N;  
2521]  
i'- THIS/THESE [N; 2013.8]  
i-'c(ɨ) THIS/THESE [N; 2013]  
i-'cua WALK THIS WAY [V;  
1268]  
i-'cu?a RESEMBLE (SOMETHING  
HERE) [V; 1004]  
i'jaav(i) GRAPES [N; 2411]  
i'jaavi-mp(ɨ) GRAPE VINE [N;  
2423]  
i'jaga WILD [V; 1546]  
i'japaka SCARED [V; 1040]  
i'javaga AFRAID [V; 1041]  
i'javi-ntuarɨni DANGEROUS/SCARY [V; 1089]  
i-'ka- THIS/THESE [N;  
2013.9]  
i-'m(ɨ) THEY (HERE) [N;  
2010]  
i'ng(a) HE/SHE (HERE) [N;  
2007]  
i'piina(a) BEAVER [N; 2261]  
i-'va HERE [A; 0225]  
'jaaki BRING-SG-OBJ [V;  
1254]  
'jaa-kwa?i TAKE (AWAY) [V;  
1262]  
'jaasɨ FLY OFF-PL [V; 1434]  
ja'ga CRY [V; 1334]  
ja'ga-huvi-av(ɨ) CRYING SONG  
[N; 2840]  
ja'hi HUNT [V; 1486]  
ja'?i TIRED-SG/DRUNK/DEAD [V;  
1046]  
ja'?(i) DEAD-SG/TIRED/SUFFER  
[V; 1046]  
ja'?i-kwa?(i) DIE [V; 1346]  
ja-'jaga BURST INTO TEARS [V;  
1482]  
ja'wi CARRY-SG-OBJ [V; 1317]  
ja'wi-ni?i HOLD [V; 1380]  
-j(ɨ) PRESENT [T; 5101]  
jɨ'?a-ki ENTER/SINK/SET [V;

- 1359]  
 j±'a-ki SET (SUN)/ENTER/SINK [V; 1359]  
 j±'±ki SWALLOW [V; 1455]  
 j±'h±va-nt OUTDOORS/OUTSIDE [A; 0238]  
 j±-'j±wi SIT (DOWN)-PL [V; 1280]  
 j±'pak(i) COLLAPSE (OPEN STRUCTURE) [V; 1324]  
 j±'van SPRING OR AUTUMN [N; 2807]  
 j±'waav(i) PLAIN [N; 2586]  
 j±'wi SIT-PL [V; 1278]  
 jo'kok(i) COLLAPSE (ENCLOSED STRUCTURE) [V; 1325]  
 -j(u) WHILE (SUBORDINATOR) [ ; 5130]  
 ju'±a CARRY-PL-OBJ [V; 1318]  
 ju'±a-ki BRING-PL-OBJ [V; 1255]  
 ju'±ara WARM [V; 1081]  
 ju'hu-gai FAT [V; 1022]  
 ju'hu-v(i) FAT [N; 2542]  
 ju'm±a TIRED-PL/DRUNK/DEAD [V; 1047]  
 ju'm±a DEAD-PL/TIRED/SUFFER [V; 1047]  
 ju'm±i-ga WEAK [V; 1052]  
 ju'na PUT-PL-OBJ [V; 1422]  
 ju'nakaïm( ) GANG/COMPANY/CLAN [N; 2145]  
 ju'±(u) LEG [N; 2076]  
 ju'vimp(±) PINE-TREE [N; 2417]  
 ju'wip NINE [A; 0509]  
 ju'wita(a) UTE [N; 2142]  
 -k(a) AFTER (SUBORDINATOR) [ ; 5133]  
 -k(a) PRESENT/PAST [T; 5107]  
 -ka (+SEV SUBJ) [ ; 5152]  
 'kaac(i) RAT [N; 2244]  
 'kaag(i) NECKLACE/NECK THING [N; 2630]  
 'kaa-kaiva-gai MOUNTAINOUS [V; 1093]  
 'kaamp(±) HILL [N; 2559]  
 'kaataniv(±) COTTON [N; 2408]  
 kac ha'±ic pi'juwa? WORRIED/BOTHERED [V; 8101]  
 ka'c(u) NO/NOT [A; 0450]  
 kac u-'vaw±-wa±at EMPTY THERE [I; 8103]  
 ka'hon(i) BOX [N; 2512]  
 -ka(i) RESULT [ ; 5109]  
 -ka(i) PERFECT [ ; 5108]  
 'kaicog(o) HAT [N; 2629]  
 'kaiv(a) MOUNTAIN [N; 2577]  
 'kaiva-kuvai±a(a) MOUNTAIN PEAK [N; 2578]  
 'kaiva-taka(a) MOUNTAIN TOP [N; 2579]  
 ka-'kar± SIT (DOWN)-SG/STOP [V; 1279]  
 ka'ma TASTE [V; 1172]  
 ka'm(±) JACK-RABBIT [N; 2232]  
 ka'n(i) HOUSE [N; 2563]  
 ka'ni-gai LIVE/RESIDE [V; 1396]  
 ka'ni±i VISIT [V; 1475]  
 ka'ni-p(±) VILLAGE (ABANDONED)/CAMP [N; 2518]  
 ka'ni-t±iwap(±) DOOR/HOUSE-CLOSING [N; 2537]  
 ka'pak(i) SNAP/BREAK (STRING) [V; 1309]  
 ka'raga RATTLE [V; 1488]  
 ka'r± SIT-SG [V; 1277]  
 ka'r±-n±ump(±) SADDLE [N; 2596]  
 ka'r±-tia(a) CHAIR [N; 2525]  
 -kat(±) -ER [N; 5213]  
 'kiaw(i) YESTERDAY [A; 0262]  
 ki'cijon(a) SPIT [V; 1503]  
 'ki±maanc(i) OTHER/ANOTHER [A; 0550]  
 'ki±maaa-n±iw(±) MORONGO/SERRANO [N; 2117]  
 'ki±iwa(a) EDGE [N; 2541]  
 ki'±?(i) BITE [V; 1304]  
 ki'±maka±(a) TASTE [V; 1163]  
 ki'±man DIFFERENT [A; 0551]  
 ki'±manc(i) DIFFERENT ONE [N; 2143]  
 ki'±rukwi BREAK/SNAP [V; 1307]  
 ki'±wagai SHARP [V; 1026]  
 'kij±aa PLAY [V; 1415]  
 ki'±ja-ni±i LAUGH [V; 1391]  
 ki'±ja-p(±) ENTERTAINMENT [N; 2831]  
 ki'±ja-pitua FUNNY [V; 1086]  
 ki'±ja-sui SMILE [V; 1447]  
 ki'±ja-sui-kai SMILE [V; 1447.5]  
 ki'±ja-sui-ni±i SMILE [V; 1447.6]  
 'ko(a) CUT/NICK [V; 1337]  
 ko'±a-p(i) TOBACCO [N; 2634]  
 ko'±a-t±ka SMOKE [V; 1510]  
 ko'c(i) BASKET [N; 2638]  
 ko'go±i KILL-PL-OBJ/SCOLD [V; 1388.2]  
 ko'±i KILL-PL-OBJ/SCOLD [V; 1388]

- ko'miwa CORNER [N; 2625]  
 ko'n(o) CRADLE [N; 2533]  
 ko'pok(i) SNAP/BREAK (STICK)  
 [V; 1308]  
 ko'to?o-ngu TURN  
 AROUND/RETURN/COME BACK [V;  
 1428]  
 ku'ca-ka GREY [V; 1009]  
 ku'ca-p(±) ASHES [N; 2624]  
 kuca-w(a) ASHES [N; 2624.8]  
 ku'ciki BURN [V; 1313]  
 ku'c(u) BUFFALO/CAMEL [N;  
 2210]  
 ku'kwap(i) WOOD/STICK/FIREWOOD  
 [N; 2607]  
 ku'kwi SHOOT/STING [V; 1438]  
 ku'm(a) HUSBAND [N; 2038]  
 ku'm(a) MALE (NONHUMAN) [N;  
 2038.9]  
 ku'ma-ru MARRY (FEMALE  
 SUBJECT) [V; 1529]  
 ku'n(a) FIRE [N; 2546]  
 ku'nav(±) SACK/SHEATH [N;  
 2595]  
 kur(a) NECK [N; 2088]  
 ku'r(ar)(i) FENCE/CORRAL [N;  
 2544]  
 ku's(a) PANTS [N; 2583]  
 ku'sa?a FRY [V; 1369]  
 ku'sa?a-nump(±) FRYING-PAN  
 [N; 2552]  
 ku'tucaa HOT [V; 1070]  
 ku'tuci HOT [V; 1076]  
 'kuu BURY [V; 1314]  
 'kuuci?(i) PIG [N; 2243]  
 'kuupi(i) COFFEE [N; 2531]  
 'kuuta?(a) SWEATER [N; 2612]  
 'kwa± IN (TIME)/AGO/FROM NOW  
 [A; 0251]  
 'kwa± AGO/IN (TIME)/AWAY [A;  
 0251]  
 'kwa±-nkai SWIFT [V; 1543]  
 -kwa?(i) BECOME/GET/TURN [V;  
 1901]  
 -kwa?(i) AWAY [A; 0220]  
 kwa'?ija I DUNNO [I; 8150]  
 kwa-'kwavi LIE (DOWN)-PL [V;  
 1284]  
 kwa'rojaw(i) CHICKEN [N;  
 2215]  
 kwa's± RIPE/COOK/BURN [V;  
 1328]  
 kwa's± COOK/RIPE [V; 1328]  
 kwa's(i) TAIL [N; 2614]  
 kwa's(u) DRESS [N; 2538]  
 kwa'su-ntu DRESS/PUT ON DRESS  
 [V; 1553]  
 kwa'vi LIE-PL [V; 1276]  
 kwa'h±  
 CATCH-SG-OBJ/TAKE/RECEIVE  
 [V; 1293]  
 kwi'r±ki GET UP [V; 1512]  
 kwi'ca DEFECATE [V; 1552]  
 kwi'cara?(a) SPOON [N; 2605]  
 kwi'hi-ka SMOKE [V; 1538]  
 kwi'hi-p( ) SMOKE [N; 2633]  
 'kwii- LEFT [A; 0231]  
 'kwii-gant(±) LEFT-HANDED  
 ONE/SOUTH-PAW [N; 2113]  
 'kwiijaac(i) SNAKE [N; 2247]  
 'kwii-mi-tu(a) LEFT/TO THE-  
 [A; 0233]  
 'kwii-mi-tu(a) TO THE  
 LEFT/LEFT [A; 0233]  
 'kwiin?a TURN [V; 1470]  
 kwi'jukwimp(i) CUCUMBER [N;  
 2409]  
 kwi'nu?ungu SPIN/TURN [V;  
 1452]  
 kwi'pa HIT/FALL/STING  
 (SCORPION) [V; 1361]  
 kwi'ta-r±nia LIE/FIB [V;  
 1395]  
 kwi't(u) ANUS [N; 2051]  
 kwi'tu-mukw(i) BUTTOCKS [N;  
 2060]  
 ma'- THAT/THOSE (VIS) [N;  
 2014.8]  
 ma'- HAND- [N; 2070]  
 ma'?a COLOR/MARK/PAINT [V;  
 1326]  
 'maa SO/LIKE THAT [I; 9014]  
 -ma?ak(u) FINISH [V; 1904]  
 'maap±c(i) OLD LADY/OLD WOMAN  
 [N; 2121]  
 ma'?awa?i TAKE CARE OF [V;  
 1459]  
 ma'?awa?i REAR/RAISE [V;  
 1499]  
 -ma± FINISH [V; 1905]  
 'ma± MAKE [V; 1400]  
 -maga TRY [V; 1906]  
 ma'ga GIVE [V; 1292]  
 ma-'gugikai POINT AT [V;  
 1416]  
 ma'ha LAUNDER [V; 1392]  
 ma'hav(±) TREE/PLANT [N;  
 2420]  
 ma'h(i) FIND [V; 1364]  
 'mai SAY [V; 1110]  
 'mai--ni THINK [V; 1111]  
 'mai-nk± EXPLAIN/TEACH [V;  
 1203]  
 ma-'j±mpugi NUDGE [V; 1408]  
 ma'juma KILL-PL-OBJ [V;  
 1390]  
 ma-'ka- THAT/THOSE (VIS) [N;  
 2014.9]  
 ma'ma-sumparu(i) GATHER [V;  
 1371]

- ma'ma?u(u) WOMAN [N; 2131]  
 ma-'m(±) THEY (VIS) [N;  
 2011]  
 ma-'nana-nk± REAR [V; 1381]  
 -manankw(a) BECAUSE OF/FROM  
 [P; 0120]  
 ma-nankwa-tu(a) TOWARDS THAT  
 WAY (DIRECTION) [P; 0121]  
 ma'ncu SQUEEZE [V; 1505]  
 ma'nig FIVE [A; 0505]  
 ma'ng(a) HE/SHE (VIS) [N;  
 2008]  
 -mank(u) ON [P; 0162]  
 ma'n(o) EVERY/ALL [A; 0601]  
 ma'no CHASE [V; 1319]  
 ma'no?o CHASE [V; 1319.8]  
 ma'no?o-k(o) CHASE [V;  
 1319.9]  
 -mant± PART OF/SOME OF [P;  
 0190]  
 ma-'nujukwa-nk± MOVE/SHOVE  
 [V; 1439]  
 ma-'nura RUB WITH HAND [V;  
 1532]  
 ma'pik(a) TOUCH [V; 1166]  
 ma-'r(±) THAT/THOSE (VIS) [N;  
 2014]  
 ma'r±gai HELP [V; 1375]  
 ma'r±kwipa PUSH [V; 1496]  
 ma-'ru?a RESEMBLE (SOMETHING  
 VIS) [V; 1004]  
 ma-'rua WALK THAT WAY [V;  
 1268]  
 ma-ruka-n?a CLIMB ON THAT [V;  
 1256]  
 ma-'rupun?i-nk± WAKE [V;  
 1477]  
 ma-'sia-gant(±)  
 FORK/FINGERED-THING [N;  
 2551]  
 ma-'si(±) FINGER [N; 2063]  
 ma's±w TEN [A; 0510]  
 ma'sico?(o) FINGER-NAIL [N;  
 2064]  
 masi'kwarip(i) CLOTH [N;  
 2529]  
 ma-'sonk(u) GLOVE [N; 2648]  
 ma'sua FINISH (CONSUME) [V;  
 1365]  
 ma-'tog(o) THUMB [N; 2079]  
 ma-'uni-ni?i HANDLE [V;  
 1558]  
 -maupa STOP [V; 1916]  
 ma'va- COLD (ILL) [N; 2835]  
 ma-'va THERE (VIS) [A; 0226]  
 ma-'vacigi CLAP HANDS [V;  
 1321]  
 ma-'vaciki SLAP [V; 1441]  
 ma'vacikink± SLAP [V; 1502]  
 ma'va-ja?(i) HAVE A COLD [V;  
 1046.8]  
 ma'vang?i PET [V; 1412]  
 ma'vik(a) TOUCH/FEEL [V;  
 1165]  
 ma'vo?a COVER [V; 1330]  
 ma-'waga EXPENSIVE/COSTLY [V;  
 1085]  
 ma-'wava CREEP [V; 1333]  
 ma'wia LAZY/TIRE OF [V;  
 1059]  
 ma'wi?a AUNT (MA OLD SI) [N;  
 2041]  
 ma'wi-?±c( ) NEPHEW [N;  
 2042]  
 -m(±) (-SG +ANIM SUBJ) [ ;  
 5150]  
 'mi±ga(i) VERY [A; 0302]  
 mi±j(±) GOPHER [N; 2263]  
 mi'm(i) YOU-PL [N; 2006]  
 mi'nisi RETURN-PL [V; 1266]  
 mi'ngimp±c(i) EAGLE [N;  
 2252]  
 -mi USITATIVE [ ; 5111]  
 mi'?au-nci SMALL [V; 1028]  
 mi'?au-nci-n LESS [A; 0306]  
 mi'?au-p±ciw(±) SMALL ONE [N;  
 2128]  
 mi'jarogopic(i) MOON [N;  
 2576]  
 mi'jo FAR [V; 1020]  
 mi'jot(o) FAR [A; 0228]  
 'mo(a) FATHER [N; 2030]  
 mo'hara BITTER [V; 1071]  
 mo'hara-t(±) BITTER THING [N;  
 2643]  
 'moi LEAD [V; 1394]  
 mo'?o-v(±) HAND [N; 2069]  
 -mpa(a) FUTURE [T; 5103]  
 -mp(±) (ABSOLUTIVE) [N;  
 5201]  
 -mp±(±) PAST (MOM) [T; 5105]  
 -mp(i) (ABSOLUTIVE) [N;  
 5202]  
 mu'cu STRONG [V; 1051]  
 mu'guaru THINK [V; 1463.8]  
 mu'guaruni?i THINK [V; 1463]  
 mu'guat BRAINGLESS [I; 9002]  
 mu'hump±c(i) OWL [N; 2239]  
 mu'kunt(a) STRAIGHT [V;  
 1542]  
 mu'kwis SEVEN [A; 0507]  
 mu'n?unki ROUND [V; 1034]  
 mu'pang(a) EMPTY OUT [V;  
 1356]  
 mu'ru?(i) BLANKET [N; 2508]  
 mu'ru?i-gaip(±)  
 BLANKET-CAST-AWAY [N;  
 2508.9]  
 mu'simpij( ) SISTER-IN-LAW  
 [N; 2043]

- musu TRY (IN VAIN)/UNABLE TO [V; 1907]  
 -musu UNABLE TO [V; 1907]  
 'muuna?(a) MULE [N; 2238]  
 'muupic(i) FLY [N; 2228]  
 mu'v(i) NOSE [N; 2077]  
 -n(a) -ING (NOMINAL) [ ; 5126]  
 na'- SELF/REFLEXIVE [ ; 2016]  
 'naaki-miga(i) EXTREMELY/VERY [A; 0303]  
 'naanci EIGHT [A; 0508]  
 'naapagap(±) KIN/RELATIVE [N; 2110]  
 'naapagap(±) BELT [N; 2507]  
 'naapiw(±) OLD MAN [N; 2123]  
 'naa-ta?ik(a) EVERY DAY/DAY AFTER DAY [A; 0255]  
 'naaw(a) TRACK [N; 2635]  
 na'cukwi NARROW [V; 1032]  
 -nag(a) IN [P; 0118]  
 na'g(a) MOUNTAIN SHEEP [N; 2236]  
 na'gaap(±) CAPE/SHAWL [N; 2522]  
 na'gami SICK [V; 1055]  
 na'ga-vunkuc(i) SHEEP [N; 2246]  
 na'gigi CRACK OPEN [V; 1521]  
 na-'gu-kwi SHOOT EACH OTHER [V; 1438.1]  
 na-'guma-ru MARRY (RECIPROCAL) [V; 1525]  
 na-'hukwivi HURT-SELF [V; 1384]  
 na-'hump(a) ONESELF [A; 0350]  
 na'?i BURN [V; 1312]  
 'nainc(i) YOUNG GIRL [N; 2133]  
 na'?inci-c(i) LITTLE GIRL [N; 2109]  
 na?isa-?angaav(i) ANT [N; 2258]  
 na'?isa-hiw(a) IN-LAW [N; 2146]  
 na'?i-tupik(±) BURN UP [V; 1515]  
 na-'jawi?i-tui SEND [V; 1435]  
 na'ma- TOGETHER [A; 0351]  
 na'm± FIRST [A; 0256]  
 na'mi?(i) YOUNGER SISTER [N; 2037]  
 na'mp(a) FOOT [N; 2065]  
 na'na GROW [V; 1373]  
 na-n±-mpaka FIGHT [V; 1485]  
 na'nga-ja?i ANGRY [V; 1042]  
 na'nis( ) APART/SEPARATELY [A; 0333]  
 na'nka LISTEN/HEAR [V; 1155]  
 na'nka-ka(i) LISTEN/HEAR [V; 1156]  
 na'nka-v(a) LEAF [N; 2424]  
 na'nka-v(±) EAR [N; 2061]  
 na'nka-vutucuga UNDERSTAND [V; 1123]  
 na'nkwaru?(u) METAL/CAN/CONTAINER [N; 2519]  
 na'r± ASK FOR [V; 1301]  
 na-'r±gap(±) PICTURE OF SELF [N; 2584.9]  
 na'r±na RUN-PL/DASH [V; 1432]  
 na-'rona-p(±) FIST-FIGHT [N; 2829]  
 na'ro?(o) SHIRT [N; 2599]  
 na'ro?o-ntu MAKE A SHIRT [V; 1511]  
 na'ru-ga BUY [V; 1295]  
 na'ruganip(±) WAR [N; 2827]  
 na'ruga-t±ravi SELL [V; 1296]  
 na'ru-ga-tui-kan(i) STORE/SHOP [N; 2608]  
 na'sum±a FORGET [V; 1124]  
 na-'sum±a-sutui FORGET [V; 1124.5]  
 na-'t±na TRAIL [V; 1389.9]  
 na'va SIX [A; 0506]  
 na'vak± SWIM [V; 1457]  
 na-'vuaganump(±) MEDICINE [N; 2573]  
 na-'wa-cipi-nk± ESCAPE [V; 1360]  
 na-'waga-ka COST [V; 1410.9]  
 na-'waga-nk± PAY [V; 1410]  
 na'wa?it± APPEAR/SHOW UP [V; 1251]  
 'n±a-p PROUD [V; 1530]  
 'n±± I [N; 2001]  
 'n±±ni I [N; 2001.9]  
 'n±±vaav(i) SNOW [N; 2602]  
 n±'gar(±) AIR/WIND [N; 2619]  
 n±'kap(±) ROUND-DANCE [N; 2825]  
 n±-'maga-nt(±) GENEROUS ONE [N; 2144]  
 n±'m(i) WE (EXCL) [N; 2004]  
 n±-'mpo?o-tui-kat(±) TEACHER [N; 2129]  
 n±-'mpo?o-tui TEACH-SCHOOL [V; 1460]  
 n±-'mpuni-tu?i SHOW [V; 1151.7]  
 n±'nga WEAVE BASKET [V; 1480]  
 n±'ngap(±) CHEST [N; 2092]

- nɪ'nga-p(i) BASKET [N; 2504]  
 nɪ'nga-pi-v(ɪ) BASKET [N;  
 2503]  
 nɪ-'nkuu BURY (SOMEONE) [V;  
 1314.6]  
 nɪ-'nkwi-tui-kat(ɪ)  
 POLICEMAN/PERSON-CATCHER  
 [N; 2126]  
 nɪ'va-ʔiwa SNOW [V; 1556]  
 nɪ'w(ɪ)  
 CHEMEHUEVI/INDIAN/PERSON  
 [N; 2103]  
 nɪ'wi-ʔa-v BODY [N; 2056]  
 nɪ'wi-ga(i) LIVE [V; 1054]  
 nɪ'wi-mp(i) LIVER [N; 2087]  
 -ng(u) MOMENTANEOUS [ ; 5113]  
 'nia-v(i) NAME [N; 2823]  
 -ni(i) -LIKE (SENS VB COMP)  
 [A; 5165]  
 -niʔi CONTINUATIVE [ ; 5112]  
 ni'ʔi(a) CACHE/FOOD STORE [N;  
 2516]  
 'ninga READ/COUNT [V; 1329]  
 ni'ja CALL [V; 1342]  
 ni'ja-ga HAVE A NAME [V;  
 1057]  
 ni'mpɪa ENGAGE IN CONVERSATION  
 [V; 1484]  
 ni'mukumpa TRANSLATE/EXPLAIN  
 /SET STRAIGHT [V; 1202]  
 -nku(u) COULD [ ; 5117]  
 -nkuu-p(ɪ) COULD [ ; 5118]  
 no'joga BOIL [V; 1305]  
 no'komʔa BEND [V; 1303]  
 no'mai-nukwi GALLOP [V;  
 1370]  
 no'nosi DREAM [V; 1131]  
 no'pav(i) EGG [N; 2540]  
 nu'jukwa MOVE [V; 1261]  
 nu'kwi RUN [V; 1430]  
 -nump(ɪ) INSTRUMENT [S;  
 5261]  
 o'hov(ɪ) BONE [N; 2057]  
 o'nci(a) FOX (LITTLE KIT) [N;  
 2253]  
 o'no- JUST (NOW/THEN) [A;  
 0257]  
 o'nto-ka BROWN [V; 1007]  
 o'p(i) MESQUITE BEANS [N;  
 2404]  
 o'pi-mp(ɪ) MESQUITE [N;  
 2413]  
 orange(i) ORANGE [N; 2416]  
 o'saramp(ɪ) (CACTUS) [N;  
 2405]  
 o'tav(ɪ) SAND [N; 2598]  
 o'wasia-ka YELLOW [V; 1016]  
 pa'- WATER [N; 2617.9]  
 'paa WATER [N; 2617]  
 pa'ʔa TALL [V; 1029]
- pa-'ʔaaj(a) WATER-TURTLE [N;  
 2249]  
 'paacaʔac(i) BAT [N; 2205]  
 pa'ʔa-ni LOUD/TALL [V;  
 1029.5]  
 pa'ʔa-ntoga LONG [V; 1025]  
 'paapas(i) POTATOES [N;  
 2426]  
 pa'ʔa-v(i) WORM [N; 2257]  
 'paaviiv(ɪ) BARREL-CACTUS [N;  
 2403]  
 pa'caciv(ɪ) MOCCASIN [N;  
 2651]  
 pa-'caga WASH [V; 1478]  
 pa'cav(ɪ) LEATHER [N; 2567]  
 pa'c(ɪ) DAUGHTER [N; 2033]  
 pa'c(i) OLDER SISTER [N;  
 2035]  
 'paɪ-p(i) BLOOD [N; 2082]  
 'paɪ-w(a) BLOOD [N; 2082.8]  
 pa-'ga(a) RIVER [N; 2591]  
 pa'gacukwit(a) BLACKBIRD [N;  
 2209]  
 pa'gap(ɪ) SHOE [N; 2600]  
 pa-'gari-r(ɪ) LAKE [N; 2566]  
 pa-'gawic(i) NAVAJO [N;  
 2118]  
 pa'gi-c(i) FISH [N; 2226]  
 pa'ginav(ɪ) CLOUD [N; 2530]  
 pa'gi SOUND [V; 1171]  
 pa'gi WALK-PL [V; 1269]  
 pa'gi-ka-rim NOMADS/TRAVELERS  
 [N; 2119]  
 pa'gi-kwaʔi GO AWAY-PL [V;  
 1269.8]  
 pa'gi-mporo TRAVEL  
 AROUND/WANDER [V; 1269.9]  
 pa'ha AUNT (FA SI) [N; 2040]  
 pa'hi THREE [A; 0503]  
 pa-'hivi-nump(ɪ) WATER GLASS  
 [N; 2636]  
 pa-'hora DIG A WELL [V;  
 1348]  
 pa-'hoora-p(ɪ) WELL [N;  
 2618]  
 pa-'huina FLOAT [V; 1367]  
 'pai CALL OVER [V; 1316]  
 pajaa FRONT [N; 2067]  
 -pajaʔa-va(a) IN FRONT OF [P;  
 0115]  
 pa-'jaʔi DROWN [V; 1353]  
 pa'jʔ(ɪ) KANGAROO RAT [N;  
 2233]  
 pa'jɪ RETURN-SG [V; 1265]  
 pa-'jɪʔa-ki SINK/DROWN [V;  
 1354]  
 pa'jɪ-kii COME BACK [V;  
 1267]  
 pa-'jua-nump(ɪ) BUCKET [N;  
 2515]

