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A Grammar of the Lake Miwok Language

By

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DISSERTATION

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To
Dr. Mary R. Haas
with deepest appreciation

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INTRODUCTION

Lake Miwok is a California Penutian language formerly spoken in a small area south of Clear Lake.¹ It is now remembered by about eight people, most of whom live on the Middletown Reservation just outside Middletown, California. It is closely related to Coast Miwok, spoken from the tip of the Marin Peninsula north to Bodega Bay, for which we have modern recordings of the Bodega dialect. It is more distantly related to the Eastern Miwok languages. These include the Sierra Miwok languages, spoken on the western slopes of the Sierra Nevada Mountains from the Fresno River north to the Consumnes River; Plains Miwok, spoken between Ione and Stockton; and Saclan, which might have been the language of a group of Indians living west of Mount Diablo.² There is some evidence, mostly in place names, that the area between Mount Diablo and Stockton was also once inhabited by Miwok-speaking tribes.³

The most complete description of the original boundaries of the Lake Miwok area was made by S. A. Barrett in 1908:

"Beginning at a point on Cache creek about four miles from its source, the southernmost end of Clear lake, the boundary of the Northern or

or Lake Moquelumnan [Miwok] dialectic area runs in a general southeasterly direction, probably along the ridge between Jerusalem Valley and Morgan Valley creeks, crosses the latter near the confluence of the two, and passes through the hills east of Jerusalem valley to Putah creek, which it crosses at a point about five miles east of Guenoc. From here it runs for a short distance in the same direction, and then, turning in a southwesterly direction, it runs to a point probably about eight miles northeast of Mt. St. Helena. East of this portion of the boundary lies the Southerly Wintun [Patwin] area. At this point the boundary turns in a northwesterly direction and runs through the mountains and into Coyote valley to a point about three miles northeast of Middletown and about a mile and a half southwest of Guenoc. Turning then in a westerly direction it runs through Coyote valley, crossing Putah creek, and passes to the summit of Cobb mountain. This portion of the boundary separates the Northern Moquelumnan [Lake Miwok] from the Yukian Wappo area. It here turns and runs in a general northerly direction, following up the range connecting Cobb mountain with Mt. Knaktai, to a point just east of the headwaters

of Cole creek where it turns in a general easterly direction and runs through the foot-hills to the southern extremity of Lower Lake, and thence to Cache creek, down which it runs for about four miles to the point of starting. From Cobb mountain on to its northeastern extremity the boundary separates the Northern Moquelumnan [Lake Miwok] from the Eastern and Southeastern Pomo dialectic areas.

"To the north of the Northern Moquelumnan dialectic area lies the Southeastern Pomo area, to the east is Wintun [Patwin] territory, and to the south the territory of the Yukian Wappo, while on the west the Eastern Pomo area adjoins it."⁴

Lake Miwok appears to have remained undiscovered until relatively recent years. Powers, in 1877, placed the Lake Miwok area in Patwin territory,⁵ where it remained in the Powell classification of 1891.⁶ Powers, however, makes passing reference to a group of Indians which might have been Lake Miwok: ". . . in Pope and Coyote Valleys there was spoken a language now nearly, if not quite, extinct."⁷

As a result of the extensive field work undertaken around the turn of the century, Barrett announced,

in 1903, the discovery of a new Miwok language in the southern part of Lake County.⁸ In 1908, Barrett published a 282 word Lake Miwok vocabulary along with detailed information on the boundaries of Lake Miwok territory and the location of village sites.⁹ A portion of this vocabulary also appeared in Barrett's more general effort to delineate territory originally occupied by the Miwok Indians.¹⁰ Merriam published a few Lake Miwok legends in 1910, but they were in English except for the names of the principal characters.¹¹

After this initial period of research, the Lake Miwok language suffered considerable neglect. Attempts at classification have been based, until recently, largely on Barrett's early work. L. S. Freeland gathered some textual and paradigmatic material in 1922, but it was not published until 1947.¹² There is also an unpublished vocabulary of about 450 words taken by Sydney M. Lamb in 1955 from Mrs. Doris Yee of Middletown.¹³ In addition, there are about 300 pages of linguistic notes taken by Dr. John P. Harrington.¹⁴

The present study is based on field work done during the spring and summer of 1956, and the summers of 1957 and 1958 under the auspices of the Survey of California Indian Languages, Linguistics Department, University of California, Berkeley. A dictionary based on this material

has already been submitted for publication.¹⁵ Numerous texts exist in manuscript form and are in process of being prepared for publication. My informants were Mr. John Knight and Mr. James Knight of Middletown, California, Mrs. Alma Grace of San Francisco, California, and Mrs. Doris Yee of Middletown, California.

Grateful acknowledgment is made to my Indian informants, whose kindness extended to every aspect of my work with them. Dr. Murray B. Emeneau, Dr. Gene M. Schramm, and Dr. William F. Shipley have made many helpful suggestions in the preparation of this work. In particular, I wish to express deepest appreciation to Dr. Mary R. Haas, under whose direction this grammar was written.

FOOTNOTES

¹Catherine A. Callaghan, "California Penutian: History and Bibliography," *International Journal of American Linguistics* 24.189-194 (1958).

²M. S. Beeler, "Saclan," *International Journal of American Linguistics* 21.201-209 (1955); "Saclan Once More," *International Journal of American Linguistics* 25.67-68 (1959).

³James Allen Bennyhoff, *The Ethnogeography of the Plains Miwok*, 1960 (unpublished).

⁴S. A. Barrett, "The Ethno-Geography of the Pomo and Neighboring Indians," *University of California Publications in American Archaeology and Ethnology* 6.314 (1908).

⁵Stephen Powers, "Tribes of California, U. S. Geographical and Geological Survey of the Rocky Mountain Region," *Contributions to North American Ethnology* 3.1-613 (1877).

⁶John Wesley Powell, "Indian Linguistic Families of America North of Mexico," *Bureau of American Ethnology Annual Reports* 7.1-142 (1891).

⁷Barrett, *op. cit.*, p. 218.

⁸S. A. Barrett, "A New Moquelumnan Territory in California," *American Anthropologist* n.s. 5.750 (1903).

⁹Barrett (1908), *op. cit.*

¹⁰Barrett, "The Geography and Dialects of the Miwok Indians," *University of California Publications in American Archaeology and Ethnology* 6.333-380. (1908).

¹¹C. Hart Merriam, *The Dawn of the World Myths and Weird Tales Told by the Newan Indians of California*, Cleveland (1910).

¹²L. S. Freeland, "Western Miwok Texts with Linguistic Sketch," *International Journal of American Linguistics* 13.31-46 (1947).

¹³This vocabulary was collected under the auspices of the Survey of California Indian Languages, Linguistics Department, University of California, Berkeley.

¹⁴This material is now in the Bureau of American Ethnology, Smithsonian Institution, Washington, D. C.

¹⁵Catherine A. Callaghan, *Lake Miwok Dictionary*, unpublished (1962).

BIBLIOGRAPHY OF LAKE MIWOK

Angulo, J, de, and Freeland, L, S.

1928. "Miwok and Pomo Myths," *Journal of American Folklore* 41.232-252.

Barrett, S. A.

- 1903 "A New Moquelumnan Territory in California," *American Anthropologist* n.s. 5.730.
1908. "The Ethno-Geography of the Pomo and Neighboring Indians," *University of California Publications in American Archaeology and Ethnology* 6.68-80, 108-109, 301-318.
1908. "The Geography and Dialects of the Miwok Indians," *University of California Publications in American Archaeology and Ethnology* 6.333-380.

Beeler, M. S.

1955. "Saclan," *International Journal of American Linguistics* 21.201-209.
1959. "Saclan Once More," *International Journal of American Linguistics* 25.67-68.

Broadbent, Sylvia M., and Catherine A, Callaghan

1960. "Comparative Miwok: A Preliminary Survey," *International Journal of American Linguistics* 26.301-316.

Callaghan, Catherine A.

- 1959. "California Penutian: History and Bibliography," *International Journal of American Linguistics* 24.189-194.
- 1959. "Note on Lake Miwok Numerals," *International Journal of American Linguistics* 24.247.
- 1961. "Phonemic Borrowing in Lake Miwok," unpublished.
- 1962. "Comparative Miwok-Mutsun with Notes on Rumsen," *International Journal of American Linguistics* 28.97-107.
- 1962. *Lake Miwok Dictionary*, unpublished.

Dixon, Roland B., and Alfred L. Kroeber

- 1903. "The Native Languages of California," *American Anthropologist* n.s. 5.1-26.
- 1907. "Numerical Systems of the Languages of California," *American Anthropologist* n.s. 9.663-690.
- 1913. "Relationship of the Indian Languages of California," *Science* n.s. 37.225.
- 1913. "New Linguistic Families in California," *American Anthropologist* n.s. 15.647-655.

1919. "Linguistic Families of California," University of California Publications in American Archaeology and Ethnology 16.47-118.

Freeland, L. S.

1947. "Western Miwok Texts with Linguistic Sketch," International Journal of American Linguistics 13.31-46.

Kroeber, A. L.

1906. "The Dialectic Divisions of the M_oquelumnan Family in Relation to the Internal Differentiation of the Other Linguistic Families of California," American Anthropologist n.s. 8.652-663.
1911. "The Languages of the Coast of California North of San Francisco, University of California Publications in American Archeology and Ethnology 9.278-319.
1911. "Phonetic Constituents of the Native Languages of California," University of California Publications in American Archeology and Ethnology 10.1-12.
1925. Handbook of the Indians of California, Bureau of American Ethnology Bulletin 78.272-278. Reissued by the California Book Company, Ltd., Berkeley, in 1953.

1932. "The Patwin and Their Neighbors," University of California Publications in American Archeology and Ethnology 29.366-369.

Loeb, E. M.

1932. "The Western Kuksu Cult," University of California Publications in American Archeology and Ethnology 23.113-124.

Merriam, C. H.

1907. "Distribution and Classification of the Mewan Stock," American Anthropologist n.s. 9.338-357.
1908. "Totemism in California," American Anthropologist n.s. 10.558-562.
1910. The Dawn of the World Myths and Weird Tales Told by the Mewan Indians of California, Cleveland.

Pitkin, Harvey, and William Shipley

1958. "A Comparative Survey of California Penutian," International Journal of American Linguistics 24.174-188.

Sapir, Edward

1921. "A Characteristic Penutian Form of Stem," International Journal of American Linguistics 2.58-67.

Schmidt, Robert

1934. "Die Küsten Miwok," in Die Ursprung der Göttesidee, 5.251-259 (Münster).

Shafer, Robert

1947. "Penutian," International Journal of American Linguistics 13.205-219.

- 1952 "Notes on Penutian," International Journal of American Linguistics 18.211-216.

Swadesh, Morris

1956. "Problems of Long-Range Comparison in Penutian," Language 32.17-41.

100 PHONOLOGY

110. The phonemes of Lake Miwok are as follows:

Consonantal

Stops:	Plain	p	t	t̚	k	ʔ
	Aspirated	p ^h	t ^h	t̚ ^h	k ^h	
	Glottalized	p̚	t̚	t̚̚	k̚	
	Voiced	b	d		(g)	
Affricates:	Plain		c	č		
	Glottalized		c̚	č̚	č̚̚	
Spirants:		(f)(θ)	s	ʃ	ʒ	h
Sonorants:	Nasals	m	n			
		w	l	(r)	j	

Vocalic

	Front	Central	Back
High	i ii		u uu
Mid	e ee	(e)	o oo
Low		a aa	
		(aa) _{ɪɪ}	

Stress: ' and no mark

Juncture: ... ≠

Intonational patterns: . ; ? !

A sentence is a sequence of phonemes bounded by the onset of speech and the first instance of final juncture

(see 162), or by two consecutive instances of final juncture. A sentence may consist of a series of words (see 211) or a single word uttered in isolation, although not every word can be elicited in isolation, e.g.,

hɪntikaʃun ʔáaʃaw 'tree' kóca ʔáaʃawʃu. ʔálwa.

"How do you say 'tree' in the Indian language (Lake Miwok)? ʔálwa."

ʔinlɪstu?´ hɛlla. "Are you ready? No."

Each of these examples consists of two sentences. Most stressed words other than particles may occur in isolation. Unstressed words and particles other than the quotative particles are rarely found in isolation.

FINAL POSITION occurs immediately before final juncture (162). Distributional statements concerning final position involve the last phoneme of any sequence which can occur before final juncture. These sequences include all items which may occur in isolation as well as certain unstressed pronouns or particles which may end a sentence even though they never occur alone.

Present-day speakers of Lake Miwok, all bilingual in English, tend to insert English words or phrases into their speech with little or no phonetic modification. In such instances, I consider that they have temporarily switched languages, even though Lake Miwok morphological elements may occur in immediate constituency with the

foreign sequences, e.g.,

(Fourth-of-July)to hélla katawhál'ina. "I'm

not going to work on the Fourth of July."

-to is an allative case suffix in immediate constituency with the sequence "Fourth of July," which is pronounced as in English. I have not included the phonemes or syllable canons of such English sequences in my description of Lake Miwok.

Phonemes enclosed in parentheses in the chart are found only in loan words and exclamations. These phonemes will now be discussed individually.

/g/ is a voiced, lenis velar fricative. It occurs in a single word, sigáaru "cigarette," from Spanish cigarro "cigar."

/f/ is a voiceless bilabial fricative which is found in one exclamation and in a few Spanish loan words, e.g.,

fíinu "fine" (not coarse) from Spanish fino
"fine,"

káfe "coffee" from Spanish café "coffee," and

fjúuuuuuu "Scat!" an exclamation used to chase
animals away.

θ/ is a voiceless interdental fricative which occurs optionally in k^hámduθ (also k^hámdut) "Kamduth," the name of the largest island in Clear Lake. This is probably a loan word from Southeastern Pomo qómdot [q^hómdot] "Kamduth,"

or from English Kamduth.

/r/ is an apical trill, partially unvoiced in final position. It is of frequent occurrence in loan words from Spanish, e.g.,

ríiku "to be rich," from Spanish rico "rich";

kojméeru "umpire," from Spanish coimero "keeper of a gambling house," and

relóos "watch," from Spanish reloj "watch," possibly through Southern Pomo relós "watch."

/r/ is also found in tórtor "a greenish insect similar to a grasshopper," from Patwin t^hórt^hór, tóRtòR "cricket."

This is the only recorded instance of /r/ in a Lake Miwok word which was not ultimately borrowed from Spanish.

/e/ is a mid-central unrounded short vowel occurring optionally in čéčweji (also čéečweji) "church," from English church plus -weji "house."

/ã/ is a low central long nasalized vowel which is found optionally in the exclamation háah (also háah) "What did you say?" "What!"

Prolonged phonemes occur in a few exclamations. The number of moras are approximated by the number of times the phoneme is repeated in the transcription. These exclamations will now be listed:

fjuuuuuuu [fyúuuuuuu] Scat!, an exclamation used to chase animals away.

kAAAAA [kAAAAA] Bah! This is the only example
of a voiceless vowel in the language.

léep, léeeep [lEEp^h, lEEEEp^h] an imitation of
the sound of a large, mythical game animal.

pšššššššš Sound of a chicken hawk flying around.

The non-plain stops and affricates, /t/, and probably /s/, have apparently been borrowed from neighboring Indian languages. They are more frequent, however, than the phonemes discussed above. In a few cases they have spread by analogy or allophonic realignment into words from Proto-Miwok. Consequently, they are no longer peripheral.

120. Consonants.

Unglottalized consonants are lenis in Lake Miwok. Glottalized consonants are most fortis immediately preceding a stressed vowel, less fortis before unstressed vowels, and lenis in syllable final position; although the degree of force varies from speaker to speaker.¹ Geminate consonants occur only intervocalically and are pronounced as long consonants. There is no contrast between a long stop or affricate and a cluster consisting of a stop or affricate preceded by a homorganic plain stop; e.g., pácca "good-luck charm" could never contrast with *pátca.

¹James Knight usually pronounces glottalized consonants in a more fortis fashion than my other informants.

Thus ʔóttá "flesh" is phonetically [ʔót:ʌ]. The first consonant of a medial non-geminate cluster is optionally released.

Plain stops are always released before final juncture and optionally released before non-homorganic consonants. Plain stops other than /ʔ/ receive slight aspiration before /j/ and /w/, and optional slight aspiration before non-initial vowels and when released before other consonants. In other positions they are unaspirated. Slight aspiration is indicated by an underlined raised "h", e.g.,

/ʔáaʔaw/ = [ʔá:t^hʔw ^f ʔá:tʔw] "to speak"

/ʔáppi/ = [ʔá:p^hi ^f ʔá:p:i] "father"

/p/ is a voiceless bilabial stop; e.g.,

/páapa/ = [pá:pa^f pá:p^hʌ] "grandfather,"

/léep/ = [lÉ:p] "cry of a large animal," and

/búmpjuk/ = [búmp^hyUk] "coarse acorn fibers."

/t/ is a voiceless interdental stop formed by pressing the blade of the tongue against the upper teeth, e.g.,

/táata/ = [tá:tʌ ^f t^há:tʌ] "uncle,"

/kút/ = [kút] "tooth," and

/ʔátkal/ = [ʔá:t^hkʌl ^f ʔá:t^hkʌl] "mushroom."

Underlining is used to indicate interdental position.

/ʔ/ is a slightly retroflex voiceless post-alveolar stop formed by placing the tip of the tongue just behind

the alveolar ridge. When /o/ precedes /t̚/ plus a stop, anticipatory retroflexion produces an "r" coloring, indicated by a raised "r", e.g.,

/t̚ille/ = [t̚íll̥:E] "noon,"

/ʔútu/ = [ʔútu̥^f ʔútu̥^h-u] "whiskers," and

/ʔótt̚a/ = [ʔó^rt̚:ʌ^f ʔó^rt̚:ʌ^h] "two."

/t̚/ is rare in word initial position and does not occur in word final position.

/k/ is a voiceless velar stop, e.g.,

/káaka/ = [ká:kʌ^f ká:kʌ^h] "uncle,"

/kíik/ = [kí·k] "water," and

/ʔókjapo/ = [ʔók^hyʌpʌ].

/ʔ/ is a glottal stop. Before vowels in sentence medial position, /ʔ/ is often weakly articulated or absent. When /ʔ/ is the first member of a consonant cluster, it is optionally released, in which case an echo vowel appears between /ʔ/ and the following consonant, e.g.,

/tóʔle/ = [tóʔ̥l̥E^f tóʔ̥^ol̥E] "star,"

/máakʔena/ = [má·kʔɛnʌ] "to get sick," and

/ʔinʔúunu/ = [ʔInʔú:nu] "your mother."

/ʔ/ never occurs in final position.

Aspirated stops occur only in syllable initial position, and they usually alternate with plain stops. Historically, they are in the process of merging with the latter. Where a contrast between plain and aspirated

stops still exists, the aspirated stops are marked by a greater degree of aspiration, e.g.,

/p^háakum/ = [p^há:kŭm] "dwarf sunflower,"

/pákah/ = [pákΛh] "flower,"

/ʔóʔʔ^haja/ = [ʔó^rʔ:ḡayΛ] "eight," and

/ʔóʔʔa/ = [ʔó^rʔ:ḡΛ f ʔó^rʔ:Λ] "two."

/p^h/ is a bilabial voiceless aspirated stop, e.g.,

/p^hák^hak/ = [p^hákp^hak] "egg." This word alternates freely with pákpak.

/t^h/ is a voiceless aspirated interdental stop formed by pressing the blade of the tongue against the back of the upper teeth, e.g.,

/t^hokóllu/ = [t^hokól:u] "knee,"

/kanókt^haj/ = [kΛnókt^hḡay] "Mt. Kanocktay." This word alternates freely with kanóktaj.

/ʔ^h/ is a slightly retroflex voiceless aspirated post-alveolar stop formed by placing the tip of the tongue just behind the alveolar ridge, e.g.,

/ʔ^hó1ʔojə/ = [ʔ^hó1ʔoyΛ] "to be tall,"

/ʔóʔʔ^haja/ = [ʔó^rʔ:ḡayΛ] "eight."

/k^h/ is a voiceless aspirated velar stop, e.g.,

/k^hádo/ = [k^hádΛ] "sweet black acorn bread,"

/búk^hal/ = [bŭk^hal] "fish trap."

Glottalized stops are formed by closure at the point of articulation and the glottis. Tongue release occurs

slightly before glottal release. There is a contrast between glottalized consonant and a stop plus glottal stop,¹ e.g.,

/máakʔena/ = [má·kʔenʌ] "to get sick"

/p^háakum/ = [p^há:kUm] "dwarf sunflower"

Glottalized stops are rare in syllable final position and never occur in final position.

/p̥/ is a voiceless glottalized bilabial stop, e.g.,

/p̥ódwaj/ = [p̥ódwaj] "snake"

/lúpum/ = [l̥UpUm] "to be diving"

/t̥/ is a voiceless glottalized interdental stop formed by pressing the blade of the tongue against the back of the upper teeth, e.g.,

/ʂót̥ah/ = [ʂót̥ah] "type of medicinal plant"

/t̥áwih/ = [t̥áwih] "bottomless basket"

/léet̥kaʔi/ = [lé·t̥kaʔi] "to cut off a small piece."

/t̥/ is a slightly retroflex voiceless glottalized post-alveolar stop formed by placing the tip of the tongue just behind the alveolar ridge, e.g.,

/t̥úlip/ = [t̥ÚlIp] "to glisten"

/p^hít̥kaʔi/ = [p^hít̥kaʔi] "to press down"

/k̥/ is a voiceless glottalized velar stop, e.g.,

¹In the rapid speech of James Knight, stop plus glottal stop alternates freely with a glottalized stop; e.g., máakʔena [má·kʔenʌ] "to get sick" varies with máakena [má·kenʌ].

/kúpum/ = [kúpUm] "finger"

/ʔíikʂal/ = [ʔi.kʂaʎ] "whooping cough"

/ʂúmkaʂ/ = [ʂúmkaʂ] "carrot."

The last two forms vary with ʔíikʂal and ʂúmkaʂ respectively.

There are two voiced stops in Lake Miwok, excluding /g/, which occurs in a single word, sigáaru "cigar."

/b/ is a voiced bilabial stop, e.g.,

/búmpjuk/ = [búmp^hjUk] "coarse acorn fibers"

/k^hábbaja/ = [k^háb:əyaʎ] "to be bald."

/d/ is a voiced post-dental stop formed by placing the tongue at the base of the teeth, e.g.,

/dolóomen/ = [dól^hmen] "throat"

/k^hádo/ = [k^hádʌ] "sweet black acorn bread"

/ʔídkatʂi/ = [ʔsídkatʂi] "to squirt."

122. Plain affricates are lenis and unaspirated.

/c/ is [ts], a post-dental stop plus a post-dental slit spirant. Before consonants the stop component is often weakly articulated or absent, e.g.,

/cúuk/ = [tsú:k] "to melt"

/héeko/ = [hÉ.tskʌ] "to hate, chase away, avoid"

/káac/ = ká:ts] "fish"

/pácca/ = [pát.saʎ] "good luck charm."

/ʂ/ is [ʂʂ], an apico-alveolar stop plus an apico-

alveolar groove spirant. /č/ is rare except in Spanish loan words. In words not of Spanish origin, /č/ varies freely with /c/. Examples are:

/čáa/ = [tʃá:] "tea" from Spanish cha "tea"

/čówte/ = [tʃówtE] "to be pleasing"

The latter word varies freely with cówte.

There are three glottalized affricates.

/č̣/ is [tʃ̣] in all positions, a post-dental glottalized stop plus a post-dental slit spirant, e.g.,

/č̣íwʃi/ = [tʃ̣íwʃi] "hail"

/kóčča/ = [kót·'sʌ] "to poke something"

/p^híičwati/ = [p^hí·tswaʃi] "to crush one thing fast"

/č̣̣/ is a rare phoneme. It usually varies freely with /č̣/. /č̣̣/ is [tʃ̣̣], a glottalized apico-alveolar stop plus an apico-alveolar groove spirant, e.g.,

/č̣̣écis/ = [tʃ̣̣éʃiʃ] "tan oak acorn"

/wuč̣̣áaʃi/ = [wUʃ̣̣á:ʃi] "to switch"

These words alternate with čécis and wučáaʃi respectively. Thus far, /č̣̣/ has not been found in syllable-final position.