- pa'ka KILL-SG-OBJ/SCOLD [V; 1387]  
 pa'ka-nk̄i HURT [V; 1383]  
 -paki KNOW HOW TO/CAN [ ; 5114]  
 pa'mp̄n̄(i) POT [N; 2588]  
 pa'na LIGHT [V; 1010]  
 pa'na-cic( ) MOVIES/FLICKERS [N; 2652]  
 pa'na-ka-t(̄i) LIGHT [N; 2815]  
 pa'nankwa COME DOWN/FR NORTH [V; 1257]  
 pa'na-pu?(i) GLASSES (EYE) [N; 2555]  
 pa-'nukwi-c(̄i) STREAM [N; 2609]  
 pa'paw(a) BEAR [N; 2206]  
 pa'piliv(̄i) PAPER [N; 2581]  
 pa-'rakwica LAUNDRER [V; 1393]  
 pa'ran?ig(i) PAIUTE [N; 2124]  
 pa'rangar(a) PUMPKIN [N; 2421]  
 pa-'riasi-p(̄i) GLASS (PANE)/ICE [N; 2554]  
 pa-'riasi-p(̄i) ICE/FROZEN WATER/GLASS [N; 2554]  
 pa-'ri?asi-tiwap(̄i) WINDOW [N; 2639]  
 pa-'rigi SOAK/WASH [V; 1448]  
 pa-'riwa-p(̄i) DAM [N; 2646]  
 pa'rowa-ga PURPLE [V; 1012]  
 pa-'ru MIX IN WATER [V; 1406]  
 pa's(a) FIELD/PASTURE [N; 2545]  
 pa'sa-rawac(i) FARMER/GROWER [N; 2107]  
 pa'sa-ru FARM [V; 1362]  
 pa'v(i) OLDER BROTHER [N; 2034]  
 pa'von?okwi-c(̄i) WATERMELON [N; 2422]  
 pa-'vo(o) DITCH [N; 2627]  
 pa'wa SWELL (STING/DISEASE) [V; 1507]  
 p̄i- RELATIVE PRONOUN [N; 2025]  
 -p(̄i) (ABSOLUTE) [N; 5201]  
 -p(̄i) (NOMINAL) [ ; 5140]  
 -p̄iciw(̄i) ONE [N; 5230]  
 -p̄iga(i) LONG AGO [S; 0259]  
 -p̄iga(i) REMOTE PAST [T; 5106]  
 p̄i'k̄iki TEAR [V; 1461]  
 p̄i'nka- KEEP ON/INSIST ON [A; 0280]  
 p̄i'ra-mi-tu(a) TO THE RIGHT/RIGHT [A; 0234]  
 p̄i't̄ija HEAVY [V; 1031]  
 -p(i) (ABSOLUTE) [N; 5202]  
 'pi(a) FEMALE (NONHUMAN) [N; 2031.9]  
 'pi(a) MOTHER [N; 2031]  
 -pica(a) MORE/ -ER [A; 0305]  
 pica'rak(i) DOG/BITCH [N; 2225]  
 pic̄i SUCK/SUCKLE [V; 1508]  
 pi'h(i) BREAST/UDDER [N; 2059]  
 pi'hi-vov(i) MILK [N; 2574]  
 'pii I WISH [I; 9010]  
 'piikaj(u) LATER [A; 0258]  
 'piinkic(i) PIG [N; 2241]  
 'piisu?(u) DOLLAR/PESO [N; 2535]  
 pi'jagama SWEET [V; 1080]  
 pi'jagank(̄i) ITCH [V; 1527]  
 pi'j̄i-p(i) HEART [N; 2074]  
 pi'j̄i-w(a) HEART [N; 2073.8]  
 pi'j̄i-w(i) HEART [N; 2073]  
 pi'joga PULL [V; 1495]  
 pi'kaga SMOOTH [V; 1033]  
 pi'kagaac(i) BUG [N; 2211]  
 pi'ka-hoa-ga(i) HAVE SORE BACK [V; 1513]  
 pi'ki ROT [V; 1429]  
 pi'naw?i-nk̄i LEAVE [V; 1398]  
 pi'nga-t̄i-m( ) YOUNGEST [N; 2148]  
 pi'pic̄i ARRIVE [V; 1253]  
 pi'pitan?(a) VOMIT [V; 1490]  
 pi'so?oc(i) CHILD [N; 2104]  
 pi'tang(a) QUICKLY/IN A HURRY/FAST [A; 0322]  
 pi'w(a) WIFE [N; 2039]  
 pi'wa-ru MARRY (MALE SUBJECT) [V; 1528]  
 po'ni(a) SKUNK [N; 2254]  
 po'?o DRAW/WRITE [V; 1349]  
 po'?o PATH/TRAIL/STREET/ROAD [N; 2592]  
 po'?o ROAD/PATH/TRAIL/STREET [N; 2592]  
 'poo?av(i) FLEA/LOUSE [N; 2227]  
 'pooa SWELL/INFLATE [V; 1456]  
 'pooja TROT [V; 1465]  
 po'?o-kat(̄i) LETTER [N; 2569]  
 po'?o-p(̄i) LETTER [N; 2568]  
 'poor(o) CANE/WAND [N; 2520]  
 po'?o-tu?i TEACH [V; 1466]  
 pu'caku FILL [V; 1363]  
 pu'hagant(̄i) MEDICINE-MAN/DOCTOR [N; 2105]



- pu?'incac(i) MOUSE [N; 2237]  
 pu?'iv(i) EYE/SEED [N; 2062]  
 pu'kwi BLOW [V; 1483]  
 pu'nk(u) PET [N; 2240]  
 pu'nkuu-c(i) DOG/PET [N;  
 2222]  
 pu'nkuv(±) WOOL [N; 2622]  
 pu'nua STINK/SMELL [V; 1079]  
 pu'ru?ai-ku BREAK/SHATTER [V;  
 1306]  
 pu'sagai LOOK FOR [V; 1397]  
 pu'tucuga  
 UNDERSTAND/KNOW/LEARN [V;  
 1121]  
 'puuciv(±) STAR [N; 2606]  
 'puunii SEE/LOOK [V; 1151]  
 'puunii-ka(i) SEE/LOOK [V;  
 1152]  
 'puus(i) CAT [N; 2213]  
 -ra(a) (YES-NO Q) [ ; 5160]  
 -rua GIVE/HAND [V; 1291]  
 -ruac(i) OFFSPRING/--LET [S;  
 5251]  
 -ruk(a) UNDER [P; 0108]  
 -ruka-tu(a) UNDER [P; 0109]  
 -ruka-tua-c( ) LESS THAN [P;  
 0196]  
 sa'?ap(i) GRAVY [N; 2556]  
 sa'gav(±) WILLOW [N; 2430]  
 sa'gwi-v(±) GUTS [N; 2085]  
 'sai MELT/DISSOLVE [V; 1405]  
 sa'map(±) PALLET/RUG [N;  
 2580]  
 sa'mi-kar(±) DOUGH/SQUISHY  
 STUFF [N; 2628]  
 sa'mita?a-p(i) BREAD [N;  
 2513]  
 -samp(a) ONLY [A; 0604]  
 sa'mpav(a) SLOWLY/QUIETLY [A;  
 0323]  
 sa'mpava-ni SLOWLY/QUIETLY  
 [A; 0324]  
 sa'na-p(i) SAP/GUM [N; 2632]  
 -sap(a) ACTUALLY/THOUGH [A;  
 0405]  
 sa'p(±) BELLY/STOMACH [N;  
 2081]  
 sa'pi?ai DIFFICULT [V; 1090]  
 sa'pija?i BRAVE/FORMIDABLE  
 [V; 1045]  
 'saronc(i) FOAM/BEER/SUDS [N;  
 2642]  
 sa'wa-ga GREEN/BLUE [V;  
 1006]  
 sa'wa-kan(i) CHEMEHUEVI-HOUSE  
 (ARROW-WEED) [N; 2527]  
 sa'wa-p(±) ARROW-WEED [N;  
 2402]  
 si'gi-nka TART [V; 1094]  
 si'gi-nkama TART/TASTE TART  
 [V; 1095]  
 si'gipic(i) LIZARD [N; 2234]  
 si'?ip(i) FLOWER [N; 2410]  
 si-'ja?i COLD [V; 1072]  
 si'na?av(i) COYOTE [N; 2220]  
 si'na?av(i) COPY CAT/COYOTE  
 [N; 2220]  
 si-'tu?i COLD [V; 1073]  
 si'?i URINATE [V; 1474]  
 si'?ip(i) URINE [N; 2091]  
 si'?i-wa?i URINATE (GO TO)  
 [V; 1474.3]  
 si'kuc(i) SQUIRREL [N; 2256]  
 si'puna?(a) SPOON [N; 2604]  
 si'va WHITTLE/SHAVE-WOOD [V;  
 1481]  
 si'va-va WHITTLE [V; 1481.7]  
 si'vuja?(a) ONION [N; 2415]  
 si'wa?avaac(i) CHEMEHUEVI-VALLEY  
 [N; 2528]  
 so'm?a SPREAD (BLANKET) [V;  
 1540]  
 'soo-g( ) LUNG/LUNGS [N;  
 2093]  
 'soo-v(i) LUNG/LUNGS [N;  
 2093.6]  
 -s(u) ALSO/TOO/STILL [S;  
 0401]  
 -s(u) TOO/STILL [S; 0401]  
 -s(u) STILL/ALSO [S; 0401]  
 -suawa-ga(i) WANT [V; 1910]  
 su-'mai REMEMBER [V; 1122]  
 -sumpa FEEL [V; 1524]  
 su'mpav(a) SLOWLY/QUIETLY [A;  
 0325]  
 su'mpava-ni QUIETLY/SLOWLY  
 [A; 0326]  
 -su-ntu?i THINK [V; 1129]  
 'suu- EASY TO/READY TO [A;  
 0410]  
 'suu ONE [A; 0501]  
 'suukur(i) BEADS [N; 2505]  
 'suunava EVEN/STRAIGHT [V;  
 1523]  
 'suuparua GATHER TOGETHER [V;  
 1372]  
 'suupi-n(i) MAYBE [A; 0456]  
 'suu-tav(a) ALL DAY [A;  
 0252]  
 'suuv(a) MAYBE [A; 0455]  
 su'waink± KISS [V; 1519]  
 su'wa-ka BREATHE [V; 1310]  
 su'wa-p(±) BREATH [N; 2821]  
 ta'- FOOT- [N; 2066]  
 ta'c(a) SUMMER [N; 2806]  
 ta'?ik(a) TOMORROW [A; 0263]  
 ta'ka(a) ROOF/TOP [N; 2593]  
 ta'kus(a) PANT-LEG [N; 2582]  
 takwi-ntui ENCIRCLE [V;  
 1492]

- ta'm(i) WE-DU (INCL) [N; 2002]  
 ta'mi-want(ɨ) YOU-OR-ME/ONE OF US [N; 2019]  
 ta'nga KICK [V; 1386]  
 ta'ng(a) KNEE [N; 2075]  
 ta'ntɨi-c(i) NORTHERNER [N; 2120]  
 ta'ntɨi-p NORTH [A; 0221]  
 ta'ntɨvai-t SOUTH [A; 0222]  
 ta'paki SPLIT ASUNDER [V; 1504.8]  
 ta'paki-n?(a) CUT DOWN/SPLIT [V; 1504]  
 ta'pang(a) BACON/PIG/PORK [N; 2203]  
 ta'panga-c(i) PIG [N; 2242]  
 ta'pas(ɨ) DRY/DRY UP [V; 1084]  
 tapic(a) TIE [V; 1509]  
 ta'picac(i) LAWMAN/POLICE [N; 2112]  
 ta-'pik(a) TOUCH WITH FOOT OR TOE [V; 1168]  
 ta'pok(a) CHOP [V; 1320]  
 ta'ru?i HOT [V; 1077]  
 ta'siant(ɨ) DAWN [N; 2801]  
 ta'siantɨ-pa-t EAST [A; 0223]  
 ta-'sɨ(ɨ) TOE [N; 2080]  
 ta'siav(i) ANT [N; 2202]  
 ta'sico?(o) TOE-NAIL/CLAW [N; 2083]  
 ta'sovoro HUMID/STICKY [V; 1078]  
 ta-'takusa-pagap(ɨ) BOOT [N; 2510]  
 ta'tiwin?a OPEN [V; 1409]  
 ta-'tog(o) BIG TOE [N; 2055]  
 ta'va?ac(i) CHIPMUNK [N; 2251]  
 ta'va-j(ɨ) DAY [N; 2802]  
 ta'va-pɨc(i) SUN/DAY [N; 2611]  
 ta'vasɨ DRY [V; 1074]  
 ta'vasɨ-kwaipɨw SKINNY/DRIED UP/SHRIVELED [V; 1083.5]  
 ta'vasɨ-kwa?i DRY UP [V; 1083]  
 ta'v(i) HIT/STONE [V; 1379]  
 ta'vi-nump(ɨ) HAMMER [N; 2558]  
 ta'vu-c(i) HARE [N; 2230]  
 ta'vu-ruac(i) LITTLE HARE [N; 2230.9]  
 ta'w?a-c(i) MAN [N; 2114]  
 ta'w?a-c(i) MALE (HUMAN)/MAN [N; 2114]  
 ta'wa-mp(i) TOOTH [N; 2090]  
 ta'wasɨ SUN-BURN [V; 1454]
- ta'wasɨ-nkwa?i SUN-BURN [V; 1454.5]  
 ta'w(ɨ) WE-SEV (INCL) [N; 2003]  
 tɨ'- PERSON [N; 2125]  
 -t(ɨ) (ACTIVE PARTICIPLE) [ ; 5124]  
 -tɨa(a) PLACE (FOR) [N; 5262]  
 tɨ'?asɨ FREEZE [V; 1368]  
 tɨ'cawa TAKE AWAY [V; 1458]  
 -tɨ(ɨ) (PASSIVE) (AGENTLESS) [ ; 5120]  
 'tɨimp(a) MOUTH [N; 2084]  
 'tɨirava-nt OUTSIDE/OUTDOORS [A; 0239]  
 'tɨirav(i) FLOOR/GROUND [N; 2547]  
 tɨ'ga TAKE A PICTURE OF [V; 1555]  
 tɨ'gai ACT [V; 1469]  
 tɨ'gap(ɨ) PICTURE/SHOT [N; 2584]  
 tɨ'gɨ?i NEED/LACK [V; 1125]  
 tɨ'gɨ-?iv(a) LACK/HUNGER [N; 2822]  
 tɨ'gɨ-?i-va-v(ɨ) HUNGER [N; 2822.9]  
 tɨ'gɨ-jumi HUNGRY-PL [V; 1053]  
 tɨ-'guu BURY (SOMEONE) [V; 1315]  
 tɨ'gu?uni COOK [V; 1327]  
 tɨ'hij(a) DEER [N; 2221]  
 tɨ'hija-v(ɨ) DEERHIDE [N; 2647]  
 tɨ'ka EAT [V; 1355]  
 tɨ'ka-p(i) FOOD/FOODSTORE [N; 2550]  
 tɨ'ka-tɨa(a) TABLE [N; 2613]  
 tɨ'kaw?i TURN INTO [V; 1471]  
 tɨ'm?a BAKE [V; 1302]  
 tɨ'mp(i) ROCK/MONEY [N; 2575]  
 tɨ'mpi-ka-t RICH [V; 1088]  
 tɨ'na FOLLOW/HUNT [V; 1389]  
 tɨ'na HUNT [V; 1389]  
 tɨ'nankwa COME UP/FR SOUTH [V; 1258]  
 tɨ'nia TELL [V; 1204]  
 tɨ'nia-p(ɨ) NEWS/STORY [N; 2824]  
 tɨ'ravi THROW DOWN [V; 1464]  
 tɨ'rawi?i RUN-SG/DASH/START (CAR) [V; 1431]  
 tɨ'rɨna-v(ɨ) ROOT [N; 2631]  
 tɨ'rijaw BUT/YET/THOUGH [A; 0403]  
 tɨ'rijaw YET/BUT [A; 0403]  
 tɨ'sɨv(i) GRASS [N; 2412]

- tɪ-'sumɪa FORGET/LEAVE BEHIND [V; 1132]  
 tɪ-'sumɪa-sutui FORGET [V; 1132.5]  
 -tɪtu?a--ni(i) SEEM [V; 1908]  
 tɪ'v(a) PINON NUTS [N; 2418]  
 tɪ'vac(i) WOLF [N; 2250]  
 -tɪvicu WANT/ASK [V; 1917]  
 tɪ'vijawi WORK [V; 1517]  
 tɪ'vingi ASK [V; 1201]  
 tɪ'vip(ɪ) DIRT/EARTH/GROUND [N; 2534]  
 tɪ'visamp(a) TRUE [V; 1091]  
 tɪ'viw(a) LAND/COUNTRY [N; 2532]  
 tɪ'wa CLOSE [V; 1323]  
 tɪ'wa-p(ɪ) DOOR/CLOSING [N; 2536]  
 tɪ'wavaga SOUND/MAKE A SOUND [V; 1449]  
 tɪ'wɪni FAST [A; 0332]  
 'tii TEA [N; 2615]  
 to'c(i) HEAD [N; 2071]  
 to'ci-vɪ?a-v(ɪ) HAIR [N; 2068]  
 to'goi- IN MIDST OF [A; 0281]  
 to'goi-tava-j(ɪ) MIDDAY [N; 2816]  
 to'goi-?uni-ngu-ca?a-k( ) SERVES HIM RIGHT [I; 8105]  
 to'kwimaw?ɪ APPEAR/SHOW UP [V; 1252]  
 to'm(o) WINTER/YEAR [N; 2805]  
 to'n(a) HIT/PUNCH/STAB [V; 1378]  
 'tooro?(o) BULL [N; 2212]  
 to'posi-gi STAB [V; 1506]  
 to'posi-ki-nkɪ STAB/PIERCE [V; 1506.8]  
 to'sa-ga WHITE [V; 1015]  
 to'sikwa STICK IN [V; 1451]  
 to'vi-ci SHORT [V; 1027]  
 to'vi-pɪciw(ɪ) SHORT ONE [N; 2127]  
 -tu (+SEV OBJ) [ ; 5153]  
 -tu?a BECOME (A NOUN)/TURN (ADJ) [V; 1902]  
 'tu(a) SON [N; 2032]  
 -tu(a) TO/AT/TOWARD (MOTION) [P; 0150]  
 tu'ca-ga(i) DIRTY [V; 1082]  
 tu'ca-v(i) DIRT [N; 2626]  
 tu'gump(a) SKY [N; 2601]  
 tu'hiv(i) FLOUR [N; 2549]  
 -tui MAKE/CAUSE/LET [V; 1002]  
 tu'k(u) MOUNTAIN LION [N; 2235]  
 tu'kuav(i) MEAT [N; 2572]  
 tu'ku-punku-c(i) CAT [N; 2214]  
 tu'mirus(i) TOMATO [N; 2425]  
 tu'nap(ɪ) STRING [N; 2610]  
 tu'nkuka THICK [V; 1030]  
 tu'pa-ga BLACK/DARK [V; 1005]  
 tu'paki SLIP LOOSE/UNTIE [V; 1536]  
 tu'pun?i WAKE [V; 1476]  
 tu'punua-c(i) NEGRO [N; 2136]  
 tu-'punuwa DARK [V; 1008]  
 turu'ti?a TORTILLA [N; 2641]  
 tu'sup(ɪ) FLOUR/S.T.GROUND [N; 2548]  
 tu'?uma CATCH-PL-OBJ/TAKE/RECEIVE [V; 1294]  
 tu'vaki SLIP LOOSE/UNTIE [V; 1535]  
 tu'wan(u) NIGHT-TIME [N; 2804]  
 u'- THAT/THOSE (INVIS) [N; 2015.8]  
 u'gwi SMELL/SNIFF [V; 1159]  
 u'gwi-ka(i) SNIFF/SMELL [V; 1160]  
 u-'ka- THAT/THOSE (INVIS) [N; 2015.9]  
 u'kwiv(ɪ) CHARCOAL/COAL [N; 2526]  
 u-'m(ɪ) THEY (INVIS) [N; 2012]  
 u'ng(a) HE/SHE (INVIS) [N; 2009]  
 u'ni-a-ni?i WEAR [V; 1479]  
 u'ni-nupɪru MAKE [V; 1473]  
 -upa?(a) IN (LOC) [P; 0104]  
 -upa?a-tɪ-manankw(a) OUT FROM INSIDE [P; 0125]  
 -upa?a-tu(a) INTO [P; 0105]  
 u-'r(ɪ) THAT/THOSE (INVIS) [N; 2015]  
 u'rɪɪ IS S STILL THE CASE [I; 8135]  
 u-'ru?a BE LIKE (SOMETHING INVIS) [V; 1004]  
 u-'rua WALK-SG [V; 1268]  
 u-'ru?a RESEMBLE (SOMETHING INVIS) [V; 1004]  
 u-'ru?a HAVE/OWN [V; 1003]  
 u'rua-kwa?i GO/LEAVE [V; 1268.8]  
 u-'rua-voro WALK AROUND [V; 1268.9]  
 u'rump(ɪ) ROPE [N; 2594]

- u'siwanav(i) CICADA [N; 2216]  
 u'tusamp(a) ALL THE TIME/ALWAYS [A; 0253]  
 'ʔuu THEN [I; 9016]  
 'uunii BE/DO [V; 1000]  
 'uunii-ka(i) BE [V; 1001]  
 u-'wan THERE (INVIS) [A; 0227]  
 -va(a) ON/AT (LOC) [P; 0102]  
 -va(a) FUTURE [T; 5102]  
 -va(a) AT/ON (LOC) [P; 0102]  
 -vaac IN ORDER TO [S; 0423]  
 -vaʔan(a) ON/-TOP OF (LOC) [P; 0106]  
 -vaa-nti-manankw(a) AWAY FROM [P; 0123]  
 -vaʔa-ntu(a) ONTO/ON TOP OF (MOTION) [P; 0107]  
 -vaa-ntu(a) ONTO [P; 0103]  
 -vacɨ ABOUT [P; 0122]  
 -va-jɨw(i) BESIDE [P; 0112]  
 va'rɨr(i) BARREL [N; 2502]  
 -vaw(a) OF/FROM [P; 0165]  
 -vaw(a) FROM/OF [P; 0165]  
 -v(ɨ) (ABSOLUTE) [N; 5201]  
 -vɨ LANGUAGE [S; 5240]  
 -v(ɨ) ONE'S OWN (IIIRD PERS) [S; 2017]  
 -vɨ(ɨ) PAST (DUR) [T; 5104]  
 -v(i) (ABSOLUTE) [N; 5202]  
 -vinʔap(a) BEHIND [P; 0110]  
 -vinʔapa-cu(a) BEHIND [P; 0111]  
 vi'ntanaʔ(a) WINDOW [N; 2620]  
 vo'litaʔ(a) MARBLE [N; 2571]  
 -voro AROUND/MOVING AROUND [V; 1915]  
 -voro GO TO-PL [V; 1914]  
 vu'tijaʔav(ɨ) GLASS (DRINKING) [N; 2553]  
 'vuut(i) BOAT [N; 2509]  
 -w(a) WITH (INSTR) [P; 0170]  
 wa'ʔacug(u) DOG [N; 2224]  
 'waampakwic(i) SCORPION [N; 2245]  
 'waanaa-v(ɨ) WEB/NET [N; 2637]  
 wa'ʔangi SHOUT [V; 1534]  
 wa'ʔarov(i) HORSE [N; 2231]  
 wa'ʔarovi-mpagap(ɨ) HORSESHOE [N; 2649]  
 wa'ʔawi BARK [V; 1520]  
 wa'cav(i) BEE [N; 2207]  
 wa'cɨ PUT-SG-OBJ [V; 1421]  
 wa'cɨ ELECT/PUT [V; 1421]  
 wa'cɨw FOUR [A; 0504]  
 -waga-ru(a) THROUGH [P; 0117]  
 wa'gata-c(i) FROG [N; 2229]  
 wa'gi ENTER-PL [V; 1358]  
 wa'ha- VERY (ADJ)/ALMOST (VERB) [A; 0301]  
 wa'ha- BOTH [A; 0602]  
 wa'ha TWO [A; 0502]  
 wa'ha- ALMOST (VERB)/VERY (ADJ) [A; 0301]  
 -waʔ(i) NEG [S; 0451]  
 -waʔ(i) WITH (ACCOMP) [P; 0172]  
 -wai GET/BECOME [V; 1903]  
 -waʔi GO TO-SG [V; 1913]  
 wa'ki COME FR EAST/WEST [V; 1259]  
 wa'mi STAND-PL [V; 1274]  
 wa'na-ru MAKE A WEB [V; 1401]  
 wa'nc(i) ANTELOPE [N; 2260]  
 wa'nkasi(i) COW [N; 2217]  
 -wank(u) FROM [P; 0160]  
 -wantɨ PART OF/SOME OF [P; 0190]  
 wa'va CRAWL [V; 1332]  
 wa-'wami STAND (UP)-PL [V; 1282]  
 'wɨ(a) PENIS [N; 2078]  
 wɨ'coi POUR [V; 1417]  
 'wɨɨka WORK [V; 1518]  
 wɨ'ʔi DROP-SG/FALL [V; 1351.9]  
 wɨ'ʔi-ku LOST-SG/FALL/DROP [V; 1351]  
 wɨ'nɨ STAND-SG [V; 1273]  
 wɨ'nɨmi DANCE [V; 1344]  
 wɨ'nʔogi SHAVE (BODY)/RAKE [V; 1427]  
 wɨ'pantui DANGLE [V; 1522]  
 wɨ'para SPREAD/HANG [V; 1374]  
 wɨ'puki JUMP [V; 1385]  
 wɨ'sivoʔona WHITTLE [V; 1493]  
 wɨ'tuc(a) WIPE [V; 1491]  
 wɨ'wai HANG [V; 1516]  
 wɨ-'wɨnɨ STAND (UP)-SG [V; 1281]  
 wi'ci FLY [V; 1366]  
 wi'ciʔic(i) BIRD [N; 2208]  
 wi'ci-ku FLY OFF-SG [V; 1433]  
 wi'ci-nʔump(ɨ) AIRPLANE/FLYING OBJECT [N; 2645]  
 wi'h(i) KNIFE [N; 2565]  
 'wiiwav(i) OIL/GREASE [N; 2557]  
 wi'jutamp(ɨ) CHOLLA [N; 2406]  
 'wine(i) WINE [N; 2621]  
 wi'sia-v(i) WING [N; 2543]

## ENGLISH-CHEMEHUEVI

ABOUT -vacɨ [P; 0122]	ANY hu'mpait(a) [A; 0605]
(ABSOLUTE) -c(ɨ) [N; 5207]	APART/SEPARATELY na'nis( )
(ABSOLUTE) -v(i) [N; 5202]	[A; 0333]
(ABSOLUTE) -p(i) [N; 5202]	APPEAR/SHOW UP to'kwimaw?ɨ
(ABSOLUTE) -v(ɨ) [N; 5201]	[V; 1252]
(ABSOLUTE) -mp(ɨ) [N;	APPEAR/SHOW UP na'wa?itɨ [V;
5201]	1251]
(ABSOLUTE) -mp(i) [N;	APPLE 'aaporos(i) [N; 2401]
5202]	ARM a'ngav(ɨ) [N; 2052]
(ABSOLUTE) -c(i) [N; 5208]	AROUND/MOVING AROUND -voro
(ABSOLUTE) -p(ɨ) [N; 5201]	[V; 1915]
ACT tɨ'gai [V; 1469]	ARRIVE pi'picɨ [V; 1253]
(ACTIVE PARTICIPLE) -t(ɨ) [ ;	ARROW-WEED sa'wa-p(ɨ) [N;
5124]	2402]
ACTUALLY/THOUGH -sap(a) [A;	ARROW/BULLET 'huu [N; 2501]
0405]	ASHES kuca-w(a) [N; 2624.8]
AFRAID i'javaga [V; 1041]	ASHES ku'ca-p(ɨ) [N; 2624]
AFTER (SUBORDINATOR) -c(i) [ ;	ASK tɨ'vingi [V; 1201]
5132]	ASK FOR na'rɨ [V; 1301]
AFTER (SUBORDINATOR) -k(a) [ ;	AT/ON (LOC) -va(a) [P; 0102]
5133]	AT/TOWARD/TO (MOTION) -tu(a)
AGED -hɨgac( ) [N; 5255]	[P; 0150]
AGO/IN (TIME)/AWAY 'kwaɨ [A;	AUNT (FA SI) pa'ha [N; 2040]
0251]	AUNT (MA OLD SI) ma'wi?a [N;
AIR/WIND nɨ'gar(ɨ) [N; 2619]	2041]
AIRPLANE/FLYING OBJECT	AWAY -kwa?(i) [A; 0220]
wi'ci-n?ump(ɨ) [N; 2645]	AWAY FROM -vaa-ntɨ-manankw(a)
ALL DAY 'suu-tav(a) [A;	[P; 0123]
0252]	AWAY/FROM NOW/AGO 'kwaɨ [A;
ALL THE TIME/ALWAYS	0251]
u'tusamp(a) [A; 0253]	BABY ɨ'ngapic(i) [N; 2101]
ALL/EVERY ma'n(o) [A; 0601]	BACK 'ho(a) [N; 2053]
ALMOST (VERB)/VERY (ADJ)	BACON/PIG/PORK ta'pang(a) [N;
wa'ha- [A; 0301]	2203]
ALREADY/LONG AGO 'ɨɨs(u) [A;	BAD ɨ'vɨ-j [I; 9001]
0254]	BAD ɨ'vɨ-ni [V; 1043.5]
ALSO/TOO/STILL -s(u) [S;	BAD ɨ'vɨ-pɨwɨ-ni [V; 1044]
0401]	BAD/ILL ɨ'vɨ-ju--ni [V;
(AND) THEN 'haita [A; 0402]	1043]
ANGRY na'nga-ja?i [V; 1042]	BADGER hu'n(a) [N; 2204]
ANT a'ngaav(i) [N; 2201]	BAKE tɨ'm?a [V; 1302]
ANT na?isa-?angaav(i) [N;	BARK wa'?awi [V; 1520]
2258]	BARK/SKIN/HIDE/FUR a'si-?a
ANT ta'siav(i) [N; 2202]	[N; 2054.7]
ANTELOPE wa'nc(i) [N; 2260]	BARREL va'rɨr(i) [N; 2502]
ANUS kwi't(u) [N; 2051]	BARREL-CACTUS 'paaviiv(ɨ) [N;

- 2403]  
 BASKET ni'nga-p(i) [N; 2504]  
 BASKET ko'c(i) [N; 2638]  
 BASKET ni'nga-pi-v(±) [N; 2503]  
 BAT 'paaca?ac(i) [N; 2205]  
 BE 'uunii-ka(i) [V; 1001]  
 BE LIKE (SOMETHING INVIS) u-'ru?a [V; 1004]  
 BE/DO 'uunii [V; 1000]  
 BE/HAVE -ga(i) [V; 1120]  
 BEADS 'suukur(i) [N; 2505]  
 BEANS (MESQUITE) o'p(i) [N; 2404]  
 BEAR pa'paw(a) [N; 2206]  
 BEAUTIFUL/DELICIOUS a'jaampi [V; 1056]  
 BEAVER i'piina(a) [N; 2261]  
 BECAUSE OF/FROM -manankw(a) [P; 0120]  
 BECOME (A NOUN)/TURN (ADJ) -tu?a [V; 1902]  
 BECOME/GET/TURN -kwa?(i) [V; 1901]  
 BED ha'vi-tia(a) [N; 2506]  
 BEE wa'cav(i) [N; 2207]  
 BEER/SUDS/FOAM 'saronc(i) [N; 2642]  
 BEFOREHAND ±i- [A; 0282]  
 BEHIND -vin?ap(a) [P; 0110]  
 BEHIND -vin?apa-cu(a) [P; 0111]  
 BELLY/STOMACH sa'p(±) [N; 2081]  
 BELT 'naapagap(±) [N; 2507]  
 BEND no'kom?a [V; 1303]  
 BESIDE -va-j±w(i) [P; 0112]  
 BIG ho'ko [V; 1021]  
 BIG TOE ta-'tog(o) [N; 2055]  
 BIRD wi'ci?ic(i) [N; 2208]  
 BITE k±?(i) [V; 1304]  
 BITTER mo'hara [V; 1071]  
 BITTER THING mo'hara-t(±) [N; 2643]  
 BLACK/DARK tu'pa-ga [V; 1005]  
 BLACKBIRD pa'gacukwit(a) [N; 2209]  
 BLANKET mu'ru?(i) [N; 2508]  
 BLANKET-CAST-AWAY mu'ru?i-gaip(±) [N; 2508.9]  
 BLOOD 'pai-p(i) [N; 2082]  
 BLOOD 'pai-w(a) [N; 2082.8]  
 BLOW pu'kwi [V; 1483]  
 BLUE/GREEN sa'wa-ga [V; 1006]  
 BOAT 'vuut(i) [N; 2509]  
 BODY n±'w±-?a-v [N; 2056]  
 BOIL no'joga [V; 1305]  
 BONE o'hov(±) [N; 2057]  
 BOOT ta-'takusa-pagap(±) [N; 2510]  
 BOTH wa'ha- [A; 0602]  
 BOTHERED/WORRIED kac ha'ic pi'juwa? [V; 8101]  
 BOW/GUN a'c(±) [N; 2511]  
 BOX ka'hon(i) [N; 2512]  
 BOY (LITTLE) 'aipac(i) [N; 2102]  
 BRAIN co'pik(i) [N; 2058]  
 BRAINLESS mu'guat [I; 9002]  
 BRAVE/FORMIDABLE sa'pija?i [V; 1045]  
 BREAD sa'mita?a-p(i) [N; 2513]  
 BREAK/SHATTER pu'ru?ai-ku [V; 1306]  
 BREAK/SNAP k±'rukwi [V; 1307]  
 BREAK/SNAP (STICK) ko'pok(i) [V; 1308]  
 BREAK/SNAP (STRING) ka'pak(i) [V; 1309]  
 BREAST/UDDER pi'h(i) [N; 2059]  
 BREATH su'wa-p(±) [N; 2821]  
 BREATHE su'wa-ka [V; 1310]  
 BRING-PL-OBJ ju'?a-ki [V; 1255]  
 BRING-SG-OBJ 'jaaki [V; 1254]  
 BROTH/JUICE/FRUIT-hu'va-sa?ap(±) [N; 2514]  
 BROWN o'nto-ka [V; 1007]  
 BUCKET pa-'jua-nump(±) [N; 2515]  
 BUFFALO/CAMEL ku'c(u) [N; 2210]  
 BUG pi'kagaac(i) [N; 2211]  
 BULL 'tooro?(o) [N; 2212]  
 BULLET/ARROW 'huu [N; 2501]  
 BUMP (HEAD)/HIT co-'kwipa [V; 1311]  
 BURN ku'ciki [V; 1313]  
 BURN na'?i [V; 1312]  
 BURN UP na'?i-tupik(±) [V; 1515]  
 BURST INTO TEARS ja-'jaga [V; 1482]  
 BURY 'kuu [V; 1314]  
 BURY (SOMEONE) t±-'guu [V; 1315]  
 BURY (SOMEONE) n±-'nkuu [V; 1314.6]  
 BUT hu-'?urua-gai-sap(a) [A; 8120]  
 BUT/YET/THOUGH t±'rijaw [A; 0403]  
 BUTTOCKS kwi'tu-mukw(i) [N;

- 2060]  
 BUY na'ru-ga [V; 1295]  
 CACHE/FOOD STORE ni'?i(a) [N; 2516]  
 CACTUS o'saramp(±) [N; 2405]  
 CAKE 'cake(i) [N; 2517]  
 CALL ni'ja [V; 1342]  
 CALL OVER 'pai [V; 1316]  
 CAMEL/BUFFALO ku'c(u) [N; 2210]  
 CAMP/VILLAGE (ABANDONED) ka'ni-p(±) [N; 2518]  
 CAN/CONTAINER/METAL na'nkwaru?(u) [N; 2519]  
 CANE/WAND 'poor(o) [N; 2520]  
 CANYON/WASH hu'wip(i) [N; 2521]  
 CAPE/SHAWL na'gaap(±) [N; 2522]  
 CAR ata'mup(i) [N; 2524]  
 CAR 'car(i) [N; 2523]  
 CARRY-PL-OBJ ju'?a [V; 1318]  
 CARRY-SG-OBJ ja'wi [V; 1317]  
 CAT tu'ku-punku-c(i) [N; 2214]  
 CAT 'puus(i) [N; 2213]  
 CATCH-PL-OBJ/TAKE/RECEIVE tu'?uma [V; 1294]  
 CATCH-SG-OBJ/TAKE/RECEIVE kw±'hi [V; 1293]  
 CAUSE/MAKE/LET -tui [V; 1002]  
 CERTAINLY h±'v±± [I; 9003]  
 CHAIR ka'r±-tia(a) [N; 2525]  
 CHARCOAL/COAL u'kwiv(±) [N; 2526]  
 CHASE ma'no [V; 1319]  
 CHASE ma'no?o [V; 1319.8]  
 CHASE ma'no?o-k(o) [V; 1319.9]  
 CHEMEHUEVI-HOUSE (ARROW-WEED) sa'wa-kan(i) [N; 2527]  
 CHEMEHUEVI-VALLEY si'wa?avaac(i) [N; 2528]  
 CHEMEHUEVI/INDIAN/PERSON n±'w(±) [N; 2103]  
 CHEST n±'ngap(±) [N; 2092]  
 CHICKEN kwa'rojaw(i) [N; 2215]  
 CHILD pi'so?oc(i) [N; 2104]  
 CHIPMUNK ta'va?ac(i) [N; 2251]  
 CHOLLA wi'jutamp(±) [N; 2406]  
 CHOP ta'pok(a) [V; 1320]  
 CICADA u'siwanav(i) [N; 2216]  
 CLAP HANDS ma-'vacigi [V; 1321]  
 CLAW/TOE-NAIL ta'sico?(o) [N; 2083]  
 CLEAN/FIX ha'?i-ti-ma± [V; 1322]  
 CLIMB ON THAT ma-ruka-n?a [V; 1256]  
 CLOSE t±'wa [V; 1323]  
 CLOSE/NEAR ca'gip() [A; 0240]  
 CLOTH masi'kwarip(i) [N; 2529]  
 CLOUD pa'ginav(±) [N; 2530]  
 COFFEE 'kuupi(i) [N; 2531]  
 COLD s±-'ja?i [V; 1072]  
 COLD s±-'tu?i [V; 1073]  
 COLD (ILL) ma'va- [N; 2835]  
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 COLLAPSE (OPEN STRUCTURE) j±'pak(i) [V; 1324]  
 COLOR/MARK/PAINT ma'?a [V; 1326]  
 COME BACK pa'j±-kii [V; 1267]  
 COME DOWN/FR NORTH pa'nankwa [V; 1257]  
 COME FR EAST/WEST wa'ki [V; 1259]  
 COME HERE h±'v± [I; 9004]  
 COME OUT-PL ci'vunga [V; 1263]  
 COME OUT-SG ci'pi [V; 1260]  
 COME TO-PL -gi-voro [V; 1912]  
 COME TO-SG -gi [V; 1911]  
 COME UP/FR SOUTH t±'nankwa [V; 1258]  
 CONTAINER/CAN/METAL na'nkwaru?(u) [N; 2519]  
 CONTINUATIVE -ni?i [ ; 5112]  
 COOK t±'gu?uni [V; 1327]  
 COOK/RIPE kwa's± [V; 1328]  
 COPY CAT/COYOTE s±'na?av(i) [N; 2220]  
 CORN ha'wiv(i) [N; 2407]  
 CORNER ko'miwa [N; 2625]  
 COST na-'waga-ka [V; 1410.9]  
 COTTON 'kaataniv(±) [N; 2408]  
 COULD -nku(u) [ ; 5117]  
 COULD -nkuu-p(±) [ ; 5118]  
 COUNCIL a'mpaga-tu?i-ka-m(±) [N; 2135]  
 COUNT/READ 'niinga [V; 1329]  
 COUNTRY/LAND t±'viw(a) [N; 2532]  
 COVER ma'vo?a [V; 1330]  
 COW wa'nkasi(i) [N; 2217]  
 COW-KILLER hu'vacinoc(i) [N; 2218]

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   a'kagupic(i) [N; 2219]  
 COYOTE si'na'av(i) [N; 2220]  
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   1331]  
 CRAWL wa'va [V; 1332]  
 CREEP ma-'wava [V; 1333]  
 CRY ja'ga [V; 1334]  
 CRYING SONG ja'ga-huvi-av(±)  
   [N; 2840]  
 CUCUMBER kwi'jukwimp(i) [N;  
   2409]  
 CUT ci'kw± [V; 1335]  
 CUT DOWN/SPLIT ta'paki-n?(a)  
   [V; 1504]  
 CUT OFF ci'kavica [V; 1339]  
 CUT OFF ci'kapin?a [V; 1340]  
 CUT/DICE ci'puru?(u) [V;  
   1336]  
 CUT/NICK 'ko(a) [V; 1337]  
 CUT/SLICE ci'kwa?ica [V;  
   1338]  
 DAM pa-'riwa-p(±) [N; 2646]  
 DANCE wi'nimi [V; 1344]  
 DANGEROUS/SCARY  
   i'javi-ntuarini [V; 1089]  
 DANGLE wi'pantui [V; 1522]  
 DARK tu-'punuwa [V; 1008]  
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   1005]  
 DAUGHTER pa'c(±) [N; 2033]  
 DAWN ta'siant(±) [N; 2801]  
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   'naa-ta?ik(a) [A; 0255]  
 DAY/SUN ta'va-pic(i) [N;  
   2611]  
 DEAD-PL/TIRED/SUFFER ju'm?a  
   [V; 1047]  
 DEAD-SG/TIRED/SUFFER ja'?(i)  
   [V; 1046]  
 DEER ti'hij(a) [N; 2221]  
 DEERHIDE ti'hija-v(±) [N;  
   2647]  
 DEFECATE kwi'ca [V; 1552]  
 DELICIOUS/LOVELY a'jaampi [V;  
   1056]  
 DESTROY ±'vi-maw?(±) [V;  
   1345]  
 DIE ja'?(i-kwa?(i) [V; 1346]  
 DIFFERENT ki'man [A; 0551]  
 DIFFERENT ONE ki'manc(i) [N;  
   2143]  
 DIFFICULT sa'pi?ai [V; 1090]  
 DIG 'hoora [V; 1347]  
 DIG A WELL pa-'hora [V;  
   1348]  
 (DIMINUTIVE) -c(i) [N;
- 5250]  
 DIRT tu'ca-v(i) [N; 2626]  
 DIRT/EARTH/GROUND ti'vip(±)  
   [N; 2534]  
 DIRTY tu'ca-ga(i) [V; 1082]  
 DISMANTLE/TEAR DOWN  
   ca'jokwin?a [V; 1554]  
 DITCH pa-'vo(o) [N; 2627]  
 DO WHAT ha'ga-ni [A; 0212]  
 DO/BE 'uunii [V; 1000]  
 DOCTOR/MEDICINE-MAN  
   pu'hagant(±) [N; 2105]  
 DOG wa'?'acug(u) [N; 2224]  
 DOG ca-'wacug(u) [N; 2223]  
 DOG/BITCH pica'rak(i) [N;  
   2225]  
 DOG/PET pu'nkuu-c(i) [N;  
   2222]  
 DOLLAR/PESO 'piisu?(u) [N;  
   2535]  
 DOOR/CLOSING ti'wa-p(±) [N;  
   2536]  
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   ka'ni-tiwap(±) [N; 2537]  
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   sa'mi-kar(±) [N; 2628]  
 DRAW/WRITE po'?o [V; 1349]  
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 DRESS kwa's(u) [N; 2538]  
 DRESS/PUT ON DRESS kwa'su-ntu  
   [V; 1553]  
 DRINK hi'vi [V; 1350]  
 DROP-PL/FALL ho'honono?o [V;  
   1352]  
 DROP-PL/FALL ho'nono?o [V;  
   1352.9]  
 DROP-SG/FALL wi'?'i-ku [V;  
   1351]  
 DROP-SG/FALL wi'?'i [V;  
   1351.9]  
 DROWN pa-'ja?i [V; 1353]  
 DROWN/SINK pa-'j±?a-ki [V;  
   1354]  
 DRUNK-PL/TIRED/DEAD ju'm?a  
   [V; 1047]  
 DRUNK-SG/TIRED/DEAD ja'?'i [V;  
   1046]  
 DRY ta'vas± [V; 1074]  
 DRY UP ta'vas±-kwa?i [V;  
   1083]  
 DRY/DRY UP ta'pas(±) [V;  
   1084]  
 DUCK ci'g(a) [N; 2262]  
 DUST hu'kump(±) [N; 2539]  
 EAGLE mi'ngimp±c(i) [N;  
   2252]  
 EAR na'nka-v(±) [N; 2061]  
 EARTH/DIRT/GROUND ti'vip(±)  
   [N; 2534]  
 EAST ta'siant±-pa-t [A;



- 0223]  
EASY TO/READY TO 'suu- [A;  
0410]  
EAT tɨ'ka [V; 1355]  
EDGE 'kɨɨwa(a) [N; 2541]  
EGG no'pav(i) [N; 2540]  
EIGHT 'naanci [A; 0508]  
ELECT/PUT wa'cɨ [V; 1421]  
EMPTY OUT mu'pang(a) [V;  
1356]  
EMPTY THERE kac u-'vawi-wa?at  
[I; 8103]  
ENCIRCLE takwi-ntui [V;  
1492]  
ENGAGE IN CONVERSATION ni'mpɨa  
[V; 1484]  
ENGLISH/WHITE-MAN 'haiku(u)  
[N; 2106]  
ENTER-PL wa'gi [V; 1358]  
ENTER/PLANT ɨ'ga [V; 1357]  
ENTER/SINK/SET jɨ'ʔa-ki [V;  
1359]  
ENTERTAINMENT ki'ja-p(ɨ) [N;  
2831]  
-ER -kat(ɨ) [N; 5213]  
ESCAPE na-'wa-cipi-nkɨ [V;  
1360]  
EVEN/STRAIGHT 'suunava [V;  
1523]  
EVENING ɨ'ga-p(ɨ) [N; 2803]  
EVERY DAY/DAY AFTER DAY  
'naa-taʔik(a) [A; 0255]  
EVERY/ALL ma'n(o) [A; 0601]  
EXPENSIVE/COSTLY ma-'waga [V;  
1085]  
EXPLAIN/SET STRAIGHT  
ni'mukumpa [V; 1202]  
EXPLAIN/TEACH 'mai-nkɨ [V;  
1203]  
EXTREMELY/VERY 'naaki-mɨga(i)  
[A; 0303]  
EYE/SEED pu'ʔiv(i) [N; 2062]  
FALL-PL/DROP ho'hononoʔo [V;  
1352]  
FALL-SG/DROP wɨ'ʔi-ku [V;  
1351]  
FALL/STUMBLE/HIT kwi'pa [V;  
1361]  
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FAR mi'jot(o) [A; 0228]  
FARM pa'sa-ru [V; 1362]  
FARMER/GROWER pa'sa-rawac(i)  
[N; 2107]  
FAST tɨ'wɨni [A; 0332]  
FAST/IN A HURRY/QUICKLY  
pi'tang(a) [A; 0322]  
FAT ju'hu-gai [V; 1022]  
FAT ju'hu-v(i) [N; 2542]  
FATHER 'mo(a) [N; 2030]  
FEATHER/WING wi'sia-v(i) [N;  
2543]  
FEEL -sumpa [V; 1524]  
FEEL/TOUCH ma'vik(a) [V;  
1165]  
FEMALE (NONHUMAN) 'pi(a) [N;  
2031.9]  
FENCE/CORRAL ku'rar(i) [N;  
2544]  
FEW/A FEW hi'mpa-jok( ) [A;  
0606]  
FIELD/PASTURE pa's(a) [N;  
2545]  
FIGHT na-nɨ-mpaka [V; 1485]  
FILL pu'caku [V; 1363]  
FIND ma'h(i) [V; 1364]  
FINGER ma-'sɨ(ɨ) [N; 2063]  
FINGER-NAIL ma'sicoʔ(o) [N;  
2064]  
FINISH -maʔak(u) [V; 1904]  
FINISH -maɨ [V; 1905]  
FINISH (CONSUME) ma'sua [V;  
1365]  
FIRE ku'n(a) [N; 2546]  
FIRST na'mɨ [A; 0256]  
FISH pa'gɨ-c(i) [N; 2226]  
FIST-FIGHT na-'rona-p(ɨ) [N;  
2829]  
FIVE ma'nɨg [A; 0505]  
FIX/CLEAN ha'ʔi-tɨ-maɨ [V;  
1322]  
FLASH cɨ'pɨpɨʔɨ [V; 1551]  
FLEA/LOUSE 'pooʔav(i) [N;  
2227]  
FLOAT pa-'huina [V; 1367]  
FLOOR/GROUND 'tɨɨrav(i) [N;  
2547]  
FLOUR tu'hiv(i) [N; 2549]  
FLOUR/S.T.GROUND tu'sup(ɨ)  
[N; 2548]  
FLOWER sɨ'ʔip(i) [N; 2410]  
FLY wi'ci [V; 1366]  
FLY 'muupic(i) [N; 2228]  
FLY OFF-PL 'jaasɨ [V; 1434]  
FLY OFF-SG wi'ci-ku [V;  
1433]  
FOAM/BEER/SUDS 'saronc(i) [N;  
2642]  
FOLLOW/HUNT tɨ'na [V; 1389]  
FOOD STORE/CACHE ni'ʔi(a) [N;  
2516]  
FOOD/FOODSTORE tɨ'ka-p(i) [N;  
2550]  
FOOT na'mp(a) [N; 2065]  
FOOT- ta'- [N; 2066]  
FORGET na-'sumɨa-sutui [V;  
1124.5]  
FORGET tɨ-'sumɨa-sutui [V;  
1132.5]  
FORGET na'sumɨa [V; 1124]  
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- [V; 1132]  
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 ma-'sia-gant(±) [N; 2551]  
 FORMER -gaip(±) [N; 5220]  
 FOUR wa'c±w [A; 0504]  
 FOX (LITTLE KIT) o'nci(a) [N; 2253]  
 FREEZE t±'pas± [V; 1368]  
 FROG wa'gata-c(i) [N; 2229]  
 FROM -wank(u) [P; 0160]  
 FROM/BECAUSE OF -manankw(a) [P; 0120]  
 FROM/OF -vaw(a) [P; 0165]  
 FRONT pajaa [N; 2067]  
 FRY ku'sa?a [V; 1369]  
 FRYING-PAN ku'sa?a-nump(±) [N; 2552]  
 FUNNY ki'ja-pitua [V; 1086]  
 FUR/PEEL/BARK/SHELL a'si-?a [N; 2054.7]  
 FUTURE -mpa(a) [T; 5103]  
 FUTURE -va(a) [T; 5102]  
 GALLOP no'mai-nukwi [V; 1370]  
 GANG/COMPANY/CLAN ju'nakaim( ) [N; 2145]  
 GATHER ma'ma-sumparu(i) [V; 1371]  
 GATHER TOGETHER 'suuparua [V; 1372]  
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 GET UP kw±'r±ki [V; 1512]  
 GET-PL-OBJ/TAKE/CATCH tu'?uma [V; 1294]  
 GET-SG-OBJ/TAKE/CATCH kw±'h± [V; 1293]  
 GET/BECOME -wai [V; 1903]  
 GHOST/SPIRIT ±'n±p(i) [N; 2108]  
 GIRL (LITTLE) na'?inci-c(i) [N; 2109]  
 GIVE ma'ga [V; 1292]  
 GIVE/HAND -rua [V; 1291]  
 GLASS (DRINKING) vu'tija?av(±) [N; 2553]  
 GLASS (PANE)/ICE pa-'r±as±-p(±) [N; 2554]  
 GLASSES (EYE) pa'na-pu?(i) [N; 2555]  
 GLOVE ma-'sonk(u) [N; 2648]  
 GO AWAY-PL pa'gi-kwa?i [V; 1269.8]  
 GO TO-PL -voro [V; 1914]  
 GO TO-SG -wa?i [V; 1913]  
 GO/LEAVE u'rua-kwa?i [V; 1268.8]  
 GOOD ha'?±-c(i) [V; 1050.5]  
 GOOD ha'?±-t±- [V; 1050]  
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 GOOD/FINE ha'?±-c [I; 9005]  
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 GOPHER m±j(±) [N; 2263]  
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 GRAPE VINE i'jaavi-mp(±) [N; 2423]  
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 GREY ku'ca-ka [V; 1009]  
 GROUND/DIRT/EARTH t±'vip(±) [N; 2534]  
 GROUND/FLOOR 't±irav(i) [N; 2547]  
 GROW na'na [V; 1373]  
 GUN/BOW a'c(±) [N; 2511]  
 GUTS sa'gwi-v(±) [N; 2085]  
 HAIR to'ci-v±?a-v(±) [N; 2068]  
 HAMMER ta'vi-nump(±) [N; 2558]  
 HAND mo'?o-v(±) [N; 2069]  
 HAND- ma'- [N; 2070]  
 HANDLE ma-'uni-ni?i [V; 1558]  
 HANG w±'wai [V; 1516]  
 HANG/SPREAD w±'para [V; 1374]  
 HARE ta'vu-c(i) [N; 2230]  
 HAT 'kaicog(o) [N; 2629]  
 HATE ±'v±-suntu?i [V; 1126]  
 HAVE A COLD ma'va-ja?(i) [V; 1046.8]  
 HAVE A NAME ni'ja-ga [V; 1057]  
 HAVE SORE BACK pi'ka-hoa-ga(i) [V; 1513]  
 HAVE/BE -ga(i) [V; 1120]  
 HAVE/OWN u-'ru?a [V; 1003]  
 HE/SHE (HERE) i'ng(a) [N; 2007]  
 HE/SHE (INVIS) u'ng(a) [N; 2009]  
 HE/SHE (VIS) ma'ng(a) [N; 2008]  
 HEAD to'c(i) [N; 2071]  
 HEAD- co'- [N; 2072]  
 HEAR/LISTEN na'nka-ka(i) [V; 1156]  
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 HEART pi'j±-p(i) [N; 2074]  
 HEART pi'j±-w(a) [N; 2073.8]  
 HEART pi'j±-w(i) [N; 2073]  
 HEAVY p±'t±ja [V; 1031]  
 HECK 'hainu 'h±in [I; 9015]

- HELP ma'rɪgai [V; 1375]  
 HERE i-'va [A; 0225]  
 HIDE 'aaga-wacɪ [V; 1377]  
 HIDE 'aaga-musi [V; 1376]  
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 [N; 2054.7]  
 HILL 'kaamp(ɪ) [N; 2559]  
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 1378]  
 HIT/STONE ta'v(i) [V; 1379]  
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 HOLE ho'paki-p(ɪ) [N; 2560]  
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 [V; 1024]  
 HOLEY/HAVE A HOLE hi'pɪki [V;  
 1023]  
 HORN 'aap(ɪ) [N; 2086]  
 HORSE wa'ʔarov(i) [N; 2231]  
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 [N; 2649]  
 HOT ku'tucaa [V; 1070]  
 HOT a'rɪɪ-ni [V; 1075]  
 HOT ta'ruʔi [V; 1077]  
 HOT ku'tuci [V; 1076]  
 HOUSE ka'n(i) [N; 2563]  
 HOW MANY ha'no-pai-jujum(ɪ)  
 [A; 0210]  
 HOW MANY ha'no-pai-t(ɪ) [A;  
 0211]  
 HOW/WHY ha'ganiga(i) [A;  
 0202]  
 HUMID/STICKY ta'sovoro [V;  
 1078]  
 HUNGER tɪ'gi-ʔiv(a) [N;  
 2822]  
 HUNGER tɪ'gi-ʔi-va-v(ɪ) [N;  
 2822.9]  
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 1053]  
 HUNT ja'hi [V; 1486]  
 HUNT tɪ'na [V; 1389]  
 HURT pa'ka-nkɪ [V; 1383]  
 HURT-SELF na-'hukwivi [V;  
 1384]  
 HUSBAND ku'm(a) [N; 2038]  
 I 'nɪɪ [N; 2001]  
 I 'nɪɪni [N; 2001.9]  
 I DUNNO kwa'ʔija [I; 8150]  
 I THINK 'aaroo [I; 8130]  
 I WISH 'pii [I; 9010]  
 I WISH ha'ganis [I; 8140]  
 ICE/FROZEN WATER/GLASS  
 pa-'riasi-p(ɪ) [N; 2554]  
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 1043]  
 IN -agav( ) [P; 0113]  
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 IN (LOC) -upaʔ(a) [P; 0104]  
 IN (TIME)/AGO/FROM NOW 'kwaɪ  
 [A; 0251]  
 IN FRONT OF -pajaʔa-va(a) [P;  
 0115]  
 IN MIDST OF to'goi- [A;  
 0281]  
 IN ORDER TO -vaac [S; 0423]  
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 2146]  
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 nɪ'w(ɪ) [N; 2103]  
 -ING (NOMINAL) -n(a) [ ;  
 5126]  
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 0280]  
 INSTRUMENT -nump(ɪ) [S;  
 5261]  
 INTO -upaʔa-tu(a) [P; 0105]  
 IS S STILL THE CASE u'rɪɪ [I;  
 8135]  
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 IT'S HOT a'rɪɪ [I; 9009]  
 ITCH pi'jagank(ɪ) [V; 1527]  
 JACK-RABBIT ka'm(ɪ) [N;  
 2232]  
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 JUICE/SAP/SOUP hu'va-v(ɪ) [N;  
 2603]  
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 0257]  
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 2233]  
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 0280]  
 KEY ci'kwi-cui-nump(ɪ) [N;  
 2564]  
 KICK ta'nga [V; 1386]  
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 1390]  
 KILL-PL-OBJ/SCOLD ko'ʔi [V;  
 1388]  
 KILL-PL-OBJ/SCOLD ko'goʔi [V;  
 1388.2]  
 KILL-SG-OBJ/SCOLD pa'ka [V;  
 1387]  
 KIN/RELATIVE 'hiw(a) [N;  
 2111]  
 KIN/RELATIVE 'naapagap(ɪ) [N;  
 2110]  
 KISS su'wainkɪ [V; 1519]  
 KNEE ta'ng(a) [N; 2075]  
 KNIFE wi'h(i) [N; 2565]  
 KNOW HOW TO/CAN -paki [ ;