/č̣̣̣/ is a glottalized lateral stop followed by a lateral spirant, with variation in the degree of glottalization. /č̣̣̣/ has been found in only four words, always in morpheme initial position, e.g.,

/č̣̣̣apáaʃi/ = [č̣̣̣apá:ʃi] "to slam a door"

/ʔáwaw/ = [ʔáwəw] "to gulp down"¹

/ʔawáwʔawaw/ = [ʔəwəwʔəwəw] "to slurp slowly"

/ʔáwʔawəʔi/ = [ʔəwʔəwəʔi] "to slurp fast"

The last three forms are historically derived from the same root, ʔáw-.

123. Spirants are lenis and voiceless.

/s/ is a post-dental slit spirant of rare occurrence except in Spanish loan words, e.g.,

/sérka/ = [sérkʌ] "fence" from Spanish cerca
"fence"

/késa/ = [kéʂʌ] "Borax Lake"

/lúskume/ = [lúʂkUmE] "fish hook"

/tumístumis/ = [tUmíʂtUmis] "name of a spring"

/ʂ/ is a slightly retroflex post-alveolar groove spirant formed by placing the tip of the tongue just behind the alveolar ridge. When /o/ precedes /ʂʂ/, anticipatory retroflexion produces a slight "r" coloring, not as great as that produced before /ʂ/ plus a homorganic stop. Instances of /ʂ/ in word-final position are rare, apparently being confined to items borrowed from other Indian languages. Examples are:

/ʂéeliʂ/ = [ʂÉ:lIʂ] "snail"

¹John Knight claims that ʔáwaw is not correct Lake Miwok.

- /póʃʃol/ = [póʃ:ɔ́] "lungs"
 /ʔúʃkun/ = [ʔúʃkʉn] "pinole"
 /wilíkʃi/ = [wiłíkʃi] "to go and get something"
 /ɬ/ is a lateral spirant; e.g.,
 /ɬúnta/ = [ɬúntʌ] "snot"
 /ʔéɬkaʃi/ = [ʔéɬkʌʃi] "to come off"
 /mólɬ/ = [mólɬ] "Sulphur Banks"

The last example is the only recorded instance of /ɬ/ in final position.

/h/ is a glottal spirant [h] before vowels. Elsewhere /h/ is the velar spirant [x]. Before /ʔ/ or juncture, /h/ is often weakly articulated or absent, e.g.,

- /húul/ = [hú:ɬ] "trout"
 /póhhol/ = [póh:ɔ́] "to swell"
 /lóhlok/ = [lóhłɔk] "mudhen"
 /hákhakaʃi/ = [hákhakʌʃi] "to pant"
 /páwih/ = [páwix] "mountain"
 /pawíh kaʔúʃeɬ/ = [pawíhkaʔúʃEʰ] "I see the mountain"

124. There are two voiced nasals and three other voiced continuants in Lake Miwok.

/m/ is a bilabial nasal, e.g.

- /mú:/ = [mú:] "breast"
 /ʔámko/ = [ʔámkɔ] "older girl cousin"

/ʔupúʂmin/ = [ʔUpÚʂmIn] "helldiver"

/ʂímme/ = [ʂím:E] "bark"

/cáam/ = [tsá:m] "to wear out, die off"

/n/ is [ŋ] before velar stops in rapid speech. Elsewhere, /n/ is post-dental, e.g.,

/níi/ = [ní:] "this"

/ʔínte/ = [ʔÍnt̪E] "tears"

/holónka/ = [hɔlónkʌ] "to fell"

/túnni/ = [t̪Ún:i] "heel"

/loʔíhnaka/ = [lɔʔíxnʌkʌ] "to be noisy"

/háan/ = [há:n] "penis"

/w/ is a bilabial sonorant; e.g.,

/wáak/ = [wá:k] "crane"

/káwko/ = [káwkʌ] "brother-in-law"

/p^híicwaʔi/ = [p^hí·tswaʔi] "to crush fast"

/ʔáwwe/ = [ʔáw:E] "morning"

/ʔéew/ = [ʔé:w] "pine needles"

/l/ is a backed lateral change before /w/ and before juncture. Elsewhere, /l/ is a fronted lateral. In both cases there is also apico-post-dental contact. Examples are:

/lól #/ = [l̪â:l̪^h] "to come off" (hair, feathers, etc.)

/kúlla/ = [kÚl̪:ʌ] "liver"

/ʔáwwa/ = [ʔáwʌ] "tree"

/mólpa/ = [mól₁p^Λ] "cloud"

/cibleŋi/ = [tsIb₁leŋi] "to spring"

/j/ is [y], produced with very little friction; e.g.,

/jójti/ = [yóy₁ti] "to struggle"

/tájh/ = [táj₁yh] "man"

/búmpjuk/ = [bÚmp^hyUk] "coarse buckeye fibers"

/ʔókjapo/ = [ʔók^hy^Λp^Λ] "to develop"

/káaj/ = [ká:y] "to dry up"

130. Vowels.

There are five short vowels and five corresponding long vowels in Lake Miwok. Front vowels and /a/ are unrounded; back vowels are rounded. Long vowels in non-final closed syllables are about one and a half moras in length. Elsewhere, they are from two to three moras in length. Short vowels are centralized in non-final unstressed syllables. They are shortest and most centralized in non-final open unstressed syllables.

/i/ is a short high front vowel which varies from [i] to [I]. It tends to be higher before final juncture and lower elsewhere, e.g.,

/kúcci/ = [kÚt:si] "small"

/páwih/ = [páwih] "mountain"

/pawih kaʔuŋe./ = [pawíhk^ΛʔÚŋE^h] "I see the mountain"

/wájik/ = [wájIk] or [wájik] "some"

/ii/ is a long close high front vowel in all positions; e.g.,

/tíi/ = [tí:] "claw"

/kíik/ = [kí:k] "water"

/p^híic'waṭi/ = [p^hí·tswaṭi] "to crush fast"

/e/ is a short mid front vowel which varies from [e] to [ɛ]. It tends to be highest before /j/, somewhat lower elsewhere **in final syllables**, and lowest in other positions; e.g.,

/ʔéjje/ = [ʔéj:E] "manzanita berries"

/ʔejjeʔala/ = [ʔéj:ɛʔa₁Λ] "manzanita tree"

/ʔáwweh/ = [ʔáw:Eh] "to dawn"

/ʔélaṭj/ = [ʔé₁ṭay] "child"

/ee/ is a long mid front vowel in all positions; e.g.,

/née/ = [né:] "this"

/ʔéew/ = [ʔÉ:w] "pine needles"

/jčebkati/ = [yÉ·bkaṭi] "to cave in"

/a/ is a short low vowel which varies from [a] to [a̠].¹ It tends to be fronted before a nasal plus consonant, less fronted before /j/, backed before /w/ and /lw/, and central elsewhere. /a/ in open syllables is often [Λ]. Examples are:

/ʔájaw/ = [ʔáyaw] "to gather"

¹[a] is a low central unrounded vowel. A dot under a vowel indicates backing; e.g., [a̠] is not as fronted as [a].

/mána/ = [mána] or [mána] "to be gay"

/ʔáttá/ = [ʔá:t̪:ʌ] "elder brother"

/lákəh/ = [lákəh] or [lákəh] "cottonwood"

/ʔókjapo/ = [ʔók^hyapɔ] or [ók^hyapɔ] "to develop"

/ʔánʔajʔalwa/ = [ʔánʔajʔaɭwə] "elderberry tree"

/aa/ is a long low central vowel in all positions, e.g.,

/káa/ = [ká:] "door"

/náawkaʂa/ = [ná·wkəʂə] "to miaow"

/káa/ = [ká:t̪] "to be damp"

/ʔáala/ = [ʔá:l̪] "east"

/o/ is a short mid back vowel, symmetrical with /e/.

It varies from [o] to [ɔ]. It tends to be highest before /w/, somewhat lower elsewhere **in final syllables**, and lowest in other positions, e.g.,

/mówen/ = [mówen] "to trap"

/koʔéçti/ = [koʔé:t̪i] "to push over"

/hóloh/ = [hóləh] "to lean against something"

/ʔámko/ = [ʔámkɔ] "older girl cousin"

/oo/ is a long mid back vowel in all positions; e.g.,

/kóo/ = [ká:] "to push"

/kóok/ = [ká:k] "tail"

/lólolo/ = [lól:lɔ] "leg"

/k^hóobkaçti/ = [k^há·bkəçti] "to gash"

/u/ is a short high back vowel, symmetrical with /i/.

It varies from [u] to [U]. It tends to be higher before

final juncture, and lower in other positions, e.g.

/kúkuh/ = [kÚkuh] "flea"

/kukúhto/ = [kUkÚht_Ω] "on the flea"

/ʔúunuʔala/ = [ʔú:nUʔa_Λ] "buckeye tree"

/púttu/ = [pÚt_u] "baby"

/kút/ = [kUt^h ~ kut^h] "tooth"

/uu/ is a long high back vowel in all positions; e.g.,

/kúu/ = [kú:] "to be rotten"

/ʔúune/ = [ʔú:nE] "to put in"

/şúul/ = [şú:ɿ] "eagle"

/lúuntu/ = [lú·ntu] "creek dogwood"

The approximate range of the ten vowel phonemes is summarized in the following chart:

	Front	Central	Back
High	i: i I		U u u:
	e		o
Mid	E: E		Ω Ω:
	ε		o
Low	a a	Λ	ɑ
		ɑ	
		ɑ:	

140. Syllables.

Syllables are of the canon C₁V(V) (C₂), where C₁ and C₂ may be any consonant and V may be any vowel, except

for cases discussed below.¹ If C_2 is in word-final position, it is never a non-plain stop, /ʔ/, /č/, /č̣/, or /ḳ/.

Initial clusters of two consonants occur only in a few loan words and a single exclamation; namely,

fjuuuuuu "Scat!"

skóowa "broom" from Spanish escoba "broom"

stáat "to start" from English start

stúufa "stove" from Spanish estufa "stove"

Syllable-final clusters of two consonants are also extremely rare. The cluster /mp/ occurs in the first syllable of a single word:

búmpjup "coarse buckeye fibers"

The cluster /jh/ is found in four words:

tájh "man"

tájhtajispawih "name of a hill by Gwenock Lake"

(also tájtajispawih and tájtajpawih)

wájh "an exclamation of emphasis or regret"

(also wáj)

the second member of the phrase ?úuj hújh "a

dance signal"

tájh "man" and čálaj "bug" illustrate a contrast between /...ajh/ and /...aj/. tájhto "on the man" and čalájto "on the bug" are examples of this contrast in non-final

¹Phonemic slashes are omitted in citing examples if there is no ambiguity.

position. The cluster /jw/ occurs in one exclamation:

ʔóowh "all right" (also ʔóow)

Long syllables contain long vowels; short syllables contain short vowels; closed syllables end in consonants; and final syllables occur immediately before final juncture.

Examples of long open syllables are:

káa "door"

/loo.../ in lóolo "leg"

Examples of long closed syllables are:

kíik "water"

/lúun,,,/ in lúuntu "creek dogwood"

Examples of short open syllables are the sequences:

/ku.../ and /...le/ in kúle "bear"

Examples of short closed syllables are:

kút "tooth"

/...luk/ in káluk "skunk"

/şút.../ and /...tak/ in şúttak "to have eyes"

141. Consonant clusters occur only intervocalically and consist of two members (C_1C_2) except in the special cases previously discussed. If C_1 and C_2 are voiceless homorganic stops, C_1 is always a plain stop; e.g.,

bápp^ha "to club"

líkkamṭi "to have a contest"

şṭṭa "two"

If C_2 is an affricate, C_1 is never a voiceless homorganic stop. Thus far, no clusters consisting of a stop or affricate plus λ have been recorded.

150. Stress.

There are two degrees of phonemic stress in Lake Miwok, // and no mark.

151. // is emphasis and falling pitch [^] on long final syllables and occasionally on long open pre-final syllables. Otherwise, // is emphasis and high pitch [']. The last stressed syllable in a sentence tends to have a higher pitch than preceding stressed syllables. Examples are:

/kóo/ = [kâ:] "to push"

/kíik/ = [kí:k] "water"

/kíikto/ = [kí·kt̩] "on the water"

/híina/ = [hí:nΔ] or [hí:nΔ] "to give"

/šút/ = [šÚt] "eye"

/šímme/ = [ším:E] "bark"

It is assumed that these examples were followed by final juncture.

152. Unmarked syllables have lower pitch and less emphasis than stressed syllables [˘], and non-final short open unstressed syllables have the least emphasis and shortest duration of all [no mark]. An example of a

sentence containing stressed and unstressed syllables is:

/keláckelac káŕŕatu ʔúlki konʔókaj #/ = [keláckelácc-
káŕ:ʌtʊʔúlki kónʔókáj^h] "Long, long ago,
this is the way they made acorn mush."

160. Juncture.

There are two junctures, pause juncture and final juncture.

161. Pause juncture /.../ is the cessation of the flow of speech without the concomitant features of final juncture. The pause may be very short, or it may last as long as a couple of seconds. It may occur between any two morphemes except those which constitute the verbal theme (see 235), although it is commonest between two words. It usually indicates reflection or an afterthought on the part of the speaker. The previous word or morpheme of the utterance, or an augmented phrase containing the previous word or morpheme may follow the pause. The incidence of this juncture does not effect the contours of the intonational patterns (see 170). Examples are:

miŕi ʔekáal kon...konjécca. "And then they . . .
they mash it."

ʔolúut konʔokáj miŕi...konʔajée konwócca. "When
they make baskets . . . they whittle the
sticks."

kostállajtu ?úunu...hintíil ?úunu konwilíkxi.

"They went after fruit . . . old-time
fruit (buckeye) with a sack."

máa kon...máa kon...nawáaha kučíijaŋtu kon wócca.

"That they . . . that they . . . they
whittle with a pocket knife or a kitchen
knife."

récj kóola...ŋtu lákat...ŋtu máac kúnun. "King's
Girl . . . that's what my mother used . . .
to call her."

In the last example, the first instance of pause juncture occurs between kóola- "girl" and the instrumental case suffix -ŋtu, and the second instance separates lákat "to call, name" from -ŋtu.

162. Final juncture /#/ is glottal stricture ['], glottal stricture plus breath release ['^h], or breath release [^h] after vowels and sonorants. After stops, /#/ is usually a slight breath release, but occasionally there is a fortis glottal stricture followed by breath release [''^h]. Elsewhere, /#/ is breath release.

Examples are:

/ʔóttat#/ = [ʔótt:ʌ'] or [ʔótt:ʌ'^h] or [ʔótt:ʌ^h]
"flesh"

/túmajt#/ = [túmajt'] or [túmajt'^h] or [túmajt^h]
"wood"

/níik #/ = [ní:k^h] or occasionally [ní:k''^h]

"to settle to the bottom"

/ʔawéecu máa kaʔúʔe #/ = [ʔawÉ:tsUmá:kaʔÚʔE']

"That's all I have seen."

170. Intonational patterns.

There are three intonational patterns: declarative, interrogative, and exclamatory.

171. Declarative intonational patterns are by far the commonest in the corpus elicited to date. In a sentence with declarative intonation, the last stressed syllable is as high or higher in pitch than any preceding syllable in the sentence. If an unstressed syllable follows, it has a lower pitch than other unstressed syllables in the sentence. If a series of unstressed syllables follow, the pitch level of each of these succeeding syllables tends to be lower than the last one. If the last stressed syllable is final and long, it has a pronounced falling pitch. Words spoken in isolation show declarative intonational patterns.

A DECLARATIVE SENTENCE has a declarative intonational pattern. It is marked by a period, e.g.,

/ʔéetaw ʔuníhi./ = [ʔÉ:t̄q̄wʔUní:hí'^h] "It's hot
today."

/ʔóow./ = [ʔʌ:w^h] "All right."

/wíinu kawilíkşin?ina./ = [wí:nŪkĀwīlīkşīn?īnĀ^{'h}]

"I'm going after wine."

/ʔujéc wéejiton hówo./ = [ʔŪyĒ:wĒ:yītōnhówŌ^{'h}]

"Come into the house and sit down."

The straight lines above syllables indicate relative pitch.

Occasionally a sentence has two successive declarative intonational patterns with no intervening final juncture. In such cases the two sequences will be separated by a semicolon, e.g.,

/miṭi ʔekáal konkiikto konhínte; miṭi ʔekál kon...

kon jécca./ = [mīṭīʔEkā·lkōnkī·ktōkōnhIntĒ

mīṭīĒkalkōn...kōnyét:sĀ^{'h}] "And then they

put it in water and then they mash it."

172. The interrogative intonational pattern differs from the declarative intonational pattern in that the pitch level of unstressed syllables following the last stressed syllable is not appreciably lower than that of the last stressed syllable. If the last stressed syllable is a final long syllable, there is little if any falling pitch. An INTERROGATIVE SENTENCE has an interrogative intonational pattern. It is followed by a question mark; e.g.,

/inlístu?/ = [ʔīnlī·stū[']] "Are you ready?"

/nít kahíntikaşaja?/ = [nītĀhIntīk şAyĀ^{'h}]

"What shall I do?"

/ʔáaj ʔúu?/ = [ʔā:yʔúu:^{'h}] "Oh, yeah?"

On rare occasions the interrogative intonational pattern is followed by another intonational pattern with no intervening final juncture. In these instances the first sequence is followed by a question mark plus a semi-colon, e.g.,

/ʔálwa kaʔettuja ʔajeʔ; nít kahíntikaʂajaʔ/ =
 [ʔá|wá|ká|ʔé|t:Uyá|ʔayen|ít|ká|k|Int|Iká|ʂá|yá|ʔ^h]

"Should I climb this tree, or what shall I do?"

173. The exclamatory intonational pattern consists of increased loudness and rapidly falling pitch on the last stressed syllable, sometimes with prolongation of vowels or consonants.

An EXCLAMATORY SENTENCE has exclamatory intonation. It is followed by an exclamation point. Many exclamatory sentences are exclamations, though not all instances of exclamations will show exclamatory intonational patterns. Examples are:

/fjuuuuu! / = [fyuuuu^h] "Scat!"
 /ʔekáal ʔiwéeta! / = [ʔéká:|ʔíwÉ:ʔá^h] "And then,
 he went away!"

If an exclamatory intonational pattern is followed by another intonational pattern with no intervening final juncture, the two sequences are separated by an exclamation point plus a semi-colon; e.g.,

/t^huuu!; wéeɛtanco; huwúmnakako./ = [t^huuuwE:tʃʌn-
ts̄h̄ŪwŪmnʌkʌk̄n'] "Scat! go on, you ugly
fellows!"

180. Morphophonemics.

Morphophonemic writing is indicated by double slashes; i.e., by // . . . //,¹ and morphs are separated by hyphens. Hyphens are omitted in statements of morphophonemic rules and the representations of morphophonemes.

181. Most morphophonemes have a single phonemic representation. The exceptions will be discussed individually.

181.1. //N// is /n^f m/ in the sequence //...V(h)^SNp ...//. //N// is /n/ in the sequence //...V(h)^SN// followed by word or final juncture. Elsewhere, //N// is not represented, e.g.,

//páwih-^SNpa-t0// = /pawínpat^f pawímpat/ "toward
the mountain"

//ʔédak-^SNpa-t0// = /ʔedákpat/ "far off"

//tájh-^SN// = /táj/ "man" (nominative case)

//páwih-^SN// = /páwin/ "mountain" (nominative case)

//káac-^Sn// = /kaac/ "fish" (nominative case)

¹The slashes will be omitted where there is no chance of ambiguity.

181.2. //O// is /o/ in the sequence //...CCO//.
Elsewhere, //O// is optionally /o/ or not represented,
e.g.,

//páwih-tO// = /pawíhto/ "on the mountain"
//jómi-tO// = /jómit ^f jomíto/ "at the village"

181.3. //S// is /s/ after voiceless stops and affri-
cates. Elsewhere, //S// is /ʃ/, e.g.,

. //wíp-ʃe-^mʦi// = /wípʃeʃi/ "to come undone"
//ʔóc-ʃe-^mʦi// = /ʔócʃeʃi/ "to split open"
//ʔól-ʃe-^mʦi// = /ʔólʃeʃi/ "to come off"

181.4. //T// is /t/ in the sequence //...V(h)^sT...//.
//T// is not represented in the sequence //...C^{-hs}T...//.
When not preceded by raised "s," //T// is /t/ in the sequence
//...TV// plus word or final juncture, and /t ^f s/ else-
where, e.g.,

//lákíh-^sTak// = /lakíitak/ "dancer"
//ʔúʃʃu-^sTak// = /ʔúʃʃutak/ "drinker"
//híccuw-^sTak// = /híccuwak/ "runner"
//ʔúb-ʦiʦa// = /ʔúbʦiʦa/ "to leave things, one at a
time"
//ʔúb-ʦiʦa-nuka// = /ʔúbʦiʦanuka ^f ʔúbʦiʦanuka/
"to make people leave things, one at a
time"

181.5. //U// is /u/ in the sequences //...CCU// and //...VCuU...//. Elsewhere, //U// is not represented, e.g.,

//tájh-nU// = /tájhnu/ "man" (post-verbal subjective case)

//ríiku-kon-nU// = /ríikukonnu/ "the rich ones" (post-verbal subjective case)

//ʔálwa-nU// = /ʔálwan/ "tree" (post-verbal subjective case)

//kát-uUʔa// = /katúʔa/ "to slaughter"

//lál1-uUʔa// = /lálluʔa/ "to feel around"

181.6. After consonants, //V// is the vowel of the preceding syllable. After vowels, //V// is length,¹ e.g.,

//ʔáʔaw-Vʂi// = /ʔaʔáawaʂi/ "to talk on and on"

//háp-VV1-a// = /hapáala/ "to be cracking into little pieces"

//ʔúnu-V// = /ʔunú/ "mother" (vocative case)

182. Morphophonemic rules operate in the following order on phonemic sequences after the appropriate phonemic representation of any morphophonemes:

182.1. Subtraction.

Subtraction is symbolized by a raised "s," //...h^s...// is not represented. //...n^s// is not represented if word

¹Long vowels are written double for ease of reading.

juncture follows, e.g.,

//tállah-^spu// = /tállapu/ "to put something up"

//ʔúʔel-kon-^s// = /ʔuʔélko/ "white people"

(appositive case)

Elsewhere, there is no subtraction, e.g.,

//tállah-mi// = /tállahmi/ "Stand up."

182.2. Vocalic reduction.

V_2 is not represented in the sequence //... V_1V_2 ...//.

//páwih-^suc// = /páwic/ "mountain" (objective case)¹

//téma-^sak// = /témak/ "enemy, opponent"

182.3. Metathesis.

Metathesis is symbolized by raised "m." //... $C_1VC_2^m$...// is //... C_1C_2V ...//.

//pít-ak-^mʔi// = /pítkaʔi/ "to tighten something"

//ʔáliw-^mʔi// = /ʔálwiʔi/ "to miss the mark once"

Elsewhere, there is no metathesis, e.g.,

//báp^ha-^mʔi// = /bap^háaʔi/ "to club once"

182.4. Consonantal reduction.

C_2 is not represented in the sequence //... $C_1C_2^{-h}C_3$...//²

¹Note that subtraction operates first, then vocalic reduction.

²There are two exceptions: búmpjuk "coarse acorn fibers" and ʔáwtnúka "to strike someone out" (from English out plus ʔ-nukaʔ).

e.g.,

//jólʔ-ak-^mʔi// = /jólkaʔi/ "to rip something
off"¹

//p^húmʔ-ʔi// = /p^húmʔi/ "to arch the back" (cat)

//tájh-t0// = /tájhto/ "on the man"

182.5. Componential loss.

In a cluster consisting of two identical non-plain stops or affricates, the first member loses its aspiration or glottalization, e.g.,

//báp^hp^ha// = /bápp^ha/ "to club repeatedly"

//ɬétta// = /ɬétta/ "to throw several things"

//wúčča// = /wúčča/ "to switch someone several
times"

182.6. Morphophonemic stress shift.

Morphophonemic stress shift is obligatory across morpheme boundaries and optional across word boundaries.²

It can be schematized as follows:

//CVC(h)V(V)CV// = /CVC(h)VVCV/

//CVC(h)VCCV// = /CVC(h)V(V)CCV/,

with /CVC(h)VCCV/ being the commoner alternant.

¹Note that metathesis operates first, then consonantal reduction.

²This criterion defines the word boundary.

Elsewhere, there is no stress shift, e.g.,

//táwhal-^sʔak// = /tawháalak/ "worker"

//ʔúpuh-^sʔak// = /ʔupúʔak/ "swimmer"

//káwaj kaʔúʔe// = /kawá(a)j kaʔúʔe^f káwaj

kaʔúʔe/ "I see the horse."

//ʔóle kaʔúʔe// = /ʔolée kaʔúʔe^f ʔóle kaʔúʔe/

"I see Coyote."

//káni-ni// = /kaníni/ "with me"

//kéʔ-eeʔi// = /keʔéʔi/ "to scrape dirt"

//tállah-mi// = /tállahmi/ "Stand up."

//ka-ʔáppi kaʔúʔe// = /kaʔáppi kaʔúʔe/ "I see my
father."

182.7. Geminatión.

Geminatión is symbolized by a raised "g."

//...ʔC^gV// is /...ʔCCV/.

//...ʔC^gCV// is /...ʔCCV/, e.g.,

//hówo-n^gi// = /howónni/ "chair"¹

//wék^g-el^g-a// = /wekélla/ "to have several turns"

//ʔúʔe^g-po// = /ʔuʔéppo/ "to find something for
oneself"

Elsewhere, there is no geminatión, e.g.,

//lída-n^gi// = /liddani/ "iron"

¹Note that morphophonemic stress shift operates first, then geminatión.

//p'ém-m-el^g-a// = /p'ém-mela/ "to stick into some-
thing" (several objects)

182.8. Assimilation

//...V₁t₁V// is /...V₁t₁V^f ...V₁t₁V/

//...V₁t₁V// is /...V₁t₁V^f ...V₁t₁V/ if V₁ is
unstressed.

//hojót-tu// = /hojót^ftu hojót^ftu/ "beginning"
(instrumental case)

//néenut-tu// = /néenu^ftu néenu^ftu/ "knowing"
(instrumental case)

Elsewhere, there is no assimilation, e.g.,

//néenut-to// = /néenutto/ "knowing" (allative
case)

//ríiku-kon-nU// = /ríikukonnu/ "the rich people"
(post-verbal subjective)

In other portions of the grammar, the following sub-
stitutions have been made:

"G" for raised "g"

"M" for raised "m"

"S" for raised "s".

200 INTRODUCTION TO MORPHOLOGY

210. Morphemes are of two types in Lake Miwok, ROOTS and AFFIXES. Roots are monomorphemic, although there is occasional submorphemic resemblance between different roots (see 260). Affixes include both prefixes and suffixes. There are both stressed and unstressed roots, but affixes never bear the stress.

211. A WORD comprises one or more roots with accompanying affixes. Only one of these roots may be a stressed root, although not all words contain a stressed root. There are no strictly phonological criteria distinguishing morpheme boundaries from word boundaries, but morphophonemic stress shift is obligatory across morpheme boundaries and optional across word boundaries (see 182.5). Words sometimes consist of a single root, such as *hella* "no," and *miṭi* "and, when." *ʔoléejomi* "Coyote Place" consists of two roots, *ʔóle* "coyote" and *-jomi* "place," plus a zero representation of the appositive case suffix. The resulting canon requires morphophonemic stress shift. *kaʔóoni* "I come" contains the first person singular pronominal prefix *ka-* and the verbal root *ʔóoni* "to come."

There are four classes of root morphemes in Lake

Miwok: nominal roots, verbal roots, particles, and exclamations. These classes are definable in terms of type of accompanying affixes, lack of accompanying affixes, and immediate constituency with the rest of the utterance.

220. Nouns.

NOMINAL ROOTS may be immediately followed by one of a set of case suffixes. Nominal roots are of two types, stressed and unstressed. STRONG ROOTS are stressed, and WEAK ROOTS are unstressed. Strong nominal roots of the canon $CVCV(C)$ regularly have a weak alternant $-CVCV(C)$,¹ e.g.,

páwih "mountain," whose weak form is -pawih

Certain other strong roots also have weak alternants, but the canonical forms of the latter cannot be predicted, e.g.,

táwhal "work," whose weak form is (-)tawhal(-)

?álwa "tree," whose weak form is usually -?ala

221. A NOMINAL COMPOUND consists of two or more nominal roots, one strong and the others weak, or of a strong nominal root with non-final nominal affixes plus a weak nominal root. Examples are:

¹A citation of a weak root which follows the strong root in a compound will be preceded by a hyphen, and one which precedes the strong root will be followed by a hyphen. One which may either precede or follow the strong root will be both preceded and followed by hyphens enclosed in parentheses.

héenaputu "little boy" from héena "boy" plus
-putu "baby"

wikíjolumlakah "Fire Eating Dance" from wiki
"fire" plus -jolum "to eat" (both a
nominal and a verbal root) plus -lakah
"dance"

jolúmnloklo "garden" from jólum "to eat" plus
-nGi "impersonal agentive suffix" plus
-loklo "field"

The weak root usually follows the strong root in a
nominal compound consisting of a strong root and a weak
root, e.g.,

wajáaʔala "oak tree" from wája "acorn" plus
-ʔala "tree"

Some weak roots always precede the strong root, and others,
like (-)tawhal(-) "work," sometimes precede and sometimes
follow the strong root, e.g.,

tawhalkénne "Monday" from tawhal- plus kénne
"one"

cówtetawhal "easy work" from cówte "easy, nice"
plus -tawhal

Quite frequently the first member of a nominal com-
pound translates an English adjective, e.g.,

cówtetawhal "easy work"

Occasionally, a nominal compound consists of strong

and weak alternants of the same nominal root, e.g.,

wikiwiki "shooting star" from wiki "fire" plus
-wiki

dóodo "over there" from dóo "there" plus -do

The latter type of compound more frequently involves pronominal roots than other types of nominal roots.

222. A NOMINAL COMPLEX consists of a nominal root or a nominal compound followed by one or more non-final nominal suffixes. Examples are:

húkkewa "in front" from húkke "farther out" plus
the locational suffix -wa

?oléejomimpa- "towards Coyote Place" from the
compound ?oléejomi "Coyote Place" plus
the directional suffix {-Npa}

The first member of a nominal compound is sometimes a nominal complex, e.g.,

jolúniloklo "garden" from jolúnni "food" plus
-loklo "field"

jolúnni is a nominal complex consisting of the root jólun "to eat" plus the impersonal agentive suffix // -nGi//.

223. A NOMINAL THEME may be either a nominal root, a nominal compound, or a nominal complex.

224. A NOMINAL UNIT consists of a pronominal prefix (if any) plus a nominal theme plus a case suffix, e.g.,

?iṭiháju "his dog" from ?iṭi- "his" plus háju

"dog" plus a zero representation of the appositive case

?oléejomimpat "towards Coyote Place" from
 ?oléejomi- "Coyote Place" plus the directional suffix {-Npaʃ} plus the locative case suffix {-toʃ}

Sometimes a nominal unit will be based on a weak rather than a strong root, e.g.,

wuwec "creek" from wuwe- "creek" plus {-ucʃ},
 an allomorph of the objective case

225. PRONOUNS are a special subclass of nominal roots which never take pronominal prefixes. All pronominal roots have strong and weak alternants, and pronominal themes are quite often based on the weak alternants, e.g.,

kanic "me, obj. case"¹

Case suffixes which follow pronominal themes often have allomorphs differing from the allomorphs of those which follow other nominal themes, e.g.,

máʃʃu "by that means" which has the instrumental suffix -ʃʃu rather than -ʃtu

225.1. PERSONAL PRONOUNS never form compounds, although they might be found in pronominal complexes,

¹There is also a strong form kánnic "me, obj. case."

e.g.,

kani- in kanímpa- "towards me" from káni "me"
plus the directional suffix [-Npaʔ]

These pronouns usually translate English personal pronouns.

225.2. IMPERSONAL PRONOUNS may form compounds. They usually translate English demonstratives, such as *née* "this," but in addition such roots as *múʔe* "all, every," *ʔeke* "something," and *máa* "he, she, it, that" are included. They are often the first root of a nominal compound, e.g.,

máahaju "that dog" from *máa* "that" plus *-haju*
"dog"

dóodo "over there," from *dóo* "there" plus its
weak alternate *-do*

Both members of the latter compound are pronominal roots. An example of an impersonal pronominal root in a pronominal complex is:

dóoʂa "the other side" from *dóo* "there" plus the
place or time marker *-ʂa*

230. Verbs.

VERBAL ROOTS may occur in conjunction with verbal suffixes. Verbal roots, like nominal roots, may be either stressed or unstressed. Strong verbal roots are stressed, and weak verbal roots are unstressed. The same morph may function sometimes as a nominal root and sometimes

as a verbal root. *kóoca* "Indian," for example, usually occurs with nominal suffixes, but it can take verbal suffixes, in which case it is best translated as "to be an Indian."

231. A VERBAL COMPOUND is composed of two verbal roots, one strong and one weak, e.g.,

henujóok "to be really dead" from *henu-* "really, truly" and *jóok* "to be dead"

Most color terms are verbal compounds consisting of a strong verbal root followed by its weak alternant, e.g.,

ʔawáaʔawa "to be red" from *ʔáwa-* plus *-ʔawa*

In this instance the strong root appears by itself in the nominal compound *ʔawáahuja* "magnesite beads," but the roots of such compound color terms usually have no separate occurrence.

232. SUBJECTIVE PRONOMINAL PREFIXES may immediately precede verbal roots, e.g.,

ʔi- "he" in *ʔiʔúte* "he sees"

These prefixes may precede a verbal compound, e.g.,

ʔihenujóok "he is really dead" from *ʔi-* "he" plus *henujóok* "to be really dead"

Occasionally they are in immediate constituency with a phrase; that is to say, with a sequence composed of more than one word, e.g.,

hélla mahénu kóoca níh ʔaje "we're not really

Indians now"

Here, ma- "we" is in immediate constituency with henu kóoca "to be really Indians."¹

233. In cases not involving verbal compounds or verbal phrases, a verbal stem is the first meaningful unit which can follow a subjective pronominal prefix. A verbal stem is often a verbal root, e.g.,

ʔúʔe "to see" in ʔiʔúʔe "he sees"

In other cases, the verbal stem is derived from a verbal root by one of the following stem formative processes: no change, change in length of one or more of the phonemes of the root, reduction of the canonical form of the root, and reduction in the root canon followed by change in the length of a phoneme of the root. There may be one, two, or three stems derived from the same root.

233.1. Semelfactive stems are associated with single action. They are usually identical with the verbal root, e.g.,

ʔúʃʃu "to drink once"

ʔít- in // ʔít-ak-Nʔi// = /ʔítkaʔi/ "to peel one thing rapidly"

233.2. Iterative stems are associated with finite

¹henu "really, truly" has a weak alternant henu- which appears as the first member of verbal compounds, e.g., henujóck "to be really dead."

repeated action. They are derived from verbal roots by one or the other of the stem formative processes mentioned in section 233, e.g.,

łít- in łítak "to peel several things rapidly,"

which illustrates no change

tállah "to be standing" (said of several objects),

derived from tálah "to stand," which shows consonantal augmentation

?úuşu "to drink repeatedly," derived from ?úşşu

"to drink," an example of vocalic augmentation plus consonantal reduction

hij- in híjṭiṭa "to win all the time," derived

from híja "to win" through loss of the final vowel

233.3. Repetitive stems are associated with non-finite repeated action. They are derived from verbal roots by one of the stem formative processes discussed in section 233, most commonly by no change or by reduction of the verbal root to the canon $C_1V_1C_2-$ or $C_1V_1C_2V_2C_3-$, e.g.,

lálaj- in // lálaj-Vṣi// = /laláajaṣi/ "to feel

around," from the verbal root lálaj

"to feel"

péloj- in // péloj-Vṣi// = /pelójoṣi/ "to fix

things up," from the verbal root péloj

"to fix"

234. Some verbal stems always occur before certain suffixes. These suffixes will be called thematic suffixes. In a given sentence, there may be zero, one, or two thematic suffixes following the verbal stem. A BASAL SUFFIX is a first position thematic suffix. An ASPECTUAL SUFFIX is a second position thematic suffix. When there is a single thematic suffix, it is sometimes a basal suffix and sometimes an aspectual suffix. The category to which a particular thematic suffix belongs is determined from those cases in which it is one of two thematic suffixes.

234.1. Basal suffixes usually refer to speed or type of verbal action, e.g.

-ak "swift, careless, or medio-passive action"

in // ɬit-ak-Mɬi// = /ɬitkaɬi/ "to peel one thing fast" or "to come off in a large piece" from ɬit- "to peel" plus

-ak plus the semelfactive suffix // -Mɬi//

-uk "slow, deliberate action" in // ɬit-uk-Mɬi// =

/ɬitkuɬi/ "to peel something thoroughly"

234.2. Aspectual suffixes are of three kinds: semelfactive, iterative, and repetitive, e.g.,

// -Mɬi//, a semelfactive suffix in // ɬit-uk-Mɬi// =

/ɬitkuɬi/ "to peel something thoroughly"

-uʔe, an iterative suffix in //hájap-uʔe// = /hajáapuʔe/ "to shout several times," from hájap-, an iterative stem derived from the verbal root háajap "to shout" by reduction in the length of the first vowel.

There is no basal suffix in the latter example.

Lake Miwok has only one repetitive suffix, -Vʂi, which occurs with every repetitive stem, sometimes with an intervening basal suffix, e.g.,

//ʔáʔaw-Vʂi// = /ʔaʔáawaʂi/ "to talk on and on" from the repetitive stem ʔáʔaw-, derived from the verbal root ʔáaʔaw "to talk" through reduction of the first vowel

//cáj-VVC₂-Vʂi// = /cajéajaʂi/ "to shake the head quickly and repeatedly," from the repetitive stem cáj-, derived from the verbal root cája "to shake" through loss of the final vowel.

The basal suffix -VVC- "quick action" occurs in the second example.

235. A VERBAL THEME is a morpheme or a sequence of morphemes which may be preceded by a subjective pronominal prefix and which may be followed by one or more post-thematic suffixes. Thus defined, a verbal theme may be either a verbal root which does not undergo any stem

formative processes, a verbal compound, or a verbal stem plus any accompanying thematic suffixes, e.g.,

?úŕte "to see," a verbal root from which no verbal stem is ever derived

cúunih "to move several things," an iterative stem derived from the verbal root cúnih "to move something" by lengthening of the first vowel, and which takes no thematic suffixes

//cáj-C₁VC₂-Vŕi// = /cájcajəŕi/ "to shake the head uncontrollably," from the repetitive stem caj- plus the basal suffix -C₁VC₂- "slow action" plus the repetitive suffix -Vŕi

235.1. A SEMELEFACTIVE VERBAL THEME contains a semelfactive stem; e.g.,

?úŕŕu "to drink once," which takes no thematic suffixes

//ŕit-sk-ŕiŕi// = /ŕitkaŕi/ "to peel one thing fast" or "to come off in a large piece," which was discussed in section 234.1

235.2. An ITERATIVE VERBAL THEME contains an iterative stem, e.g.,

?úuŕu "to drink repeatedly," which does not occur with thematic suffixes

//lít-ak// = /lítak/ "to peel several things
rapidly

//híj-ṭiṭa// = /híjtiṭa/ "to win all the time"

Further discussion of these iterative themes is presented in section 233.2.

235.3. A REPETITIVE VERBAL THEME contains a repetitive stem, e.g.,

//ʔáṭaw-Vṣi// = /ʔaṭáawaṣi/ "to talk on and on"

//cáj-VVC₂-Vṣi// = /cajáajaṣi/ "to shake the head
uncontrollably

These items are discussed in section 234.2.

236. Post-thematic suffixes express a variety of ideas; reciprocity, distance, and many more, e.g.,

-ku, a passive suffix in //túw-en-ku// = /tuwénku/
"to be shot once," which follows the verbal
theme //túw-en// = /túwen/ "to shoot once"¹

Most verbal themes may occur with or without post-thematic suffixes, but a few are always found before certain suffixes, e.g.,

lillu-, an iterative verbal theme which is always
followed by the andative suffix ~~ṭiṭ~~ giving
lilluṭi "to fly away, one at a time"²

¹túwen is derived from túw- "to shoot" plus the semelfactive suffix -en.

²lillu- is derived from the verbal root lilu- "to fly" by gemination of the medial consonant.

Many other verbal themes, however, may occur with or without **f-tʃ**, e.g.,

lákíh "to dance" in ?ilákíh "he is dancing" and
/?ilákíhʃi/ "he is going dancing"

Likewise, other post-thematic suffixes which always follow certain verbal themes may or may not occur after other verbal themes.

When two or more post-thematic suffixes appear, their relative word order is rigidly determined, e.g.,

//ka-túw-en-ku-nʔina// = /katuwónkunʔina/ "I'm
going to be shot," which includes the
passive suffix **-ku** and the future
marker **-nʔina**.

237. A VERBAL UNIT consists of a verbal theme plus any accompanying affixes; that is to say, a subjective pronominal prefix, if there is one, and any post-thematic suffixes. Examples are:

?iʔúte "he sees"

//ka-túw-en-ku-nʔina// = /katuwónkunʔina/ "I'm
going to be shot," discussed in the pre-
ceding section

A verbal unit, like a nominal unit, has at most a single stressed syllable.

238. ADJECTIVES are a special subclass of verbal units which never have subjective pronominal prefixes.

They always precede the noun with which they are in immediate constituency. Usually, they are monomorphemic, e.g.,

ʔóbu "to be bad" in /ʔóbu kóoca/ ^f /ʔobúu kóoca/
 "bad person"

There is optional morphophonemic stress shift in the preceding example across the word boundary. Adjectives are sometimes verbal compounds, e.g.,

//ʔáwa-ʔawa// = /ʔawáaʔawa/ "to be red," from the
 strong root ʔáwa- plus its weak alternate
 -ʔawa

Some adjectives are more complex types of verbal units, e.g.,

//jómu-nGaka// = /jomúnna/ "to be fine, pleasant,
 beautiful" from jómu "to laugh" plus the
 indirect causative suffix -nGaka

Occasionally, words which translate English adjectives follow the noun with which they are in immediate constituency, in which case they take the same case endings as the nouns in question and function as nouns.

240. Particles.

PARTICLES never take affixes, and they are not always separated from the rest of the utterance on the basis of junctural or intonational features.

241. SIMPLE PARTICLES are monomorphemic. They may

be stressed or unstressed, e.g.,

hélla "no, not"

kaʔi "just like (something)"

242. COMPLEX PARTICLES are morphemic sequences **usually** consisting of a nominal or pronominal root plus a simple particle. They are all stressed and, like simple particles, they do not take affixes. An example is:

maháli "yet" from ma- "that" plus háli "still, yet"

250. Exclamations.

Exclamations, like particles, never take affixes. Unlike particles, however, they are always stressed and never compounded with other parts of speech. Individual exclamations or phrases consisting of two or more exclamations either constitute separate utterances or are separated from the rest of the utterance by intonational or junctural features. Exclamations or exclamatory phrases occur in the following examples:

hée! "No!" (an exclamation of contradiction)

fjúuu!; kaʂa weno. "'Scat!" he said."

kóol kól kól kól kasa weno. "He went 'plop, plop, plop.'"

Exclamations often contain phonemes or clusters not otherwise found in Lake Miwok, such as the /fj.../ in fjuuu! "Scat!" and the voiceless vowel in kAAAA! "Bah!"

Prolonged vowels are also common, as in the two preceding examples.

260. **Submorphemics.**

Lake Miwok, like English, has a large number of sequences which are partially resemblant but not capable of complete analysis. These resemblances follow various patterns, most of which, oddly enough, resemble similar patterns in English. Some of these patterns represent the remnants of processes which might have been active in Proto-Miwok or Pre-Miwok, like the English pairs blood-bleed, food-feed, etc. Others may be the results of consonantal symbolism or analogy.

Various sequences of the canon CV(V)C... can be isolated and given a vague meaning, much like the gl... in English glisten, glitter, glow, glimmer, gleam, etc. As in English, the remaining portions of such sets cannot be assigned meanings except possibly in terms of other marginal sets of the same type, like the ...inner in "glimmer," which also occurs in "shimmer." An example of such a submorphemic sequence in Lake Miwok is mol..., which seems to convey the meaning "to cover" in the broadest sense. This sequence is found in the following items:

móla	to pile wood
móle-	to pour
mólle	shade, shadow, reflection
móllu-pa	to cover
mólo-k	mask
mólpa	cloud
mólu	to wear

The sequence ...pa in mólpa also occurs in the words micpa "fog, mist," and ?úupa "rain," and can be said to pertain vaguely to the heavens. From this point of view, mólpa "cloud" might be said to mean "that which covers the heavens." However, this analysis leaves one with the sequences mic... and ?úu..., which have no assignable meaning.

The following sequences of the form CV(V)C... appear to have submorphemic status. Some of them, like mol..., can nowhere be isolated as separate morphemes. A few, like húk "nose," can be segmented on the morphemic level, but they also occur in other items in which it is impossible to give morphemic status to the remaining sequences.

ča(a)k...	split, torn, cracked
he(e)n...	pertaining to the breath
huk...	pertaining to the nose or smelling
jok'	to hang
ka(a)w...	to cut

lak...	pertaining to naming, calling, or wishing
lal...	to feel
let...	pertaining to the tongue
loj...	to rub
mol...	to cover
pol...	pertaining to water
p ^h uk...puk...	to be rounded
p ^h um...	to be humped
'pem...	to stick
ʃul...	pertaining to the skin
ʃun...	pertaining to a protective covering
ten...	pertaining to fur or feathers
tut...	to be twisted or rolled up
wil...	pertaining to air movement
wo(o)t̄...	to be bent

In certain cases there is a fossilized relationship between a noun and verb of the blood-bleed type, but in Lake Miwok, this relationship is usually one of quantitative ablaut.

In the first type of ablaut the noun is of the canon ^{or CVCVC} CVC(C)V₁ and the verb is of the canon CVCV.

húke	a while ago	húuke	to be first
jútte, -jute	pitch, chewing gum	júute	to chew
kílli	horn	kíili	to hook with the horns

lólo	foot	kóolo	to track
wíki	fire	wíiki	to burn
ʔólak	oar, mush spoon	ʔóolak	to row

In the second type of ablaut the noun is of the canon C'VCCV(C) and the verb is of the canon C'VCV.

kíccaw	blood	kíccaw	to bleed
mólle	shade, shadow, reflection	móle-	to pour ¹

The remaining noun-verb pairs show aberrant relationships, some of which involve qualitative as well as quantitative ablaut, or the loss or addition of frozen sequences.

háttuk	shot, explosion	//hát-uk-Nṽi//	to burst
-hukuj	old lady	hukúuju	to grow old (said of a woman)
jókku	a lie	jóko	to tell a lie
káal	smoke from a fire	káalle	to be smoky, sultry
kée	excrement	kúnuh	to defecate
kíwva	arrow	kíwi	to point with a wand
kójjo	salt	kójup	to salt some- thing
kówva	half	kówuh	to be in the middle

¹This is a questionable set from a semantic standpoint.

lákko	thirst	//lákum-Mṭi//	to swallow
pólpol	lake	//pól-uk-Mṭi//	to flood
túnni	heel	//túna-Mṭi//	to kick
ʔále	grave	ʔáalle	to bury
ʔálok	ear	ʔálu	to hear
ʔinte	tears	ʔiinte	to cry

The remaining pairs are not noun-verb pairs.

káṣṣa	this kind, this time (noun and verb)	káṣa	still, thus (particle)
kúle	bear	kúule	sound of bear (exclamation)
wálli	outside (noun)	wáli	season, year, area, world (noun)

There are a very small number of verb sets in which the intransitive member ends in /h/.¹ The intransitive member of these sets behaves as a monomorphemic unit in the morphology of the language. The iterative stem tállah "to stand" (several people), for example, is derived from the verbal root tálah "to stand" by gemination of the medial consonant, one of the common processes by which iterative stems are derived from verbal roots.