- 5114]  
 KNOW/UNDERSTAND/LEARN.  
 pu'tucuga [V; 1121]  
 LACK/HUNGER ti'gi-?iv(a) [N;  
 2822]  
 LAKE pa-'gar-i-r(i) [N; 2566]  
 LAND/COUNTRY ti'viw(a) [N;  
 2532]  
 LANGUAGE a'mpaga-p(i) [N;  
 2830]  
 LANGUAGE -v-i [S; 5240]  
 LATER 'piikaj(u) [A; 0258]  
 LAUGH ki'ja-ni?i [V; 1391]  
 LAUNDER pa-'rakwica [V;  
 1393]  
 LAUNDER ma'ha [V; 1392]  
 LAWMAN/POLICE ta'picac(i) [N;  
 2112]  
 LAZY/TIRE OF ma'wia [V;  
 1059]  
 LEAD 'moi [V; 1394]  
 LEAF na'nka-v(a) [N; 2424]  
 LEARN/KNOW pu'tucuga [V;  
 1121]  
 LEATHER pa'cav(i) [N; 2567]  
 LEAVE pi'naw?i-nk-i [V; 1398]  
 LEFT 'kwii- [A; 0231]  
 LEFT-HANDED ONE/SOUTH-PAW  
 'kwii-gant(i) [N; 2113]  
 LEFT/TO THE- 'kwii-mi-tu(a)  
 [A; 0233]  
 LEG ju'?(u) [N; 2076]  
 LESS mi'?'au-nci-n [A; 0306]  
 LESS THAN -ruka-tua-c( ) [P;  
 0196]  
 LET/MAKE/CAUSE -tui [V;  
 1002]  
 LETTER po'?'o-kat(i) [N;  
 2569]  
 LETTER po'?'o-p(i) [N; 2568]  
 LIE (DOWN)-PL kwa-'kwavi [V;  
 1284]  
 LIE (DOWN)-SG ha-'havi [V;  
 1283]  
 LIE-PL kwa'vi [V; 1276]  
 LIE-SG ha'vi [V; 1275]  
 LIE/FIB kwi'ta-r-ania [V;  
 1395]  
 LIGHT pa'na [V; 1010]  
 LIGHT pa'na-ka-t(i) [N;  
 2815]  
 LIKE ha'?'i-suntu?i [V; 1127]  
 -LIKE (SENS VB COMP) -ni(i)  
 [A; 5165]  
 LISTEN/HEAR na'nka-ka(i) [V;  
 1156]  
 LISTEN/HEAR na'nka [V; 1155]  
 LITTLE BOY 'aipac(i) [N;  
 2102]  
 LITTLE GIRL na'?'inci-c(i) [N;
- 2109]  
 LITTLE HARE ta'vu-ruac(i) [N;  
 2230.9]  
 LIVE ni'wi-ga(i) [V; 1054]  
 LIVE/RESIDE ka'ni-gai [V;  
 1396]  
 LIVER ni'wimp(i) [N; 2087]  
 LIZARD si'gipic(i) [N; 2234]  
 LONG pa'?'a-ntoga [V; 1025]  
 LONG AGO -piga(i) [S; 0259]  
 LONG AGO/ALREADY 'iis(u) [A;  
 0254]  
 LONG TIME i'witu [A; 0260]  
 LOOK FOR pu'sagai [V; 1397]  
 LOOK/SEE 'puunii [V; 1151]  
 LOOK/SEE 'puunii-ka(i) [V;  
 1152]  
 LOST-PL/FALL/DROP ho'honono?o  
 [V; 1352]  
 LOST-SG/FALL/DROP wi'?'i-ku  
 [V; 1351]  
 LOTS OF a'va?a- [A; 0603]  
 LOUD/TALL pa'?'a-ni [V;  
 1029.5]  
 LOUSE/FLEA 'poo'av(i) [N;  
 2227]  
 LOVE/RESPECT/ADMIRE a'ja-wa?i  
 [V; 1128]  
 LOVELY a'jaampi-tu?a--ni(i)  
 [V; 1056.4]  
 LOVELY a'jaampi--ni(i) [V;  
 1056.5]  
 LOVELY/PRETTY/DELICIOUS  
 a'jaampi [V; 1056]  
 LUMBER ho'v(i) [N; 2570]  
 LUNG/LUNGS 'soo-v(i) [N;  
 2093.6]  
 LUNG/LUNGS 'soo-g( ) [N;  
 2093]  
 MAKE 'ma-i [V; 1400]  
 MAKE u'ni-nupiru [V; 1473]  
 MAKE A SHIRT na'ro?o-ntu [V;  
 1511]  
 MAKE A SOUND/SOUND ti'wavaga  
 [V; 1449]  
 MAKE A WEB wa'na-ru [V;  
 1401]  
 MAKE/CAUSE/LET -tui [V;  
 1002]  
 MALE (HUMAN)/MAN ta'w?a-c(i)  
 [N; 2114]  
 MALE (NONHUMAN) ku'm(a) [N;  
 2038.9]  
 MAN ta'w?a-c(i) [N; 2114]  
 MARBLE vo'lita?(a) [N; 2571]  
 MARRY (FEMALE SUBJECT)  
 ku'ma-ru [V; 1529]  
 MARRY (MALE SUBJECT) pi'wa-ru  
 [V; 1528]  
 MARRY (RECIPR) na-'guma-ru

- [V; 1525]  
 MAYBE 'suupi-n(i) [A; 0456]  
 MAYBE 'suuv(a) [A; 0455]  
 MEAT tu'kuav(i) [N; 2572]  
 MEDICINE na-'vuaganump(±) [N; 2573]  
 MEDICINE-MAN/DOCTOR  
 pu'hagant(±) [N; 2105]  
 MELT/DISSOLVE 'sai [V; 1405]  
 MESQUITE o'pi-mp(±) [N; 2413]  
 MESQUITE BEANS o'p(i) [N; 2404]  
 METAL/CAN/CONTAINER  
 na'nkwaru?(u) [N; 2519]  
 MEXICAN ha'?at-aiku(u) [N; 2115]  
 MIDDAY to'goi-tava-j(±) [N; 2816]  
 MILK pi'hi-vov(i) [N; 2574]  
 MIX IN WATER pa-'ru [V; 1406]  
 MOCCASIN pa'caciv(±) [N; 2651]  
 MOHAVE a'jat(a) [N; 2116]  
 MOMENTANEOUS -ng(u) [ ; 5113]  
 MONEY/ROCK t±'mp(i) [N; 2575]  
 MOON mi'jarogopic(i) [N; 2576]  
 MORE THAN -gaa-va?a-c( ) [P; 0195]  
 MORE/ -ER -pica(a) [A; 0305]  
 MORONGO/SERRANO 'k±imaa-niw(±) [N; 2117]  
 MOTHER 'pi(a) [N; 2031]  
 MOULT ho'vi [V; 1407]  
 MOUNTAIN 'kaiv(a) [N; 2577]  
 MOUNTAIN LION tu'k(u) [N; 2235]  
 MOUNTAIN PEAK  
 'kaiva-kuvai?a(a) [N; 2578]  
 MOUNTAIN SHEEP na'g(a) [N; 2236]  
 MOUNTAIN TOP 'kaiva-taka(a) [N; 2579]  
 MOUNTAINOUS 'kaa-kaiva-gai [V; 1093]  
 MOUSE pu'?incac(i) [N; 2237]  
 MOUTH 't±±mp(a) [N; 2084]  
 MOVE nu'jukwa [V; 1261]  
 MOVE/SHOVE ma-'nujukwa-nk± [V; 1439]  
 MOVIES/FLICKERS pa'na-cic( ) [N; 2652]  
 MOVING AROUND/AROUND -voro [V; 1915]  
 MULE 'muuna?(a) [N; 2238]  
 NAME 'nia-v(i) [N; 2823]  
 NARROW na'cukwi [V; 1032]  
 NAVAJO pa-'gawic(i) [N; 2118]  
 NEAR ca'gip(a) [A; 0229]  
 NECK kur(a) [N; 2088]  
 NECKLACE/NECK THING 'kaag(i) [N; 2630]  
 NEED/LACK t±'g±?i [V; 1125]  
 NEG -?ap(a) [S; 0452]  
 NEG -wa?(i) [S; 0451]  
 NEGRO tu'punua-c(i) [N; 2136]  
 NEPHEW ma'wi-?±c( ) [N; 2042]  
 NET/WEB 'waanaa-v(±) [N; 2637]  
 NEW/YOUNG 'a±-ga [V; 1087]  
 NEWS/STORY t±'nia-p(±) [N; 2824]  
 NIGHT-TIME tu'wan(u) [N; 2804]  
 NINE ju'wip [A; 0509]  
 NO/NOT ka'c(u) [A; 0450]  
 NOMADS/TRAVELERS pa'gi-ka-r±m [N; 2119]  
 (NOMINAL) -p(±) [ ; 5140]  
 NORTH ta'nt±i-p [A; 0221]  
 NORTHERNER ta'nt±i-c(i) [N; 2120]  
 NOSE mu'v(i) [N; 2077]  
 NOW/TODAY 'a±-v(i) [A; 0261]  
 NUDGE ma-'j±mpugi [V; 1408]  
 OCEAN hu'cip(a) [N; 2623]  
 OCOTILLO ±'n±pi-poromp(±) [N; 2414]  
 OF/FROM -vaw(a) [P; 0165]  
 OFFSPRING/-LET -ruac(i) [S; 5251]  
 OH ha'?a± [I; 9011]  
 OIL/GREASE 'wiiwav(i) [N; 2557]  
 OLD '±iti-p±w [V; 1092]  
 OLD LADY/OLD WOMAN 'maap±c(i) [N; 2121]  
 OLD MAN ±'sa-v±c(i) [N; 2122]  
 OLD MAN 'naap±w(±) [N; 2123]  
 OLD WOMAN/OLD LADY 'maap±c(i) [N; 2121]  
 OLDER BROTHER pa'v(i) [N; 2034]  
 OLDER SISTER pa'c(i) [N; 2035]  
 ON -mank(u) [P; 0162]  
 ON/-TOP OF (LOC) -va?an(a) [P; 0106]  
 ON/AT (LOC) -va(a) [P; 0102]  
 ONE -p±ciw(±) [N; 5230]  
 ONE 'suu [A; 0501]  
 ONE'S OWN (IIIRD PERS) -v(±)

[S; 2017]  
 ONESELF na-'hump(a) [A;  
 0350]  
 ONION si'vuja?(a) [N; 2415]  
 ONLY -somp(a) [A; 0604]  
 ONTO -vaa-ntu(a) [P; 0103]  
 ONTO/ON TOP OF (MOTION)  
 -va?a-ntu(a) [P; 0107]  
 OPEN ta'tiwin?a [V; 1409]  
 ORANGE 'orange(i) [N; 2416]  
 OTHER/ANOTHER 'kiiimaanc(i)  
 [A; 0550]  
 OUCH a'ni [I; 9012]  
 OUT FROM INSIDE  
 -upa?a-ti-manankw(a) [P;  
 0125]  
 OUTDOORS/OUTSIDE ji'hiva-nt  
 [A; 0238]  
 OUTSIDE/OUTDOORS 'tiirava-nt  
 [A; 0239]  
 OVER -gaa-va?(a) [P; 0116]  
 OWL mu'humpic(i) [N; 2239]  
 PAINT/MARK/COLOR ma'?a [V;  
 1326]  
 PAIUTE pa'ran?ig(i) [N;  
 2124]  
 PALLET/RUG sa'map(i) [N;  
 2580]  
 PANT-LEG ta'kus(a) [N; 2582]  
 PANTS ku's(a) [N; 2583]  
 PAPER pa'piliv(i) [N; 2581]  
 PART OF/SOME OF -wanti [P;  
 0190]  
 PART OF/SOME OF -manti [P;  
 0190]  
 (PASSIVE) (AGENTLESS) -ti(i)  
 [ ; 5120]  
 PAST (DUR) -vi(i) [T; 5104]  
 PAST (MOM) -mpi(i) [T; 5105]  
 PATH/TRAIL/STREET/ROAD po'?o)  
 [N; 2592]  
 PAY na-'waga-nki [V; 1410]  
 PEEL/SKIN a'si-vo?a [V;  
 1411]  
 PEEL/SKIN/SHELL/FUR a'si-?a  
 [N; 2054.7]  
 PENIS 'wi(a) [N; 2078]  
 PERFECT -ca(a) [ ; 5110]  
 PERFECT -ka(i) [ ; 5108]  
 PERSON ti'- [N; 2125]  
 PERSON/CHEMEHUEVI/INDIAN  
 ni'w(i) [N; 2103]  
 PET ma'vang?i [V; 1412]  
 PET pu'nk(u) [N; 2240]  
 PET/DOG pu'nkuu-c(i) [N;  
 2222]  
 PICK 'coowaa [V; 1413]  
 PICTURE OF SELF na-'rigap(i)  
 [N; 2584.9]  
 PICTURE/SHOT ti'gap(i)

[N; 2584]  
 PIG ta'panga-c(i) [N; 2242]  
 PIG 'piinkic(i) [N; 2241]  
 PIG 'kuuci?(i) [N; 2243]  
 PIG/BACON/PORK ta'pang(a) [N;  
 2203]  
 PINCH hi'ncum?i [V; 1414]  
 PINE-TREE ju'vimp(i) [N;  
 2417]  
 PINK a'nka-sia-ka [V; 1011]  
 PINON NUTS ti'v(a) [N; 2418]  
 PLACE (FOR) -tia(a) [N;  
 5262]  
 PLAIN ji'waav(i) [N; 2586]  
 PLANT i'ga-p(i) [N; 2419]  
 PLANT/ENTER i'ga [V; 1357]  
 PLANT/TREE ma'hav(i) [N;  
 2420]  
 PLATE/DISH hi'mpic(i) [N;  
 2640]  
 PLAY 'kiijaa [V; 1415]  
 POINT AT ma-'gugikai [V;  
 1416]  
 POINTED OBJECT- ci'- [N;  
 2587]  
 POKE HEAD IN SOMEWHERE  
 hu'cini?i [V; 1487]  
 POLICE/LAWMAN ta'picac(i) [N;  
 2112]  
 POLICEMAN/PERSON-CATCHER  
 ni-'nkwi-tui-kat(i) [N;  
 2126]  
 PORK/PIG ta'pang(a) [N;  
 2203]  
 POT pa'mpin?(i) [N; 2588]  
 POTATOES 'paapas(i) [N;  
 2426]  
 POUR wi'coi [V; 1417]  
 PRESENT -j(i) [T; 5101]  
 PRESENT/PAST -k(a) [T; 5107]  
 PROUD 'nia-p [V; 1530]  
 PULL pi'joga [V; 1495]  
 PULL OUT ho'va [V; 1418]  
 PUMPKIN pa'rangar(a) [N;  
 2421]  
 PURPLE pa'rowa-ga [V; 1012]  
 PUSH ma'rikwipa [V; 1496]  
 PUT-PL-OBJ ju'na [V; 1422]  
 PUT-SG-OBJ wa'ci [V; 1421]  
 QUICKLY/IN A HURRY/FAST  
 pi'tang(a) [A; 0322]  
 QUIETLY/SLOWLY sa'mpav(a) [A;  
 0323]  
 QUIETLY/SLOWLY su'mpava-ni  
 [A; 0326]  
 QUIETLY/SLOWLY sa'mpava-ni  
 [A; 0324]  
 QUIETLY/SLOWLY su'mpav(a) [A;  
 0325]  
 QUIETLY/STILL 'aa- [A; 0330]

- RADIO/RECORD-PLAYER  
hu'vi-tu-nump(±) [N;  
2589]
- RAIN ±'wa [V; 1425]  
RAIN ±'wa-r(±) [N; 2590]  
RAISE/REAR ma'ʔawaʔi [V;  
1499]
- RAKE/SHAVE (BODY) wi'nʔogi  
[V; 1427]
- RAT 'kaac(i) [N; 2244]  
RATTLE ka'raga [V; 1488]  
READ/COUNT 'niinga [V; 1329]  
REAR/RAISE ma'ʔawaʔi [V;  
1499]
- RED a'nka-ga [V; 1013]  
REFLEXIVE/SELF na'- [S;  
2016]
- RELATIVE PRONOUN pi- [N;  
2025]
- RELATIVE/KIN 'hiiw(a) [N;  
2111]
- RELATIVE/KIN 'naapagap(±) [N;  
2110]
- REMEMBER su-'mai [V; 1122]  
REMOTE PAST -piga(i) [T;  
5106]
- RESEMBLE (SOMETHING HERE)  
i-'cuʔa [V; 1004]  
RESEMBLE (SOMETHING INVIS)  
u-'ruʔa [V; 1004]  
RESEMBLE (SOMETHING VIS)  
ma-'ruʔa [V; 1004]
- RESULT -ka(i) [ ; 5109]  
RETURN-PL mi'nisi [V; 1266]  
RETURN-SG pa'j± [V; 1265]  
RETURN/TURN AROUND ko'toʔo-ngu  
[V; 1428]
- RICH ti'mpi-ka-t [V; 1088]  
RIGHT/TO THE- pi'ra-mi-tu(a)  
[A; 0234]
- RIND/PEEL/SKIN a'si-v(±) [N;  
2054]
- RIPE/COOK/BURN kwa's± [V;  
1328]
- RIVER pa-'ga(a) [N; 2591]  
ROAD/PATH/TRAIL/STREET po'ʔ(o)  
[N; 2592]
- ROADRUNNER ±'c(a) [N; 2259]  
ROCK/MONEY ti'mp(i) [N;  
2575]
- ROOF/TOP ta'ka(a) [N; 2593]  
ROOT ti'r±na-v(±) [N; 2631]  
ROPE u'rump(±) [N; 2594]  
ROT pi'ki [V; 1429]  
ROUND mu'nʔunki [V; 1034]  
ROUND-DANCE ni'kap(±) [N;  
2825]
- RUB WITH HAND ma-'nura [V;  
1532]
- RUG/PALLET sa'map(±) [N;  
2580]
- RUN nu'kwi [V; 1430]  
RUN-PL/DASH na'r±na [V;  
1432]  
RUN-SG/DASH/START (CAR)  
ti'r±wiʔi [V; 1431]  
SACK/SHEATH ku'nav(±) [N;  
2595]  
SADDLE ka'r±-nʔump(±) [N;  
2596]  
SALT a'so-na [V; 1514]  
SALT/ALKALINE a'somp(±) [N;  
2597]  
SAND o'tav(±) [N; 2598]  
SAP/GUM sa'na-p(i) [N; 2632]  
SAP/JUICE/SOUP hu'va-v(±) [N;  
2603]  
SAY 'mai [V; 1110]  
SCARED i'japaka [V; 1040]  
SCORPION 'waampakwic(i) [N;  
2245]  
SCRATCH 'coonʔa [V; 1501]  
SECRETLY/STEALTHILY 'aaga-  
[A; 0331]  
SEE/LOOK 'puunii [V; 1151]  
SEE/LOOK 'puunii-ka(i) [V;  
1152]  
SEED/EYE pu'ʔiv(i) [N; 2062]  
SEEM -tiʔtuʔa--ni(i) [V;  
1908]  
SELF/REFLEXIVE na'- [S;  
2016]  
SELL na'ruga-tiravi [V;  
1296]  
SEND na-'jawiʔi-tui [V;  
1435]  
SERRANO/MORONGO 'kiimaa-niw(±)  
[N; 2117]  
SERVES HIM RIGHT  
to'goi-ʔuni-ngu-caʔa-k( )  
[I; 8105]  
SET (SUN)/ENTER/SINK j±'ʔa-ki  
[V; 1359]  
(+SEV OBJ) -tu [ ; 5153]  
(+SEV SUBJ) -ka [ ; 5152]  
SEVEN mu'kwis [A; 0507]  
SEVERAL a'wavant±-m(±) [N;  
2018]  
SEW ca'pikaʔa [V; 1436]  
SEW/WEAVE ca'ga [V; 1437]  
(-SG +ANIM SUBJ) -m(±) [ ;  
5150]  
SHARP ki'wagai [V; 1026]  
SHAVE (BODY)/RAKE wi'nʔogi  
[V; 1427]  
SHAWL/CAPE na'gaap(±) [N;  
2522]  
SHEATH/SACK ku'nav(±) [N;  
2595]  
SHEEP na'ga-vunkuc(i) [N;

- 2246]  
 SHELL/SKIN/COVERING a'si-?a  
 [N; 2054.7]  
 SHIRT na'ro?(o) [N; 2599]  
 SHOE pa'gap(±) [N; 2600]  
 SHOOT EA OTHER na-'gu-kwi [V;  
 1438.1]  
 SHOOT/STING ku'kwi [V; 1438]  
 SHORT to'vi-ci [V; 1027]  
 SHORT ONE to'vi-p±ciw(±) [N;  
 2127]  
 SHOULD -guu-p(±) [ ; 5116]  
 SHOUT wa'?angi [V; 1534]  
 SHOVE/MOVE ma-'nujukwa-nk±  
 [V; 1439]  
 SHOW n±-'mpuni-tu?i [V;  
 1151.7]  
 SHRINK/CRAMP co'nok(a) [V;  
 1331]  
 SICK na'gami [V; 1055]  
 SILVER a'si-ga [V; 1014]  
 SING hu'vi-tu [V; 1440]  
 SINK/DROWN pa-'j±?a-ki [V;  
 1354]  
 SINK/ENTER/SET j±?'a-ki [V;  
 1359]  
 SISTER-IN-LAW mu'simpij( )  
 [N; 2043]  
 SIT (DOWN)-PL j±-'j±wi [V;  
 1280]  
 SIT (DOWN)-SG/STOP ka-'kar±  
 [V; 1279]  
 SIT-PL j±'wi [V; 1278]  
 SIT-SG ka'r± [V; 1277]  
 SIX na'va [A; 0506]  
 SKIN/PEEL a'si-vo?a [V;  
 1411]  
 SKIN/PEEL/RIND/BARK a'si-?a  
 [N; 2054.7]  
 SKIN/RIND/PEEL a'si-v(±) [N;  
 2054]  
 SKINNY/DRIED UP/SHRIVELED  
 ta'vas±-kwaip±w [V;  
 1083.5]  
 SKUNK po'ni(a) [N; 2254]  
 SKY tu'gump(a) [N; 2601]  
 SLAP ma'vacikink± [V; 1502]  
 SLAP ma-'vaciki [V; 1441]  
 SLEEP ±'p±i-p(±) [N; 2828]  
 SLEEP-PL ±'koi [V; 1446]  
 SLEEP-SG ±'p±i [V; 1445]  
 SLIP LOOSE/UNTIE tu'paki [V;  
 1536]  
 SLIP LOOSE/UNTIE tu'vaki [V;  
 1535]  
 SLOWLY/QUIETLY sa'mpav(a) [A;  
 0323]  
 SLOWLY/QUIETLY sa'mpava-ni  
 [A; 0324]  
 SLOWLY/QUIETLY su'mpav(a) [A;
- 0325]  
 SMALL mi'?au-nci [V; 1028]  
 SMALL ONE mi'?au-p±ciw(±) [N;  
 2128]  
 SMELL/SNIFF u'gwi-ka(i) [V;  
 1160]  
 SMELL/SNIFF u'gwi [V; 1159]  
 SMELL/STINK pu'nua [V; 1079]  
 SMILE ki'ja-sui-ni?i [V;  
 1447.6]  
 SMILE ki'ja-sui-kai [V;  
 1447.5]  
 SMILE ki'ja-sui [V; 1447]  
 SMOKE kwi'hi-p( ) [N; 2633]  
 SMOKE ko'?a-t±ka [V; 1510]  
 SMOKE kwi'hi-ka [V; 1538]  
 SMOOTH pi'kaga [V; 1033]  
 SNAKE 'kwiijaac(i) [N; 2247]  
 SNAP/BREAK (STICK) ko'pok(i)  
 [V; 1308]  
 SNAP/BREAK (STRING) ka'pak(i)  
 [V; 1309]  
 SNEEZE ha'w?isi [V; 1539]  
 SNIFF/SMELL u'gwi-ka(i) [V;  
 1160]  
 SNIFF/SMELL u'gwi [V; 1159]  
 SNOW 'n±±vaav(i) [N; 2602]  
 SNOW n±'va-?±wa [V; 1556]  
 SO/LIKE THAT 'maa [I; 9014]  
 SOAK/WASH pa-'r±gi [V; 1448]  
 SOME/PART OF -want± [P;  
 0190]  
 SOME/PART OF -mant± [P;  
 0190]  
 SOMEONE ha'nga-sap(a) [N;  
 2023]  
 SOMETHING hi'mp±-sap(a) [N;  
 2022]  
 SOMETHING 'hiimara?ap±c(i)  
 [N; 2028]  
 SON 'tu(a) [N; 2032]  
 SONG hu'vi-av(±) [N; 2826]  
 SOON/IN A MOMENT 'a±-vi-s(u)  
 [A; 0264]  
 SOUND pa'gi [V; 1171]  
 SOUND/MAKE A SOUND t±'wavaga  
 [V; 1449]  
 SOUP/BROTH/JUICE  
 hu'va-sa?ap(±) [N; 2514]  
 SOUP/BROTH/JUICE hu'va-v(±)  
 [N; 2603]  
 SOUTH ta'nt±vai-t [A; 0222]  
 SPEAK/TALK a'mpaga [V; 1450]  
 SPIDER ho'koso?a-v(i) [N;  
 2255]  
 SPIN/TURN kwi'nu?ungu [V;  
 1452]  
 SPIRIT/GHOST ±'n±p(i) [N;  
 2108]  
 SPIT k±'cijon(a) [V; 1503]



- SPLIT ASUNDER ta'paki [V; 1504.8]  
 SPLIT/CUT DOWN ta'paki-n?(a) [V; 1504]  
 SPOON si'puna?(a) [N; 2604]  
 SPOON kwi'cara?(a) [N; 2605]  
 SPREAD (BLANKET) so'm?a [V; 1540]  
 SPREAD/HANG wi'para [V; 1374]  
 SPRING OR AUTUMN jɪ'van [N; 2807]  
 SQUEEZE ma'ncu [V; 1505]  
 SQUIRREL si'kuc(i) [N; 2256]  
 SQUAW BUSH hu?upi-v(ɪ) [N; 2428]  
 SQUAW BUSH BERRY hu?up(i) [N; 2429]  
 STAB to'posi-gi [V; 1506]  
 STAB/PIERCE to'posi-ki-nki [V; 1506.8]  
 STAND (UP)-PL wa-'wami [V; 1282]  
 STAND (UP)-SG wi-'wini [V; 1281]  
 STAND-PL wa'mi [V; 1274]  
 STAND-SG wi'nɪ [V; 1273]  
 STAR 'puuciv(ɪ) [N; 2606]  
 START-SG (CAR)/RUN ti'rawi?i [V; 1431]  
 STEAL ɪ'jɪngi [V; 1453]  
 STEALTHILY/SECRETLY/SNEAKILY 'aaga- [A; 0331]  
 STICK IN to'sikwa [V; 1451]  
 STICK/WOOD ku'kwap(i) [N; 2607]  
 STILL/ALSO -s(u) [S; 0401]  
 STILL/QUIETLY 'aa- [A; 0330]  
 STING (SCORPION)/HIT kwi'pa [V; 1361]  
 STING/SHOOT ku'kwi [V; 1438]  
 STINK/SMELL pu'nua [V; 1079]  
 STOMACH/BELLY sa'p(ɪ) [N; 2081]  
 STOP -maupa [V; 1916]  
 STOP-SG/SIT (DOWN) ka-'karɪ [V; 1279]  
 STORE/SHOP na'ru-ga-tui-kan(i) [N; 2608]  
 STORY/NEWS ti'nɪa-p(ɪ) [N; 2824]  
 STRAIGHT mu'kunt(a) [V; 1542]  
 STREAM pa-'nukwi-c(ɪ) [N; 2609]  
 STRING tu'nap(ɪ) [N; 2610]  
 STRONG mu'cu [V; 1051]  
 SUCK/SUCKLE picɪ [V; 1508]  
 SUMMER ta'c(a) [N; 2806]  
 SUN-BURN ta'wasɪ [V; 1454]  
 SUN-BURN ta'wasɪ-nkwa?i [V; 1454.5]  
 SUN/DAY ta'va-pic(i) [N; 2611]  
 SUSPECT hu-'mai--ni [V; 1112]  
 SWALLOW jɪ'ʔiki [V; 1455]  
 SWEATER 'kuuta?(a) [N; 2612]  
 SWEET pi'jagama [V; 1080]  
 SWELL (STING/DISEASE) pa'wa [V; 1507]  
 SWELL/INFLATE 'pooa [V; 1456]  
 SWIFT 'kwaɪ-nkai [V; 1543]  
 SWIM na'vakɪ [V; 1457]  
 TABLE ti'ka-tɪa(a) [N; 2613]  
 TAG-Q/HUH? hi'naa [A; 0200]  
 TAIL kwa's(i) [N; 2614]  
 TAKE (AWAY) 'jaa-kwa?i [V; 1262]  
 TAKE A PICTURE OF ti'ga [V; 1555]  
 TAKE AWAY ti'cawa [V; 1458]  
 TAKE CARE OF ma'ʔawa?i [V; 1459]  
 TAKE-PL-OBJ/GET/CATCH tu'ʔuma [V; 1294]  
 TAKE-SG-OBJ/GET/CATCH kwi'hɪ [V; 1293]  
 TALK/SPEAK a'mpaga [V; 1450]  
 TALL pa'ʔa [V; 1029]  
 TART sɪ'gi-nka [V; 1094]  
 TART/TASTE TART si'gi-nkama [V; 1095]  
 TASTE ka'ma [V; 1172]  
 TASTE ki'maka?(a) [V; 1163]  
 TEA 'tii [N; 2615]  
 TEACH po'ʔo-tu?i [V; 1466]  
 TEACH-SCHOOL ni-'mpoʔo-tui [V; 1460]  
 TEACH/EXPLAIN 'mai-nkɪ [V; 1203]  
 TEACHER ni-'mpoʔo-tui-kat(ɪ) [N; 2129]  
 TEAR pi'kiki [V; 1461]  
 TEAR ca'pɪkin?a [V; 1462]  
 TELL ti'nɪa [V; 1204]  
 TEN ma'siw [A; 0510]  
 THAT/THOSE (INVIS) u'- [N; 2015.8]  
 THAT/THOSE (INVIS) u-'ka- [N; 2015.9]  
 THAT/THOSE (INVIS) u-'r(ɪ) [N; 2015]  
 THAT/THOSE (VIS) ma-'r(ɪ) [N; 2014]  
 THAT/THOSE (VIS) ma'- [N; 2014.8]  
 THAT/THOSE (VIS) ma-'ka- [N; 2014.9]