¹Elsewhere in the language, both transitive and intransitive verbs may end in /h/.

móle-	to pour	móleh	to spill
ʔáwwe	morning, to be morning	ʔáwweh	to dawn

:

300 NOUNS AND PRONOUNS

310. Possessive pronominal prefixes immediately precede nominal themes and nominal phrases. Kinship terms and nouns designating body parts usually take a possessive pronominal prefix, though not always. These prefixes are:

	Singular	Dual	Plural
first person inclusive		ʔoc-, ʔic- ¹	
	ka-		ma-
first person exclusive		ʔic-	
second person	ʔin-	moc-	mon-
third person non-reflexive	ʔiʔi-	koc-	kon-
third person reflexive	hana-	hanakoc-	hanakon-
indefinite	ʔan-	ʔan-	ʔan-

Like the English pronouns, these pronominal prefixes are capable of partial analysis. -c, for example, could be segmented as a personal dual suffix, and mo- and ko-

¹The inclusive-exclusive distinction appears only in the first person dual pronominal prefix in the speech of Mrs. Grace. Other speakers use ʔic- for both the inclusive and the exclusive, although John Knight remembers that a distinction was formerly made by older people.

could be analyzed respectively as non-singular second and third person elements. hanakoc- and hanakon- are clearly compounded from other prefixes. A complete analysis of this type, however, would involve more statements than there are elements in the chart; consequently, it will not be attempted.

hana- "his own, her own, its own" has the same referent as the subject or subjective prefix of the verbal theme in the same clause, whereas ?iṭi- "his, her, its" has a different referent; e.g.,

hanaháju ?úṭe. "He sees his own dog."

?iṭiháju ?úṭe. "He sees his (somebody else's) dog."

Likewise, hanakoc- translates as "their own (dual)," and hanakon- as "their own (plural)."

The indefinite ?an- "one's, someone's" occurs most frequently in translations of an English superlative, e.g.,

?anlíilewa kakiwa. "I'm the strongest one here,"

or more precisely, "I'm stronger than any-

one" from ?an-, plus líilewa, a noun meaning

"greater degree," plus ka- "I," plus kíwa

"to be strong." A completely literal trans-

lation would be "Anyone's greater degree I

am strong."

320. Non-final nominal suffixes occur after nominal

roots or nominal compounds in nominal themes. When there are two or more of these suffixes, their relative order is rigidly determined. These suffixes are presented in alphabetical order. A statement of their distribution will follow.

320.1. -ja occurs only after kénne "one" in kénneja "one at a time", e.g.,

kénnejaṭu konwéwṭiṭa. "They're going, one at a time."

320.2. -ka also occurs with a single root, ?ekée "where, which, somewhere, some such," in ?ekéeka "how many, how much, that many, just a few, about"; e.g.,

?ekéekaṭu konhíja? "By how much did they win?"

320.3. -kaṣa "type of, kind of" occurs after both nominal and pronominal roots, e.g.,

néekaṣa "this kind of" from née "this," as in

néekaṣalakah "this kind of dance"

híntikaṣa "how" from hínti "what," as in

híntikaṣa cáne? "How much?"

dóokaṣa "just like that" from dóo "that," as in

dóokaṣa kahíccuw. "I run, just like that."

320.4. -kon, a plural suffix, is rare except in nominal units referring to people or personages, e.g.,

?uṭélkon "white people"

ṣolókkon kóocakon "the mouse people"

-kon always follows any other suffixes in a nominal theme except -şaka(h) and -welak, e.g.,

ʔéelaʔakkon "players" from ʔéela "to play,"
plus -Şʔak, a personal agentive suffix,
plus -kon.

-kon is sometimes in immediate constituency with a phrase, as in the second example, or with a clause, e.g.,

konlemájhintekon "those whom they invited"

-kon is often omitted when there is some other overt indication that the nominal unit refers to more than one person, e.g.,

konmíiw híccuw. "Their husbands are running" from
kon- "their" plus míiw "husband" plus
híccuw "to run"

320.5. -koc is a dual suffix whose occurrence parallels that of -kon. It appears mainly in nominal units referring to persons or personages, e.g.

ʔóʔʔa púttukoc "two babies"

It is sometimes omitted, however, when there is some other overt reference to duality, e.g.,

kocmíiw híccuw ^f kocmíiwkoc híccuw. "Their (dual)
husbands are running."

-koc always follows any other suffixes in the nominal theme except -şaka(h) and -welak, e.g.,

ʔéelaʔakkoc "two players" from ʔéela "to play"

plus the agentive suffix -Sṭak plus
-koc

§20.6. † -Npaṭ is -mpa after the locational suffix
-wa and -Npa elsewhere.¹ It is a directional suffix
meaning "onto, to, toward." It is found only before the
allative suffix; e.g.,

ʔolómpat "eastward"

níimukpat "into this road"

† -Npaṭ follows any other non-final suffixes, e.g.,

numáawampat "in different directions" from núma

"different" plus -wa, a locational marker

plus † -Npaṭ plus the allative case suffix

-tO.

This suffix often occurs after pronominal roots, e.g.,

kanímpat "towards me"

mámpat wéeta. "he went over that way."

Other examples follow:

háalin şúkuh kaşa weno nekóolan nehéenampat

(//ne-héena-Npa-tO//). "Are you still

alive,' the girl asked the boy."

mác ʔajénpat (//ʔáje-Npa-tO//) koncáanih. "They

tie that to the stick."

níimukpat (//níi-muk-Npa-tO//) kaʔúkan. "I just

came into this road."

¹//-Npa// is more frequently /-mpa/ than /-npa/.

ʔilákten ʔotóʔʔawampat (//ʔotóʔʔa-wa-mpa-to//)
 ʔúkuh. "He named (the directions) four
 ways."

‡ -Npaʔ is sometimes in immediate constituency with
 a phrase, e.g.,

híin takénninpat "towards where the sun rises,"
 literally, "towards the sun's rising place"

When the suffix is in immediate constituency with a clause,
 it has the meaning "while, until," e.g.,

jájjumpat "while he's calling"

hélla hinti jólum lákin muʔénpato. "He didn't
 eat anything until the dance was over."

320.7. -nGi is an impersonal agentive suffix mean-
 ing "that which does something," "place where something
 is done," "for the purpose of doing something," e.g.,

líddani "clothes iron" from lídda "to rub"

howónni "chair" from hówo "to sit"

ʔóppojni "driving" from ʔóppoj "to drive," as
 in ʔinʔóppojnic cacíhmin. "Watch your
 driving" or, more literally, "Watch the
 place where you're driving."

Examples of the purposive usage are:

wajánni "to give away," an answer to the question,
 "What are those gifts for?"

típmuʔi láktek ʔupúhñito. "It's too cold for

swimming."

A slightly more abstract meaning of -nGi is illustrated by:

ʔáwweni "morning, early in the morning" from
 ʔáwwe(h) "to dawn" or, more literally,
 "time when it is dawning"

Although -nGi is a nominal suffix, it is added to verbal roots and verbal stems. Thus it can be called a nominalizing suffix.

Sometimes a variant form of the verbal root occurs with -nGi, e.g.,

póje- in pojénni "necklace," as contrasted with
 póoje "to put something around the neck."

Like many of these suffixes, -nGi also occurs in immediate constituency with clauses, e.g.,

neʔolúut konʔokájni hintišúccanşakah. "What
 they make this basket with is something
 like string."

320.8. -şa is a nominal suffix meaning "position, side, time, way," e.g.,

níşa "the near side" from níi "this"
 máşa "that way, through there" from máa "that"
 kúččişa "a little while" from kúčči "little"
 kénneşa "one time" from kénne "one"

This last expression often appears at the beginning of

narratives, e.g.,

kénneṣa weno kénne hēenan lákte weno ćíddidik
kíwa. "One time, it is said, there was
a young man whose name, it is said, was
Stoutheart."

-ṣa often precedes the locational suffix -wa, e.g.,

dóoṣawa "the other side" from dóo "over there"

320.9. -ṣaka(h) "like, this kind of, this manner"

always follows the possessive case of its immediate
constituent, e.g.,

kóocanṣakah "like an Indian" from kóoca "Indian"
mákṣanṣakampat híccuw. "That's the way it's
going," where mákṣa means "that way."

When -ṣaka(h) is in immediate constituency with two units,
both of these units take the possessive case, e.g.,

niwéejin ?álwanṣaka "like the house, like the
trees"

-ṣaka(h) is sometimes in immediate constituency with the
dual or plural of a nominal or pronominal unit, in which
case -ṣaka(h) follows the possessive dual or possessive
plural suffix, e.g.,

hēenakonṣakah "just like young men"

?íkkonṣakah "just like them"

míkkocṣakah "just like you two"

-ṣaka(h) is often found after the possessive case

of verbal stems or even verbal units, e.g.,

hélle ?i?i?áa?aw?aka?u ka?áa?aw témma. "I can't talk like him," where ?áa?aw is a semelfactive theme meaning "to talk."

Since -?aka(h) can convert a verbal theme into a nominal unit, it may be called a nominalizing suffix. In fact, ?i?i?áa?aw?aka?u is marked as a nominal unit, both by the presence of the possessive prefix ?i?i- "his" and the instrumental case suffix. Consequently, hélle ?i?i?áa?aw?aka?u ka?áa?aw témma translates literally as "I can't talk like his talking."

Even though -?aka(h) is a nominalizing suffix, the resultant theme sometimes functions as a verbal theme. Thus hujúuman?aka means both "like a meadowlark" and "to be like a meadowlark," e.g.,

néputun hujúuman?aka. "This baby is like a meadowlark (he talks all the time)."

This situation exactly parallels the distribution of the root kóoca, which may function either as a nominal root meaning "Indian" or a verbal root meaning "to be an Indian."

-?aka(h) can be in immediate constituency with phrases and clauses as well as portions of nominal units, e.g.,

hínti ?úccan?akah "just like some sort of string"

makóllan weno lífile niwéejin ?álwanşaka lífile
 cókteşa. "Waves, it is said, as high as
 the house, as high as the trees, came
 one after the other."

In the second example, -şaka(h) is in immediate consti-
 tuency with a phrase consisting of two nominal units in
 the possessive case, namely, niwéejin "the house" and
 ?álwan "tree." An example of -şaka(h) in immediate con-
 stituency with a clause is:

hélle maşu nih kóono maşáwwuşensaka "not the kind
 of gun we have now"

in which -şaka(h) is in immediate constituency with the
 clause kóono maşáwweşe "we have a gun."

§20.10. -Ştak is a personal agentive suffix meaning
 "one who does" or "one who is." This suffix is also a
 nominalizing suffix. Examples are:

haciişak "a selfish person" from hécih "to be
 selfish"

híccuwak "runner" from híccuw "to run"

?aşaawak "lawyer" from the repetitive stem ?áşaw-
 "to talk on and on"

?úşşuşak "drinker" from the semelfactive stem
 ?úşşu "to drink"

?úuşuşak "drunkard" from the iterative stem
 ?úuşu "to drink all the time"

320.11. -wa is a locational suffix meaning "place, side, way, one," e.g.,

joléewa "the shortest way" from jóle "near"

héllawa "bottom" from hélla "below"

mu?éewa "all around" from mú?e "all"

míiwa "your side" from míi "you"

wajíkwa "some of it" from wájik "some"

?eméenewa "best ones" or "the best" from ?eméene
"good"

tóppawa "behind" from tóppa "after," as in the sentence háali ko tóppawam ka?óppoj kataw-háaluc. "I'm still behind in my work."

-wa follows the nominal suffix -şa but precedes all other suffixes, e.g.,

dóoşawa "the other side"

kenéewampat "to one side"

In the case of kówwa "half," -wa follows the unique root ków-; compare kówh "half, middle."

-wa can be in immediate constituency with phrases and clauses, e.g.,

?awéecu men mát kacatéhwaşu ka?alúupa. "I just listen while sitting there."

Occasionally, a sequence with the suffix -wa functions as a verbal theme, e.g.,

katawhál tóppawa. "I'm behind in my work" or,

more literally, "My work is behind."

320.12. -welak is a benefactive nominal suffix meaning "for the sake of," e.g.,

hanacáccowelaku lócok. "He's doing it for his grandchild."

mamáksawelak ka'óoni nitto. "That's what I came here for."

hújka^kşupowelak konlákih. "They dance to be happy" or, more literally, "They dance for happiness."

-welak follows all other non-final suffixes. A preceding plural suffix is in the possessive case, e.g.,

hanakon[?]elájkonwelakuc konkója. "They sing for the sake of their children."

Compare the verbal suffix -welak, meaning "might, to be about to, let's, to wish, to want."

320.13. -wi is a nominal suffix meaning "house, place" which has thus far been found only after cíppa "bread" in the word cíppawi "bakery." -wi is probably a shortened form of -weji, a weak form meaning "house."

321. A schematic representation of the distribution of non-final nominal suffixes now follows:

			-ja
			-ka
			-kaşa
		-şaka(h)	[-Npa]
	-kon	{ -şaka(h)	
		{ -welak	
	-koc	{ -şaka(h)	
		{ -welak	
-nGi			
-Sṭak	{ -kon		
	{ -koc		
	-şa	-wa	
		-wi	

330. Nominal units are closed by case suffixes, called final nominal suffixes, as distinct from the non-final nominal suffixes previously considered. There are ten case suffixes: appositive, subjective, possessive, objective, allative, locative, ablative, instrumental, comitative, and vocative, and they will be discussed in the order indicated. With the exception of the possessive case, these suffixes appear only at the end of nominal units. Their allomorphy depends upon whether or not they immediately follow a pronominal root, whether the nominal unit precedes or follows the verbal unit, and which

pronominal prefixes are present if a verbal unit immediately follows. In other words, case allomorphy is influenced in a rather complicated manner by morphological and syntactic criteria.

330.1. The appositive case $\{ -m\}$ is $-m \overset{f}{\sim} -\emptyset$ after the introductory pronominal roots *ma* "that" and *ne* or *nee* "this," e.g.,

ma kánni $\overset{f}{\sim}$ *mam kánni*. "That's me."

mam néen mi hínte. "This is the one that's doing it to you."

pawíhlulan nem pódwaj. "This 'pawíhlula' is a snake."

$\{ -m\}$ is $-S$ after the plural marker $-kon$, e.g.,

?úťélko (//?úťel-kon-S//) "white people"

Elsewhere, $\{ -m\}$ is $-\emptyset$.

All citation forms are given in this case, e.g.,

"*hintikaťun ?áaťaw* 'tree' *kóoca?aťawtu*?"

"?áľwa." "How do you say 'tree' in Lake Miwok?" "?áľwa."

Likewise, the appositive case is used with all other forms which occur in isolation, where it usually translates as "it is," e.g.,

?úťel *kóono mahínti*. "It's a white man's gun, you know."

This case occurs after demonstrative pronominal

roots and demonstrative pronominal compounds, having an introductory function, e.g.,

níini ?inlúppu." "Here is your money."

née?ane kela ?éetaw. "It's getting hot already."

mama máa? "Is this the one?"

nene née héena? "Is this the young man?"

mántin pánnu nene? "Whose handkerchief is this?"

máama hínti? "What's that?"

In the first of the above examples, the appositive case follows both members of the apposition; namely, níini "here is" and ?inlúppu "your money." A parallel situation obtains in the other examples. The first instance of the appositive case in the sixth example is in immediate constituency with the phrase mántin pánnu "whose handkerchief" rather than with a single word.

The appositive case appears after nominal units which occur as exclamations, afterthoughts, or asides,¹ e.g.,

jomúnnaka híi (//híi-ø//). "What a beautiful day!"

kaníi (//káni-ø//) ?aje kaşút ?óbu. "As for me,

¹James Knight often uses the subjective case after nominal units which occur utterance finally and are in apposition to other nominal units in the sentence, or which appear as afterthoughts, e.g., ?ictáwhal makóoca katúuŋan. "That's our job, killing people." John Knight would say ?ictáwhal ma kóoca katúuŋa. Both John Knight and James Knight use the appositive case after the nominal unit ?ictáwhal "our job," but James Knight uses the subjective case after the phrase ma kóoca katúuŋa "killing people."

my eyes are bad."

cakáttun táwlik konhawúñtu wéeḗḗa ʔawáaʔawahinte.

"They buy blackbird wings, those that are red."

In the last example, ʔawáaʔawahinte "those that are red" is in apposition to cakáttun táwlik "blackbird wings," which is in the objective case.

There is an especially strong tendency to use the subjective case after an utterance final nominal unit when it is in apposition with a nominal unit in the subjective case, e.g.,

mántin ʔóonina? ʔonáaḗaknu. "Who's coming?
Hunter."

máahintet kénne jómtan hówo ʔúʔkaḗan. "Then
there's one doctor sitting there, a
great hunter."

The appositive case may occur after nominal units designating time, especially if it is not specific, e.g.,

ʔúme (//ʔúme-Ø//) ʔúupa. "It was raining last
night."

deléeka ʔóorat (//ʔóora-tØ//) ʔáwwe (//ʔawwe-Ø//)
ma wéeḗḗa. "At three o'clock in the morn-
ing we went."

In the second example, the appositive case follows ʔáwwe "morning," while the allative case -tØ occurs after the

more specific temporal referent *deléeka ?óora* "three o'clock."

330.2. The subjective case suffix *ɛ -nuɔ* is the final suffix in nominal units which function as subjects of verbs or verbal phrases.

ɛ -nuɔ is *-∅* after first and second person pronominal roots, e.g.,

kánni ka?óoni. "I myself am coming."

míi ?in?óoni? "Are you coming?"

In other instances where the subject precedes the verb, *-nu* is *-SN*, e.g.,

?íkkon (//?íikko-SN//) koɔmoleeɕi. "They were the ones who spilled it."

mú?en (//mú?e-SN//) lóoho. "The whole lot of them are lazy."

ka?unúun (//ka-?únu-SN//) kani tákkopunen?inaj.

"My mother is going to patch it for me."

táj (//tájh-SN//) ?óoni. "The man is coming."

káac (//káac-SN//) jólum. "The fish is eating."

kapulúk (//púluk-SN//) kani kowóolodoɕi. "My stomach is growling."

kukún (//kúkuh-SN//) ?intíkkít mékuh. "A flea is sitting on your forehead."

kúkun (//kúkuh-SN//) ?intíkkít maɕáa wace. "A flea must have been biting your forehead."

Some of the above examples illustrate optional morphophonemic stress shift across word boundaries (see 182.2).

When the subject follows the verbal unit, † -nu‡ is -nU,¹ e.g.,

máa konʔáamuptu konwéeṭa ríikukonnu (//ríiku-kon-nU//). "They pay him, the rich people."²

hélla jolúm ʔééja ʔíṣṣa ne kóolan (//kóola-nU//).

"This girl still didn't want to eat."

muʔéewa ṣúkukh ʔolúut ʔokájnín (//ʔókaj-nGi-nU//).

"It's everywhere, basket making."

héllako hunáama kapulúknu (//ka-púluk-nU//). "My stomach's not hurting yet."

There are instances where a single nominal unit functions as the subject of more than one verbal unit, e.g.,

née héenan weno húuke weno maʔidíi cánnanlakíc nít ʔonínnuka. "This young man, it is said, is the first, it is said, to bring that Bighead dance here."

In this sentence //héena-SN// is the subject of húuke "to be first" and ʔonínnuka "to bring."

Sometimes † -nu‡ occurs after two nominal or

¹By far the commonest word order is subject-verb. The reverse order occurs most frequently when the subject is mentioned as an afterthought or to clarify possible ambiguity.

²//-kon-nU// = /-konu/ in the speech of James Knight.

pronominal units in the same clause; that is to say, where two nominal or pronominal units function as subjects of the same verb. In some cases, these units bear a noun-adjective relationship when translated into English, e.g.,

jomít şukúujomin ?ekéekan ?ómah. "There are just a few people staying home who fast," where şukúujomi means "people staying" and ?ekéeka means "that many, so many."

Occasionally, † -nu‡ is found after two nominal units, both of which function as subjects of the same verb, and which translate into English as a compound subject, e.g.,

kawáacun halíhalin şúkuh. "There's sugar and everything there," where kawáacu means "sugar" and halíhali means "everything."

The comitative case -ni, however, is commoner, in such instances.

† -nu‡ can be in immediate constituency with a phrase, e.g.,

camihlukaj ?okáj mákşa. "Making rabbit skin blankets is that way (that's the way they make rabbit skin blankets)."

camihlukaj ?okáj is á phrase meaning "making rabbit skin blankets" and mákşa is a verb which means "to be that way."

mékşa?ak ne?óţţan máa wilíiku ?éejahinten hélla wilík men mát jóok. "Then these two who

wanted to catch him did not catch him, and just died right there."

Here, † -nu†, represented as /-n/, is in immediate constituency with the phrase máa wilíiku ?éeja "wanted to catch him" plus the relative clause marker -hinte. The nominal unit ?ó††a-nU plus the adjectival clause function as the subject of two verbal units.

An example of † -nu† in immediate constituency with a clause is:

?iscpéehon mahúun ?i†i wajaáahinten máa joo şuwéhkaşat
máa ?i†i híinaşu wéeta. "The mirror which
the panther gave him will bring him what-
ever he wishes for."

† -nu†, represented as -Ø, is in immediate constituency with the clause húun ?i†i waja "the panther gives him" plus the relative clause marker -hinte.

330.3. -SK is a possessive case suffix, e.g.,

?ólen (//?óle-SK//) şuluk "coyote skin"

p^hák^hak (//p^hák^hak-SK//) şuluk "egg shell"

táj (//tájh-SK//) şáapa "the man's hair"

cámin (//cámi-SK//) şuluk "rabbit skin," from

cámih "rabbit"

The similarity between the allomorphy of the subjective and possessive cases can lead to ambiguity, e.g., kóocan hójpu could mean either "the Indian's chief" or

"the Indian is a chief."

When there is a compound possessor with the "and" intervening between the members of the compound, -SN appears only after the last member, e.g.,

ném kaʔáppi he kaʔáppin ʔáppin kíwwa.¹ "This is my father's and my father's father's arrow (the arrow belonging to my father and grandfather)."

-SN, unlike other case suffixes, sometimes occurs medially in nominal units and occasionally between members of a nominal compound, e.g.,

kusnéerunweji "kitchen, cook house" from kusnéeru "cook" and -weji "house"

mákṣaṣəkampat híccuw. "That's the way it's going," where mákṣa means "that way."²

When -ṣaka(h) is in immediate constituency with two nominal sequences, both of them take the possessive case, e.g.,

makóllan weno líile niwécjin ʔálwanṣaka líile cókteṭa. "Waves, it is said, as high as the trees, the house, came one right after the other," where ʔálwa means "trees" and wécji means "house"

¹Such compounds frequently take the comitative case.

²The nominal complex which results from adding -ṣaka(h) to //mákṣa-SN// itself takes further suffixes including a final locative case suffix.

330.4. † -uc‡, the objective case suffix, follows sequences which function as the direct or indirect object of one or more verbs. Like the subjective case, † -uc‡ has a very complex allomorphy, dependent upon morphological and syntactic criteria.

If a nominal unit in the objective case immediately precedes a declarative verbal unit¹ with no overt subjective pronominal prefix or with a second person singular subjective pronominal prefix,² † -uc‡ is -i after the dual marker -koc and -su elsewhere, e.g.,

káacun ?ú‡e? (//káac-Su-n ?ú‡e?//) "Did you see the fish?"

káacu ?ú‡e. (//káac-Su Ø-?ú‡e.//) "He saw the fish."

máataju (//máa-tá‡h-Su//) hínammak‡u wéeta. "He was bragging about that man."

mákkoci (//mák-koc-i//) ?élu. "He's looking at us two."

mákkoc máa káacu (//káac-Su//) ?óken? "Did those two catch that fish?"³

¹A DECLARATIVE VERBAL UNIT has no imperative suffix.

²The second person singular subjective pronominal prefix †?in- ‡ is -n immediately following † -uc‡.

³The verbal unit ?óken "catch" contains no pronominal prefix, since a third person plural suffix, mákkoc "those two," has already been specified.

néen ?ikóonu (//?íkon-Su//) potóonuka. "This
thing blinds them."

páwin ?ú?e? (//páwih-Su-n ?ú?e?//) "Did you see
the mountain?"

wéeci (//wéeci-Su//) ?okáj?ina. "He's going to
build a house."

?élaj kóolakonu (//kóola-kon-Su//) jokúu?a. "He
killed several girls."

If a nominal unit in the objective case immediately precedes a declarative verbal unit with an overt subjective pronominal prefix other than a second person singular subjective pronominal prefix, † -uc‡ is \emptyset , e.g.,

hójpu ka?úte. "I saw the chief."

kajówac kowúh (//kówuh- \emptyset //) mocwéenuka. "You
two are to take half my land."

kawáj ka?ú?e. "I saw the horse."

tájh ma?ú?e. "We saw the man."

?íkkoc ka?ú?e. "I saw them (dual)."

Otherwise, † -uc‡ is -ic ^f -ic' after the dual marker -koc and -Suc ^f -Suc' elsewhere, e.g.,

halíhali ?okáaju néenut ?e néenawan. cáwac
(//cáwah-Suc//) pákah númnanumac (//númma-
numa-Suc//).¹ "This old man knows how to
make all kinds of things. Nets, feather

¹An object follows the verb for emphasis, clarification, or as an afterthought.

things."

hanawóko hebkaáti cáneć (//cane-Suc//). "He grieves over his sister, a lot."

hinnaćućic (//hínnah-Spući-Suc//) kášan.¹ "Just right, isn't it?"

húşuc (//húş-Suc//) jolúmni kawája. "I gave the buzzard some food."

jóntakon joléewac (//jóle-wa-Suc//) hélla ka?óppoć. "I don't go around doctors."

káacuc (//kaac-Suc//) jolúmni. "Eat the fish."

kiwac (//kiwaa-Suc//) kanic (//kani-Suc//) wajan. "Give me the arrow."

kíwwakonuc (//kíwaa-kon-Suc//) kanic (//kani-Suc//) wajan. "Give me the arrows."

konhúćkan?inaj ?ićic (//?ići-Suc//). "They are going to feel happy for him."

mákkocic (//mak-koc-ic//) ?élun. "Look at us two."

páwic (//páwih-Suc//) ?élun. "Look at the mountain."

şuwáa ?ićic (//?ići-Suc//) kanin ?áşkajnenuka.²

¹kášan is the second person singular imperative of káşa "to say." hínnapući "just right" is usually a verbal unit.

²Negative imperatives do not contain imperative suffixes. ?itic "him" has the allomorph -Suc because the word kanin intervenes between ?ićic and the verbal unit.

"Don't let him get mad at me."

tájuc (//tájh-Suc//) ?élun. "Look at the man."

?alúupan púttukocic (//púttu-koc-ic//). "Listen
to the babies (dual)."

Occasionally, there is a compound object with † -uc‡ after each member of the compound, e.g.,

hanatóokac he hanačakáaka ?áaṭawnuka. "He's mak-
ing his whistle and rattle talk" (that is,
he is blowing his whistle and rattling his
rattle), from tóoka "whistle" and čakáaka
"rattle"

jolúmic ka?únu (he) ka?áppic welíkšinen. "Get
my mother and father some food."¹

In the second example, † -uc‡ is in immediate constitu-
ency with the phrase ka?únu (he) ka?áppi "my mother and
father."

† -uc‡ occurs with certain words which do not trans-
late into English as objects, e.g.,

?in?óoninṣakan nákač hälla ?óoni. "No one has
come as far as you," where nákač means
"far."

† -uc‡ often follows verbal units, e.g.,

híccuw-nukac (//híccuw-nuka-Suc//) hälla kanéenut.

¹Such compounds often take the comitative case, e.g.,
ka?áppini ka?unúuni jolúmic welíkšinen. "Get my father
and mother some food."

"I don't know how to make it run," where
 híccuwnuka means "to make something run."

‡ -uc‡ is sometimes in immediate constituency with
 clauses, e.g.,

kani wilíiku ?eeja. "He wants to catch me," where
 ‡ -uc‡ follows the clause kani wilík "he
 catches me."

múu ka?úşşu ka?éeja. "I like to drink milk," where
 ‡ -uc‡ is in immediate constituency with
 the clause múu ka?úşşu "I drink milk"

A somewhat more complicated development obtains in:

kál ma jolúumu menáawu ?éeja şe. "Then he wanted
 to try to eat."

The first instance of ‡ -uc‡, represented as -u, is in
 immediate constituency with the clause ma jólum "he eats."

The next instance of ‡ -uc‡, which is also -u, is in
 immediate constituency with a longer clause which includes
 the first one; namely, ma jolúumu ménaw "he tries to eat."

mákşat mántin menáawu ?éejac menáawnukan níh. "But
 if somebody wants to try it, let him try
 it now."

The first instance of ‡ -uc‡, represented as -u, is in
 immediate constituency with the verbal unit ménaw "he
 tries," and the second instance of ‡ -uc‡, represented
 as -c, occurs in immediate constituency with the clause

mántin menáawu ?éeja "somebody wants to try," which is an object clause of the imperative menáwnukan "let him try."

‡ -uc‡ occurs in immediate constituency with clauses which translate into English as result clauses, e.g.,

mát húujaŋu ?iŋi kon?ámupŋu konwéeŋa miŋi
hénkaŋinukan témmac. "Then they would pay
him with beads so that he could make (this
child) well."

‡ -uc‡, represented as -c, follows the clause miŋi hénkaŋinukan témma "then he can make (this child) well."

hénan hínŋe ?óbu mulúumulu míwwak?inajhintec.

"She feels bad because she's going to get
married to the black man."

‡ -uc‡, represented as -c, is in immediate constituency with the clause mulúumulu míwwak?inaj "she's going to get married to the black man" plus the relative clause marker -hínŋe.

Occasionally, an attributive phrase or an attributive clause follows a nominal unit. If this unit plus the phrase functions as an object, there is a double occurrence of ‡ -uc‡, once after the nominal unit and once after the attributive phrase, e.g.,

joléewac mu?ec halíhalin cúup ma. "Everything
is burning up all around us," where

jolćewa means "nearby" and mu?e means "all."
 mákşařu konwílik née. wénec kóoca hénkařinukanic.

"That's where they get it--medicine to
 make people well," where wéne means "med-
 icine," and kóoca hénkařinukani means "for
 the purpose of making people well."

mi kawelén?ina řáahic katálan témmac. "I'll help
 you as long as I can."

In the last example, † -uc‡ occurs once with the nominal
 unit řáahi "as long as" and once with the clause katálan
 témma "I can stand."

The following sentence illustrates an attributive
 within the attributive phrase:

man túnnanan miři kénec mác ?ecec. "He's going
 to kick one of them somewhere."

There are three occurrences of † -uc‡; one after kéene
 "one," one after má- "that, there," and one after ?eke
 "something." Here, ?ecec is attributive to mác in the
 phrase mác ?ecec "somewhere," which in turn is attributive
 to kénec "one."

There are a few instances of † -uc‡ in sentences
 which do not contain any overt verbal unit, e.g.,

jomúnakařu moc?elájkonuc (//moc-?élaj-kon-řuc//).

"Be good to your children," where jomún-
 nakařu is the instrumental case of

jomúnnaka "nice."

jóo ?inpaēeluc (//?in-pápel-Suc//). "Here is your paper," where jóo "here" is a particle.¹

§30.5. The allative case suffix † -to‡ is -to when the subjective pronominal prefix of a following verbal unit is -n or -c,² e.g.,

híiton (//híi-to-n//) lákin témmaṣe. "You can dance in the daytime, too."

?ekétton (//?ékeG-to-n//) wéēṭa? "Where are you going?"

?ujée jomímpatoc (//jómi-Npa-to-c//) ?ánwaṭi.
"Let us go towards home."

Otherwise, † -to‡ is everywhere -tC, e.g.,

halíihalin lákte máa kaníto (//káni-tC//).

"Everything was named to me."

helókpat (//hélók-Npa-tC//) wéēṭa. "He went behind (something)."

míit (//míi-tC//) ?adée láktek. "It's too big for you."

After vowels, // -tC// is more frequently /-t/ than

¹This construction varies freely with jóo ?inpaēel.

²The second person singular prefix †?in- ‡ is always -n after † -to‡. The first person dual prefix †?ic- ‡ is optionally -c after † -to‡.

/-to/ in all positions. When //-t0// is /-to/ after vowels, final juncture usually follows.

When it occurs in nominal units, the allative case suffix has the meaning "at, in, to, into, during, near, by, on, onto," e.g.,

mán tulet "in there" from tule "inside"

réejto ?onínnuka. "He brought (them) to the King"
from réej "king"

née kawéenukan?ina méa réejpato. "I'm going to
take that to the King."

In the last sentence, both the directional suffix † -mpa† and the locative case suffix appear after réej "king."

şúttö "over her eyes" from şút "eyes"

?iřicánnat ?úkan. "Something occurred to him,
something came into his head," where cána
means "head."

wejáat ?utóhhinte "where he fell onto the ground"
from wéja "ground"

káal náamit mí?aje héllan ?úkan témma. "And (he
told) the last one, you can't come in," where
náami means "the last one."

lóklot ?óelařak "fielder in baseball, player in
the field" from lóklo "field"

mákřa nákat ?awóecu ?ořóřřan ?áju. "At that point,
there are only four left," where náka

means "extent."

kíik káawit cókteṭu wéeṭa. "The water is coming
down now," where káawi means "down."

máksaṭu níijowat kaʔóppoṭʔinaj. "That's the way
I'm going to be on this earth," where
jówa means "earth"

ṣijénwejit ʔiṭi konhówwopu." "They put him in jail,"
where ṣijénweji means "jail."

dohínnat "in that spot," where dohínna means "that
spot."

ʔóṭṭatumajto kénne "twenty-one: one on two sticks,"
where ʔóṭṭatumaj means "twenty: two sticks."

kénne lúpput ʔoṭóṭṭa rejáal "one dollar and fifty
cents: four bits on one dollar," where
lúppu means "dollar."

The allative case occurs after certain nominal units
which designate a specific time or a specific interval of
time, e.g.,

ʔáwwet káṣṣat ṣe ʔinʔuṭéewelak. "Tomorrow I'll
see you at this time again," where ʔáwwe
means "tomorrow" and káṣṣa means "this
time."

ʔoṭóṭṭahit "after four days" from ʔoṭóṭṭahi "four
days"

híiton lákin ténna ṣe. "You can dance in the day-

time, too," where *hii* means "day."

şemmit ?uméet híin táke. "The sun was shining yesterday evening," where *şemmi* means "yesterday" and *?úme* means "evening."

Duration of time is expressed by *láawali* "then, until, while" plus *t* -*toŕ*, e.g.,

mákşatu cókte cókten láawalit. "He was coming, just like that" or, more literally, "That's the way he was coming while he was coming."
jotóolan láawalit mélen. "It keeps on breaking until it's all gone."

láawalit ?ekáal macakúu koncánih. "And then they tie the brush."

In the first two examples *láawali* was preceded by a nominal unit in the possessive case, the stem of which is usually a verbal theme, e.g., *cókte* "to come along (suf.*)" and *jotóola* "to be breaking (iter. med. pas.)."

Nominal units referring to time may occur with the appositive case, especially if their temporal designation is not specific, e.g.,

nii?awe híin táke. "The sun was shining this morning."

?úme ?úupa. "It was raining last night."

mu?échi péwlut kawéeta. "I go to town every day," where *mu?échi* means "every day."

ʔáwwentala kaʔússu. "I drink in the morning."
 deléeka ʔóorat ʔáwwe mawéeta. "At three o'clock
 in the morning we went."

In the last sentence, the allative case occurs after ʔóora "o'clock," and the appositive case follows ʔáwwe "morning."

şáahi ʔúnniput deléeka ʔotóttahit ʔóoni weno
 ʔóttañse. "After a long time, maybe three
 or four days, it is said, three or four
 more men came."

Here, the appositive case occurs with şáahi "a long time" and the allative case is found in immediate constituency with the phrase deléeka ʔotóttahi "three or four days."

When ʔ -toʔ is in immediate constituency with a clause plus the relative clause marker -hinte, it carries the meaning "where," e.g.,

hokii neʔotótta cánnac ʔekétton hóojehintet. "Go
 wherever you put those four heads."¹

konlemájʔinajhintepat kénnetajh konhíja. "They
 are going to send one man to where they
 invite (people)."²

¹ ʔ -toʔ follows the clause neʔotótta cánnac ʔekétton hooje "you put those four heads somewhere" plus the relative clause marker -hinte.

² ʔ -toʔ follows the clause konlemájʔinaj "they're going to invite people" plus the relative clause marker -hinte plus the directional suffix ʔ -Npaʔ.

mu[?]éelakihto konlakíhhintet kojáa[?]ak [?]óppoj. "At
all the dances which they dance there has
to be a singer."

In the last sentence, the relative clause konlakíhhinte
"which they dance" is attributive to the nominal unit
mu[?]éelakih "all the dances," and there is a double occur-
rence of † -to‡, first after the nominal unit, then after
its attributive clause.

When † -to‡ is in immediate constituency with a
clause other than a relative clause, it has the meaning
"when, if, since, after," e.g.,

men ka[?]álu kon[?]a[?]áawa[?]ito. "I just hear (about it)
when they talk (about it)," where † -to‡ is
in immediate constituency with kon[?]a[?]áawasi
"they talk."

má[?]k[?]set [?]eméene kénne kanéenu[?]to. "Well, it's all
right, since I know one (song)," where
† -to‡ is in immediate constituency with
the clause kénne kanéenu[?] "I know one."

há[?]ali má[?]ac hená[?]ani [?]ukú[?]hto. "Maybe he's there
yet, still alive," where † -to‡ is in
immediate constituency with há[?]ali má[?]ac
hená[?]ani [?]ukuh "he's there yet, still
alive," which in this case constitutes
the rest of the sentence.

The last example has no dependent clause.

ʔ -toʔ occurs after clauses which translate into English as potential if-clauses or as contrary-to-fact if-clauses, e.g.,

kani káttenʔinato nít kani monweléetu monwéeʔanʔina.

"If he is going to kill me, you fellows will come over and help me," where ʔ -toʔ follows the clause kani káttenʔina "he is going to kill me."

canéc kani konliláwnet máa kanéenutʔuʔa. "If they had told me more, I would know that," where ʔ -toʔ is in immediate constituency with the clause canéc kani konliláwne "they tell me more."

330.6. The locative case suffix is -m in all cases thus far recorded, but the corpus contains no instance of this case following a consonant. It means "where, near, on," and usually gives a less specific designation of the locality than the allative suffix, e.g., kenéewam "on one side" v.s. kenéewat "in a corner (one particular place)," as illustrated by the sentences:

kenéewam hóppa. "It made a hole in one side."

ʔekál mawíllen líilet kenéewat ʔóʔʔa ʔáanim
konhóoje. "Now in the corner of that
pile of meal they place two leaves."

Other sentences illustrating the occurrence of the locative case suffix are:

náac numáawam móla. "She piled that in a different place," where núma means "different."

réej húukewam tálah. "He's standing in front of the King," where húuke means "before."

mól níiṣam "on this side of the Sulphur Banks," where níi means "this."

Thus far the locative suffix has been found only after the locational nominal suffixes -ṣa and -wa, and has not occurred in immediate constituency with clauses or phrases.

330.7. The ablative case suffix, † -muḷ, is -mu immediately before the second person singular subjective pronominal prefix,¹ and -mU elsewhere. It means "out of, from, away from," either from a concrete place, a point in time, or a situation.² Illustrative sentences now follow:

hélla námun táken témma muhínti. "You can't get out of that (hole), you know," where má- means "that."

¹This prefix is -n immediately following † -muḷ.

²This last usage occurs in the speech of James Knight and may be a loan shift from English.

káatun mám táke. "The cat came out of there."
 kawúlto ?aje ?óoniþu konwéeþa weno cánen ?ekémmu.

"They come in the night time, a lot of
 them from someplace," where ?ékeG- means
 "someplace."

níihintem dóompato "from now on," or more liter-
 ally, "from this place to that place,"
 where níihinte means "this place."

pawíhmu ka?óoni. "I come from the mountain,"
 where páwih means "mountain."

tájhmu kawéeþa. "I walked away from the man,"
 where tájh means "man."

ne péedron þe ?áaþawu néenuthinteþu máahintem
 táke. "Since this Pedro knew how to talk
 (cleverly), he got out of it (an unpleasant
 situation)," where máahinte means "it,
 that."

néen kilácmu hójot. "This started from a long
 time ago," where kilac means "long ago."

mántin máakhintem hénkaþit jómtan hinti láktupoto
 lakiþ kon?áaþawþu konwéeþa. "When some-
 body gets over being sick, when the doc-
 tor wishes then they ask for a dance,"
 where máakhinte means "the state of being
 sick."

‡ -mu‡ can also be in immediate constituency with clauses, e.g.,

ʔekál mawentáanam ʔelúhintem weno ʔekál men
hanaʔáppimpat híccuw. "From the window
where she was watching, it is said, she
then ran to her father," where -m is in
immediate constituency with the clause
ʔélu "she was watching"¹ plus the relative
clause marker -hinte.

This clause is attributive to wentána "window," and there is a double occurrence of ‡ -mu‡, first after wentána, then after the attributive clause.

330.8. The instrumental case suffix ‡ -tu‡ is -su after máa "that," máG- "that," néG- "this," and ʔékeG- "something."

When ‡ -tu‡ follows a sequence which usually functions as a nominal stem, it often means "through," "with," "by means of," or "from," e.g.,

tumájju ʔi‡i kapakáa‡i. "I hit him with a stick,"
where túmaj means "stick."

ki‡én‡u ʔokájku. "It was made from elderberry
wood," where ki‡en means "elderberry."

mát húuja‡u ʔi‡i konʔáamup‡u konwéeta. "Then they

¹ʔélu "she was watching" is both a verbal unit and a clause.

pay him with the beads," where húuja means "beads."

kalíilawhinte hunáa mon?uʔénnina monʂúʔtu. "What I am describing, you will see yourselves with your own eyes," where ʂút means "eyes." ʔoʔáaʔu ʔicwéeʔanʔina ma máa. "We'll both go together," where ʔóʔa- means "two."

jokókʂuʔakʔu kanin lákat. "You called me a liar," where jokókʂuʔak means "liar."

maʔáaʔawʔu nímpat támál káʂan. "In our language this way is north, isn't it?" where maʔáaʔaw means "our language."

hélle ʔiʔiʔáaʔawʂakaʔu kaʔáaʔaw témma. "I can't talk like him," or more literally, "I can't talk like his talking," where ʔiʔiʔáaʔawʂaka means "like his talking."

hanaʔéelakonʔu weno húu. "He escaped, it is said, through (the help of) his pets," where hanaʔéelakon means "his pets."

katájhʔu ma née. "I'm getting to be a man, now," where tájh means "man."

ʔékeʂʂu (//ʔékeG-ʔu//) "just barely" from ʔékeG- "somewhere"

kučújkocʔu ʔitulúj weno. "He was going around and around the two little ones, it is said,"

where *kučújkoc* means "the two little ones."
neʔóṭṭaṭu mán hójot témaa. "You can start it with
 those two (stories)," where *ʔóṭṭa* means
 "two."

he kóocako ʔaje men hanacánnatu ma wílik. "But
 the Indians just get them (songs) with
 their heads (learn songs by ear)," where
cánná means "head" or "heads."

ʔekal mákṣaṭu mahéenan weno mahijóelu tokáaṭi
híntikaṣaṭu. "Then the boy, it is said,
 ran against that piece of iron somehow,"
 where *híntikaṣa* means "somehow."

ʔiṭiʔáaṭawṭu ʔáaṭawto ma ʔálu. "He heard him
 when he was speaking his language," where
ʔiṭiʔáaṭaw means "his language."

kawájṭu kaʔóni. "I came by horseback," where
káwaj means "horse."

Expressions which translate into English as adverbs
 are formed by adding *ṭ -ṭuṭ* to adjectives, e.g.,

pówwoloṭu konṣúkuh. "They're sitting around."

ʔeméneṭu kanic wájan. "Give (it) to me the
 right way," where *ʔeméne* means "right."

ṣupákṭu ṭútkāṭi "to wind too hard," where *ṣupak*
 means "hard."

jomúnnakaṭu nocʔelájkonuc. "Be good to your

children," where *jomúnaka* means "good."

ʔijáh̄tu. "I wish I could too."

In the last two examples, there is no overt verb. *ʔíjah* "I wish" is generally a particle.

When *ʔ -tuʔ* follows a verbal stem, it frequently has a continuative meaning, especially when followed by *wéeta* "to go" or *cók̄te* "to come," e.g.,

ʔemén̄tu wéeta. "He's still going, he's going on and on," where *ʔém̄en* means "to be just like."

néejowan ʂelípnakaʔu cók̄te. "This world is getting to be dangerous," where *ʂelípnaka* means "to be dangerous."

néejowan ʂelípnakaʔu wéeta. "This world is something getting bad."¹

tahál̄tu ʔóppoj. "He goes around working," where *táhal* means "to work."

máan kúč̄či joléeʔu cáam cók̄te. "That (disease) is pretty nearly all gone," or more literally, "That (disease) is getting a little close to dying out," where *jól̄e* means "to be close."

ʔ -tuʔ is often in immediate constituency with

¹ Contrast this with the preceding sentence.

clauses, in which case it usually has a durative connotation, e.g.,

kawééṭaṭu kawééṭa. "I'm always going," where -ṭu follows the clause kawééṭa "I'm going."

In such cases, a pronominal prefix, identical with the prefix of the main verb, occurs optionally before the verbal unit plus † -ṭuṭ, e.g.,

hunáa lakih konʔokájṭu konwééṭa † hunáa lákih
ʔokájṭu konwééṭa. "They just make the
dance up themselves," where ʔókaj means
"to make up."

There is disagreement as to which variant is preferable. Occasionally, there is a pronominal prefix before the verbal unit and none before the main verb, e.g.,

cakáttun táwlik konhawúḥṭu wééṭa. "They used to
buy blackbird wings," where háwuh means
"to buy."

Clauses within clauses are illustrated by the following examples:

hunán ʔikonu pállaṭu kontakééṭu konwééṭa. "When
they're born, they're full of diseases,"
or more literally, "Diseases fill them
when they're born."

The first instance of † -ṭuṭ occurs in immediate constituency with the clause hunán ʔikonu pálla "diseases fill

them," The second instance of $\text{t} -\text{tu}\text{t}$ occurs in immediate constituency with the complex clause $\text{hunán} \text{?ikonu pálla}\text{tu kontáke}$ "they come out with diseases filling them," where táke means "to come out."

$\text{t} -\text{tu}\text{t}$ can occur in immediate constituency with a dependent clause even when the verbal unit of the main clause is not wéeta or $\text{cók}\text{te}$, e.g.,

$\text{mák}\text{sa}\text{tu konhínte wajíkwa} \text{?a}\text{táawa}\text{si}\text{tu wajík kojá}\text{tu}$.

"That's the way they did it, some of them talking and some of them singing."

Here, the first instance of $\text{t} -\text{tu}\text{t}$ occurs after $\text{mák}\text{sa}$ "that way," the second in immediate constituency with the clause $\text{wajíkwa} \text{?a}\text{táawa}\text{si}$ "some of them talked," and the third in immediate constituency with the clause wajík kója "some of them sang." $\text{t} -\text{tu}\text{t}$ has a durative meaning in the second and third instances.

$\text{hénan} \text{?obúu}\text{tu nócca}$. "He feels sorry and cries," or more literally, "His breath is bad and he cries," where $-\text{tu}$ follows the clause $\text{hénan} \text{?óbu}$ "his breath is bad."

$\text{mat wéeta} \text{?éej}\text{atu} \text{?áa}\text{tawka}\text{ti}$. "He talks as if he might want to go over there, where $-\text{tu}$ occurs after the clause $\text{mat wéeta} \text{?éej}\text{a}$ "he wants to go there."

In this case, $-\text{tu}$ expresses manner rather than duration,

even though it is in immediate constituency with a clause.

‡ -tu‡ can also be in immediate constituency with a relative clause, e.g.,

mi konʔéejahinte‡tu "because they want you," where
-tu is in immediate constituency with the
clause me konʔéēja "they want you" plus the
relative clause marker -hinte.

330.9. ‡ -ni‡ is -i after the plural marker -kon
and -ni elsewhere. It is roughly translated as "with, along
with," e.g.,

káacni konʔelákte. "They are playing with the
fish," where káac means "fish."

kaʔáppini kawícaj. "I am walking with my father,"
where kaʔáppi means "my father."

naʔutél weno káacu jólum hanaʔójja kóocani. "That
white fellow, it is said, ate fish with
his Indian friend," where ʔójja means
"friend."