- THAT/THOSE (VIS) ma-'ka- [N; 2014.9]  
 THEN 'ʔuu [I; 9016]  
 THEN/AND THEN 'haita [A; 0402]  
 THERE (INVIS) u-'wan [A; 0227]  
 THERE (VIS) ma-'va [A; 0226]  
 THEY (HERE) i-'m(ɨ) [N; 2010]  
 THEY (INVIS) u-'m(ɨ) [N; 2012]  
 THEY (VIS) ma-'m(ɨ) [N; 2011]  
 THICK tu'nkuka [V; 1030]  
 THIEF ɨ'jɨnkak(ɨ) [N; 2130]  
 THIN ci'ʔauc(i) [V; 1035]  
 THINK 'mai--ni [V; 1111]  
 THINK mu'guaru [V; 1463.8]  
 THINK -su-ntu?i [V; 1129]  
 THINK mu'guaruni?i [V; 1463]  
 THIS/THESE i-'ka- [N; 2013.9]  
 THIS/THESE i-'c(ɨ) [N; 2013]  
 THIS/THESE i'- [N; 2013.8]  
 THOUGH -gai-sap(a) [ ; 5169]  
 THOUGH/ACTUALLY -sap(a) [A; 0405]  
 THOUGH/YET tɨ'rijaw [A; 0403]  
 THREE pa'hi [A; 0503]  
 THROUGH -waga-ru(a) [P; 0117]  
 THROW DOWN tɨ'ravi [V; 1464]  
 THUMB ma-'tog(o) [N; 2079]  
 TIE tapic(a) [V; 1509]  
 TIRED-PL/DRUNK/DEAD ju'm?a [V; 1047]  
 TIRED-SG/DRUNK/DEAD ja'?i [V; 1046]  
 TO THE LEFT/LEFT 'kwii-mi-tu(a) [A; 0233]  
 TO THE RIGHT/RIGHT pɨ'ra-mi-tu(a) [A; 0234]  
 TO/AT/TOWARD (MOTION) -tu(a) [P; 0150]  
 TOBACCO ko'ʔa-p(i) [N; 2634]  
 TODAY/NOW 'aɨ-v(i) [A; 0261]  
 TOE ta-'sɨ(ɨ) [N; 2080]  
 TOE-NAIL/CLAW ta'sico?(o) [N; 2083]  
 TOGETHER na'ma- [A; 0351]  
 TOMATO tu'mirus(i) [N; 2425]  
 TOMORROW ta'ʔik(a) [A; 0263]  
 TONGUE a'go-mp(i) [N; 2089]  
 TOO/STILL -s(u) [S; 0401]  
 TOOTH ta'wa-mp(i) [N; 2090]  
 TOP/ROOF ta'ka(a) [N; 2593]  
 TORTILLA turu'ti?a [N; 2641]  
 TOUCH ma'pik(a) [V; 1166]  
 TOUCH WITH FOOT OR TOE ta-'pik(a) [V; 1168]  
 TOUCH/FEEL ma'vik(a) [V; 1165]  
 TOWARD/AT/TO (MOTION) -tu(a) [P; 0150]  
 TOWARDS THAT WAY (DIRECTION) ma-nankwa-tu(a) [P; 0121]  
 TRACK 'naaw(a) [N; 2635]  
 TRAIL na-'tɨna [V; 1389.9]  
 TRANSLATE/EXPLAIN ni'mukumpa [V; 1202]  
 TRAVEL AROUND/WANDER pa'gi-mporo [V; 1269.9]  
 TREE/PLANT ma'hav(ɨ) [N; 2420]  
 TROT 'pooja [V; 1465]  
 TRUE tɨ'visamp(a) [V; 1091]  
 TRY -maga [V; 1906]  
 TRY (IN VAIN)/UNABLE TO -musu [V; 1907]  
 TURN 'kwiin?a [V; 1470]  
 TURN ci'kwicui [V; 1489]  
 TURN AROUND/RETURN/COME BACK ko'to?o-ngu [V; 1428]  
 TURN INTO tɨ'kaw?i [V; 1471]  
 TURN/SPIN kwi'nu?ungu [V; 1452]  
 TURTLE 'aaj(a) [N; 2248]  
 TURTLE-SHELL 'aaja-?asi-v(ɨ) [N; 2616]  
 TWO wa'ha [A; 0502]  
 UDDER/BREAST pi'h(i) [N; 2059]  
 UGLY/BAD ɨ'ci-ni [V; 1058]  
 UNABLE TO -musu [V; 1907]  
 UNDER -ruka-tu(a) [P; 0109]  
 UNDER -ruk(a) [P; 0108]  
 UNDERSTAND na'nka-vutucuga [V; 1123]  
 UNDERSTAND/KNOW/LEARN pu'tucuga [V; 1121]  
 UNTIE hu'pa [V; 1472]  
 UNTIE/COME UNTIED hu'pa-ki [V; 1545]  
 URINATE si'?i [V; 1474]  
 URINATE (GO TO) si'?i-wa?i [V; 1474.3]  
 URINE si'?ip(i) [N; 2091]  
 USITATIVE -mi [ ; 5111]  
 UTE ju'wita(a) [N; 2142]  
 VERY 'mɨga(i) [A; 0302]  
 VERY (ADJ)/ALMOST (VERB) wa'ha- [A; 0301]  
 VERY/EXTREMELY 'naakɨ-mɨga(i) [A; 0303]  
 VILLAGE (ABANDONED)/CAMP ka'ni-p(ɨ) [N; 2518]  
 VISIT ka'ni?i [V; 1475]  
 VOMIT pi'pitan?(a) [V; 1490]

- WAKE ma-'rupun?i-nkɪ [V; 1477]  
 WAKE tu'pun?i [V; 1476]  
 WALK AROUND u-'rua-voro [V; 1268.9]  
 WALK THAT WAY ma-'rua [V; 1268]  
 WALK THIS WAY i-'cua [V; 1268]  
 WALK-PL pa'gi [V; 1269]  
 WALK-SG u-'rua [V; 1268]  
 WAND/CANE 'poor(o) [N; 2520]  
 WANDER/TRAVEL AROUND pa'gi-mporo [V; 1269.9]  
 WANT -suawa-ga(i) [V; 1910]  
 WANT/ASK -tɪvicu [V; 1917]  
 WAR na'ruganip(ɪ) [N; 2827]  
 WARM ju'ʔara [V; 1081]  
 WASH pa-'caga [V; 1478]  
 WASH/CANYON hu'wip(i) [N; 2521]  
 WATER 'paa [N; 2617]  
 WATER pa'- [N; 2617.9]  
 WATER GLASS pa-'hivi-nump(ɪ) [N; 2636]  
 WATER-TURTLE pa-'ʔaaj(a) [N; 2249]  
 WATERMELON pa'von?okwi-c(ɪ) [N; 2422]  
 WE (EXCL) nɪ'm(i) [N; 2004]  
 WE-DU (INCL) ta'm(i) [N; 2002]  
 WE-SEV (INCL) ta'w(ɪ) [N; 2003]  
 WEAK ju'm?i-ga [V; 1052]  
 WEAR u'ni-a-ni?i [V; 1479]  
 WEAVE BASKET nɪ'nga [V; 1480]  
 WEAVE/SEW ca'ga [V; 1437]  
 WEB/NET 'waanaa-v(ɪ) [N; 2637]  
 WELL pa-'hoora-p(ɪ) [N; 2618]  
 WELL/GOOD ha'ʔɪ-ju [V; 1048]  
 WEST ɪ'ga-tua-nt [A; 0224]  
 WHAT hi'mp(ɪ) [N; 2020]  
 WHAT/HOW ha'ni(a) [A; 0209]  
 WHEAT a'cit(a) [N; 2427]  
 WHEN ha'nok(o) [A; 0203]  
 WHERE (LOC) ha'ga-va [A; 0204]  
 WHERE (MOTION) ha'ga-vaa-ntua [A; 0205]  
 WHERE (MOTION) ha'ga-rua [A; 0206]  
 WHICH ha'gakaja [A; 0207]  
 WHILE (SUBORDINATOR) -ga(i) [ ; 5130]  
 WHILE (SUBORDINATOR) -g(u) [ ; 5131]  
 WHILE (SUBORDINATOR) -j(u) [ ; 5130]  
 WHIP/HIT/FALL kwi'pa [V; 1361]  
 WHITE to'sa-ga [V; 1015]  
 WHITE-MAN/ENGLISH 'haiku(u) [N; 2106]  
 WHITTLE si'va-va [V; 1481.7]  
 WHITTLE wi'sivo?ona [V; 1493]  
 WHITTLE/SHAVE-WOOD si'va [V; 1481]  
 WHO ha'ng(a) [N; 2021]  
 WHO/WHAT hi'n(i) [N; 2024]  
 WHY ha'ga-ruaga(i) [A; 0208]  
 WHY/HOW ha'ga-ni?ing(u) [A; 0201]  
 WIDE a'waʔano [V; 1036]  
 WIFE pi'w(a) [N; 2039]  
 WILD i'jaga [V; 1546]  
 WILLOW sa'gav(ɪ) [N; 2430]  
 WIND nɪ'gar(ɪ) [N; 2619]  
 WINDOW vi'ntana?(a) [N; 2620]  
 WINDOW pa-'ri?asi-tiwap(ɪ) [N; 2639]  
 WINE 'wine(i) [N; 2621]  
 WING/FEATHER wi'sia-v(i) [N; 2543]  
 WINTER/YEAR to'm(o) [N; 2805]  
 WIPE wi'tuc(a) [V; 1491]  
 WITH (ACCOMP) -wa?(i) [P; 0172]  
 WITH (INSTR) -w(a) [P; 0170]  
 WOLF tɪ'vac(i) [N; 2250]  
 WOMAN ma'maʔu(u) [N; 2131]  
 WOOD/STICK/FIREWOOD ku'kwap(i) [N; 2607]  
 WOOL pu'nkuv(ɪ) [N; 2622]  
 WORK tɪ'vijawi [V; 1517]  
 WORK 'wɪɪka [V; 1518]  
 WORM pa'ʔa-v(i) [N; 2257]  
 WORRIED/BOTHERED kac ha'ɪc pi'juwa? [V; 8101]  
 WOULD -gu(u) [ ; 5115]  
 WRITE/DRAW po'ʔo [V; 1349]  
 YEAR/WINTER to'm(o) [N; 2805]  
 YELLOW o'wasia-ka [V; 1016]  
 YES hɪ'ʔɪ [I; 9013]  
 (YES-NO Q) -ra(a) [ ; 5160]  
 YESTERDAY 'kɪaw(i) [A; 0262]  
 YET/BUT tɪ'rijaw [A; 0403]  
 YOU-OR-ME/ONE OF US ta'mi-want(ɪ) [N; 2019]  
 YOU-PL mɪ'm(i) [N; 2006]  
 YOU-SG ɪ'm(i) [N; 2005]  
 YOUNG BOY 'aivac(i) [N; 2132]

YOUNG GIRL 'nainc(i) [N;  
2133]  
YOUNG PERSON 'a±-n±w(±) [N;  
2134]  
YOUNGER BROTHER ca'ki?(i) [N;  
2036]  
YOUNGER SISTER na'mi?(i) [N;  
2037]  
YOUNGEST pi'nga-t±-m( ) [N;  
2148]

## LEXICAL FEATURE LISTING

- 0102 -va(a) P AT/ON (LOC) \*V, -MOT, --N, /-wa(a), see 0225  
0103 -vaa-ntu(a) P ONTO \*V, +MOT, /-waa-ntu(a), see 0102,0150  
0104 -upa?(a) P IN (LOC) \*V, -MOT, /-ipa?(a)  
0105 -upa?a-tu(a) P INTO \*V, +MOT, /-ipa?a-tu(a), see 0104,0150  
0106 -va?an(a) P ON/-TOP OF (LOC) \*V, -MOT,  
/-va?a/-pa?an(a)/-mpa?an(a), see 0102  
0107 -va?a-ntu(a) P ONTO/ON TOP OF (MOTION) \*V, +MOT, see  
0106,0150  
0108 -ruk(a) P UNDER \*V, -MOT, see 1256,0109  
0109 -ruka-tu(a) P UNDER \*V, +MOT, see 0108,0150  
0110 -vin?ap(a) P BEHIND \*V, -MOT  
0111 -vin?apa-cu(a) P BEHIND \*V, +MOT, see 0110,0150  
0112 -va-jiw(i) P BESIDE -V, \*MOT  
0113 -agav( ) P IN V  
0115 -paja?a-va(a) P IN FRONT OF \*V, -MOT,  
/-paja?a/-vaja?a-va(a)/ka-vaja?a-va(a), see 2067  
0116 -gaa-va?(a) P OVER \*V, \*MOT, NGU=IMP  
0117 -waga-ru(a) P THROUGH \*V, +MOT  
0118 -nag(a) P IN V, MOT  
0120 -manankw(a) P BECAUSE OF/FROM -V  
0121 ma-nankwa-tu(a) P TOWARDS THAT WAY (DIRECTION \*V, +MOT, see  
0120,0150  
0122 -vacì P ABOUT V, MOT, see 0123,0125  
0123 -vaa-ntì-manankw(a) P AWAY FROM -V, +MOT,  
/-vaa-cì-manankw(a), see 0102,0120  
0125 -upa?a-tì-manankw(a) P OUT FROM INSIDE -V, +VMOT,  
/-ipa?a--, see 0104,0120  
0150 -tu(a) P TOWARD/AT/TO (MOTION) +V, +MOT, +VMOT, NGU=IMP,  
V/M=PAST, /-ru(a)/-cu(a), see 1291  
0160 -wank(u) P FROM -V  
0162 -mank(u) P ON -V  
0165 -vaw(a) P FROM/OF V  
0170 -w(a) P WITH (INSTR) -V, -ANIM-OBJ  
0172 -wa?(i) P WITH (ACCOMP) \*V, \*ANIM-OBJ, \*CONT, J=PRES  
0190 -mantì P SOME/PART OF -V  
0195 -gaa-va?a-c( ) P MORE THAN V, see 0116  
0196 -ruka-tua-c( ) P LESS THAN V, see 0108  
0200 hi'naa A TAG-Q/HUH? +Q, -BND  
0201 ha'ga-ni?ing(u) A WHY/HOW  
0202 ha'ganiga(i) A HOW/WHY  
0203 ha'nok(o) A WHEN  
0204 ha'ga-va A WHERE (LOC)  
0205 ha'ga-vaa-ntua A WHERE (MOTION)  
0206 ha'ga-rua A WHERE (MOTION)  
0207 ha'gakaja A WHICH  
0208 ha'ga-ruaga(i) A WHY  
0209 ha'ni(a) A WHAT/HOW \*TRAN, +V, +PRO

- 0210 ha'no-pai-jujum(±) A HOW MANY +ANIM  
 0211 ha'no-pai-t(±) A HOW MANY -ANIM  
 0212 ha'ga-ni A DO WHAT TRAN, +V  
 0220 -kwa?(i) A AWAY  
 0221 ta'nt±i-p A NORTH  
 0222 ta'nt±ivai-t A SOUTH  
 0223 ta's±iant±-pa-t A EAST  
 0224 ±'ga-tua-nt A WEST  
 0225 i-'va A HERE  
 0226 ma-'va A THERE (VIS)  
 0227 u-'wan A THERE (INVIS)  
 0228 mi'jot(o) A FAR  
 0229 ca'gip(a) A NEAR  
 0231 'kwii- A LEFT  
 0233 'kwii-mi-tu(a) A TO THE LEFT/LEFT +V, +MOT  
 0234 p±'ra-mi-tu(a) A RIGHT/TO THE- +V, +MOT  
 0238 j±'h±iva-nt A OUTDOORS/OUTSIDE  
 0239 't±irava-nt A OUTSIDE/OUTDOORS  
 0240 ca'gip( ) A CLOSE/NEAR  
 0251 'kwa± A IN (TIME)/AGO/FROM NOW +V, +MOT, +TIME, +PLACE,  
 NGU=IMP  
 0252 'suu-tav(a) A ALL DAY  
 0253 u'tusamp(a) A ALL THE TIME/ALWAYS  
 0254 '±is(u) A LONG AGO/ALREADY  
 0255 'naa-ta?ik(a) A EVERY DAY/DAY AFTER DAY  
 0256 na'm± A FIRST  
 0257 o'no- A JUST (NOW/THEN) +BND, +PREFIX  
 0258 'piikaj(u) A LATER  
 0259 -p±ga(i) S LONG AGO  
 0260 ±'witu A LONG TIME  
 0261 'a±-v(i) A TODAY/NOW  
 0262 'k±aw(i) A YESTERDAY  
 0263 ta'?ik(a) A TOMORROW  
 0264 'a±-vi-s(u) A SOON/IN A MOMENT  
 0280 p±'nka- A KEEP ON/INSIST ON  
 0281 to'goi- A IN MIDST OF  
 0282 ±i- A BEFOREHAND  
 0301 wa'ha- A VERY (ADJ)/ALMOST (VERB)  
 0302 'm±iga(i) A VERY  
 0303 'naaki-m±ga(i) A EXTREMELY/VERY  
 0305 -p±ca(a) A MORE/ -ER  
 0306 mi'?au-nci-n A LESS see 1028  
 0307 'h±i- A IN VAIN  
 0322 pi'tang(a) A QUICKLY/IN A HURRY/FAST +V, R=HAB  
 0323 sa'mpav(a) A SLOWLY/QUIETLY  
 0324 sa'mpava-ni A SLOWLY/QUIETLY  
 0325 su'mpav(a) A SLOWLY/QUIETLY  
 0326 su'mpava-ni A QUIETLY/SLOWLY  
 0330 'aa- A QUIETLY/STILL  
 0331 'aaga- A SECRETLY/STEALTHILY  
 0332 t±'w±ni A FAST  
 0333 na'nis( ) A APART/SEPARATELY  
 0350 na-'hump(a) A ONESELF  
 0351 na'ma- A TOGETHER  
 0401 -s(u) S ALSO/TOO/STILL  
 0402 'haita A (AND) THEN  
 0403 t±'rijaw A BUT/YET/THOUGH  
 0405 -sap(a) A ACTUALLY/THOUGH  
 0410 'suu- A EASY TO/READY TO  
 0423 -vaac S IN ORDER TO

- 0450 ka'c(u) A NO/NOT  
 0451 -wa?(i) S NEG  
 0452 -?ap(a) S NEG  
 0455 'suuv(a) A MAYBE  
 0456 'suupi-n(i) A MAYBE  
 0501 'suu A ONE  
 0502 wa'ha A TWO  
 0503 pa'hi A THREE  
 0504 wa'ciw A FOUR  
 0505 ma'nig A FIVE  
 0506 na'va A SIX  
 0507 mu'kwis A SEVEN  
 0508 'naanci A EIGHT  
 0509 ju'wip A NINE  
 0510 ma'siw A TEN  
 0550 'kiimaanc(i) A OTHER/ANOTHER  
 0551 ki'man A DIFFERENT  
 0601 ma'n(o) A ALL/EVERY +N  
 0602 wa'ha- A BOTH +N  
 0603 a'va?a- A LOTS OF  
 0604 -samp(a) A ONLY  
 0605 hu'mpait(a) A ANY  
 0606 hi'mpa-jok( ) A FEW/A FEW  
 1000 'uunii V BE/DO \*TRAN, KA=P/P, V=PAST, 1001=+RESULT  
 1001 'uunii-ka(i) V BE -TRAN, V=PAST, 0=PRES, 1000=-RESULT  
 1002 -tui V LET/MAKE/CAUSE +TRAN, \*S, +OBJ-PREF, +V-PREF, C=HAB,  
 0/NGU=IMP, V/M=PAST  
 1003 u-'ru?a V HAVE/OWN +TRAN, R=HAB, V=PAST, J=PRES  
 1004 i-'cu?a V RESEMBLE (SOMETHING HERE) TRAN, GA=GER  
 1005 tu-'pa-ga V DARK/BLACK -TRAN, R=HAB, J=PRES, V=PAST,  
 TU'--=PL, see 1008,2804  
 1006 sa'wa-ga V GREEN/BLUE -TRAN, R=HAB, SA'--=PL, J=PRES,  
 V/M=PAST, GA=GER, see 2402  
 1007 o'nto-ka V BROWN -TRAN, R=HAB, O'--=PL, J=PRES  
 1008 tu-'punuwa V DARK -TRAN, /tu-'punu?a, V=PAST, see  
 1005,2804  
 1009 ku'ca-ka V GREY -TRAN, R=HAB, KU'--=PL, J=PRES, GA=GER,  
 V/M=PAST  
 1010 pa'na V LIGHT -TRAN, NGU=MOM, KA=DUR, see 2810  
 1011 a'nka-sia-ka V PINK -TRAN, A'--=PL, R=HAB, V/M=PAST, see  
 1013  
 1012 pa'rowa-ga V PURPLE -TRAN, R=HAB  
 1013 a'nka-ga V RED -TRAN, R=HAB, A'--=PL  
 1014 a'si-ga V SILVER -TRAN, R=HAB  
 1015 to'sa-ga V WHITE -TRAN, R=HAB, J=PRES, TO'--=PL  
 1016 o'wasia-ka V YELLOW -TRAN, R=HAB, J=PRES, O'--=PL  
 1020 mi'jo V FAR -TRAN, GA=GER, T=HAB  
 1021 ho'ko V BIG -TRAN, NT=HAB, J=PRES  
 1022 ju'hu-gai V FAT -TRAN, V=PAST, J=PRES, see 2542  
 1023 hi'piki V HOLEY/HAVE A HOLE -TRAN, J=PRES, see 1024,2560-2  
 1024 hi'vigi-ca V HOLEY/FULL OF HOLES -TRAN, J=PRES, see  
 1023,2560-2  
 1025 pa'?a-ntoga V LONG -TRAN, NGU=MOM, \*CONCRETE, V/M=PAST,  
 GA=GER, see 1029  
 1026 ki'wagai V SHARP -TRAN, NT=HAB, 0=PRES, V/M=PAST, GA=GER,  
 see 2541  
 1027 to'vi-ci V SHORT -TRAN, see 2127  
 1028 mi'?au-nci V SMALL -TRAN, V=PAST, see 2128  
 1029 pa'?a V TALL -TRAN, NT=HAB, GA=GER, J=PRES, V=PAST,  
 PA'--=PL, see 1037

- 1029.5 pa?'a-ni V LOUD/TALL (SENS COMP)  
 1030 tu'nkuka V THICK -TRAN, V/M=PAST, J=PRES, NGU=MOM  
 1031 pi'ti:ja V HEAVY -TRAN, J=PRES, V/M=PAST  
 1032 na'cukwi V NARROW -TRAN, J=PRES  
 1033 pi'kaga V SMOOTH -TRAN, V=PAST  
 1034 mu'n?unki V ROUND -TRAN, V=PAST  
 1035 ci'?auc(i) V THIN -TRAN, J=PRES, NGU=IMP, V/M=PAST  
 1036 a'wa?ano V WIDE -TRAN, J=PRES, NT=HAB  
 1040 i'japaka V SCARED -TRAN, 0=IMP, V=PAST, C=GER, 1041=DUR  
 1041 i'javaga V AFRAID -TRAN, V=PAST, GA=GER, J=PRES, NGU=IMP,  
 1040=MOM  
 1042 na'nga-ja?i V ANGRY -TRAN, J=PRES, 0/NGU=IMP, see 1046  
 1043 i'vi--ju--ni V ILL/BAD -TRAN, V=PAST, see 9001,1044,  
 \*S-SUBJ  
 1043.5 i'vi--ni V BAD (SENS COMP)  
 1044 i'vi-piwi--ni V BAD -TRAN, see 9001,1043  
 1045 sa'pija?i V BRAVE/FORMIDABLE -TRAN, GA=GER, NGU=IMP  
 1046 ja'?i V TIRED-SG/DRUNK/DEAD -TRAN, V=PAST, 0/J=PRES,  
 GA=GER, see 2835,1346  
 1046.8 ma'va-ja?(i) V HAVE A COLD  
 1047 ju'm?a V TIRED-PL/DRUNK/DEAD -TRAN  
 1048 ha'?i--ju V WELL/GOOD -TRAN, 0=PRES, V=PAST, see  
 9006,9005,1049, NGU=IMP  
 1049 ha'?i--p(i) V GOOD/NICE/FUN -TRAN, see 9005,9006,1048,  
 W=ANIM  
 1050 ha'?i--ti- V GOOD -TRAN, see 1322,1127,9006  
 1050.5 ha'?i--c(i) V GOOD (SENS COMP)  
 1051 mu'cu V STRONG -TRAN, J=PRES, NT/T=HAB, \*ANIM, MU'--=PL,  
 NGU=IMP, NGU=MOM, V/M=PAST  
 1052 ju'm?i-ga V WEAK -TRAN, R=HAB, V/M=PAST, NGU=IMP, J=PRES,  
 see 1047  
 1053 ti'gi--jumi V HUNGRY-PL -TRAN, V=PAST, see 1052,1047,2822  
 1054 ni'wi--ga(i) V LIVE -TRAN, V/M=PAST, see 2056,2103  
 1055 na'gami V SICK -TRAN, NGU=IMP, NGU=MOM, V/M=PAST, GA=GER  
 1056 a'jaampi V BEAUTIFUL/DELICIOUS -TRAN, V=PAST, R=HAB  
 1056.4 a'jaampi--tu?a--ni(i) V LOVELY  
 1056.5 a'jaampi--ni(i) V LOVELY (SENS COMP)  
 1057 ni'ja-ga V HAVE A NAME -TRAN, see 1120,1342,2823  
 1058 i'ci--ni V UGLY/BAD -TRAN, (SENS COMP)  
 1059 ma'w'a V LAZY/TIRE OF  
 1070 ku'tucaa V HOT -TRAN, C=GER, M=PAST, 0=PRES, 1076=DUR  
 1071 mo'hara V BITTER -TRAN, J=PRES, V/M=PAST  
 1072 si--'ja?i V COLD -TRAN, C=HAB, +ANIM-SUBJ, J=PRES  
 1073 si--'tu?i V COLD -TRAN, \*ANIM-SUBJ  
 1074 ta'vasi V DRY -TRAN  
 1075 a'r:i--ni V HOT -TRAN, see 9009  
 1076 ku'tuci V HOT -TRAN, V/M=PAST, GA=GER, 1070=MOM  
 1077 ta'ru?i V HOT -TRAN  
 1078 ta'sovoro V HUMID/STICKY -TRAN, J=PRES  
 1079 pu'nua V STINK/SMELL -TRAN, V=PAST, J=PRES  
 1080 pi'jagama V SWEET -TRAN  
 1081 ju'?ara V WARM -TRAN, \*ANIM-SUBJ  
 1082 tu'ca-ga(i) V DIRTY -TRAN, 0=PRES, see 2626  
 1083 ta'vasi--kwa?i V DRY UP -TRAN, J=PRES, see 1074,1084  
 1083.5 ta'vasi--kwaipiw V SKINNY/DRIED UP/SHRIVELED  
 1084 ta'pas(i) V DRY/DRY UP -TRAN, 1074=DUR, see 1083  
 1085 ma-'waga V EXPENSIVE/COSTLY -TRAN, see 1410  
 1086 ki'ja-pitua V FUNNY -TRAN, V=PAST  
 1087 'ai--ga V NEW/YOUNG -TRAN, V/M=PAST, R=HAB, J=PRES, see  
 0261,2134



- 1088 tɨ'mpi-ka-t V RICH -TRAN  
 1089 i'javi-ntuarɨni V DANGEROUS/SCARY TRAN  
 1090 sa'piʔai V DIFFICULT -TRAN, /sa'pi-jaʔi, V/M=PAST, J=PRES, T=HAB  
 1091 tɨ'visamp(a) V TRUE TRAN, +S-SUBJ, T=HAB  
 1092 ʔitiɨ-pɨw V OLD -TRAN  
 1093 'kaa-kaiva-gai V MOUNTAINOUS -TRAN  
 1094 sɨ'gɨ-nka V TART -TRAN  
 1095 sɨ'gɨ-nkama V TART/TASTE TART -TRAN  
 1110 'mai V SAY +TRAN, +S, V=PAST, KA=P/P, see 1110,1111,1203, (DAT: N-RUA), NGU=IMP  
 1111 'mai--ni V THINK +TRAN, +S, KA=P/P, J=PRES, V=PAST, see 1110  
 1112 hu-'mai--ni V SUSPECT +TRAN, +S, KA=P/P, see 1110,1111  
 1120 -ga(i) V BE/HAVE +TRAN, +OBJ-PREF, NT=HAB, 0=PRES, V=PAST, NGU=IMP  
 1121 pu'tucuga V UNDERSTAND/KNOW/LEARN +TRAN, V=PAST, R=HAB, \*S, \*IT, NGU=IMP, J=PRES  
 1122 su-'mai V REMEMBER +TRAN, \*S, J=PRES, \*V-PREF, \*IT, V=PAST, NGU=IMP  
 1123 na'nka-vutucuga V UNDERSTAND TRAN, V=PAST, see 1155,1121  
 1124 na'sumɨa V FORGET +TRAN, see 1129,1132  
 1124.5 na-'sumɨa-sutui V FORGET  
 1125 tɨ'gɨʔi V NEED/LACK +TRAN, V=PAST, J=PRES, GA=GER  
 1126 ɨ'vɨ-suntuʔi V HATE +TRAN, C=HAB, see 9001,1129  
 1127 ha'ʔɨ-suntuʔi V LIKE +TRAN, C=HAB, \*S, J=PRES, V=PAST, NGU=MOM, /-sutuʔi, see 9006,1129  
 1128 a'ja-waʔi V LOVE/RESPECT/ADMIRE +TRAN, C=HAB, V=PAST, M=PAST, see 1056  
 1129 -su-ntuʔi V THINK +TRAN, +V-PREF, J=PRES, C=HAB, GA=GER, V=PAST, see 1124,1122,1126  
 1131 no'nosi V DREAM -TRAN, V=PAST, M=PAST, GA=GER, (OBJ: N-VACE)  
 1132 tɨ-'sumɨa V FORGET/LEAVE BEHIND +TRAN, /ta-'sumɨa, V=PAST, see 1124,1129  
 1132.5 tɨ-'sumɨa-sutui V FORGET  
 1151 'puunii V SEE/LOOK \*TRAN, NGU=IMP, \*OBJ-PREF, C=HAB, J=PRES, V=PAST, 1152=+RESULT  
 1151.7 nɨ-'mpuni-tuʔi V SHOW  
 1152 'puunii-ka(i) V LOOK/SEE +TRAN, 0/NGU=IMP, +RESULT, 1151=-RESULT, V/M=PAST, NGU=MOM, 0/J=PRES  
 1155 na'nka V LISTEN/HEAR \*TRAN, V=PAST, 1156=+RESULT  
 1156 na'nka-ka(i) V LISTEN/HEAR +TRAN, +RESULT, 1155=-RESULT  
 1159 u'gwi V SMELL/SNIFF \*TRAN, V=PAST, 1160=+RESULT, \*CONT  
 1160 u'gwi-ka(i) V SNIFF/SMELL TRAN, +RESULT, 1159=-RESULT  
 1163 kɨ'makaʔ(a) V TASTE +TRAN, 0/NGU=IMP, V=PAST, see 1172  
 1165 ma'vik(a) V TOUCH/FEEL +TRAN, V=PAST, \*CONT, 1166=MOM  
 1166 ma'pik(a) V TOUCH +TRAN, V=PAST, 0=IMP, 1165=DUR  
 1168 ta-'pik(a) V TOUCH WITH FOOT OR TOE TRAN  
 1171 pa'gi V SOUND -TRAN, C=HAB, /1067/1101  
 1172 ka'ma v tastɨ -tran, V=PAST, \*A-PREF, see 1163  
 1201 tɨ'vingi V ASK +TRAN, +S  
 1202 ni'mukumpa V EXPLAIN/SET STRAIGHT +TRAN, V=PAST  
 1203 'mai-nkɨ V TEACH/EXPLAIN +TRAN, V/M=PAST, GA=GER, 2-OBJ, \*OBJ-PREF, see 1110  
 1204 tɨ'nia V TELL +TRAN, +S, 2-OBJ, R=HAB  
 1251 na'waʔitɨ V APPEAR/SHOW UP -TRAN, M=PAST  
 1252 to'kwimawʔɨ V APPEAR/SHOW UP -TRAN, V=PAST  
 1253 pi'picɨ V ARRIVE -TRAN  
 1254 'jaaki V BRING-SG-OBJ +TRAN, C=HAB, NGU=IMP, \*OBJ-PREF