ʔi‡íini kaʔóppoj. "I went around with him," where
ʔíti means "him."

háali máac henáani şukúhto. "Maybe he's there
yet, still alive," or more literally,
"Maybe he's still there with his breath,"
where hena means "breath."

ʔi‡iʔójja kélsini kochíccuw weno. "They (dual)

were running, (he) with his friend Kelsey," where ?i?i?ójja means "his friend," and kélse means "Kelsey."

kélsini is in the comitative case, but ?i?i?ójja is in the appositive case.

-ni often occurs after both members of phrases which translate into English as compound subjects, compound objects, or even compound modifiers, e.g.,

ka?unúuni ka?áppini háaliko nit kocşúkuh. "My mother and my father are still here," where ka?únu means "my mother" and ka?áppi means "my father."

míini kaníini ?ic?áa?aw. "You and I are talking," where míi means "you," and káni- means "I." ka?unúuni ka?áppini ka?ú?e. "I see my mother and father."

In this sentence, the phrase whose members contain -ni are translated into English as a compound object.

ka?áppini ka?unúuni kúččic jolúmic welíkşin.

"Get my mother and father some food," where jolúmic means "food," and welíkşin means "to get."

There is an alternative translation in Lake Miwok for this English sentence; namely, jolúmic ka?únu (he) ka?áppic welíkşinen. Here, † -uc†, the objective case suffix, is

in immediate constituency with the phrase ka?únu (he) ka?áppi, and the comitative suffix does not appear at all.

mám ka?áppini ka?unúuni kocwéeji. "That is my father and mother's house," where mám means "that is," and wéeji means "house."

In this sentence the phrase ka?áppini ka?unúuni translates into English as a compound possessor, namely as "my father and mother's."

?awáa?awani ce?áawni túpúkkusi. "brown and white spotted," where ?awáa?awa means "brown," and ce?áaw means "white."

30.10. The vocative case, { -V}, is -V after the following forms:

cáco- "grandchild"
 háma "grandmother"
 pápa "grandfather"
 wóko "older sister"
 ?ápi- "father"¹
 ?áta- "older brother"
 ?ela- "younger sibling"
 ?únu "mother"

Elsewhere, { -V} is -∅.² The vocative of "grandchild"

¹Forms followed by hyphens are special allomorphs which occur only before { -V}.

²Only one morpheme, ?élaj "child," has a special allomorph (?ées) before a zero representation of { -V}. This term of address is used largely in addressing one's adult children.

may be either cácco or cacóo; that is to say, either cácco plus -Ø or cáco- plus -V. Other morphemes have a single vocative form.

The use of the vocative can be illustrated by a few examples:

ʔunúu ʔujée. "Mother, come here," where ʔúnu
means "mother."

cacóo cacóo cacóo! kajóok ma! "Grandchild,
grandchild, grandchild! I'm dead!"

cácco cácco! kanic hájpance! "Grandchild, grand-
child! Wait for me!"¹

331. The array of case suffixes which have just been discussed can best be exemplified by some illustrative paradigms. Five stem types are included, one ending in a vowel, one ending in -h, one ending in a consonant other than -h, one ending in a cluster (tájh, the only one of its type), and pronouns.

¹Note the two forms of the vocative for cácco "grand-child" in this and the preceding example.

VOCALIC

app.	?únu "mother"	?álwa "tree"
subj.	?únun	?álwan
poss.	?únun	?álwan
obj.	?únu, ?únuc	?álwa, ?álwac
all.	?únut, ?unúuto	?álwat, ?álwato
loc.		
abl.	?únun	?álwan
instr.	?unúuʔu	?álwaʔu
com.	?unúuni	?álwani
voc.	?unúu	

app.	kenéewa "one side"
subj.	
poss.	
obj.	
all.	kenéewat "in a corner"
loc.	kenéewam "on one side"
abl.	
instr.	
com.	
voc.	

	...h	,...jh
app.	kúkuh "flea"	tájh "man"
subj.	kúkun, kukúhnu	táj, tájhnu
poss.	kúkun	táj
obj.	kúkuh, kúkuc	tájh, táju, tájuc
all.	kukúhto	tájhto
loc.		
abl.	kukúhmu	tájhmu
instr.	kukúhṭu	tájhṭu
com.	kukúhni	tájhni
voc.	kúkuh	tájh

	...c ^{-h}
app.	túmaj "stick"
subj.	túmaj, tumájnu
poss.	túmaj
obj.	túmaj, tumáaju, tumáajuc
all.	tumájto
loc.	
abl.	tumájmu
instr.	tumájṭu
com.	tumájni
voc.	

Pronouns

singular

app.	kánni "I"	née, néem "this"
subj.	kánni	néen
poss.	kanín	néen
obj.	kánni, kani, kánnic, kanic	née, néec
all.	kanít	
loc.		
abl.		
instr.		néşşu ¹
com.	kaníini	
voc.		

dual

plural

app.	mákkoc "those two"	?íkko "they" ²
subj.	mákkoc, mákkoenu	?íkkon
poss.	mákkoc	?íkkon
obj.	mákkoc, mákkoci, mákkocic	?íkkon, ?íkóonu, ?íkonu, ?íkonuc
all.	mákkoccto	
loc.		
abl.	mákkocmu	
instr.	mákkocçu	
com.	mákkocni	?íkóoni
voc.		

¹This form is based on the stem né-.

²The forms given are based on three different forms: ?íkkon, ?íkon, and ?íkon.

400 VERBS

410. Subjective pronominal prefixes immediately precede verbal themes. They are optional and usually absent when there is an imperative suffix, e.g., *híccuwmi* "you run." Otherwise, they constitute the only overt indication of person and number in the verbal unit. These prefixes are given in the following chart:

	Singular	Dual	Plural
First person inclusive	ka-, -k, k ⁻¹	ʔoc-, ʔic-, -c ¹	ma-, ʔim-
First person exclusive		ʔic-, -c ¹	
Second person	ʔin-, -n	noc-	mon-
Third person	ʔi-	koc-	kon-
Third person reflexive	hana-	hanakoc-	hanakon-
Indefinite	ʔan-	ʔan-	ʔan-

The prefixes of this series closely resemble those of the possessive series, a situation which can lead to some ambiguity, e.g., *kahójpu* can mean either "my chief" or "I am a chief." The principal differences between these two series are in the third person singular and

¹The shortened alternates for the first person singular and dual occur optionally in the speech of James Knight when he is speaking rapidly.

the presence of certain shortened alternates of the other prefixes.

The allomorph -k of the first person singular forms a phonological unit with an immediately preceding word ending in a vowel, or with a following word, e.g.,

péwluk ?enláʃin?inamaʃe. "I'm going to see the town again."

mákkon kuʃée miʃi "when I see them"

The allomorph -c of the first person dual always forms a phonological unit with the preceding word. This is a rare allomorph, of optional occurrence after a word which ends in a vowel, e.g.,

mákkon tómmac wílik níi ?aje. "That way we were able to get him anyway."

In normal speech the second person singular subjective pronominal prefix {ʔin-} is -n sentence medially after vowels and ʔin- elsewhere, e.g.,

ʔiʃin ?úʃe? "Did you see him?"

hájun ?úʃe? "Did you see the dog?"

In such cases, -n forms a phonological unit with the preceding word, and consequently will be written with it. In slow, deliberate speech {ʔin-} is sometimes ʔin- following a vowel if the preceding word is not an independent pronoun.

ʔac- is an indefinite pronominal prefix with no

implication of number.¹ It generally translates as "one, someone, people in general," e.g.,

holóomajuc hélla ?anjólum. "They (Indian people) don't eat rattlesnakes."

hínti?u ?anwénnan?aka. "It looks as if someone has rubbed something here."

jomúnnaka?u ?an?ukúhto ?obúu wace. "It's no good for them (someone) to be living well."

?im- is a rare alternate form of the first person plural, e.g.,

ma?óoroc hélla mat hóoje man ?ánwa?it ?imhija muhínti. "If he doesn't put that gold there and comes back, we win, you see."²

As far as can be determined, there is no difference in meaning between ma- and ?im-.

420. Semelfactive stems.

A semelfactive stem may be identical with the verbal root or derived from it by consonantal augmentation or vocalic reduction. Since corresponding iterative stems

¹?in-? is sometimes used by James Knight in an indefinite sense, as in kóocakon wáttaton ?óppojto "if you (meaning anyone) go among the people." This usage is possibly a loan shift from English.

²This is the only recorded instance of ?im-. It occurred in the speech of James Knight.

are derived from verbal roots by a number of processes, there is not always a neat correspondence between classes of semelfactive stems and classes of iterative stems.

There will be a separate discussion of each class and subclass, followed by a list of the semelfactive stems in that class and their verbal roots.

421. Class I semelfactive verbal stems are identical with their roots. *cája* "to nod," for example, is both a verbal root and a semelfactive stem. This class is subdivided according to the thematic suffixes which follow the stem.

421.1. Class I. A semelfactive verbal stems take no semelfactive suffix.

Class 1. A. 1 semelfactive verbal stems take no basal suffix. They are of the following canons:

cV(V)c-

cV(V)c(c)v-

cV(V)cvc-

cVc(c)vc-

cVvcvcv-

cVccvcv-

cvcVvcv-

Since there are two Spanish loan words in this class,¹ it

¹*mélil* "to measure" from Spanish *medir* "to measure" and *mónton* "to stack" from Spanish *monton* "pile."

is still partially open.

<u>Verbal Root or</u> <u>Semelfactive Stem</u>	<u>English</u>
cáam	to fade away
cákal	to sift
cánih	to tie
//cápa-Spu// ¹	to request
cáte	to lie down
cémaj	to order, send for
cókte	to come along
cóla	to soak
//cówa-ʦi//	to fear
//cówaj-nuka//	to move
cúnih	to move something
cúummi	to smile
cúup	to burn
cújal	to be cramped, crippled
háajap	to yell
hácah	to stand (said of an animal or an object)
háli	to think, plan
háwuh	to buy

¹Verbal roots and stems which always precede a post-thematic suffix will be cited morphophonemically, with a hyphen between the stem and the suffix.

<u>Verbal Root or Semelfactive Stem</u>	<u>English</u>
hénuh	to request, ask
héṭup	to cover
héwa	to spread out
hína	to give away
híja	to send
híja	to win, beat
hójot, hójut	to start
hól, hóol	to fall down
hólloh	to lean against
hówo	to sit
húna	to warm
húna	to be solitary
húunih	to tell, show, think erroneously
jéalak	to squeal
jéek	to be spoiled (said of potatoes)
jókap	to hang someone
//júkku-Spu//	to hang something up
jóok	to die, be dead
//júkku-Spu//	to get a hold on something
káaj	to dry up
káṭi	to string (a bead)
kéew	to run away

<u>Verbal Root or Semelfactive Stem</u>	<u>English</u>
kéwʔil	to be sticking out (said of a person's ribs)
kóom	to get burned
kóʃi	to play handball
kúna	to vomit
kúnuh	to defecate
kúuh	to be rotten
kúčči, kúcci	to be small
lákát	to call
lánuk	to wade across
//líku-ʦi//	to pass
líláw-	to tell someone something
//lílú-ʦi//	to fly
lókól	to get dry limbs
lúku	to borrow
láwaw	to gulp
máak	to be sick
málik	to put out (a light)
máʦa	to bite
méej	to be tired
mékúh	to sit (said of a bug), to lie on the belly
mélih	to grow

<u>Verbal Root or Semelfactive Stem</u>	<u>English</u>
mélil	to measure
mónaw, mínaw	to try
méʔak	to think, remember
//mina-ʔi//, //ména-ʔi//	to hit, guess someone correctly (in the hand game)
//mókku-pa//	to pounce on something
móle	to pile (wood)
mónton	to stack (wood)
mówen	to trap
múla	to hit once (with a stick)
múluj	to fall down, tumble
múlut	to eat breakfast
níik	to settle
nóca ¹	to cry
nówik	to break
nówwu-	to be broken
núum	to drown
páatal	to wrap
//páka-ʔi//	to hit
pálla	to fill, be full
póloj	to float down

¹It is uncertain whether this is the semelfactive or the iterative stem.

<u>Verbal Root or</u> <u>Semelfactive Stem</u>	<u>English</u>
//póttu-Spu//	to pile up
púna	to dip
//p ^h úku-Ṭi//	to rise (bread)
//pém̄mu-Spu//	to stick something on
//púcca-Ṭi//, //pucca-Ṭi//	to blow fast
ṣáawuṭe	to have
//ṣéttu-Ṭi//	to dodge
ṣíka	to fill, charge (batteries)
ṣíṭak	to drill
ṣóla	to hide something
ṣúcuk	to leak
ṣúlih	to shed, moult, peel off
táam	to heal
tákah	to lie on the back
tálah	to stand (said of a person)
táli	to wake up
télup	to roll
//ténu-Ṭi//	to raise fur or feathers
téwe	to weave a basket
tíil	to not reach
//tíku-Ṭi//	to jump
tóla	to throw
tóon	to be cooked, done

<u>Verbal Root or Semelfactive Stem</u>	<u>English</u>
tóon	to get a splinter or a thorn
//túmu-Ṭi//	to go for wood
//tákkú-Spu//	to patch once
túlip	to shine, glisten
wája	to give
wákut	to rob
wéeṭa	to go
//wákka-Spu//	to place across
wéle	to help
wénum	to choose
wicaj	to walk
wílik, wélik	to get
wólah	to be hollow
//wóle-Ṭi//	to leach
wóoma	to cheat, fool
//wóotlu-Spu//	to be curled up
wóṭal	to bend things over
//wúna-Ṭi//	to run (pus)
?áah	to be full, sated
?áaṭaw	to talk
?ájaw	to gather
?áliw	to miss the mark
?álu	to hear, perceive

<u>Verbal Root or Semelfactive Stem</u>	<u>English</u>
//ʔéccu-Spu//	to turn something over on a spit
ʔemčene	to be good
ʔísal	to fry
ʔítaj	to roast
ʔócoh	to urinate
ʔókaj	to make
ʔóhaḥ	to hunt, fish
ʔóoni	to come
ʔúkan	to enter
ʔúkuc	to dream
ʔúṣṣu	to drink
ʔúteh	to fall
ʔúuj	to be withered

Class I. A. 2 semelfactive verbal stems take the medio-passive basal suffix -elG.

<u>Verbal Root</u>	<u>Semelfactive Theme</u>	<u>English</u>
ᵑémᵑ-, ᵑémʔ-	ᵑémmel, ᵑémʔel	to be sticking into something

Class I. A. 3 semelfactive verbal stems are of the canon Cᵑ(V)C- and take the intransitive basal suffix -ʔi.
Class I. A. 3 semelfactive stems are often associated with

Class I. K iterative themes, e.g.,

p^húm?i "to arch the back (cat)"

p^húm?ituma "to arch the back fast and repeatedly"

<u>Verbal Root</u>	<u>Semelfactive Theme</u>	<u>English</u>
ćúj-	ćúj?i	to squint; be dim
jó?-	jó??i	to point; hand over
p ^h úm-	p ^h úm?i	to arch the back (cat)
p ^h úun-	p ^h úun?i	to be humped (back)
tól-	tól?i	to cock the ears
tóol-	tóol?i	to be cocked (ears)

421.2. Class I. B semelfactive verbal stems take the semelfactive suffix -Mṭi. This class can be subdivided on the basis of basal suffixes.

Class I. B. 1 semelfactive verbal stems take the basal suffix -ak "swift, careless action." They are of the canon Cṽ(V)C- and CṽC?-.

Class I. B. 1 semelfactive themes are frequently associated with Class I. A. 1 iterative themes, e.g.,

ćídkaṭi "to squirt once"

ćídak "to squirt intermittently"

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
cól-	cólkaṭi ¹	to have diarrhea

¹/cólkaṭi/ is //cól-ak-Mṭi//. The other items have a similar morphophonemic representation.

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
cóol-	cóolkaṭi	to dip, soak
cú(u)l-	cú(u)lkaṭi	to slide down once
ćéec-	ćéeckaṭi	to rake one pile
ćíd-	ćídkaṭi	to squirt once
ćít-	ćítkaṭi	to wink once
ćúd-	ćúdkaṭi	to rip or split once
ćúm-	ćúmkaṭi	to suck once, slowly
ćúum-	ćúumkaṭi	to suck once, fast
déł-	déłkaṭi	to bend something out of joint
háp-	hápkaṭi	to be split
héen-	héenkaṭi	to be better; breathe
hém-	hémkaṭi	to dig one thing out
hén-	hénkaṭi	to be well; to breathe once, gasp
jéeb-	jéebkaṭi	to slide down in one slide, cave in
jé(e)c-	jé(e)ckaṭi	to come off
jé(e)p-	jé(e)pkaṭi	to flake off
jól?-	jólkaṭi	to rip off
jól-	jólkaṭi	to protrude
jóot-	jóotkaṭi	to break a long object in two
káaw-	káawkaṭi	to cut something

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
káw-	káwkaṭi	to cut something fast
k ^h íiṭ-, kíiṭ-, kíiṣ-	k ^h íiṭkaṭi, kíiṭkaṭi, kíiṣkaṭi	to rub, massage once
kóṭ-	kóṭkaṭi	to knock something off or down
k ^h óob-	k ^h óobkaṭi	to puncture the flesh
kíic-	kíickaṭi	to make one splash
lét-	létkaṭi	to cut a piece off
lém?-	lémkaṭi	to flash once
líd-	lídkaṭi	to rub against once
líid-	líidkaṭi	to rub, press against once
ṭáah-	ṭáahkaṭi	to be skinned, blistered
ṭéet-	ṭéetkaṭi	to scoop once
ṭéé?-	ṭéé?kaṭi	to cough up phlegm once
ṭíib-	ṭíibkaṭi	to slip down
ṭíit-	ṭíitkaṭi	to peel off
ṭít-	ṭítkaṭi	to peel off fast
ṭót-	ṭótkaṭi	to scratch or pinch once
ṭúb-	ṭúbkaṭi	to take a sip
ṭúub-	ṭúubkaṭi	to take a little taste
núj-	nújkaṭi	to stop up
pác-	páckaṭi	to wring out one thing

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
pél-	pélkaṭi	to blink once
píiṭ-	píiṭkaṭi	to slide off, slip out of joint
píṭ-	píṭkaṭi	to slide off
pít-	pítkaṭi	to tighten one thing
p ^h iic'-	p ^h iic'kaṭi	to crush one thing
p ^h it-, pít-, p ^h iṭ'-, píṭ'-	p ^h itkaṭi, pítkaṭi, p ^h iṭ'kaṭi, píṭ'kaṭi	to press down once
p ^h ó(o)b-	p ^h ó(o)bkaṭi	to cut something off
p'óc-	p'óckaṭi	to cut off fast
p'ój-	p'ójkaṭi	to fall down, chop off
p'óoc-	p'óockaṭi	to cut one piece
p'út-	p'útkāṭi	to kiss once
şín-	şínkaṭi	to blow the nose once
şól-	şólkaṭi	to sharpen
şóol-	şóolkaṭi	to sharpen, touch up a little
şoon-	şoonkaṭi	to wipe something off
şút-	şútkāṭi	to chop something off
şúut-	şúutkaṭi	to suck, inhale once
tíc-	tíckaṭi	to chatter once (squirrel)
túp-	túpkaṭi	to snap something

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
túup-	túupkaʔi	to be broken in two
tút-	tútkաʔi	to twist something around once
túʔ-	túʔkaʔi	to catch fire
túc-	túckaʔi	to drip once
tʰéd-, té(e)d-	tʰédkaʔi, té(e)dkաʔi	to pull off, fall down (a branch)
tʰéed-	tʰéedkaʔi	to pull down (one branch) slowly
wáʔ-	wáʔkaʔi	to split open
wéen-	wéenkaʔi	to rub something
wóc-	wóckaʔi	to scrape once
wóoc-	wóockաʔi	to scratch once
wóop-	wóopkaʔi	to scoop once
wóot-	wóotkaʔi	to bend over
wóp-	wópkaʔi	to nod once
wót-	wótkաʔi	to bend by itself (one thing)
ʔéʔ-	ʔéʔkaʔi	to come off (one thing)
ʔóʔ-	ʔóʔkaʔi	to fall down (one thing)
ʔóol-	ʔóolkաʔi	to dip (oars)
ʔót-	ʔótkաʔi	to butcher fast

Class I. B. 2 semelfactive verbal stems take the

basal suffix -uk "slow, deliberate action." They are of the canons C'VV-, C'V(V)C-, and C'VC?-.

Class I. B. 2 semelfactive themes are often associated with Class I. A. 2 iterative themes, e.g.,

hátkuṭi "to burst one thing"

hátuk "to burst several things"

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
čáa-	čáakuṭi ¹	to make a small split
čád-	čádkuṭi	to scratch once
číi-	číikuṭi	to make a small split
čúd-	čúdkuṭi	to tear a little
déł-	déłkuṭi	to break, twist something out of joint
háp-	hápkuṭi	to split or crack something
hát-	hátkuṭi	to burst something
hóm-	hómkuṭi	to pull something out
jép-	jépkuṭi	to break something off
jól?-	jólkuṭi	to tear something
jót-	jótkuṭi	to pick (fruit), pull down
júl-	júلكuṭi	to lift things up and down, to exercise
kól-	kólkuṭi	to pull off, hull

¹/čáakuṭi/ is //čáa-uk-Mṭi//. The other themes have a similar morphophonemic representation.

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
k ^h úb-	k ^h úbkuṭi	to break off
lét-	létkuṭi	to turn back (the eyelid)
ṭíb-	ṭíbkuṭi	to roll down (the sleeves)
ṭíit-	ṭíitkuṭi	to clean slowly
ṭít-	ṭítkuṭi	to take off (bark, skin)
ṭót-	ṭótkuṭi	to pinch, pick at
píṭ-	píṭkuṭi	to twist out of joint
pól-	pólkuṭi	to flood something
pút-	pútkuṭi	to cut the belly open
p ^h íc-	p ^h íckuṭi	to squeeze something
p ^h ó(o)b-, pó(o)b-	p ^h ó(o)bkuṭi, pó(o)bkuṭi	to cut something
Ṗóc-	Ṗóckuṭi	to cut something off slowly
Ṗój-	Ṗójkuṭi	to cut down
ṣút-	ṣútkuṭi	to chop off
túp-	túpkuṭi	to break something in two
tú?-	tú?kuṭi	to spark something
ṭ ^h éd-, ṭéd-, téed-	ṭ ^h édkuṭi, ṭédkuṭi, téedkuṭi	to pull down (a branch)
ṭí?-	ṭí?kuṭi	to chip something off
wáṭ-	wáṭkuṭi	to split something
wéṣ-	wéṣkuṭi	to chip something

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
wíp-	wípkuṭi	to unravel one stitch
wót-	wótkuṭi	to bend something
wúp-	wúpkuṭi	to raise something
ʔát-	ʔátkuṭi	to cut something open
ʔé±-	ʔé±kuṭi	to chop, take wood off
ʔóc-	ʔóckuṭi	to open a shell
ʔó±-	ʔó±kuṭi	to take off, hull

Class I. B. 3 semelfactive verbal stems take the semelfactive suffix -Nṭi with no basal suffix. The canonical forms of these stems are Cṽ(V)CV(C)-, CṽCCV-, and CVCVCṽV- (one instance).

Class I. B. 3 semelfactive themes sometimes form sets with Class I. A. 3 iterative themes, e.g.,

wíipaṭi "to swing something once"

wíipa "to swing something repeatedly"

Certain other Class I. B. 3 semelfactive themes form sets with Class IV iterative themes, e.g.,

cajáaṭi "to shake the head once"

cájja "to shake the head several times"

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
báph ^h a-	bap ^h áaṭi ¹	to club once
cáawel-	cáawleṭi	to wrap up quickly
cája-	cajáaṭi	to shake the head once
céʔs-	ceʔáaṭi	to knock one thing down
cópa-	copáaṭi	to break something up
cówa-	cowáaṭi	to be afraid (one person)
ʔáaka-	ʔáakaṭi	to split
ʔíika-	ʔíikaṭi	to split open
dápa-	dapáaṭi	to slam
déelew-	déelweṭi	to glide (buzzard)
hébka-, hékba-	hebkáaṭi, hekbáaṭi	to mourn
hé(e)wel-	hé(e)wlaṭi	to stir once
híṣa-	hiṣáaṭi	to shake something out
híwa-	hiwáaṭi	to shake or pull something
húca-	hucáaṭi	to cough once
jéca-	jecáaṭi	to crush one thing
jéda-	jedáaṭi	to chip off one thing
kápa-	kapáaṭi	to chip something
káwuc-	káwcuṭi	to be medium frozen

¹/bap^háaṭi/ is //báph^ha-ḥiṭi//. The other themes have a similar morphophonemic representation.