- 1255 ju'?a-ki V BRING-PL-OBJ +TRAN  
 1256 ma-ruka-n?a V CLIMB ON THAT +TRAN, +OBJ-PREF  
 1257 pa'nankwa V COME DOWN/FR NORTH -TRAN  
 1258 tì'nankwa V COME UP/FR SOUTH -TRAN  
 1259 wa'ki V COME FR EAST/WEST -TRAN, NGU=IMP  
 1260 ci'pi V COME OUT-SG -TRAN, M=PAST  
 1261 nu'jukwa V MOVE -TRAN  
 1262 'jaa-kwa?i V TAKE (AWAY) +TRAN, NGU=IMP, see 1254  
 1263 ci'vunga V COME OUT-PL -TRAN, 1260=SG  
 1265 pa'jì V RETURN-SG -TRAN, M=PAST  
 1266 mì'nìsi V RETURN-PL -TRAN  
 1267 pa'jì-kii V COME BACK -TRAN, see 1265  
 1268 u-'rua V WALK-SG -TRAN, R=HAB, V/M=PAST, NGU=IMP  
 1268.8 u'rua-kwa?i V GO/LEAVE  
 1268.9 u-'rua-voro V WALK AROUND  
 1269 pa'gi V WALK-PL -TRAN, \*V-PREF, \*CONT, +MOT  
 1269.8 pa'gi-kwa?i V GO AWAY-PL  
 1269.9 pa'gi-mporo V TRAVEL AROUND/WANDER  
 1273 wì'nì V STAND-SG -TRAN, R=HAB, NGU=IMP, 1281=MOM, V=PAST,  
 -MOM  
 1274 wa'mi V STAND-PL -TRAN, 1282=MOM, -MOM  
 1275 ha'vi V LIE-SG -TRAN, C=HAB, NGU=IMP, 1283=MOM, -MOM  
 1276 kwa'vi V LIE-PL -TRAN, 1284=MOM, -MOM  
 1277 ka'rì V SIT-SG -TRAN, R=HAB, NGU=IMP, \*V-PREF, 1279=MOM,  
 -MOM  
 1278 jì'wi V SIT-PL -TRAN, NGU=IMP, 1280=MOM, -MOM  
 1279 ka-'karì V STOP-SG/SIT (DOWN) -TRAN, R=HAB, 0=IMP,  
 1277=DUR, +MOM  
 1280 jì-'jìwi V SIT (DOWN)-PL -TRAN, 1278=DUR, +MOM, V=PAST  
 1281 wì-'wìnì V STAND (UP)-SG -TRAN, 1273=DUR, +MOM  
 1282 wa-'wami V STAND (UP)-PL -TRAN, 1274=DUR, +MOM  
 1283 ha-'havi V LIE (DOWN)-SG -TRAN, 1275=DUR, +MOM  
 1284 kwa-'kwavi V LIE (DOWN)-PL -TRAN, 1276=DUR, +MOM  
 1291 -rua V GIVE/HAND +TRAN, +DAT-PREF, 2-OBJ, NGU=IMP, M=PAST,  
 (DAT: N-A) (OBJ: N-A), see 0150  
 1292 ma'ga V GIVE +TRAN, \*OBJ-PREF, 2-OBJ, R=HAB, V/M=PAST,  
 NGU=IMP  
 1293 kwì'hì V CATCH-SG-OBJ/TAKE/RECEIVE +TRAN, 0/NGU=IMP  
 1294 tu'?uma V CATCH-PL-OBJ/TAKE/RECEIVE +TRAN  
 1295 na'ru-ga V BUY +TRAN  
 1296 na'ruga-tìravi V SELL TRAN, 0/NGU=IMP, see 1295,1464  
 1301 na'rì V ASK FOR +TRAN, \*OBJ-PREF, NGU=IMP, 2-OBJ, GA=GER,  
 VV=PAST  
 1302 tì'm?a V BAKE +TRAN, NGU=IMP, -0=IMP, J=PRES  
 1303 no'kom?a V BEND -TRAN, -IMP  
 1304 kì'?(i) V BITE +TRAN, 0=IMP, -NGU=IMP, -OBJ-PREF  
 1305 no'joga V BOIL -TRAN, -IMP, V=PAST, J=PRES  
 1306 pu'ru?ai-ku V BREAK/SHATTER -TRAN, V=PAST, -IMP, -M=PAST  
 1307 kì'rukwi V BREAK/SNAP -TRAN, 0/NGU=IMP, 0/V=PAST, -M=PAST,  
 -J=PRES, (SUBJ=STICK/BONE)  
 1308 ko'pok(i) V SNAP/BREAK (STICK) -TRAN, -IMP, 0/V=PAST, see  
 1309  
 1309 ka'pak(i) V SNAP/BREAK (STRING) -TRAN, -IMP, see 1308  
 1310 su'wa-ka V BREATHE -TRAN, R=HAB, 0/NGU=IMP, J=PRES, see  
 2821, (MOM=TAKE BREATH)  
 1311 co-'kwipa V BUMP (HEAD)/HIT -TRAN, M/V=PAST, NGU=IMP,  
 -0=IMP, see 1361,2072  
 1312 na'?i V BURN -TRAN, NGU=IMP, (SUBJ=FIRE)  
 1313 ku'ciki V BURN +TRAN, M=PAST, 0/NGU=IMP  
 1314 'kuu V BURY +TRAN, NGU=IMP, see 1315, -0=IMP

- 1314.6 nɪ-'nkuu V BURY (SOMEONE) -TRAN  
 1315 tɪ-'guu V BURY (SOMEONE) -TRAN, NGU=IMP, see 1314,2125  
 1316 'pai V CALL OVER +TRAN, NGU=IMP, V/M=PAST, -0=IMP, GA=GER  
 1317 ja'wi V CARRY-SG-OBJ +TRAN, C=HAB, 0/NGU=IMP, V=PAST, -M=PAST, see 1254,1380  
 1318 ju'ʔa V CARRY-PL-OBJ +TRAN, R=HAB, NGU=IMP, V=PAST, see 1255  
 1319 ma'no V CHASE +TRAN, R=HAB, J=PRES  
 1319.8 ma'noʔo V CHASE +TRAN, NGU=IMP  
 1319.9 ma'noʔo-k(o) V CHASE +TRAN, 0=PRES, -J=PRES, 0/NGU=IMP, V=PAST  
 1320 ta'pok(a) V CHOP +TRAN, NGU=IMP, V/M=PAST, -0=IMP  
 1321 ma-'vacigi V CLAP HANDS -TRAN, see 1441,2070  
 1322 ha'ʔɪ-tɪ-maɪ V FIX/CLEAN +TRAN, see 9006,1400  
 1323 tɪ'wa V CLOSE \*TRAN, NGU=IMP, V/M=PAST, -0=IMP  
 1324 jɪ'pak(i) V COLLAPSE (OPEN STRUCTURE) -TRAN  
 1325 jo'kok(i) V COLLAPSE (ENCLOSED STRUCTURE) -TRAN  
 1326 ma'ʔa V PAINT/MARK/COLOR +TRAN, V/M=PAST, NGU=IMP, -0=IMP, GA=GER  
 1327 tɪ'guʔuni V COOK +TRAN, NGU=IMP, V/M=PAST  
 1328 kwa'sɪ V RIPE/COOK/BURN -TRAN, NGU=IMP (TO A FRUIT)  
 1329 'niinga V READ/COUNT +TRAN, NGU=IMP, -0=IMP, V=PAST  
 1330 ma'voʔa V COVER +TRAN, V/M=PAST, NGU=IMP, -0=IMP, GA=GER  
 1331 co'nok(a) V SHRINK/CRAMP -TRAN, 0=IMP, V=PAST, -NGU=IMP, C=GER  
 1332 wa'va V CRAWL -TRAN, R=HAB, NGU=IMP, V/M=PAST, see 1333, -0=IMP  
 1333 ma-'wava V CREEP -TRAN, ARCHAIC, see 1332,2070  
 1334 ja'ga V CRY -TRAN, R=HAB, NGU=IMP, M/V=PAST, 1482=MOM  
 1335 ci'kwɪ V CUT +TRAN, 0/NGU=IMP, V/M=PAST, J=PRES  
 1336 ci'puruʔ(u) V CUT/DICE TRAN  
 1337 'ko(a) V CUT/NICK TRAN, V=PAST, 0/J=PRES  
 1338 ci'kwaʔica V CUT/SLICE TRAN  
 1339 ci'kavica V CUT OFF TRAN, GA=GER  
 1340 ci'kapinʔa V CUT OFF TRAN, V=PAST  
 1342 ni'ja V CALL +TRAN, see 1057,2823  
 1344 wɪ'nɪmi V DANCE -TRAN, 0/NGU=IMP, V=PAST, see 1273  
 1345 ɪ'vɪ-mawʔ(ɪ) V DESTROY +TRAN, V=PAST, see 9001,1400  
 1346 ja'ʔi-kwaʔ(i) V DIE -TRAN, V=PAST, 0=PRES, see 1046  
 1347 'hoora V DIG +TRAN, 0/NGU=IMP, V/M=PAST, J=PRES, see 1348  
 1348 pa-'hora V DIG A WELL -TRAN, V=PAST, see 1347,2617  
 1349 po'ʔo V WRITE/DRAW +TRAN, J=PRES, V=PAST, see 1460  
 1350 hi'vi V DRINK +TRAN, NGU=IMP, V=PAST  
 1351 wɪ'ʔi-ku V FALL-SG/DROP -TRAN, +MOM, C=GER, 91351=DUR  
 1351.9 wɪ'ʔi V DROP-SG/FALL -TRAN, J=PRES, -MOM, 1351=MOM  
 1352 ho'hononoʔo V LOST-PL/FALL/DROP -TRAN, +MOM, V=PAST, 91352=DUR  
 1352.9 ho'hononoʔo V DROP-PL/FALL -TRAN, -MOM, J=PRES, 1352=MOM  
 1353 pa-'jaʔi V DROWN -TRAN, see 2617,1346  
 1354 pa-'jɪʔa-ki V SINK/DROWN -TRAN, see 1359  
 1355 tɪ'ka V EAT +TRAN, R=HAB, V/M=PAST, NGU=IMP, \*OBJ-PREF, -C=GER, J=PRES, NGU=IMP  
 1356 mu'pang(a) V EMPTY OUT +TRAN, V/M=PAST, 0/NGU=IMP, GA=GER  
 1357 ɪ'ga V PLANT/ENTER TRAN, \*OBJ-PREF  
 1358 wa'gi V ENTER-PL TRAN  
 1359 jɪ'ʔa-ki V SINK/ENTER/SET -TRAN, V=PAST, see 1354  
 1360 na-'wa-cipi-nkɪ V ESCAPE TRAN, V=PAST, see 1260  
 1361 kwi'pa V WHIP/HIT/FALL \*TRAN, \*OBJ-PREF, V=PAST, GA=GER, -M=PAST  
 1362 pa'sa-ru V FARM TRAN, V=PAST, see 2545

- 1363 pu'caku V FILL -TRAN  
 1364 ma'h(i) V FIND +TRAN, 0=PRES, V=PAST  
 1365 ma'sua V FINISH (CONSUME) +TRAN, \*V-PREF, =HAB, M=PAST, NGU=IMP, /'sua  
 1366 wi'ci V FLY -TRAN, C=HAB, J=PRES, V=PAST, see 2208,1433  
 1367 pa-'huina V FLOAT -TRAN, see 2617, (WATER)  
 1368 ti'?'asi V FREEZE -TRAN, V/M=PAST, GA=GER  
 1369 ku'sa?a V FRY +TRAN, +ANIM-SUBJ, V/M=PAST, GA=GER, NGU=IMP  
 1370 no'mai-nukwi V GALLOP -TRAN, V=PAST, GA=GER, see 1430  
 1371 ma'ma-sumparu(i) V GATHER +TRAN, J=PRES  
 1372 'suuparua V GATHER TOGETHER -TRAN, V=PAST, see 1371, (SUBJ=PL)  
 1373 na'na V GROW -TRAN, V/M=PAST, NGU=IMP, see 1381  
 1374 wi'para V SPREAD/HANG +TRAN, M=PAST  
 1375 ma'rɨgai V HELP +TRAN, \*S, \*V-PREF, V=PAST, J=PRES  
 1376 'aaga-musi V HIDE -TRAN, J=PRES, V=PAST, see 0331  
 1377 'aaga-wacɨ V HIDE +TRAN, J=PRES, V=PAST, see 0331,1421  
 1378 to'n(a) V HIT/PUNCH/STAB +TRAN, 0=IMP  
 1379 ta'v(i) V HIT/STONE +TRAN, C=HAB, 0=IMP, V=PAST  
 1380 ja'wi-ni?i V HOLD +TRAN, V=PAST, \*OBJ-PREF, see 1317  
 1381 ma-'nana-nkɨ V REAR +TRAN, V/M=PAST, see 1373  
 1382 ca'?ikai V HOLD BACK +TRAN, \*OBJ-PREF, V=PAST, J=PRES  
 1383 pa'ka-nkɨ V HURT +TRAN  
 1384 na-'hukwivi V HURT-SELF -TRAN  
 1385 wi'puki V JUMP -TRAN  
 1386 ta'nga V KICK +TRAN  
 1387 pa'ka V KILL-SG-OBJ/SCOLD +TRAN, R=HAB, M=PAST, NGU=MOM  
 1388 ko'?i V KILL-PL-OBJ/SCOLD +TRAN  
 1388.2 ko'go?i V KILL-PL-OBJ/SCOLD  
 1389 ti'na V HUNT TRAN, J=PRES, V=PAST, NGU=IMP, +HUM-SUBJ  
 1389.9 na-'tɨna V TRAIL +TRAN, GA=GER, NGU=IMP  
 1390 ma'juma V KILL-PL-OBJ +TRAN  
 1391 ki'ja-ni?i V LAUGH -TRAN  
 1392 ma'ha V LAUNDER +TRAN, NGU=IMP, M/V=PAST, GA=GER  
 1393 pa-'rakwica V LAUNDER TRAN, see 2617  
 1394 'moi V LEAD +TRAN  
 1395 kwi'ta-rɨnia V LIE/FIB TRAN, see 1204  
 1396 ka'ni-gai V LIVE/RESIDE -TRAN  
 1397 pu'sagai V LOOK FOR +TRAN  
 1398 pi'naw?i-nkɨ V LEAVE +TRAN, 2-OBJ  
 1400 'maɨ V MAKE +TRAN, \*V-PREF, 2-OBJ, V=PAST  
 1401 wa'na-ru V MAKE A WEB -TRAN, see 2637,1002  
 1405 'sai V MELT/DISSOLVE -TRAN, M=PAST  
 1406 pa-'ru V MIX IN WATER +TRAN, V=PAST  
 1407 ho'vi V MOULT -TRAN, V=PAST, J=PRES, GA=GER, see 1418  
 1408 ma-'jɨmpugi V NUDGE TRAN, V=PAST, see 2070  
 1409 ta'tɨwin?a V OPEN \*TRAN, 0=IMP, V=PAST  
 1410 na-'waga-nkɨ V PAY +TRAN, 2-OBJ, M=PAST, see 1292,1085  
 1410.9 na-'waga-ka V COST  
 1411 a'si-vo?a V SKIN/PEEL +TRAN, NGU=IMP, V=PAST, see 2054  
 1412 ma'vang?i V PET TRAN, \*OBJ-PREF, see 2070  
 1413 'coowaa V PICK TRAN  
 1414 hi'ncum?i V PINCH +TRAN  
 1415 'kiijaa V PLAY TRAN  
 1416 ma-'gugikai V POINT AT TRAN, V=PAST  
 1417 wi'coi V POUR \*TRAN, V/M=PAST, +MOT, NGU=MOM, NGU=IMP  
 1418 ho'va V PULL OUT +TRAN, V=PAST, 2-OBJ, see 1407  
 1421 wa'cɨ V ELECT/PUT +TRAN, V/M=PAST  
 1422 ju'na V PUT-PL-OBJ +TRAN  
 1425 ɨ'wa V RAIN -TRAN

- 1427 wɨ'n?ogi V SHAVE (BODY)/RAKE TRAN, V=PAST  
 1428 ko'to?o-ngu V TURN AROUND/RETURN/COME BAC -TRAN  
 1429 pi'ki V ROT -TRAN, M=PAST  
 1430 nu'kwi V RUN -TRAN, C=HAB, NGU=IMP, V=PAST, +MOT  
 1431 tɨ'rawi?i V START-SG (CAR)/RUN -TRAN, C=HAB, 0=IMP, 0=PRES,  
     V=PAST, +MOT  
 1432 na'rɨna V RUN-PL/DASH -TRAN, 0=IMP  
 1433 wi'ci-ku V FLY OFF-SG -TRAN, V/M=PAST, +MOT, see 1366  
 1434 'jaasɨ V FLY OFF-PL -TRAN, V=PAST, +MOT  
 1435 na-'jawi?i-tui V SEND +TRAN, see 1317  
 1436 ca'pika?a V SEW TRAN, R=HAB  
 1437 ca'ga V WEAVE/SEW TRAN  
 1438 ku'kwi V SHOOT/STING +TRAN, V=PAST  
 1438.1 na-'gu-kwi V SHOOT EA OTHER  
 1439 ma-'nujukwa-nkɨ V MOVE/SHOVE +TRAN, V=PAST, see 1261  
 1440 hu'vi-tu V SING \*TRAN, NGU=IMP, V=PAST  
 1441 ma-'vaciki V SLAP +TRAN, M=PAST, see 1321  
 1445 ɨ'pɨi V SLEEP-SG -TRAN, C=HAB, V=PAST, NGU=IMP  
 1446 ɨ'koi V SLEEP-PL -TRAN, NGU=IMP  
 1447 ki'ja-sui V SMILE -TRAN, V=PAST, NGU=IMP  
 1447.5 ki'ja-sui-kai V SMILE  
 1447.6 ki'ja-sui-ni?i V SMILE  
 1448 pa-'rɨgi V SOAK/WASH +TRAN, V=PAST, NGU=IMP  
 1449 tɨ'wavaga V MAKE A SOUND/SOUND -TRAN, V=PAST, J=PRES  
 1450 a'mpaga V SPEAK/TALK +TRAN, R=HAB, V/M=PAST, \*OBJ-PREF,  
     0/NGU=IMP  
 1451 to'sikwa V STICK IN \*TRAN, M=PAST  
 1452 kwi'nu?ungu V SPIN/TURN -TRAN, 0=IMP, M=PAST  
 1453 ɨ'jɨngi V STEAL +TRAN, C=HAB, \*OBJ-PREF, 0/NGU=IMP  
 1454 ta'wasɨ V SUN-BURN TRAN, NGU=IMP  
 1454.5 ta'wasɨ-nkwa?i V SUN-BURN  
 1455 jɨ'ɨki V SWALLOW +TRAN, 0=IMP  
 1456 'pooa V SWELL/INFLATE -TRAN, 0=IMP  
 1457 na'vakɨ V SWIM -TRAN, R=HAB, V=PAST, NGU=IMP  
 1458 tɨ'cawa V TAKE AWAY +TRAN, +OBJ-PREF, 0/NGU=IMP  
 1459 ma'?awa?i V TAKE CARE OF +TRAN, \*OBJ-PREF, NGU=IMP  
 1460 nɨ'mpo?o-tui V TEACH-SCHOOL -TRAN, NGU=IMP, see 1349,1466  
 1461 pɨ'kɨki V TEAR -TRAN, -IMP  
 1462 ca'pɨkin?a V TEAR +TRAN, 0=IMP  
 1463 mu'guaruni?i V THINK -TRAN, NGU=IMP, V=PAST, GA=GER  
 1463.8 mu'guaru V THINK  
 1464 tɨ'ravi V THROW DOWN +TRAN, 0=IMP, M/V=PAST, GA=GER  
 1465 'pooja V TROT -TRAN  
 1466 po'?o-tu?i V TEACH +TRAN, -OBJ-PREF, V=PAST, see 1349,1460  
 1469 tɨ'gai V ACT TRAN, GA=GER, V=PAST, -MOM  
 1470 'kwiin?a V TURN -TRAN  
 1471 tɨ'kaw?i V TURN INTO +TRAN, +OBJ-PREF, 0=IMP  
 1472 hu'pa V UNTIE +TRAN  
 1473 u'ni-nupɨru V MAKE +TRAN, see 1000,1002  
 1474 si'?i V URINATE -TRAN, 0/NGU=IMP  
 1474.3 si'?i-wa?i V URINATE (GO TO)  
 1475 ka'ni?i V VISIT -TRAN, NGU=IMP  
 1476 tu'pun?i V WAKE -TRAN, 0=IMP, V=PAST  
 1477 ma-'rupun?i-nkɨ V WAKE +TRAN, 0=IMP, see 1476,2070  
 1478 pa-'caga V WASH +TRAN, V/M=PAST, NGU=IMP  
 1479 u'ni-a-ni?i V WEAR +TRAN, NGU=IMP  
 1480 nɨ'nga V WEAVE BASKET -TRAN, NGU=IMP, V=PAST  
 1481 si'va V WHITTLE/SHAVE-WOOD \*TRAN, NGU=IMP, V=PAST  
 1481.7 si'va-va V WHITTLE  
 1482 ja-'jaga V BURST INTO TEARS -TRAN, 0=IMP, 1334=DUR

- 1483 pu'kwi V BLOW -TRAN, M=PAST  
 1484 ni'mp̄ia V ENGAGE IN CONVERSATION TRAN  
 1485 na-n̄i-mp̄aka V FIGHT -TRAN  
 1486 ja'hi V HUNT TRAN, M/V=PAST, NGU=IMP, GA=GER  
 1487 hu'cini?i V POKE HEAD IN SOMEWHERE TRAN, GA=GER  
 1488 ka'raga V RATTLE -TRAN  
 1489 ci'kwicui V TURN TRAN  
 1490 pi'pitan?(a) V VOMIT TRAN  
 1491 w̄i'tuc(a) V WIPE +TRAN, NGU=IMP  
 1492 takwi-ntui V ENCIRCLE +TRAN  
 1493 w̄i'sivo?ona V WHITTLE +TRAN, GA=GER, /w̄i-'siva, V=PAST, see 1481  
 1495 pi'joga V PULL +TRAN, V/M=PAST, NGU=IMP, GA=GER, +MOT  
 1496 ma'r̄ikwipa V PUSH +TRAN, -MOT, GA=GER, V=PAST  
 1499 ma'?awa?i V REAR/RAISE +TRAN  
 1501 'coon?a V SCRATCH +TRAN, GA=GER, V/M=PAST  
 1502 ma'vacikink̄i V SLAP +TRAN, V/M=PAST, see 1441,1321  
 1503 k̄i'cijon(a) V SPIT TRAN, +MOT, V=PAST, 0/NGU=IMP, GA=GER  
 1504 ta'paki-n?(a) V CUT DOWN/SPLIT +TRAN, V/M=PAST, 0/NGU=IMP  
 1504.8 ta'paki V SPLIT ASUNDER  
 1505 ma'ncu V SQUEEZE +TRAN, V/M=PAST, NGU=IMP, GA=GER  
 1506 to'posi-gi V STAB +TRAN, V=PAST  
 1506.8 to'posi-ki-nk̄i V STAB/PIERCE  
 1507 pa'wa V SWELL (STING/DISEASE) -TRAN, J=PRES, V/M=PAST, GA=GER  
 1508 pic̄i V SUCK/SUCKLE +TRAN, J=PRES  
 1509 tapic(a) V TIE +TRAN, V=PAST, see 2112  
 1510 ko'?a-t̄ika V SMOKE -TRAN, R=HAB, see 1355,2634  
 1511 na'ro?o-ntu V MAKE A SHIRT -TRAN, GA=GER, /-ru, see 2599  
 1512 kw̄i'r̄iki V GET UP -TRAN, 0=IMP  
 1513 pi'ka-hoa-ga(i) V HAVE SORE BACK -TRAN  
 1514 a'so-na V SALT \*TRAN, M=PAST, see 2597  
 1515 na'?i-tupik(̄i) V BURN UP -TRAN, V=PAST, see 1312  
 1516 w̄i'wai V HANG TRAN, M/V=PAST, GA=GER  
 1517 t̄i'vijawi V WORK TRAN, J=PRES  
 1518 'w̄iika V WORK TRAN, <ENG  
 1519 su'waink̄i V KISS +TRAN, NGU=IMP  
 1520 wa'?awi V BARK -TRAN, NGU=IMP  
 1521 na'ḡigi V CRACK OPEN -TRAN, C=HAB, /na'ḡii  
 1522 w̄i'pantui V DANGLE TRAN, GA=GER, (FROM HAND)  
 1523 'suunava V EVEN/STRAIGHT -TRAN, J=PRES, NT=HAB  
 1524 -sumpa V FEEL +A-PREF  
 1525 na-'guma-ru V MARRY (RECIPR) -TRAN  
 1526 ca'?i V GRAB TRAN, GA=GER  
 1527 pi'jagank(̄i) V ITCH TRAN, V=PAST  
 1528 pi'wa-ru V MARRY (MALE SUBJECT) TRAN  
 1529 ku'ma-ru V MARRY (FEMALE SUBJECT) TRAN, M=PAST  
 1530 'n̄i-a-p V PROUD TRAN  
 1532 ma-'nura V RUB WITH HAND TRAN, GA=GER, NGU=IMP  
 1534 wa'?angi V SHOUT TRAN  
 1535 tu'vaki V SLIP LOOSE/UNTIE TRAN, GA=GER, -MOM, 1536=MOM  
 1536 tu'paki V SLIP LOOSE/UNTIE TRAN, C=GER, +MOM, 1535=DUR  
 1538 kwi'hi-ka V SMOKE TRAN, GA=GER, J=PRES, see 2633  
 1539 ha'w?isi V SNEEZE TRAN, V=PAST  
 1540 so'm?a V SPREAD (BLANKET) TRAN, GA=GER, V/M=PAST  
 1542 mu'kunt(a) V STRAIGHT -TRAN, MU'--=PL, NT=HAB  
 1543 'kwāi-nkai V SWIFT -TRAN, J=GER  
 1545 hu'pa-ki V UNTIE/COME UNTIED -TRAN, C=GER, 1472=+TRAN  
 1546 i'jaga V WILD -TRAN, J=GER

- 1551 cì'pìpì?ì V FLASH TRAN, GA=GER, V=PAST  
 1552 kwi'ca V DEFECATE TRAN  
 1553 kwa'su-ntu V DRESS/PUT ON DRESS -TRAN, V=PAST  
 1554 ca'jokwin?a V DISMANTLE/TEAR DOWN TRAN, V=PAST  
 1555 tì'ga V TAKE A PICTURE OF +TRAN, GA=GER, M=PAST, see 2584  
 1556 nì'va-?ìwa V SNOW TRAN, see 1425  
 1558 ma-'uni-ni?i V HANDLE TRAN, GA=GER  
 1901 -kwa?(i) V BECOME/GET/TURN -TRAN, +V-PREF, V=PAST, J=PRES  
 1902 -tu?a V BECOME (A NOUN)/TURN (ADJ) \*TRAN, +OBJ-PREF,  
 +V-PREF, /-ru?a/-cu?a, M=PAST, GA=GER, V=PAST  
 1903 -wai V GET/BECOME -TRAN, J=PRES, V=PAST  
 1904 -ma?ak(u) V FINISH -TRAN, +V-PREF, 0=IMP, V=PAST  
 1905 -maì V FINISH TRAN, V=PAST, +V-PREF, see 1400  
 1906 -maga V TRY -TRAN, V=PAST, +V-PREF, see 1292  
 1907 -musu V TRY (IN VAIN)/UNABLE TO -TRAN, +V-PREF, GA=GER,  
 NGU=MOM  
 1908 -tìtu?a--ni(i) V seeM -TRAN, +V-PREF, 0/J=PRES, V=PAST  
 1910 -suawa-ga(i) V WANT -TRAN, +V-PREF  
 1911 -gi V COME TO-SG -TRAN, +V-PREF  
 1912 -gi-voro V COME TO-PL -TRAN, +V-PREF  
 1913 -wa?i V GO TO-SG -TRAN, +V-PREF, NGU=IMP, see 0172  
 1914 -voro V GO TO-PL -TRAN, +V-PREF  
 1915 -voro V AROUND/MOVING AROUND -TRAN, +V-PREF, /-mporo, \*MOT  
 1916 -maupa V STOP -TRAN, +V-PREF  
 1917 -tìvìcu V WANT/ASK -TRAN, +V-PREF, GA=GER, J=PRES  
 2001 'nìì N I +ANIM, I=PERS, +SG, 'NììNI=OBLIQUE STEM, +PRO,  
 \*PREFIX, -OB  
 2001.9 'nììni N I +ANIM, I=PERS, +SG, +OB, +PRO, \*PREFIX  
 2002 ta'm(i) N WE-DU (INCL) +ANIM, I=PERS, -SG, -SEV, +INCL,  
 +PRO, \*PREFIX  
 2003 ta'w(ì) N WE-SEV (INCL) +ANIM, I=PERS, -SG, +SEV, +INCL,  
 +PRO, \*PREFIX  
 2004 nì'm(i) N WE (EXCL) +ANIM, I=PERS, -SG, -INCL, +PRO,  
 \*PREFIX  
 2005 ì'm(i) N YOU-SG +ANIM, II=PERS, +SG, +PRO, \*PREFIX  
 2006 mì'm(i) N YOU-PL +ANIM, II=PERS, -SG, +PRO, \*PREFIX  
 2007 i'ng(a) N HE/SHE (HERE) +ANIM, III=PERS, +SG, H=PROX, +PRO,  
 \*PREFIX  
 2008 ma'ng(a) N HE/SHE (VIS) +ANIM, III=PERS, +SG, V=PROX, +PRO,  
 \*PREFIX  
 2009 u'ng(a) N HE/SHE (INVIS) +ANIM, III=PERS, +SG, I=PROX,  
 +PRO, \*PREFIX  
 2010 i-'m(ì) N THEY (HERE) +ANIM, III=PERS, -SG, H=PROX, +PRO,  
 \*PREFIX  
 2011 ma-'m(ì) N THEY (VIS) +ANIM, III=PERS, -SG, V=PROX, +PRO,  
 \*PREFIX  
 2012 u-'m(ì) N THEY (INVIS) +ANIM, III=PERS, -SG, I=PROX, +PRO,  
 \*PREFIX  
 2013 i-'c(ì) N THIS/THESE -ANIM, III=PERS, H=PROX, +PRO,  
 -PREFIX, I-'KA=OBLIQUE STEM, -OB  
 2013.8 i'- N THIS/THESE -ANIM, III=PERS, H=PROX, +PRO, +PREFIX,  
 \*OB  
 2013.9 i-'ka- N THIS/THESE -ANIM, III=PERS, H=PROX, +PRO,  
 -PREFIX, +OB  
 2014 ma-'r(ì) N THAT/THOSE (VIS) -ANIM, III=PERS, V=PROX, +PRO,  
 -PREFIX, MA-'KA=OBLIQUE STEM, -OB  
 2014.8 ma'- N THAT/THOSE (VIS) -ANIM, III=PERS, V=PROX, +PRO,  
 +PREFIX, \*OB  
 2014.9 ma-'ka- N THAT/THOSE (VIS) -ANIM, III=PERS, V=PROX, +PRO,  
 -PREFIX, +OB

- 2015 u-'r(±) N THAT/THOSE (INVIS) -ANIM, III=PERS, I=PROX, +PRO, -PREFIX, U-'KA=OBLIQUE STEM, -OB
- 2015.8 u'- N THAT/THOSE (INVIS) -ANIM, III=PERS, I=PROX, +PRO, +PREFIX, \*OB
- 2015.9 u-'ka- N THAT/THOSE (INVIS) -ANIM, III=PERS, I=PROX, +PRO, -PREFIX, +OB
- 2016 na'- S SELF/REFLEXIVE ANIM, +PRO, +PREFIX, +REFLEX
- 2017 -v(±) S ONE'S OWN (IIIRD PERS) ANIM, +REFLEX, III=PERS
- 2018 a'wavant±-m(±) N SEVERAL ANIM
- 2019 ta'mi-want(±) N YOU-OR-ME/ONE OF US +ANIM, see 2002,0190
- 2020 hi'mp(±) N WHAT -ANIM, \*CONCRETE, +PRO
- 2021 ha'ng(a) N WHO +ANIM, +HUMAN, +PRO
- 2022 hi'mp±-sap(a) N SOMETHING -ANIM, \*CONCRETE, see 2020
- 2023 ha'nga-sap(a) N SOMEONE +ANIM, HA'NGA-JA-SAP(A)=ACC, +HUMAN, see 2021
- 2024 hi'n(i) N WHO/WHAT +ANIM, \*HUMAN, +PRO
- 2025 p±- N RELATIVE PRONOUN \*ANIM, +PRO, +BND, +PREFIX
- 2028 'hiimara?ap±c(i) N SOMETHING -ANIM
- 2030 'mo(a) N FATHER +ANIM, MO'--=PL, INHER POSSESSED
- 2031 'pi(a) N MOTHER +ANIM, PI'-(VI)=PL, W=PL, INHER POSSESSED
- 2031.9 'pi(a) N FEMALE (NONHUMAN) +ANIM, PI'-(VI)=PL, W=PL, -HUMAN
- 2032 'tu(a) N SON +ANIM, TU'--=PL, M=PL, INHER POSSESSED
- 2033 pa'c(±) N DAUGHTER +ANIM, INHER POSSESSED
- 2034 pa'v(i) N OLDER BROTHER +ANIM, PA'--=PL, M=PL, INHER POSSESSED
- 2035 pa'c(i) N OLDER SISTER +ANIM, PA'--=PL, W=PL, INHER POSSESSED
- 2036 ca'ki?(i) N YOUNGER BROTHER +ANIM, INHER POSSESSED
- 2037 na'mi?(i) N YOUNGER SISTER +ANIM, INHER POSSESSED
- 2038 ku'm(a) N HUSBAND +ANIM, KU'-NKU=PL, W=PL, INHER POSSESSED
- 2038.9 ku'm(a) N MALE (NONHUMAN) +ANIM, KU'-NKU=PL, W=PL, -HUMAN
- 2039 pi'w(a) N WIFE +ANIM, INHER POSSESSED
- 2040 pa'ha N AUNT (FA SI) +ANIM, INHER POSSESSED
- 2041 ma'w±?a N AUNT (MA OLD SI) +ANIM, INHER POSSESSED
- 2042 ma'w±-?±c( ) N NEPHEW +ANIM, INHER POSSESSED
- 2043 mu'simpij( ) N SISTER-IN-LAW +ANIM, INHER POSSESSED
- 2051 kwi't(u) N ANUS -ANIM, INHER POSSESSED
- 2052 a'ngav(±) N ARM -ANIM, A'--=PL, INHER POSSESSED
- 2053 'ho(a) N BACK -ANIM, HO'--=PL, INHER POSSESSED
- 2054 a'si-v(±) N SKIN/RIND/PEEL -ANIM, +N-ABS, A'--=PL, see 1411, INHER POSSESSED
- 2054.7 a'si-?a N FUR/PEEL/BARK/SHELL -ANIM, +N-POSS, A'--=PL, INHER POSSESSED
- 2055 ta-'tog(o) N BIG TOE -ANIM, INHER POSSESSED
- 2056 n±'w±-?a-v N BODY -ANIM, +N-ABS, NE'--=PL, INHER POSSESSED
- 2057 o'hov(±) N BONE -ANIM, 0=PL, +N-ABS, INHER POSSESSED
- 2058 co'pik(i) N BRAIN -ANIM, CO'--=PL, INHER POSSESSED
- 2059 pi'h(i) N UDDER/BREAST -ANIM, PI'--=PL, INHER POSSESSED
- 2060 kwi'tu-mukw(i) N BUTTOCKS -ANIM, KWI'--=PL, see 2051, INHER POSSESSED
- 2061 na'nka-v(±) N EAR -ANIM, NA'--=PL, INHER POSSESSED
- 2062 pu'?iv(i) N seed/EYE -ANIM, PU'--=PL, +N-ABS, INHER POSSESSED
- 2063 ma-'s±(±) N FINGER -ANIM, MA'--=PL, INHER POSSESSED
- 2064 ma'sico?(o) N FINGER-NAIL -ANIM, MA'--=PL, INHER POSSESSED
- 2065 na'mp(a) N FOOT -ANIM, NA'--=PL, INHER POSSESSED
- 2066 ta'- N FOOT- -ANIM, +BND, +PREFIX, INHER POSSESSED
- 2067 pajaa N FRONT -ANIM, see 0115, INHER POSSESSED



- 2068 to'ci-vi?a-v(±) N HAIR -ANIM, +N-ABS, INHER POSSESSED  
 2069 mo'?o-v(±) N HAND -ANIM, MO'--=PL, INHER POSSESSED  
 2070 ma'- N HAND- -ANIM, +BND, +PREFIX, INHER POSSESSED  
 2071 to'c(i) N HEAD -ANIM, TO'--=PL, W=PL, INHER POSSESSED  
 2072 co'- N HEAD- -ANIM, +BND, +PREFIX, INHER POSSESSED  
 2073 pi'j±-w(i) N HEART -ANIM, +N-ABS, see 2074, INHER  
 POSSESSED  
 2073.8 pi'j±-w(a) N HEART -ANIM, +N-POSS, INHER POSSESSED  
 2074 pi'j±-p(i) N HEART -ANIM, +N-ABS, see 2073, INHER  
 POSSESSED  
 2075 ta'ng(a) N KNEE -ANIM, INHER POSSESSED  
 2076 ju'?(u) N LEG -ANIM, JU'--=PL, INHER POSSESSED  
 2077 mu'v(i) N NOSE -ANIM, INHER POSSESSED  
 2078 'w±(a) N PENIS -ANIM, INHER POSSESSED  
 2079 ma'-tog(o) N THUMB -ANIM, MA'--=PL, INHER POSSESSED  
 2080 ta-'s±(±) N TOE -ANIM, TA'--W=PL INHER POSSESSED  
 2081 sa'p(±) N BELLY/STOMACH -ANIM, INHER POSSESSED  
 2082 'pa±-p(i) N BLOOD -ANIM, +N-ABS, INHER POSSESSED  
 2082.8 'pa±-w(a) N BLOOD -ANIM, +N-POSS, INHER POSSESSED  
 2083 ta'sico?(o) N TOE-NAIL/CLAW -ANIM, INHER POSSESSED  
 2084 'ti±mp(a) N MOUTH -ANIM, INHER POSSESSED  
 2085 sa'gwi-v(±) N GUTS -ANIM, +N-ABS, INHER POSSESSED  
 2086 'aap(±) N HORN -ANIM, A'--=PL, INHER POSSESSED  
 2087 ni'w±mp(i) N LIVER -ANIM, +N-ABS, INHER POSSESSED  
 2088 kur(a) N NECK -ANIM, KU'--=PL, INHER POSSESSED  
 2089 a'go-mp(i) N TONGUE -ANIM, +N-ABS, INHER POSSESSED  
 2090 ta'wa-mp(i) N TOOTH -ANIM, +N-ABS, JA/NA=OB, TA'-RA=PL,  
 INHER POSSESSED  
 2091 si'?ip(i) N URINE -ANIM, INHER POSSESSED  
 2092 ni'ngap(±) N CHEST -ANIM, INHER POSSESSED  
 2093 'soo-g( ) N LUNG/LUNGS -ANIM, INHER POSSESSED  
 2093.6 'soo-v(i) N LUNG/LUNGS -ANIM, INHER POSSESSED  
 2101 ±'ngapic(i) N BABY +ANIM, W=PL, UNPOSSESSABLE  
 2102 'aipac(i) N LITTLE BOY +ANIM, W=PL, A'--=SEV, UNPOSSESSABLE  
 2103 ni'w(±) N PERSON/CHEMEHUEVI/INDIAN +ANIM, W=PL, see  
 1054,2056  
 2104 pi'so?oc(i) N CHILD +ANIM, W=PL, PI'--=SEV, +N-ABS  
 2105 pu'hagant(±) N MEDICINE-MAN/DOCTOR +ANIM,  
 PU'-VUAGA(NTE)M=PL  
 2106 'haiku(u) N WHITE-MAN/ENGLISH +ANIM, HA'--=PL, W=PL  
 2107 pa'sa-rawac(i) N FARMER/GROWER +ANIM, -RAWAM=PL, see  
 2114,2545  
 2108 ±'ni±p(i) N GHOST/SPIRIT ANIM, M=PL  
 2109 na'?inci-c(i) N LITTLE GIRL +ANIM, 'NAA--W=PL  
 2110 'naapagap(±) N RELATIVE/KIN +ANIM, NA'--=PL  
 2111 'hiiw(a) N RELATIVE/KIN +ANIM, W=PL, HI'--=PL  
 2112 ta'picac(i) N LAWMAN/POLICE +ANIM, W=PL  
 2113 'kwii-gant(±) N LEFT-HANDED ONE/SOUTH-PAW +ANIM,  
 KWI'-GWIIGA(NTE)M=PL  
 2114 ta'w?a-c(i) N MAN +ANIM, TA'WA-M=PL  
 2115 ha'?at-aiku(u) N MEXICAN +ANIM, W=PL  
 2116 a'jat(a) N MOHAVE +ANIM, M=PL  
 2117 'k±±maa-n±w(±) N SERRANO/MORONGO +ANIM, W=PL, see 0551,2103  
 2118 pa-'gawic(i) N NAVAJO +ANIM, W=PL  
 2119 pa'gi-ka-r±m N NOMADS/TRAVELERS +ANIM  
 2120 ta'nt±i-c(i) N NORTHERNER +ANIM, W=PL  
 2121 'maap±c(i) N OLD LADY/OLD WOMAN +ANIM, MA'--V=PL  
 2122 ±'sa-v±c(i) N OLD MAN +ANIM, E'--V=PL  
 2123 'naap±w(±) N OLD MAN +ANIM, NA'--=PL  
 2124 pa'ran?±g(i) N PAIUTE +ANIM, W=PL

- 2125 tɨ'- N PERSON +ANIM, +BND, +PREFIX  
 2126 nɨ-'nkwɨ-tui-kat(ɨ) N POLICEMAN/PERSON-CATCHER +ANIM,  
 NE'-NKWETUIKA(TE)M=PL  
 2127 to'vi-pɨciw(ɨ) N SHORT ONE +ANIM, TO'--=PL, see 1027  
 2128 mi'?au-pɨciw(ɨ) N SMALL ONE +ANIM, MI'--=PL, see 1028  
 2129 nɨ-'mpo?o-tui-kat(ɨ) N TEACHER +ANIM, -KA(TE(M=PL  
 2130 ɨ'jɨnkət(ɨ) N THIEF +ANIM, E'-EJENKAM=PL, see 1453  
 2131 ma'ma?u(u) N WOMAN +ANIM, M=PL  
 2132 'aivac(i) N YOUNG BOY +ANIM, A'--W=PL, 'AIVAW=PL  
 2133 'nainc(i) N YOUNG GIRL +ANIM, NA--W=PL  
 2134 'aɨ-nɨw(ɨ) N YOUNG PERSON +ANIM, W=PL, see 1087  
 2135 a'mpaga-tu?i-ka-m(ɨ) N COUNCIL +ANIM, (PEOPLE THAT TALK FOR  
 YOU)  
 2136 tu'punua-c(i) N NEGRO +ANIM, W=PL  
 2142 ju'wita(a) N UTE +ANIM, W=PL  
 2143 kɨ'manc(i) N DIFFERENT ONE +ANIM, KE'-GE--W=PL, see 0551  
 2144 nɨ-'maga-nt(ɨ) N GENEROUS ONE +ANIM, NE'--M=PL, see 1292  
 2145 ju'nakaim( ) N GANG/COMPANY/CLAN +ANIM  
 2146 na'?isa-hiw(a) N IN-LAW +ANIM  
 2148 pi'nga-tɨ-m( ) N YOUNGEST ANIM  
 2201 a'ngaav(i) N ANT +ANIM, M=PL, +N-ABS, (TINY RED STINGING)  
 2202 ta'siav(i) N ANT +ANIM, M=PL, +N-ABS  
 2203 ta'pang(a) N PORK/PIG \*ANIM  
 2204 hu'n(a) N BADGER +ANIM, W=PL  
 2205 'paaca?ac(i) N BAT +ANIM, W=PL, +N-ABS  
 2206 pa'paw(a) N BEAR +ANIM, W=PL  
 2207 wa'cav(i) N BEE +ANIM, M=PL, +N-ABS  
 2208 wi'ci?ic(i) N BIRD +ANIM, W=PL, +N-ABS  
 2209 pa'gacukwit(a) N BLACKBIRD +ANIM, W=PL  
 2210 ku'c(u) N CAMEL/BUFFALO +ANIM, W=PL  
 2211 pi'kagaac(i) N BUG +ANIM, W=PL, +N-ABS  
 2212 'tooro?(o) N BULL +ANIM, W=PL, <SPAN  
 2213 'puus(i) N CAT +ANIM, W=PL, <ENG  
 2214 tu'ku-punku-c(i) N CAT +ANIM, W=PL, see 2235  
 2215 kwa'rojaw(i) N CHICKEN +ANIM, W=PL  
 2216 u'siwanav(i) N CICADA +ANIM, M=PL, +N-ABS  
 2217 wa'nkasi(i) N COW +ANIM, W=PL  
 2218 hu'vacinoc(i) N COW-KILLER +ANIM, W=PL  
 2219 a'kagupic(i) N COW-KILLER (WHITE) +ANIM, W=PL  
 2220 sɨ'na?av(i) N COPY CAT/COYOTE +ANIM, M=PL, +N-ABS,  
 /sɨnawavi  
 2221 tɨ'hij(a) N DEER +ANIM, W=PL  
 2222 pu'nkuu-c(i) N PET/DOG +ANIM, W=PL, +N-ABS  
 2223 ca-'wacug(u) N DOG +ANIM, -CI-W=PL  
 2224 wa'?acug(u) N DOG +ANIM, W=PL  
 2225 pica'rak(i) N DOG/BITCH +ANIM, -STRESS-RULE, W=PL, <ENG  
 2226 pa'gɨ-c(i) N FISH +ANIM, V=PL, +N-ABS  
 2227 'poo?av(i) N LOUSE/FLEA +ANIM, M=PL, +N-ABS  
 2228 'muupic(i) N FLY +ANIM, +N-ABS  
 2229 wa'gata-c(i) N FROG +ANIM, W=PL, +N-ABS  
 2230 ta'vu-c(i) N HARE +ANIM, W=PL, +N-ABS  
 2230.9 ta'vu-ruac(i) N LITTLE HARE +ANIM  
 2231 wa'?arov(i) N HORSE +ANIM, M=PL  
 2232 ka'm(ɨ) N JACK-RABBIT +ANIM, W=PL  
 2233 pa'j?(ɨ) N KANGAROO RAT +ANIM, W=PL  
 2234 sɨ'gɨpic(i) N LIZARD +ANIM, W=PL, +N-ABS  
 2235 tu'k(u) N MOUNTAIN LION +ANIM, W=PL  
 2236 na'g(a) N MOUNTAIN SHEEP +ANIM, W=PL  
 2237 pu'?incac(i) N MOUSE +ANIM, W=PL, +N-ABS  
 2238 'muuna?(a) N MULE +ANIM, W=PL, <SPAN

- 2239 mu'humpɨc(i) N OWL +ANIM, W=PL, MU'=-SEV, +N-ABS(-ABS)  
 2240 pu'nk(u) N PET +ANIM, W=PL, see 2222, POSSESSED  
 2241 'piinkic(i) N PIG +ANIM, W=PL  
 2242 ta'panga-c(i) N PIG +ANIM, W=PL  
 2243 'kuuci?(i) N PIG +ANIM, W=PL, <SPAN  
 2244 'kaac(i) N RAT +ANIM  
 2245 'waampakwic(i) N SCORPION +ANIM  
 2246 na'ga-vunkuc(i) N SHEEP +ANIM, see 2236,2222  
 2247 'kwiijaac(i) N SNAKE +ANIM  
 2248 'aaj(a) N TURTLE +ANIM, W=PL  
 2249 pa-'?aaj(a) N WATER-TURTLE +ANIM, W=PL, see 2248,2617  
 2250 tɨ'vac(i) N WOLF +ANIM, W=PL  
 2251 ta'va?ac(i) N CHIPMUNK +ANIM  
 2252 mɨ'ngimpɨc(i) N EAGLE +ANIM  
 2253 o'nci(a) N FOX (LITTLE KIT) +ANIM  
 2254 po'ni(a) N SKUNK +ANIM, W=PL  
 2255 ho'koso?a-v(i) N SPIDER +ANIM, +N-ABS  
 2256 si'kuc(i) N SQUIRREL +ANIM  
 2257 pa'?a-v(i) N WORM +ANIM, +N-ABS  
 2258 na?isa-?angaav(i) N ANT +ANIM, M=PL, +N-ABS, see 2201  
 2259 ɨ'c(a) N ROADRUNNER +ANIM, W=PL  
 2260 wa'nc(i) N ANTELOPE +ANIM, W=PL  
 2261 i'piina(a) N BEAVER +ANIM, W=PL  
 2262 cɨg(a) N DUCK +ANIM, W=PL  
 2263 mɨj(ɨ) N GOPHER +ANIM, W=PL  
 2401 'aaporos(i) N APPLE -ANIM, <ENG  
 2402 sa'wa-p(ɨ) N ARROW-WEED -ANIM, +N-ABS, see 1006  
 2403 'paaviiv(ɨ) N BARREL-CACTUS -ANIM  
 2404 o'p(i) N MESQUITE BEANS -ANIM, 0=PL  
 2405 o'saramp(ɨ) N (CACTUS) -ANIM  
 2406 wi'jutamp(ɨ) N CHOLLA -ANIM  
 2407 ha'wiv(i) N CORN -ANIM, 0=PL, +N-ABS  
 2408 'kaataniv(ɨ) N COTTON -ANIM, <ENG  
 2409 kwi'jukwimp(i) N CUCUMBER -ANIM  
 2410 sɨ'?ip(i) N FLOWER -ANIM, +N-ABS  
 2411 i'jaav(i) N GRAPES -ANIM, see 2423  
 2412 tɨ'siv(i) N GRASS -ANIM, +N-ABS  
 2413 o'pi-mp(ɨ) N MESQUITE -ANIM, see 2404  
 2414 ɨ'nɨpi-poromp(ɨ) N OCOTILLO -ANIM, -PO-POROMP=PL  
 2415 si'vuja?(a) N ONION -ANIM, <SPAN  
 2416 orange(i) N ORANGE -ANIM, =ENG  
 2417 ju'vimp(ɨ) N PINE-TREE -ANIM  
 2418 tɨ'v(a) N PINON NUTS -ANIM  
 2419 ɨ'ga-p(ɨ) N PLANT -ANIM, +N-ABS, see 1357, (CULTIVATED)  
 2420 ma'hav(ɨ) N TREE/PLANT -ANIM, +N-ABS  
 2421 pa'rangar(a) N PUMPKIN -ANIM  
 2422 pa'von?okwi-c(ɨ) N WATERMELON -ANIM, +N-ABS  
 2423 i'jaavi-mp(ɨ) N GRAPE VINE -ANIM, see 2411  
 2424 na'nka-v(a) N LEAF -ANIM, NA'=-PL, +N-ABS, see 2061  
 2425 tu'mirus(i) N TOMATO -ANIM, <ENG  
 2426 'paapas(i) N POTATOES -ANIM, <SPAN  
 2427 a'cit(a) N WHEAT -ANIM, <MOJAVE  
 2428 hu?upi-v(ɨ) N SQUAW BUSH -ANIM  
 2429 hu?up(i) N SQUAW BUSH BERRY -ANIM  
 2430 sa'gav(ɨ) N WILLOW -ANIM  
 2501 'huu N ARROW/BULLET -ANIM, 0=PL  
 2502 va'rir(i) N BARREL -ANIM, <ENG  
 2503 nɨ'nga-pi-v(ɨ) N BASKET -ANIM, +N-ABS, see 1480,2504  
 2504 nɨ'nga-p(i) N BASKET -ANIM, see 1480,2503, UNPOSSESSABLE  
 2505 'suukur(i) N BEADS -ANIM

- 2506 ha'vi-tia(a) N BED -ANIM, see 1275  
 2507 'naapagap(±) N BELT -ANIM  
 2508 mu'ru?(i) N BLANKET -ANIM, MU'--=PL  
 2508.9 mu'ru?i-gaip(±) N BLANKET-CAST-AWAY -ANIM, MU'--=PL  
 2509 'vuut(i) N BOAT -ANIM, <ENG  
 2510 ta-'takusa-pagap(±) N BOOT -ANIM, -PA-PAGAP=PL, see  
 2582,2600  
 2511 a'c(±) N GUN/BOW -ANIM  
 2512 ka'hon(i) N BOX -ANIM, <SPAN  
 2513 sa'mita?a-p(i) N BREAD -ANIM, 0=PL +N-ABS  
 2514 hu'va-sa?ap(±) N JUICE/BROTH/SOUP -ANIM, see 2603,2556  
 2515 pa-'jua-nump(±) N BUCKET -ANIM, see 2617,1318  
 2516 ni'?i(a) N FOOD STORE/CACHE -ANIM  
 2517 'cake(i) N CAKE -ANIM, =ENG  
 2518 ka'ni-p(±) N VILLAGE (ABANDONED)/CAMP -ANIM, see 2563  
 2519 na'nkwaru?(u) N METAL/CAN/CONTAINER -ANIM  
 2520 'poor(o) N WAND/CANE -ANIM  
 2521 hu'wip(i) N WASH/CANYON -ANIM, \*PREFIX  
 2522 na'gaap(±) N SHAWL/CAPE -ANIM, \*PREFIX  
 2523 'car(i) N CAR -ANIM, =ENG  
 2524 ata'mup(i) N CAR -ANIM, <ENG  
 2525 ka'rī-tia(a) N CHAIR -ANIM, see 1277  
 2526 u'kwiv(±) N CHARCOAL/COAL -ANIM, +N-ABS, -PREFIX,  
 POSSESSABLE  
 2527 sa'wa-kan(i) N CHEMEH-HOUSE (ARROW-WEED) -ANIM, see  
 2402,2563  
 2528 si'wa?avaac(i) N CHEMEH-VALLEY -ANIM  
 2529 masi'kwarip(i) N CLOTH -ANIM, -STRESS RULE, <MOJAVE  
 2530 pa'gīnav(±) N CLOUD -ANIM  
 2531 'kuupi(i) N COFFEE -ANIM, <ENG  
 2532 tī'viw(a) N LAND/COUNTRY -ANIM, +N-POSS, see 2534  
 2533 ko'n(o) N CRADLE -ANIM, 0=PL  
 2534 tī'vip(±) N DIRT/EARTH/GROUND -ANIM, 0=PL, +N-ABS, see  
 2532, (SOLID, NOT SURFACE)  
 2535 'piisu?(u) N DOLLAR/PESO -ANIM, <SPAN  
 2536 tī'wa-p(±) N DOOR/CLOSING -ANIM, see 1323  
 2537 ka'ni-tīwap(±) N DOOR/HOUSE-CLOSING -ANIM, see 2563,2536  
 2538 kwa's(u) N DRESS -ANIM  
 2539 hu'kump(±) N DUST -ANIM, \*PREFIX  
 2540 no'pav(i) N EGG -ANIM, +N-ABS  
 2541 'kīīwa(a) N EDGE -ANIM  
 2542 ju'hu-v(i) N FAT -ANIM, +N-ABS, see 1022  
 2543 wi'sia-v(i) N WING/FEATHER -ANIM, WI'--=PL, +N-ABS  
 2544 ku'rār(i) N FENCE/CORRAL -ANIM, <SPAN  
 2545 pa's(a) N FIELD/PASTURE -ANIM  
 2546 ku'n(a) N FIRE -ANIM  
 2547 'tīīrav(i) N GROUND/FLOOR -ANIM  
 2548 tu'sup(±) N FLOUR/S.T.GROUND -ANIM, +N-ABS  
 2549 tu'hiv(i) N FLOUR -ANIM  
 2550 tī'ka-p(i) N FOOD/FOODSTORE -ANIM, see 1355  
 2551 ma-'sia-gant(±) N FORK/FINGERED-THING -ANIM, see 2063,  
 \*PREFIX  
 2552 ku'sa?a-nump(±) N FRYING-PAN -ANIM, see 1369  
 2553 vu'tija?av(±) N GLASS (DRINKING) -ANIM, <SPAN  
 2554 pa-'rīasī-p(±) N ICE/FROZEN WATER/GLASS -ANIM, see  
 2617,1368  
 2555 pa'na-pu?(i) N GLASSES (EYE) -ANIM, see 1010,2062  
 2556 sa'?ap(i) N GRAVY -ANIM  
 2557 'wiīwav(i) N OIL/GREASE -ANIM, +N-ABS  
 2558 ta'vi-nump(±) N HAMMER -ANIM, see 1379