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
kéla-	keláaʔi	to chip off a piece
kóda-	kodáaʔi	to knock once on something
kólá-	koláaʔi	to knock something off
kóta-	kotáaʔi	to chop something
kúʂa-	kuʂáaʔi	to glance off something
k ^h ába-	k ^h abáaʔi	to hit the head once
k ^h óba-	k ^h obáaʔi	to gash, split
k ^h óca-, kóca-	k ^h ocáaʔi, kocáaʔi	to poke something
k ^h úba-, kúba-	k ^h ubáaʔi, kubáaʔi	to smash one thing
kíca-	kicáaʔi	to splash once, scatter once
kóma-	komáaʔi	to stir once
láataj-	látjaʔi	to crawl quickly
láca-	lacáaʔi	to knock something down
lákum-	lákmuʔi	to swallow
láwut-, láwuʔ-	láwtuʔi, láwuʔi	to sweep once
létaw-	letwaʔi	to flame up once
lída-	lidáaʔi	to rub against
lója-	lojáaʔi	to rub once, fast
lójaw-	lójwaʔi	to rub once
lúpa-	lupáaʔi	to sneeze once

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
lu'pum-	lu'pumuṭi	to dive once
ṭako-	ṭakóoṭi	to blister from heat
ṭéka-	ṭekéaṭi	to cough up and spit out phlegm
ṭéṭa-	ṭet'éaṭi	to throw one thing
ṭika-	ṭikáaṭi	to slicken once
ṭóda-	ṭodáaṭi	to pick at one's nose
ṭápa-	ṭapáaṭi	to lock
móle-	molééṭi	to pour once
pátul-	pátluṭi	to weave, form rings
pída-	pidáaṭi	to guess right once
pína-	pináaṭi	to crack something
p ^h íca-	p ^h ic'áaṭi	to crush one thing
p ^h íciw-	p ^h ic'íwaṭi	to crush one thing fast
p ^h óba-, póba-	p ^h obáaṭi, pobáaṭi	to chop something up
pé(e)caj-	pé(e)cjaṭi	to exert oneself
péca-, póca-, póca-	poc'áaṭi, poc'áaṭi, poc'áaṭi	to cut something off
póma-	pomáaṭi	to puff once
púcca-, púcca	púccaṭi púccaṭi	to blow out with one quick blow

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
púuca-	púucaṭi	to blow once (wind)
ṣéna-	ṣenáaṭi	to cough out something
ṣípa-	ṣipáaṭi	to punch with the elbow, jerk with the hand
ṣíta-	ṣitáaṭi	to smear something
ṣóca-	ṣocáaṭi	to mash once
ṣóma-	ṣomáaṭi	to punch
ṣóowuc-	ṣóowcuṭi	to be frozen
tákum-	tákmuṭi	to run after
téka-	tekáaṭi	to take (a slab) off
tépa-	tepáaṭi	to mash one finger
típum-	típmuṭi	to be cold (object or weather)
tíwa-	tiwáaṭi	to scatter by hitting once
túna-	tunáaṭi	to stamp once
tútal-	tútlaṭi	to roll up
túulaj-	túuljaṭi	to go around something
túup ^h il-, túupil-	túup ^h liṭi, túupliṭi	to spin once
t ^h óka-, tóka-	t ^h okáaṭi, tokáaṭi	to hit, bump once
táka-	takáaṭi	to slap once
tápa-	tapáaṭi	to snap, click quickly
t ^h éda-	t ^h edáaṭi	to break off

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
ʔiika-	ʔiikaʔi	to be chipped off
ʔika-	ʔikaʔi	to break something
wiipa-	wiipaʔi	to swing something once
wólaj-	wóljaʔi	to beckon once
wúća-, wúća-	wućaʔi, wućaʔi	to switch
ʔá(a)liw-	ʔá(a)lwiʔi	to miss the mark once
ʔiisal-	ʔiislaʔi	to fry quickly
ʔijaća-	ʔijaćaʔi	a bump
ʔókaj-	ʔókjaʔi	to make something fast
ʔúbu-	ʔubuʔi	to leave, let

Class I. B. 4 semelfactive verbal stems are of the canon $C\acute{V}(V)C-$ and $C\acute{V}C?$. They take the medio-passive basal suffix $-ʔe-$.

Class I. B. 4 semelfactive themes are often associated with Class I. D. 2 iterative themes, e.g.,

jébtʔeʔi "to break off and slide down, cave in"

jebéela "to come down in slides"

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
bák-	bákʂeʈi ¹	to belch
cák-	cákʂeʈi	to split open by itself
cál-	cálʂeʈi	to regain consciousness or control of oneself
čík-	číkʂeʈi	to chip off by itself
ćúd-	ćúdʂeʈi	to be torn a little
dól-	dólʂeʈi	to warp, be out of joint
háp-	hápʂeʈi	to split open
hát-	hátʂeʈi	to burst, explode
jéb-	jébʂeʈi	to break off, cave in
jép-	jépʂeʈi	to flake off
jól [?] -	jólʂeʈi	to be torn
jól-	jólʂeʈi	to sag
jóot-	tóotʂeʈi	to snap in two
jót-	jótʂeʈi	to break in two
júl-	júlʂeʈi	to rise
kól-	kólʂeʈi	to come off slowly
k ^h óob-	k ^h óobʂeʈi	to break out and leave a scar
k ^h úb-	k ^h úbʂeʈi	to be cracked

¹/bákʂeʈi/ is //bák-ʂe-Mʈi//. The other themes have a similar morphophonemic representation.

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
léet'-	léetʃeʔi	a few little pieces ¹
léʔ-	léʔʃeʔi	a little piece
léet-	léetʃeʔi	to droop
lék-	lékʃeʔi	to be loose (phlegm)
léit-	léitʃeʔi	to peel off by itself
léit-	léitʃeʔi	to come off easily
mál-	málʃeʔi	to pass out
pít-	pítʃeʔi	to become tight
pól-	pólʃeʔi	to be flooded
póp-	pópʃeʔi	a little piece of wood
pút-	pútʃeʔi	to burst open (belly)
púut-	púutʃeʔi	to burst open (several bellies)
p ^h ób-	p ^h óbʃeʔi	to break off by itself; a block of wood
póc-	pócʃeʔi	to be cut off
pój-	pójʃeʔi	to fall down
téd-	tédʃeʔi	to fall down (branch)
túk-	túkʃeʔi	to spark
túk-	túkʃeʔi	stump

¹In this instance the verbal root léet'- means "to cut off," and the medio-passive has a resultant nominal meaning.

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
túp-	túpşeti	to break in two by itself
t ^h áw-, táw-	t ^h áwşeti, táwşeti	to clot, form one lump
túp-	túpşeti	a short piece
ţík-	ţíkşeti	to be chipped
wáı-	wáışeti	to be split open
wéş-	wéşşeti	to chip off by itself
wıp-	wıpşeti	to come undone
wóot-	wóotşeti	to be bent (three or four objects)
wót-	wótşeti	to bend over
wúp-	wúpşeti	to get up
?át-	?átşeti	to split open
?éı-	?éışeti	to fly off (chip of wood)
?óc-	?ócşeti	to split open
?óı-	?óışeti	to come off

Class I. B. 5 semelfactive stems are of the canon CVC- and take the medio-passive suffix -elG.

Class I. B. 5 semelfactive themes are sometimes associated with Class I. A. 4 iterative themes, e.g.,

şítleti "to tumble over once"

şítel "to be tumbling over and over"

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
cúk-	cúkleti ¹	to choke because of swallowing the wrong way
ćib-	ćibleti	to spring (cat)
péc-	pácleti	to crackle once
póp-	pópleti	to bounce once
póʔ-	póʔleti	to bounce once
púuc-	púucleti	to roll over once
şít-	şítleti	to tumble over once
wéek-	wéekleti	to turn once (path)

421.3. Class I. C semelfactive verbal stems are of the canons CŪ(V)C- and CŪCC-, and they take the semelfactive suffix -en without a basal suffix.

Class I. C semelfactive themes are usually associated with Class I. E iterative themes, e.g.,

cétten "to step on something"

cetúuṭa "to be running over"

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
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cétt-	cétten	to step on something
jú(u)l-	jú(u)len	to burn off

¹/cúkleti/ is //cúk-elG-Mṭi//.

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
kátt-	káttén	to kill something
lál-	lálén	to touch something
mél-	mélén	to finish
múʔ-	múʔén	to quit
túj-	tújen	to rest, alight
túl-	túlen	to build
túm-	túmen	to be easy
túw-	túwen	to shoot once
wót-	wóten-	to cramp
ʔácc-	ʔáccén	to step on something
ʔók-	ʔóken	to catch something

421.4. Class I. D semelfactive verbal stems take the semelfactive suffix {-V-}. Class I. D semelfactive themes are always followed by the post-thematic causative suffix {-nuka}, which is -nka after {-V-}.

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme plus {-nuka}</u>	<u>English</u>
cicc-	ciccinka ¹	to choke over a large object
húu-	húunka	to save someone

¹/ciccinka/ is //cicc-V-nka//.

421.5. Class I. E semelfactive verbal stems are of the canon $CVC-$ and take the semelfactive suffix $-ee\dot{\tau}$ without a basal suffix.

Class I. E semelfactive themes are usually associated with Class I. G iterative themes, e.g.,

$mok\acute{e}\dot{\tau}$ "to chase out"

$m\acute{o}kih$ "to chase several people out"

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
$k\acute{a}p-$	$kap\acute{e}\dot{\tau}$	to throw away
$k\acute{e}^{\prime}-$	$ke^{\prime}\acute{e}\dot{\tau}$	to scrape dirt into a pile
$k\acute{o}^{\prime}-$	$ko^{\prime}\acute{e}\dot{\tau}$	to push something over
$m\acute{o}k-$	$mok\acute{e}\dot{\tau}$	to chase out
$\acute{t}\acute{u}l-$	$\acute{t}\acute{u}l\acute{e}\dot{\tau}$	to pour a small amount of something

421.6. Class I. F semelfactive verbal stems are of the canon $CVCVC-$ and take the semelfactive suffix $-M-$ without a basal suffix. Class I. F themes always occur before the post-thematic verbal suffix $-pa$ "intensive or directed action."

Class I. F semelfactive themes form sets with iterative themes which contain no iterative suffix but are also found immediately before the suffix $-pa$, e.g.,

$l\acute{e}tjopa$ "to lick, lap once"

letójpa "to lap"

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
létoj-	létjopa ¹	to lick once, lap once
ʔócuş-	ʔócşupa	to spray something (dog)

421.7. Class I. G semelfactive verbal stems take the semelfactive suffix -Mpo.

Class I. G. 1 semelfactive verbal stems are of the canon CVC- and take the basal suffix -ak "swift, careless action." This class contains two members.

One class I. G. 1 semelfactive theme, cólkapo "to dip something once," forms a set with the Class I. J iterative theme colákpo "to dip something several times," which contains the iterative suffix -po.

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
cól-	cólkapo ²	to dip something once
núj-	nújkapo	to stop up one thing, stuff something, hold something down

¹/létjopa/ is //létoj-M-pa//.

²/cólkapo/ is //cól-ak-Mpo//.

Class I. G. 2 semelfactive verbal stems take no basal suffix.

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
ménaw-	ménwapo ¹	to practice
nénut-	néntupo	to know, realize
?ókaj	?ókjapo ²	to develop

421.8. Class I. H semelfactive verbal stems take the semelfactive suffix -e.

Class I. H. 1 semelfactive verbal stems take no basal suffix.

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
hó(o)j-	hó(o)je	to put away
hóɬ-	hóɬe	to be loose
ták-	táke	to come up or out
tél?ew-	tél?ewe	to be flat; plate
wánuk-	wanúuke	to take something off
?úɬ-	?úɬe	to see
?úun-	?úune	to put in

¹/ménwapo/ is //ménaw-Mpo//.

²This is ?ókjapu in the speech of James Knight.

Class I. N. 2 semelfactive verbal stems take the medio-passive basal suffix--elG.

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
ćújʔ-	ćújʔele ¹	to be skinny
p ^h úmʔ-	p ^h úmʔele	to be humpbacked

421.9. Class I. I semelfactive verbal stems take the semelfactive suffix -nGe without a basal suffix.

<u>Verbal Root or Semelfactive Stem</u>	<u>Semelfactive Theme</u>	<u>English</u>
jókko-	jókkone ²	to be hanging up, to droop, to hang over
jóko-	jokónne	to be hanging

422. Class II semelfactive verbal stems are derived from their roots by gemination of the second consonant and reduction of the first vowel if it is long.

422.1. Class II. A semelfactive stems take no thematic suffixes and are always followed by the causative suffix -Spu. Their roots are of the canon CVCV(h).

Class II. A semelfactive themes are usually associated

¹/ćújʔele/ is //ćújʔ-elG-e//.

²/jókkone/ is //jókkó-nGe//.)

with Class I. A. 3 iterative themes, which are also found before -Spu, e.g.,

háccapu "to stop one thing"

hacáapu "to stop several things"

<u>Verbal</u>	<u>English</u>	<u>Semelfactive</u>	<u>English</u>
<u>Root</u>		<u>Theme plus</u>	
		<u>-Spu</u>	
cáte	to lie ¹	cáttepu	to lay
hácah	to come to a stop	háccapu ²	to stop one thing
hówo	to sit	hówoapu	to seat
tálah	to stand	tállapu	to put something up

422.2. Class II. B semelfactive verbal stems take the semelfactive suffix †-V-‡ and always occur before the causative suffix †-nuka‡, here /-nka/. Their roots are of the canon C'VC-.

<u>Verbal</u>	<u>English</u>	<u>Semelfactive</u>	<u>English</u>
<u>Root</u>		<u>Theme plus</u>	
		<u>†-nuka‡</u>	
cúap	to burn	cúppunka ³	to burn quickly
póop	to soak	póponka	to soak up

423. Class III semelfactive verbal stems are derived from their verbal roots through reduction in vowel length. They take the semelfactive suffix †-V-‡ and are followed

¹The English is given for these roots, since they all occur in isolation.

²/háccapu/ is //háccah-spu//.

³/cúppunka/ is //cúpp-V-nka//.

by the causative suffix {-nuka}, here /-nka/. Their roots are of the canon C'VVC-.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Semelfactive</u> <u>Theme plus</u> <u>{-nuka}</u>	<u>English</u>
cám	to die off	camánka ¹	to destroy
hóol	to fall (tree)	holónka	to fell a tree
kóom	to scorch	komónka	to be scorched
tíil	to not reach	tilínka	to be behind
tóon	to be ripe, done	tonónka	to be done, to cock
tóon	to get stuck by by something	tonónka	to stick people

430. Iterative Stems.

Iterative stems are derived from verbal roots by a variety of processes. These stems can be divided into classes according to their process of stem formation, and they can be further subdivided according to the thematic suffixes, if any, with which they occur.

431. Class I iterative verbal stems are identical with the verbal roots. The overt difference between Class I iterative themes and the corresponding semelfactive themes resides in the thematic suffix.

¹/camánka/ is //cám-V-nka//.

431.1. Class I.A iterative verbal stems take no iterative suffix.

Class I.A.1 iterative stems take the basal suffix -ak- "quick, careless action." They are of the canons C'V(V)C- and C'VC?-. Class I.A.1 iterative themes are often associated with Class I.B.1 semelfactive themes.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
'céec- ('céeckaṭi) ¹	to rake one pile	'céecak	to rake up several piles
'cíd- ('cídkaṭi)	to squirt once	'cídak	to squirt inter- mittently
'cít- ('cítkaṭi)	to wink once	'cítak	to wink several times
'cúm- ('cúmkaṭi)	to suck slowly	'cúmak	to suck
'cúum- ('cúumkaṭi)	to suck fast once	'cúumak	to suck fast
'héen- ('héenkaṭi)	to be alive, breathing	'héenak	to be breathing
'hén- ('hénkaṭi)	to be well; to breathe once	'hénak	to be breathing; to be kind
'jól?- ('jólkaṭi)	to rip off	'jól?ak	to tear up

¹The semelfactive theme which forms a set with the iterative theme is enclosed in parentheses beneath the verbal root. The English translates the semelfactive theme.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
k ^h íit-, kíit- (k ^h íitkaʔi, kíitkaʔi)	to rub once	k ^h íitak, kíitak	to massage
léet̚- (léet̚kaʔi)	to cut off a little piece	léet̚ak	to cut off sever- al small pieces
lémʔ- (lémkaʔi)	to light up	lémʔak	to twinkle
líid- (líidkaʔi)	to rub against	líidak	to rub against someone (said of several people)
ɬéet- (ɬéetkaʔi)	to scoop out	ɬéetak	to scrape off
ɬééʔ- (ɬééʔkaʔi)	to cough up phlegm	ɬééʔak	to cough up phlegm inter- mittently
ɬíib- (ɬíibkaʔi)	to slip something down	ɬíibak	to slip several things down
ɬíit- (ɬíitkaʔi)	to peel off, scrape off	ɬíitak	to clean off several things, scrape off
ɬít- (ɬítkaʔi)	to peel off, scrape off	ɬítak	to scrape fast
ɬúb- (ɬúbkaʔi)	to sip	//ɬúbak-ka//	to sip inter- mittently
ɬúb- (ɬúbkaʔi)	to take a small sip	ɬúbak	to suck out

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
pác- (páckaṭi)	to wring out, squeeze	pácak	to rinse things out, keep squeezing
pél?- (pélkaṭi)	to blink the eyes once	pél?ak	to keep on blinking
pít- (pítkaṭi)	to tighten	pítak	to tighten several things
p ^h íc'-		p ^h íçak ¹	to crush things fast
p ^h íic'-, píic'- (p ^h íiçkaṭi, píickaṭi)	to crush	p ^h íiçac, píicak	to crush several things
p ^h ít'-, p ^h ít- (p ^h ítkaṭi, p ^h ítkaṭi)	to press	p ^h ítak, p ^h ítak	to press things
pút- (pútkāṭi)	to kiss once	pútak	to kiss several times
şín- (şínkaṭi)	to blow one's nose	şínak	to blow one's nose continu- ously
şóon- (şóonkaṭi)	to wipe off	şóonak	to wipe things
şúut- (şúutkaṭi)	to suck, inhale	şúutak	to keep inhal- ing

¹Absence of a semelfactive theme indicates a defective set.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
tíc- (tíckaṭi)	to chatter once (ground squirrel)	tícak	to be chatter- ing
tút- (tútkṭi)	to twist once	tútak	to twist, wind
túc- (túckaṭi)	to drip once	túcak	to be dripping
t ^h éd- (t ^h édkaṭi)	to pull off, come off (branch)	t ^h édak	to pull branches off
wóoc- (wóockṭi)	to scratch once	wóocak	to scratch
wóop- (wóopkaṭi)	to scoop out	wóopak	to scoop things out
wóot̄- (wóot̄kaṭi)	to bend over	wóot̄ak	to bend several things
wót̄- (wót̄kaṭi)		wót̄ak	to bend several things
wóp- (wópkaṭi)	to nod once	wópak	to nod slowly
?ót- (?ótkaṭi)	to cut off, butcher fast	?ótak	to butcher, lance

Class I.A.2 iterative verbal stems take the basal suffix -uk "slow, careful action." They are of the canons C \acute{V} (V)C- and C \acute{V} C?-. Their themes are often associated with

Class I.B.2 semelfactive themes.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
'cáa-, 'cáa?- (cáakuṭi)	to split something open	'cáa?uk	to split several things open
'cúd- (cúdkuṭi)	to rip, tear off a piece	'cúduk	to take little pieces off
déɫ- (dékkuṭi)	to break something off, twist out of joint	déɫuk	to break off things, pull out of joint
háp- (hápkuṭi)	to split in two	hápuk	to split into several pieces
hát- (hátkuṭi)	to burst	hátuk	to break several things
hóm- (hómkuṭi)	to pull out, pluck	hómuk	to pluck, pull out several things
jé- (jépkuṭi)	to break or slice off a piece	jépuk	to break pieces off
jót- (jótkuṭi)	to pull down, pick (fruit)	jótuk	to pick (fruit)
júl- (júlkuṭi)	to lift	júluk	to lift up and down
kól- (kólkuṭi)	to take something off	kóluk	to pull several things off

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
k ^h úb- (k ^h úbkuʃi)	to break	k ^h úbuk	to break several things
lét- (létkuʃi)	to turn back (the eyelid)	létuk	to turn back people's eyelids
ʒíb- (ʒíbkuʃi)	to roll something down or up	ʒíbuk	to slide several things down
ʒíit- (ʒíitkuʃi)	to clean off slowly	ʒíituk	to scrape slowly
ʒít- (ʒítkuʃi)	to peel something off, scald off	ʒítuk	to skin several things, scrape fast
ʒót- (ʒótkuʃi)	to pinch once	ʒótuk	to pinch several times
píʒ- (píʒkuʃi)	to twist out of joint	píʒuk	to twist several things out of joint
pól- (pólkuʃi)	to flood something	póluk	to flood things one at a time
pút- (pútkuʃi)	to cut open the stomach	pútuk	to cut open sever- al stomachs
p ^h íç- (p ^h íçkuʃi)	to squeeze	p ^h íçuk	to squeeze sever- al things
p ^h ób- (p ^h óbkuʃi)	to cut in half	p ^h óbuk	to cut into short pieces

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
p'óc- (p'óckuṭi)	to cut off slowly	p'ócuk	to cut things off, prune
p'ój-, p'ójʔ- (p'ójkuṭi)	to cut off	p'ójuk, p'ójʔuk	to cut several things off or down
túp- (túpkuṭi)	to break in two	túpuk	to break in two
túʔ- (túʔkuṭi)	to spark something	túʔuk	to spark something several times
tʰéd-, téd- (tʰédkuṭi, tédkuṭi)	to pull down (a branch)	tʰéduk, téduk	to pull off (small branches)
tʰíʔ- (tʰíʔkuṭi)	to chip off	tʰíʔuk	to keep on chipping
wáɫ- (wáɫkuṭi)	to split something off	wáɫuk	to split something to crumbs
wéɫ-, wéɣ- (wéɣkuṭi)	to chip off	wéɫuk, wéɣuk	to keep on chipping off
wíp- (wípkuṭi)	to unravel a stitch	wípuk	to unravel something
wúp- (wúpkuṭi)	to raise	wúpuk	to raise several things
ʔát- (ʔátkuṭi)	to cut and spread open	ʔátuk	to spread open several things

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
ʔéɫ- (ʔéɫkuʔi)	to chop off in big slabs	ʔéɫuk	to chop off in small slabs
ʔóc- (ʔóckuʔi)	to open a shell	ʔócuk	to hull
ʔóɫ- (ʔóɫkuʔi)	to take the skin off, open in half	ʔóɫuk	to hull

Class I.A.3 iterative verbal stems take no basal suffix. Consequently, a Class I.A.3 iterative theme is identical with its verbal root, and the overt difference between it and the corresponding semelfactive theme lies in the presence of a semelfactive suffix in the latter. Class I.A.3 iterative stems are of the canons $C\acute{V}(V)CVC-$. Their themes are usually associated with Class I.B.3 semelfactive themes.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
cáawel- (cáawleʔi)	to wrap quickly	cáawel	to wrap care- fully
ʔáaka- (ʔáakaʔi)	to be split open; to rip	ʔáaka	to tear to pieces
ʔíika- (ʔíikaʔi)	to split open; to tear off	ʔíika	to slice, to rip up

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
hácah //háccah-Spu//	to come to a stop to stop something in motion	//hácah-Spu//	to stop several things in mo- tion
hówo //hówo-Spu//	to sit to seat	//hówo-Spu//	to set things out
létoj-		létoj	to keep on lick- ing
lójaw- (lójwaṭi)	to rub once with the hands	lójaw	to rub with the hands
lúpum- (lúpnuṭi)	to dive once	lúpum	to be diving
péecaj- (péecjaṭi)	to exert oneself	péecaj	to exert oneself a long time
tálah //tállah-Spu//	to stand, stand up to put something up	//tálah-Spu//	to put several things up
wíipa- (wíipaṭi)	to swing something once	wíipa	to swing some- thing, wag, wave
wólaj- (wóljaṭi)	to beckon	wólaj	to beckon, wave on
?áaliw- (?áalwiṭi)	to miss the mark	?áaliw	to miss the mark repeatedly
?íisal (?íislaṭi)	to fry quickly	?íisal	to fry several things
?óolak- (?óolkaṭi)	to dip the oars once	?óolak	to row

Class I.A.4 iterative verbal stems take the medio-passive basal suffix -elG. They are of the canon CVC- and their themes are associated with Class I.B.5 semelfactive themes.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
ćib- (ćibleṭi)	to spring (cat)	ćibel	to spring
póʔ- (póʔleṭi)	to bounce once	póʔel	to bounce several times
şít- (şítleṭi)	to tumble over once	şítel	to be tumbling over

431.2. Class I.B iterative verbal stems take the iterative suffix -Mṭa.

Class I.B.1 iterative verbal stems take no basal suffix. Their themes are associated with Class I.A.1 semelfactive themes.