- 2559 'kaamp(±) N HILL -ANIM, KA'-GA=PL  
 2560 ho'paki-p(±) N HOLE -ANIM, see 1023  
 2561 ho'paki-c(±) N HOLE -ANIM, see 2560,1023  
 2562 hi'piki-c(±) N HOLE -ANIM, see 2560,1023  
 2563 ka'n(i) N HOUSE -ANIM, 0=PL  
 2564 ci'kwi-cui-nump(±) N KEY -ANIM, see 1489  
 2565 wi'h(i) N KNIFE -ANIM  
 2566 pa-'garī-r(±) N LAKE -ANIM, see 2617,1277  
 2567 pa'cav(±) N LEATHER -ANIM  
 2568 po'ʔo-p(±) N LETTER -ANIM, see 1349  
 2569 po'ʔo-kat(±) N LETTER -ANIM, see 1349  
 2570 ho'v(i) N LUMBER -ANIM  
 2571 vo'lita?(a) N MARBLE -ANIM, =SPAN  
 2572 tu'kuav(i) N MEAT -ANIM, +N-ABS  
 2573 na-'vuaganump(±) N MEDICINE -ANIM, see 2105  
 2574 pi'hi-vov(i) N MILK -ANIM, see 2059  
 2575 ti'mp(i) N MONEY/ROCK -ANIM, 0=PL, \*PREFIX  
 2576 mi'jarogopic(i) N MOON -ANIM  
 2577 'kaiv(a) N MOUNTAIN -ANIM, KA'-GAI=PL, 'KAA-=PL  
 2578 'kaiva-kuvai?a(a) N MOUNTAIN PEAK -ANIM, SE 2577  
 2579 'kaiva-taka(a) N MOUNTAIN TOP -ANIM, see 2577,2593  
 2580 sa'map(±) N PALLET/RUG -ANIM, SA'=-=PL  
 2581 pa'piliiv(±) N PAPER -ANIM, <SPAN  
 2582 ta'kus(a) N PANT-LEG -ANIM, see 2583  
 2583 ku's(a) N PANTS -ANIM, KU'--=&6  
 2584 ti'gap(±) N PICTURE/SHOT -ANIM, see 1555  
 2584.9 na-'ri-gap(±) N PICTURE OF SELF -ANIM  
 2586 ji'waav(i) N PLAIN -ANIM  
 2587 ci'- N POINTED OBJECT- -ANIM, +BND, +PREFIX  
 2588 pa'mpīn?(i) N POT -ANIM  
 2589 hu'vi-tu-nump(±) N RADIO/RECORD-PLAYER -ANIM, see 1440  
 2590 i'wa-r(±) N RAIN -ANIM, see 1425  
 2591 pa-'ga(a) N RIVER -ANIM, see 2617  
 2592 po'ʔ(o) N PATH/TRAIL/STREET/ROAD -ANIM  
 2593 ta'ka(a) N TOP/ROOF -ANIM  
 2594 u'rump(±) N ROPE -ANIM  
 2595 ku'nav(±) N SACK/SHEATH -ANIM, POSSESSABLE  
 2596 ka'rī-n?ump(±) N SADDLE -ANIM, see 1277  
 2597 a'somp(±) N SALT/ALKALINE -ANIM, +N-ABS, see 1514  
 2598 o'tav(±) N SAND -ANIM  
 2599 na'ro?(o) N SHIRT -ANIM, NA'--=PL  
 2600 pa'gap(±) N SHOE -ANIM  
 2601 tu'gump(a) N SKY -ANIM, +N-ABS  
 2602 'niivaav(i) N SNOW -ANIM, +N-ABS  
 2603 hu'va-v(±) N SOUP/BROTH/JUICE -ANIM, +N-ABS, see 2514  
 2604 si'puna?(a) N SPOON -ANIM, <ENG  
 2605 kwi'cara?(a) N SPOON -ANIM  
 2606 'puuciv(±) N STAR -ANIM  
 2607 ku'kwap(i) N STICK/WOOD -ANIM, KU'--=PL, +N-ABS, -PREFIX  
 2608 na'ru-ga-tui-kan(i) N STORE/SHOP -ANIM, see 1295,2563  
 2609 pa-'nukwi-c(±) N STREAM -ANIM, see 2617,1430  
 2610 tu'nap(±) N STRING -ANIM  
 2611 ta'va-pīc(i) N DAY/SUN -ANIM, see 2802  
 2612 'kuuta?(a) N SWEATER -ANIM, <ENG  
 2613 ti'ka-tīa(a) N TABLE -ANIM, see 1355  
 2614 kwa's(i) N TAIL -ANIM  
 2615 'tii N TEA -ANIM, <ENG  
 2616 'aaja-ʔasi-v(±) N TURTLE-SHELL -ANIM, see 2248,2054  
 2617 'paa N WATER -ANIM  
 2617.9 pa'- N WATER -ANIM, +BND, +PREFIX

- 2618 pa-'hoora-p(ɨ) N WELL -ANIM, see 2617,1347,1348  
 2619 nɨ'gar(ɨ) N AIR/WIND -ANIM  
 2620 vi'ntana?(a) N WINDOW -ANIM, <SPAN  
 2621 'wine(i) N WINE -ANIM, =ENG  
 2622 pu'nkuv(ɨ) N WOOL -ANIM, see 2222  
 2623 hu'cip(a) N OCEAN -ANIM  
 2624 ku'ca-p(ɨ) N ASHES -ANIM, +N-ABS, /kuca-vɨ  
 2624.8 kuca-w(a) N ASHES -ANIM, +N-POSS  
 2625 ko'miwa N CORNER -ANIM, KO'=-PL  
 2626 tu'ca-v(i) N DIRT -ANIM, +N-ABS, -PREFIX, see 1082  
 2627 pa-'vo(o) N DITCH -ANIM, see 2617,2592  
 2628 sa'mi-kar(ɨ) N DOUGH/SQUISHY STUFF -ANIM, see 2513  
 2629 'kaicog(o) N HAT -ANIM  
 2630 'kaag(i) N NECKLACE/NECK THING -ANIM  
 2631 tɨ'rɨna-v(ɨ) N ROOT -ANIM, TE'=-PL, +N-ABS  
 2632 sa'na-p(i) N SAP/GUM -ANIM, +N-ABS  
 2633 kwi'hi-p( ) N SMOKE -ANIM, +N-ABS, /kwihi-v  
 2634 ko?'a-p(i) N TOBACCO -ANIM, +N-ABS  
 2635 'naaw(a) N TRACK -ANIM, NA'=-PL  
 2636 pa-'hivi-nump(ɨ) N WATER GLASS -ANIM, see 2617,1350  
 2637 'waanaa-v(ɨ) N NET/WEB -ANIM, +N-ABS  
 2638 ko'c(i) N BASKET -ANIM  
 2639 pa-'rɨ?asi-tiwap(ɨ) N WINDOW -ANIM, see 2554,2536,2617  
 2640 hi'mpɨc(i) N PLATE/DISH -ANIM  
 2641 turu'ti?a N TORTILLA -ANIM, <SPAN  
 2642 'saronc(i) N BEER/SUDS/FOAM -ANIM  
 2643 mo'hara-t(ɨ) N BITTER THING -ANIM, see 1071  
 2645 wi'ci-n?ump(ɨ) N AIRPLANE/FLYING OBJECT -ANIM  
 2646 pa-'rɨwa-p(ɨ) N DAM -ANIM, see 2617,2536  
 2647 tɨ'hija-v(ɨ) N DEERHIDE -ANIM, see 2221  
 2648 ma-'sonk(u) N GLOVE -ANIM, MA'=-PL  
 2649 wa'?arovi-mpagap(ɨ) N HORSESHOE -ANIM, see 2231,2600  
 2651 pa'caciv(ɨ) N MOCCASIN -ANIM  
 2652 pa'na-cic( ) N MOVIES/FLICKERS -ANIM, see 1010  
 2801 ta'sɨant(ɨ) N DAWN -ANIM, TA'=-PL  
 2802 ta'va-j(ɨ) N DAY -ANIM, -PREFIX  
 2803 ɨ'ga-p(ɨ) N EVENING -ANIM, see 1357  
 2804 tu'wan(u) N NIGHT-TIME -ANIM, see 1005  
 2805 to'm(o) N WINTER/YEAR -ANIM  
 2806 ta'c(a) N SUMMER -ANIM  
 2807 jɨ'van N SPRING OR AUTUMN -ANIM  
 2815 pa'na-ka-t(ɨ) N LIGHT -ANIM, see 1010  
 2816 to'goi-tava-j(ɨ) N MIDDAY -ANIM, see 2802,0281  
 2821 su'wa-p(ɨ) N BREATH -CONCRETE, see 1310  
 2822 tɨ'gɨ-?iv(a) N LACK/HUNGER -CONCRETE, +N-ABS, see  
 1053,1125  
 2822.9 tɨ'gɨ-?i-va-v(ɨ) N HUNGER -CONCRETE, +N-ABS-ABS, see  
 1053  
 2823 'nia-v(i) N NAME  
 2824 tɨ'nɨa-p(ɨ) N STORY/NEWS -CONCRETE, see 1204  
 2825 nɨ'kap(ɨ) N ROUND-DANCE -CONCRETE  
 2826 hu'vi-av(ɨ) N SONG -CONCRETE, see 1440  
 2827 na'ruganip(ɨ) N WAR -CONCRETE  
 2828 ɨ'pɨi-p(ɨ) N SLEEP -CONCRETE, see 1445  
 2829 na-'rona-p(ɨ) N FIST-FIGHT -CONCRETE, see 1378  
 2830 a'mpaga-p(ɨ) N LANGUAGE -CONCRETE, see 1450  
 2831 ki'ja-p(ɨ) N ENTERTAINMENT -CONCRETE  
 2835 ma'va- N COLD (ILL) -CONCRETE, +PREFIX  
 2840 ja'ga-huvi-av(ɨ) N CRYING SONG -CONCRETE, see 1334,2826  
 5101 -j(ɨ) T PRESENT

- 5102 -va(a) T FUTURE  
 5103 -mpa(a) T FUTURE  
 5104 -v $\dot{i}$ ( $\dot{i}$ ) T PAST (DUR)  
 5105 -mp $\dot{i}$ ( $\dot{i}$ ) T PAST (MOM)  
 5106 -p $\dot{i}$ ga(i) T REMOTE PAST  
 5107 -k(a) T PRESENT/PAST  
 5108 -ka(i) PERFECT /-kwa(i)/-nka(i)  
 5109 -ka(i) RESULT  
 5110 -ca(a) PERFECT +ENC  
 5111 -mi USITATIVE  
 5112 -ni?i CONTINUATIVE /-ni  
 5113 -ng(u) MOMENTANEOUS  
 5114 -paki KNOW HOW TO/CAN  
 5115 -gu(u) WOULD  
 5116 -guu-p( $\dot{i}$ ) SHOULD  
 5117 -nku(u) COULD  
 5118 -nkuu-p( $\dot{i}$ ) COULD  
 5120 -t $\dot{i}$ ( $\dot{i}$ ) (PASSIVE) (AGENTLESS)  
 5124 -t( $\dot{i}$ ) (ACTIVE PARTICIPLE) /-r( $\dot{i}$ )/-c( $\dot{i}$ )/-nt( $\dot{i}$ ), SOURCE OF  
 HAB TNS/ATTRIB ADJ/SUBJ REL  
 5126 -n(a) -ING (NOMINAL)  
 5130 -j(u) WHILE (SUBORDINATOR) -MOM, (BECAUSE), /j(u) aft $\dot{i}$ r  
 -ai-, (LIKE SUBJ)  
 5131 -g(u) WHILE (SUBORDINATOR) -MOM, (BECAUSE/IF), (UNLIKE  
 SUBJ)  
 5132 -c(i) AFTER (SUBORDINATOR) +MOM, (HAVING V-ED)  
 (VAA-CI=BEING ABOUT TO), (LIKE SUBJ)  
 5133 -k(a) AFTER (SUBORDINATOR) +MOM, (UNLIKE SUBJ)  
 5140 -p( $\dot{i}$ ) (NOMINAL)  
 5150 -m( $\dot{i}$ ) (-SG +ANIM SUBJ)  
 5152 -ka (+SEV SUBJ)  
 5153 -tu (+SEV OBJ)  
 5160 -ra(a) (YES-NO Q) +ENC, +Q  
 5165 -ni(i) A -LIKE (SENS VB COMP) +ADJ-PREF, +N-PREF  
 5169 -gai-sap(a) THOUGH  
 5201 -v( $\dot{i}$ ) N (ABSOLUTE)  
 5202 -mp(i) N (ABSOLUTE)  
 5207 -c( $\dot{i}$ ) N (ABSOLUTE)  
 5208 -c(i) N (ABSOLUTE)  
 5213 -kat( $\dot{i}$ ) N -ER +ANIM, -KA-RE-M( )=PL  
 5220 -gaip( $\dot{i}$ ) N FORMER  
 5230 -p $\dot{i}$ ciw( $\dot{i}$ ) N ONE +ANIM, +ADJ-PREF, (-CI- PROBABLY  
 (DIMINUTIVE), (// TO -NTE-M(E))  
 5240 -v $\dot{i}$  S LANGUAGE -ANIM  
 5250 -c(i) N (DIMINUTIVE)  
 5251 -ruac(i) S OFFSPRING/-LET  
 5255 -h $\dot{i}$ gac( ) N AGED  
 5261 -nump( $\dot{i}$ ) S INSTRUMENT /-n?ump( $\dot{i}$ )  
 5262 -t $\dot{i}$ a(a) N PLACE (FOR)  
 8101 kac ha' $\dot{i}$ c pi'juwa? V WORRIED/BOTHERED LIT=NOT HAVE GOOD  
 HEART  
 8103 kac u-'vawi-wa?at I EMPTY THERE LIT=NOT HAVE THERE  
 8105 to'goi-?uni-ngu-ca?a-k( ) I SERVES HIM RIGHT  
 8120 hu-'?urua-gai-sap(a) A BUT  
 8130 'aaroo I I THINK  
 8135 u'r $\dot{i}$  $\dot{i}$  I IS S STILL THE CASE +Q, +S  
 8140 ha'ganis I I WISH  
 8150 kwa'?ija I I DUNNO /kwa'?ija ukwaj  
 9001  $\dot{i}$ 'v $\dot{i}$ -j I BAD  
 9002 mu'guat I BRAINLESS

9003 hɨ'vɨɨ I CERTAINLY  
9004 hɨ'vɨ I COME HERE  
9005 ha'ʔɨ-c I GOOD/FINE  
9006 ha'ʔɨ-j I GOOD/FINE  
9008 a'jɨɨ I IT'S COLD  
9009 a'rɨɨ I IT'S HOT  
9010 'pii I I WISH  
9011 ha'ʔaɨ I OH  
9012 ɛ'nɨ I OUCH  
9013 hɨ'ʔɨ I YES  
9014 'maa I SO/LIKE THAT  
9015 'hainu 'hɨɨn I HECK



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## NOTES

### *Introduction*

1. Sources on history of the Chemehuevi include: Kroeber (1907), Miller and Miller (1967), and Laird (1976).
2. Traditionally sung on such occasions.
3. Harrington was employed by the Bureau of American Ethnology. He was considered a remarkably sensitive phonetician and his transcriptions were of impeccable accuracy (as were Carobeth's, who was formerly his student). He was totally preoccupied with his fieldwork, obsessed with the task of amassing as much data as was humanly possible from languages in danger of extinction.  
For a full account of Harrington's strange life, see Carobeth Laird's intriguing account *Encounter with an Angry God* (1975).
4. Carobeth Laird, *The Chemehuevis* (1976).
5. For example, Munro (1974a) and (1974b).
6. As set forth in Chomsky, *Aspects of the Theory of Syntax* (1965), for example.
7. See footnote 8, section 2.

### *Phonology*

1. Non-native.
2. For a more complete survey of the various analyses, see also Nichols (1973). Others not mentioned there include Lovins (1970), Rogers (1967).
3.  $c \rightarrow nc$  when "spirantized," only if the preceding syllable contains a nasal. (See rule P 10, section 1.33.)
4. These homorganic nasals are not specified for point of articulation in the lexicon, since MSR 25 fills in the appropriate features.

5. The fact that the nasalizing form occurs only with stems containing nasals could be stated in a redundancy rule.

6. The feature might simply have been some sort of ad hoc rule feature; the choice of [+voice] was (a) because it was available anyway, and (b) from a historical standpoint may be fairly well motivated.

7. A small number of stems when reduplicated have a long vowel in the first syllable, e.g.:

/kaiva/	<u>mountain</u>	/nainci/	<u>young girl</u>
[kaakaiv]	<u>mountain [pl]</u>	[naanainci-v]	<u>young girl [pl]-pl</u>

Since stems must be lexically marked for whether they take

CV	or	CV	anyway, (see discussion, section 1.31
[+redup]		[+redup]	
[+s]		[+g]	

above), I propose adding CVV to the list of reduplication

[+redup]
[+g]

morphemes (all examples I have seen do not alter following consonants), and mark the appropriate stems accordingly.

8. This form of the rule was suggested by P. Schachter (personal communication).

9. As written for example in: Chomsky and Halle (1968), Harms (1968), and Lovins (1970).

10. For some morphemes this rule is optional, for others it is blocked; e.g., *na-maya- self-give* is not \**nawaya-*. (There is a frozen form *nawaya-* which now means 'cost; dole out'. Historically from /*na-maya*/, it has now been lexicalized.) The form /*na-mavo?a/ self-cover* is optionally *na-wavo?a-*. Sapir concludes that spirantization is no longer a productive process. I propose that since many morphemes have to be marked as unaffected by consonant-alternation rules anyway, *m* → *w* can still be treated as an active phonological rule.

11. This rule may actually be much more complicated. For some morphemes it applies even with intervening glottal stops; e.g., /*wa?i/ neg + /tʰ/* → *wa?a-t*. For others it does not; e.g., *sʰja?i-c cold-ptc*.

12. The whole situation with glottalization is much messier than I have managed to unravel here. The glottal stop associated with certain morphemes sometimes moves back into the preceding stem. With others it obligatorily deletes in many situations. In some cases the glottal stop is an infix on its own, to mention a few aspects of the problem still to be explored.

#### Syntax

1. In some cases absolutives drop from the second member of a compound if the first member "possesses" the second; e.g., /*wanaa-vʰ/* 'web', but *hokoso?a-wana* 'spider-web'.

2. At least synchronically.

3. This does not include the purely semantic use of diminutive /-ci/, which definitely adds the meaning of little to the noun, unlike the more formal, absolutive /-ci/. The diminutive suffix is freely added to inanimate nouns, e.g., *wihi-c* 'little knife', but is syntactically different in that it does not delete in the environments absolutives do, e.g., *nɛni puŋku-ci-n* is acceptable only if translated 'my little dog'.

4. Others do optionally: *puŋku-ci-gai-ga* 'having/being a dog' (with verbalizing suffix /-gai/), *~ puŋku-gai-ga*.

5. The suffix /-ci/ is still morphologically distinct from the phonologically identical absolutive /-ci/, since the latter deletes when possessed but the former does not (see example (3) above, and footnote 3).

6. Within this set (fruits) the suffix /-pɛ/ is fairly, though not completely, productive. Although there are existing gaps in the lexicon, in the data reported by Harrington recent borrowings into Chemehuevi utilized this suffix (e.g., /*leman*/ lemon, /*leman*-vɛ/ lemon-tree). My only examples by the way are all "nasalized" or "spirantized," though Harrington (1969) gives examples with /-pɛ/ as well.

7. As far as I can tell, the choice of the suffix for a given noun is idiosyncratic.

8. I will use POSSESSED in the relevant lexical rules to mean that the form co-occurs with an overt possessor in the sentence. INHERENTLY POSSESSED will be used to describe nouns that are expected to be possessed, though not always inalienably (e.g., territory, food-store). When an overt possessor is available, these are the nouns which augment their stems with a poss suffix. When they lack a possessor (e.g., 'I saw a head in the road') the tendency is to attach /-vi/ someone's (as it is in English; 'You're on {someone's } property'), but in most cases the absolutive form is permissible instead.

A third semantic category is used, POSSESSABLE, which redundantly includes anything which is INHERENTLY POSSESSED, but also includes such things as shirts and refrigerators as well. (I'm not concerned with efficiency or elegance in semantic features here, only that these categories are distinct, and should be accounted for.)

Nouns with /-vi/ may not be overtly further possessed at the same time.

9. Adjectives are all verbs in Chemehuevi.

10. A separate feature will be used for suffixes--both are needed for the three-way distinction "prefix," "suffix," and "postfix" (see section 0.4 for discussion of terms).

11. See Munro (1974a) for a suggestion of why imperatives take nominative objects. Compare with section 2.26 in this monograph.

12. Several morphemes with initial *t-* (e.g., the participle suffix */-tʃ/*) undergo a rule changing *t* → *c* after *i*. This rule does not apply to all morphemes (e.g., */-tu/*, plural object marker on verbs, never changes), and for some the rule does not hold in all situations. For example the "causative" */-tuʔi/* has the form *-cuʔi-* after nouns ending in *i* (as in 46b) above), but not after verbs, e.g., *nukwi-tuʔi-* (not *\*nukwi-cuʔi-*) 'make run'.

13. Color terms and a handful of others; e.g., thick *tunku-ka*.

14. Sapir notes in So. Paiute a similar use of participles "in lieu of finite verbs," though in that language no K shows up.

15. Final vowel undeterminable; also, the *u* assimilates to any preceding vowel but *a* (see section 1.33 on Phonology).

16. Compare this with the further observation that while nonadjective participles used attributively or nominally must co-occur with a demonstrative pronoun, adjective participles need not--see e.g., (122a) vs. (122b) in section 2.33 below. Also, *paʔa-ntʃ-m* alone can mean 'the tall one', but 'the running one' must be *nukwi-c aŋ*. (For distribution of the *-m* (*/-ʔumʃ/*) suffix, see section 2.214 on Adjectives.)

17. See footnote 16.

18. Despite the glottal stop (which has peculiarities of its own) the *u* in this suffix assimilates to any preceding vowel but *a*. See section 1.33 on Phonology.

19. She was only able to obtain examples with */-vaa/* used as an imperative in negative sentences. MM has no such restriction, with the qualification that all her examples were felt to be less truly imperative in meaning.

20. There is no compound form *\*/vaʔa-na-tua/*, though the *-na* always occurs in the locational (noncompound) *vaʔa-na/*. I have no explanation for this.

21. This could suggest the alternative of analyzing postpositions as case suffixes, as has been done for other languages. However for Chemehuevi I reject this alternative since (a) postpositions are often equivalent to verb stems (b) modifiers do not "agree" in case/postposition with the noun (e.g., *maka-j paa-upa?* that-ob water-in 'in that water'); and (c) with an appositive prefixed to the postposition the noun is in the normal oblique case (as are all modifiers).

22. For Yes-No and Information questions the sentence ends at about the same level as it begins. For declaratives it ends somewhat lower.

23. The final, lengthened syllable also ends on a lower level--giving an exaggerated falling intonation contour. This same contour is given the tag-question morpheme (see section 2.243) as well.

Pamela Munro (p.c.) and Harrington both report similar uses of the suffix /-ʔ/ (for example, Harrington cites in isolation *nɪʔɪʔ*, 'Who--me?', and *tɪmpiiʔ*, 'Is it a rock?').

24. See footnote 23.

25. By "syntactic" imperatives I mean sentences which not only translate as imperatives but also employ syntactic devices whose combination is unique to imperatives. For the use of particular tense suffixes as "semantic" imperatives, see section 2.227.

26. The only exception is if the sentence contains the full subject pronoun you for emphasis (see D. below), it has priority over first position:

e.g.: *mɪm ic tɪka-ka-ŋ*  
you[pl] this eat-pl-imp  
 'Eat this!'

27. For two reasons: (a) *mɪm* is in the nominative--postfix pronouns (except possessors) are never allowed on nominative nouns, and (b) *mɪm* and /-ja/ are coreferential, and nouns may not be suffixed by coreferential postfixes.

28. The PS rule expanding S includes Conj within the clause to make certain permutation constraints somewhat more general (namely that a postfixed subject must be attached to the first word in the sentence.)

29. Pamela Munro (1974a) observes that objects of imperatives use the /-waʔaku/ form when conjoined, despite the fact that the first NP is in the nominative. Whatever one decides about the derivation, the reason this is so is obvious; using the nominative form results in the interpretation, 'You, along with X, hit John!' (or whatever), rather than 'Hit John and X!'

30. These embedded subjects are in the oblique case.

31. They also do not look like likely candidates for parenthetical verbs since they are not restricted to present tense and first-person.

32. If one analyzed demonstrative modifiers as appositive pronouns then the constraint on the double appearance of full subjects would have to be restated (as it should be to include other instances of appositive nouns). One might simply say that two full (unbound) coreferential pronouns do not co-occur in the same clause.

33. In a grammar with no deletion, one might want to use such an expansion for appositive nouns as well, e.g., for 'John, my brother'.

34. P. Schachter (p.c.) has pointed out that this might argue for treating postnominal demonstratives as affixes since this looks very much like "agreement."

35. I.e., a participle; see section 2.33.

36. Or "replaced" by it--K is identical to one of the lexical entries for postfixed (nom) you[sg]. (See section 2.212).

37. The other notable exceptions seem to be SUBORD clauses, moved to the front of the sentence:

puṅkuci huvitu-g aipac uṅ t̄ka-v̄t̄  
dog(ob) sing-SUBORD boy that eat-past  
 'While the dog sang, the boy ate.'

38. Actually only if SUBORD = NP VP. NP alone (N-*gajaa*) or VP alone (V-*ga* etc. for "like"-subjects) may not precede the (full) subject, etc.

39. In general I am following conventions in Stockwell, Schachter and Partee (1973) for transformational rule notation, e.g.,  $X_{[Y]}$  will mean "Y immediately dominated by X," whereas  ${}_X[Y]$  means only "Y dominated by X."

40. Sapir claims this for So. Paiute.

41. *Deep and Surface Structure Constraints in Syntax*, 1971. Perlmutter hypothesizes that in any language which allows enclisis there will be constraints on the relative order in a sequence of clitics, which are statable only as surface structure constraints.

## BIBLIOGRAPHY

- Chomsky, Noam. 1965. *Aspects of the theory of syntax*. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 1970. "Remarks on nominalization." In Jacobs and Rosenbaum.
- Chomsky, Noam, and Morris Halle. 1968. *The sound pattern of English*. New York: Harper & Row.
- Halle, Morris. 1973. "Prolegomena to a theory of word formation." *Linguistic Inquiry* 4:1, 3-16.
- Harms, Robert T. 1968. *Introduction to phonological theory*. Englewood Cliffs: Prentice-Hall.
- Harrington, John P. Unpublished field notes.
- Hooper, Joan B. 1973. *Aspects of natural generative phonology*. UCLA Ph.D. dissertation.
- Jackendoff, Ray S. 1972. *Semantic interpretation in generative grammar*. Cambridge, Mass.: MIT Press.
- Jackendoff, Ray S. 1975. "Morphological and semantic regularities in the lexicon." *Language* 51.3, 639-671.
- Jacobs, Roderick A. and Peter S. Rosenbaum. 1970. *Readings in English transformational grammar*. Waltham: Ginn and Company.
- Kroeber, A. L. 1907. *The Shoshonean dialects of California*. UCPAAE 4.65-166.
- Kroeber, A. L. 1909. *Notes on Shoshonean dialects of Southern California*. UCPAAE 8.235-69.
- Laird, Carobeth. Unpublished field notes.
- Laird, Carobeth. 1975. *Encounter with an angry god*. Banning: Malki Press.
- Laird, Carobeth. 1976. *The Chemehuevis*. Banning: Malki Press.
- Lamb, Sydney M. 1958. "Linguistic prehistory in the Great Basin." *IJAL* 24.95-100.



- Lovins, Julie B. 1970. "Towards a generative phonology of Southern Paiute." Ms.
- Miller, Ronald D. and Peggy J. Miller. 1967. *The Chemehuevi Indians of Southern California*. Banning: Malki Press.
- Munro, Pamela. 1974a. "Imperative objects in Chemehuevi." Ms.
- Munro, Pamela. 1974b. "On the morphology of Shoshonean negatives." Ms.
- Nichols, Michael J. P. 1973. *Northern Paiute historical grammar*. University of California, Berkeley Ph.D. dissertation.
- Perlmutter, D. 1971. *Deep and surface structure constraints in syntax*. New York: Holt, Rinehart and Winston.
- Press, Margaret L. 1975. *A Grammar of Chemehuevi*. UCLA. Unpublished doctoral dissertation. (Available from University Microfilms, Inc. Ann Arbor, Michigan.)
- Sapir, Edward. 1930. *Southern Paiute, a Shoshonean language*. Proceedings of the American Academy of Arts and Sciences 65:1-3.
- Sapir, Edward. 1951. "The psychological reality of phonemes." In *Selected writings of Edward Sapir in language, culture and personality*, pp. 46-60. Edited by David G. Mandelbaum. Berkeley: University of California Press.
- Shopen, Tim. 1972. *A generative theory of ellipsis: a consideration of the linguistic use of silence*. Available from the Indiana University Linguistics Club, Bloomington, Ind.
- Stirling, M. W. 1963. "John Peabody Harrington, 1884-1961" (obituary). *American Anthropologist* 65.370-381.
- Stockwell, Robert P., Paul Schachter and Barbara H. Partee. 1973. *The major syntactic structures of English*. New York: Holt, Rinehart and Winston.
- Whorf, Benjamin L. 1935. "The comparative linguistics of Uto-Aztecan." *American Anthropologist* 37.600-608.