<u>Verbal</u> <u>Root</u> ¹	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
cókte ¹	to come along	cókteṭa	to come (said of many people coming often)
wílik	to get hold	wíliṭa	to catch things, select

¹Verbal roots cited without hyphens are identical with semelfactive themes.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
ʔóoni	to come	ʔóoniṭa	to come in a group

Class I.B. 2 iterative verbal stems take the basal suffix -VV- "medio-passive action." They are of the canon CVC-, and their themes are associated with Class I.B.4 semelfactive themes.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
kól- (kólṭeṭi)	to come off in one piece	koṭóṭa	to fall off (several pieces)
ʔól- (ʔólṭeṭi)	to fly off (one chip)	ʔeṭéṭa	several chips

431.3. Class I.C iterative verbal stems take the iterative suffix -Ṣṭe with no basal suffix. Their themes are associated with Class I.A.1 semelfactive themes.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
cúumai	to smile once	cúummiṭe	to smile several times
tálah	to stand	taláṭe	to be standing around
ʔúuli	to pout	ʔúuliṭe	to be pouting

431.4 Class I.D iterative verbal stems take the iterative suffix -a.

Class I.D.1 iterative verbal stems take no basal suffix. They are of the canons C'VVC-, C'VC?- , and C'VCCVC- (one instance).

<u>Verbal Root</u>	<u>Iterative Theme</u>	<u>English</u>
jóot-	jóota ¹	to break into short pieces
káaw-	káawa	to cut with a knife
k'éw?il-	k'éw?ila	to be sticking out (several people's ribs)
p ^h íic'	p ^h íic'a	to crush completely
p ^h óob-	p ^h óoba	to chop up
p'óoc-, p'óoc'	p'óoca, p'óoc'a	to saw off, cut down
p'ój?-	p'ój?a	to cut things off
p'óm?-	p'óm?a	to puff, suck
túup-	túupa	to break to pieces
t ^h éed-	t ^h éeda	to break off (branches)

Class I.D.2 iterative verbal stems take the medio-passive basal suffix -VVl-. They are of the canon C'VC- and their themes are usually associated with Class I.B.4 semelfactive themes.

¹These iterative themes usually do not form sets with specific semelfactive themes.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
háp- (hápşeti)	to split open	hapáala ¹	to be cracking into little pieces
hát- (hátşeti)	to burst	hatáala	to sizzle (grease), shoot off (gun)
jéb- (jébşeti)	to break off, cave in (bank)	jebéela	to come down in slides
jép- (jépşeti)	to flake off	jepéela	to fall apart
jót- (jótşeti)	to snap in two	jotóola	to break into small pieces
k ^h úb- (k ^h úbşeti)	to be cracked	k ^h ubúula	to be cracked (several things)
lét- (létşeti)	a small piece	letéela	several little pieces
nów-		nowóola	to break into short pieces
p ^h ób-, pób- (p ^h óbşeti)	to fall off (branch)	p ^h obóola, pobóola	to split into short pieces (branch)
túp- (túpşeti)	to break in two (wire)	tupúula	to fall to pieces (wire), to break (several wires)

¹/hapáala/ is //háp-VV1-a//.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
t ^h áw-, táw- (t ^h áwʧeʧi, táwʧeʧi)	to clot, form one lump	t ^h awáala, tawáala	to be clotted, lumpy
ʧík- (ʧíkʧeʧi)	to chip off, to be chipped	ʧíkíila	to come off (several chips), to be chipped in several places
ʔát- (ʔátʧeʧi)	to come open	ʔatáala	to crack open, be cracked
ʔúʧ-		ʔuʧúula	chips

Class I.D.3 iterative verbal stems take the medio-passive basal suffix -elG.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
jók-		jokélla ¹	to be hanging (several things)
pótt-		póttela	several piles
ʔémm-, ʔémʔ- (ʔémmel, ʔémʔel)	to stick into something	ʔémmela, ʔémʔela	to stick into something (several objects)

431.5. Class I.E iterative verbal stems are of the canon CVC- and take the iterative suffix -uUʧa with no basal suffix. Class I.E iterative themes are usually

¹/jokélla/ is //jók-elG-a//.

associated with Class I.C semelfactive themes.

<u>Verbal Root</u>	<u>English</u>	<u>Iterative Theme</u>	<u>English</u>
hól	to fall (tree)	holúuṭa	to fall down (several trees)
júl- (júlen)	to burn	julúuṭa	to burn several times
lál- (lálen)	to touch	lalúuṭa	to feel around
túl- (túlen)	to build one thing	tulúuṭa	to build several things
túw- (túwen)	to shoot once; guess someone in the hand game	tuwúuṭa	to shoot several times; guess correctly (several people)
ʔók- (ʔóken)	to catch	ʔokúuṭa	to catch a lot of game

431.6. Class I.F iterative verbal stems take the iterative suffix -Mtuka.

Class I.F.1 iterative verbal stems are of the canon CVC- and take the medio-passive basal suffix -ṣe-.

<u>Verbal Root</u>	<u>English</u>	<u>Iterative Theme</u>	<u>English</u>
bák- (bákṣeṭi)	to belch once	bákṣetuka ¹	to belch (one person at a time)
táp- (tápáaṭi)	to snap quickly	tápṣetuka	to snap, click

¹/bákṣetuka/ is //bák-ṣe-Mtuka//.

Class I.F.2 iterative verbal stems take no basal suffix.

<u>Verbal Root or Semelfactive Theme</u>	<u>English</u>	<u>Iterative Theme</u>	<u>English</u>
ʔúlip	to shine	ʔúlpituka ¹	to shine forth

431.7. Class I.G iterative verbal stems are of the canon CVC- and take the iterative suffix -ih with no basal suffix. Class I.G iterative themes are associated with Class I.E semelfactive themes.

<u>Verbal Root</u>	<u>English</u>	<u>Iterative Theme</u>	<u>English</u>
ké?- (keʔéeti)	to scrape dirt	kéʔih	to push several piles to one side, to push one pile a little at a time
kó?- (koʔéeti)	to push, push up	kóʔih	to push up several things
mók'- (mokeeti)	to chase out	mókih	to chase several people out
ʔúl- (ʔuleeti)	to pour out	ʔúlih	to pour (several people)
wít-, wét- (witeeti, weteeti)	to open	wítih, wétih	to open several things

¹/ʔúlpituka/ is //ʔúlip-Mtuka//.

431.8. Class I.H iterative verbal stems take the iterative suffix -*ɕeɕa* with no basal suffix.

<u>Verbal Root</u>	<u>Iterative Theme</u>	<u>English</u>
móleh-	moléhɕeɕa	to tip over

431.9. Class I.I iterative stems are of the canon C'VCV(C)- and C'VC- (one instance). They take an iterative suffix which consists of the weak form of the verbal root. They take no basal suffix.

<u>Verbal Root</u>	<u>English</u>	<u>Iterative Theme</u>	<u>English</u>
ʕúm-		ʕúmak	to suck
(ʕúmkaɕi)	to suck slowly		
lójo-		lojóolojo	to rub something back and forth with the hands
lúku	to borrow	lukúuluku	to go around borrowing
ʕáwaw	to gulp	ʕawáwʕawaw	to slurp slowly
wéle	to help	weléewe	to take care of someone
wólah	to be hollow, a hollow	woláhwolah	to have several hollows

431.10. Class I.J iterative verbal stems are of the canon C'VC-. They take the iterative suffix -*po* and the basal suffix -*ak* "swift, careless action." Class I.J iterative themes are associated with Class I.G.1 semelfactive themes.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
cól-		colákpo	to dip something several times
(cólkapo)	to dip once		

431.11. Class I.K iterative verbal stems take the iterative suffix -tuma and the intransitive basal suffix -ʔi. Their roots are of the canon C^hV(V)C-. Class I.K iterative verbal themes often form sets with Class I.A.3 semelfactive themes.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
jóʔ-		jóʔʔituma	to point; hand over several things
(jóʔʔi)	to point; hand over		
p ^h úm-		p ^h úmʔituma	to arch the back fast and repeatedly
(p ^h úmʔi)	to arch the back (cat)		
p ^h úum-		p ^h úumʔituma	to arch the back slowly
(p ^h úumʔi)	to be humped (back)		
tól-		tólʔituma	to cock the ears repeatedly
(tólʔi)	to cock the ears		
tóol-		tóolʔituma	to cock the ears repeatedly
(tóolʔi)	to have the ears cocked		

431.12. Class I.L iterative stems take the iterative suffix -uʔe with no basal suffix. Their roots are of the canon C^hVVC-.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
látaj	to crawl slowly	latáajuṭe	to crawl back and forth, go around
lónak-		lonáakuṭe	to growl, snore
wícaj	to walk	wicáajuṭe	to be walking, going around
ʔólak-		ʔoláakuṭe	to growl (bears)

432. Class II iterative verbal stems are derived from verbal roots by lengthening of the first vowel and reduction in the length of the second consonant if it is geminate.

432.1. Class II.A iterative verbal stems take no iterative suffix.

Class II.A.1 iterative verbal stems take no basal suffix. Their roots are of the canon CVCV(C)-, and their themes are usually associated with Class I.A semelfactive themes.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
cákal	to sift in one shake	cáakal	to sift in batches
cánih	to tie, string (a bow)	cánih	to tie
cémaj	to tell, order, send for	cémaj	to send several people for some- thing

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
cúnih	to move some- thing	cúunih	to move several things
ćújal	to be cramped	ćúujal	to be cramped (several people)
háwuh	to buy	háawuh	to buy, one at a time
hénuh	to ask	héenuh	to ask several things
hétup	to cover someone	héeťup	to cover several people
héwa	to spread out, hang up	héewa	to spread out several things
hójot, hojut	to start	hóojot, hóojut	to start, one by one
jókap	to hang someone	jóokap	to hang several people
káťi	to string (one bead)	káaťi	to string (beads)
kóle	to wear	kóole	to wear
kóna	to bake in the ashes	kóona	to bake several things
kóři	to play the hand game	kóoři	to play the hand game and change off
kúna	to throw up once	kúuna	to puke
kúnuh	to defecate	kúunuh	to defecate repeat- edly, have diarrhea
kica- (kicáaťi)	to splash, scatter once	//kíica-paťi//	to fall all around

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
lákát	to call, name, baptize	láakat	to baptize people one at a time
lánup	to wade	lánup	to wade (several people)
lójaw- (lójwaṭi)	to rub once with the hands	lójaw	to be rubbing the hands
lókól	to go for man- zanita	lókól	to go repeatedly for manzanita
málik	to put out a light	máalik	to put out lights (said of several people)
mélil	to measure	méclil	to measure (said of several people)
ménaw	to try, try out	méenaw	to try out
métak	to remember	méetak	to remember several things
móla	to pile wood	móola	to pile wood here and there
mónton	to stack	móonton	to pile into small piles
mówen	to trap	móowen	to trap repeatedly
múluj	to fall down	múuluj	to tumble repeatedly
múlut	to eat break- fast	múulut	to eat breakfast, one person at a time
nówwu- //hówwu-kU//	to be broken	//hóowu-kU//	to break off
póloj	to float down	póoloj	to float (several objects)

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
púcca-, púcca- //púcca-ṭi, púcca-ṭi//	to blow fast	ḡúuca, púuca //púuca-ṭi//	to blow (wind) to blow through
//ṣéttu-ṭi//	to duck, dodge	//ṣéetu-ṭi//	to dodge several times
ṣika	to fill	ṣiika	to fill several things
ṣiṭak	to drill	ṣiṭak	to drill several things
ṣóla	to hide some- thing	ṣóola	to hide things one at a time
ṣúcuk	to leak (house)	ṣúucuk	to leak in several places (house)
ṣúlih	to eed, peel off	ṣúulih	to shed, be peeled off
télup	to roll some- thing	téelup	to roll several things
téwe	to weave (a basket)	téewe	to weave (several baskets)
ṭúlip	to shine, glisten	ṭúulip	to shine, glisten
wákut	to rob	wáakut	to rob several people
wénum	to choose	wéenum	to choose several things
wóle- //wóle-ṭi//	to go and leach	wóole //wóole-ṭi//	to leach, soak to leach (several people)
wótal	to bend things over fast	wóotal	to bend things over slowly
?áliw	to miss the mark, guess wrong, skip	?áaliw	to miss the mark repeatedly

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
ʔálu	to hear, feel, taste	ʔáalu	to keep on tasting things
ʔísal	to fry	ʔíisal	to fry several things
ʔítaj	to roast	ʔíitaj	to roast several things
ʔócoh	to urinate once	ʔócoch	to urinate several times
ʔókaj	to make	ʔóokag	to keep on making something
ʔónah	to hunt, fish	ʔóonah	to be hunting
ʔúkuc	to dream once	ʔúukuc	to dream
ʔúşşu	to drink	ʔúuşşu	to drink all the time

Class II.A.2 iterative verbal stems take the basal suffix -uk "slow, deliberate action." There is one verbal stem in this class, and its root is of the canon CVC-. Its theme is associated with a Class I.B.2 semelfactive theme.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
ʔád- (ʔádkuʔi)	to scratch (barbed wire)	ʔáaduk	to scratch in several places

Class II.A.3 iterative verbal stems take the basal suffix -ak "quick, careless action." Their roots are of

the canon CVC-, and their themes are associated with Class I.B.1 semelfactive themes.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
pác-		páacak	to wring out several things
(páckaṭi)	to wring out one thing		
ṣút-		ṣútak	to chop several things off
(ṣútkṭi)	to chop off		

432.2. Class II.B iterative verbal stems take the iterative suffix -Mṭa with no basal suffix.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
cókte	to come along	cóokteṭa	to come by one at a time
táli	to wake up	táeliṭa	to wake up several times
wánuk-		wáankuṭa	to pick out several things
(wanúuke)	to take something off		

432.3. Class II.C iterative verbal stems take the iterative suffix -uUṭa with no basal suffix. There are two stems in this class, both of them derived from roots of the canon CVC-.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
ták-		táakuṭa	to come out in a bunch
(táke)	to come out, up		

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
túj-		tújuṭa	to alight, one group
(tújen)	to rest		at a time

432.4. Class II.D iterative verbal stems take the iterative suffix -a with no basal suffix.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
now-		nóowa	to break several things

433. Class III iterative verbal stems are derived from verbal roots by reduction to the canon $C_1\acute{V}C_2-$.

433.1. Class III.A iterative verbal stems occur with the iterative suffix -uṭa and with no basal suffix. Their roots are of the canons $C\acute{V}VC-$, $C\acute{V}CC-$, and $C\acute{V}CCV$ (one instance), and their themes are usually associated with Class I.A.1 semelfactive themes.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
cáam	to fade away, wear out	camúṭa	to be worn out
cétt-		cetúta	to run over several things
(cétten)	to step on, run over		
cúup	to burn, get burned	cupúṭa	to be all burned

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
hóol	to fall down (tree)	holúuṭa	to fall down (several trees)
jéek	to be spoiled (potatoes)	jekúuṭa	to get spoiled, one by one
jóok	to die	jokúuṭa	to be dying (several people)
káaj	to dry up	kajúuṭa	to dry up, one at a time
kátt- (kátten)	to kill	katúuṭa	to slaughter
kéew	to run away, dodge	kewúuṭa	to run away several times
kóom	to scorch, get scorched	komúuṭa	to scorch (said of several people)
kúuh	to be rotten (meat)	kuhúuṭa	to be rotten (several things)
máak	to be sick, faint	makúuṭa	to get sick on and off
méej	to be tired	mejúuṭa	to get tired (several people)
níik	to settle (mud)	nikúuṭa	to be settling in different places
núum	to drown	numúuṭa	to drown (several people)
pálla	to fill, be full	palúuṭa	to be all full (several barrels)
táam	to heal	tamúuṭa	to heal (several sores)
tíil	to not reach	tilúuṭa	to not reach (several things)

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
tóon	to be cooked, doen, ripe	tonúuṭa	to get ripe, one by one
tóon	to get stuck by something	tonúuṭa	to get stuck by several things
ʔáah	to be sated	ʔahúuṭa	to get sated (several people)
ʔácc- (ʔáccen)	to step on one thing	ʔacúuṭa	to step on several things
ʔúuj	to be withered	ʔujúuṭa	to get withered (several things)

435.2. Class III.B iterative verbal stems take the iterative suffix -ṭeṭa without a basal suffix. Their roots are of the canons C'V(V)CV- and C'VVC-.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
híina	to give, share	hínṭeṭa	to give things away
hóoj- (hóoje)	to put away	hójṭeṭa	to put several things away
tóla	to throw	tólṭeṭa	to throw, chip in
wóma	to fool, cheat	wómṭeṭa	to be fooling, cheat several times
ʔóoni	to come	ʔónṭeṭa	to come one by one
ʔúun- (ʔúune)	to put in	ʔúnṭeṭa	to put several things in
wája	to give, share	wájṭeṭa	to give things one at a time, share things with several people

433.3. Class III.C iterative verbal stems take the iterative suffix *-ṭiṭa* without a basal suffix. Their roots are of the canons *CVCV-* and *CVCVC-* (one instance).

<u>Verbal Root</u>	<u>English</u>	<u>Iterative Theme</u>	<u>English</u>
<i>hija</i>	to send (a person or a thing)	<i>hijṭiṭa</i>	to send people one at a time, keep sending people
<i>hija</i>	to win, beat someone	<i>hijṭiṭa</i>	to win all the time, beat people several times
<i>húunih</i>	to show	<i>húnṭiṭa</i>	to show several things
<i>ʔúbu-</i> (<i>ʔubúṭi</i>)	to leave, leave something	<i>ʔúbṭiṭa</i>	to leave things, one at a time; or to leave a place, one person at a time

433.4. Class III.D iterative stems take the iterative suffix *-ih*. There is one stem in this class, and it is derived from a verbal root whose canon is *CVCV-*.

<u>Verbal Root</u>	<u>English</u>	<u>Iterative Theme</u>	<u>English</u>
<i>móle-</i> (<i>móléṭi</i>)	to pour	<i>mólih</i>	to pour into several cans

433.5. Class III.E iterative verbal stems take no iterative suffix, but they take the basal suffix *-ak* "quick, careless action." Their roots are of the canon *CVC-*, and their themes are associated with Class I.B.1

semelfactive themes.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
cóol-		cólak	to be dipping
(cóolkaṭi)	to soak, dip once		
ṭéeʔ-		ṭéʔak	to cough up and spit out
(ṭéeʔkaṭi)	to cough phlegm up		

433.6. Class III.F iterative verbal stems take the iterative suffix -a and the medio-passive basal suffix -elG.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
wéek-		wékélla ¹	to have several turns
(wéekleṭi)	to turn once (path)		

433.7. Class III.G iterative stems take the iterative suffix -VV-, and their themes are always followed by the causative suffix {-nukaṭ}, here -nuka.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
cúp	to burn	cupúnuka ²	to burn things one by one
(cúppunka)	to burn quickly		

¹/wékélla/ is //wék-elG-a//.

²/cupúnuka/ is //cúp-VV-nuka//.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme plus</u>	
		<u>[-nuka]</u>	
hóol	to fall down (tree)	holóonuka	to fell several trees
(holónka)	to fell a tree		
kóom	to scorch	komóonuka	to scorch several things
(komónka)	to be scorched, burn someone		

434. Class IV iterative stems are derived from verbal roots by gemination of C_2 and reduction of V_1 if it is long.

434.1. Class IV.A iterative verbal stems take no iterative suffix.

Class IV.A.1 iterative verbal stems take no basal suffix. Their verbal roots are of the canons $C\acute{V}(V)CV-$, $C\acute{V}CVC$, and $C\acute{V}VCVCV$ (one instance).

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
cóla	to soak	cólla	to wash
báp ^h a-		bápp ^h a	to club repeatedly
(bap ^h áaʔi)	to club		
cája-		cájja	to shake the head repeatedly
(cajáaʔi)	to shake the head		
cápa-		//cáppa-Spu//	to beg for several things
//cápa-Spu//	to beg		
cáte	to lie (road)	cátte	to lie (several roads)

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
céʔa- (ceʔáaʔi)	to knock down	céʔʔa	to knock things down
cópa- (copáaʔi)	to break up, smash up	cóppa	to smash several things
cówa- //cówa-ʔi//	to fear	//cówwa-ʔi//	to be afraid (said of several people)
ćíika- (ćíikaʔi)	to split open	ćíkka	to split into small pieces
dápa- (dapáaʔi)	to slam	dáppa	to slam
hácah	to be standing (animal, thing)	háccah	to stand, be stand- ing
híwa- (hiwáaʔi)	to shake or pull once	híwwa	to shake, pump, rock
hóloh	to lean	hólloh	to be leaning against something
húca- (hucáaʔi)	to cough	húcca	to cough repeatedly
jécs- (jecáaʔi)	to crush, mash	jécca	to crush fast, mash with a rock
jéda- (jedáaʔi)	to break off, chip	jédda	to chip off several things
kápa- (kapáaʔi)	to chip once	káppa	to chip (flint)
kéla- (keláaʔi)	to chip off bark	kélla	to chip off bark all around

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
kóla-		kól̥la	to pull or knock things off
(kołáaṭi)	to pull or knock something off		
kóta-		kótta	to keep on chopping
(kotáaṭi)	to chop once		
kúṣa-		kúṣṣa	to glance off several things
(kuṣáaṭi)	to glance off		
k ^h ába-		k ^h ábba-	to hit the head repeatedly
(k ^h abáaṭi)	to hit the head		
k ^h óca-, kóca-		k ^h ócca,	to pierce several things
(k ^h ocáaṭi,	to poke, pierce	kócca	
kočáaṭi)			
k ^h úba-, kúba-		k ^h úbba,	to smash several things
(k ^h ubáaṭi,	to smash	kúbba	
kubáaṭi)			
kíca-		kícca	to be splashing; to scatter around
(kicáaṭi)	to splash; scatter once		
kóma-		kómma	to be stirring, splashing
(komáaṭi)	to stir once, splash once		
láca-		lácca	to knock several people down
(lacáaṭi)	to knock someone down		
lída-		lídda	to rub against, iron
(lidáaṭi)	to rub once against something		
lúpa-		lúppa	to be sneezing
(lupáaṭi)	to sneeze once		

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>'heme</u>	<u>English</u>
líku- //líku-ʦi//	to pass	//líkku-ʦi//	to pass (said of several people)
lílaw- //lílaw-ne//	to tell	//líllaw-ne//	to tell what one knows
lílu- //lílu-ʦi//	to fly	//líllu-ʦi//	to fly, one by one
lója- (lojʃaʦi)	to rub once, wash	lójja	to rub, wash
łéka- (łekáaʦi)	to cough up phlegm	łékka	to keep on coughing up phlegm
łéta- (łetáaʦi)	to throw	łétta	to throw several things
łíka- (łíkáaʦi)	to move back and forth once	łíkka	to slicken
łóda- (łodáaʦi)	to pick at one's nose	łódda	to pick at one's nose
mékuh	to lie down, face down	mékkuh	to lie down
mína-, ména- //mína-ʦi, ména-ʦi//	to hit a target	//mínna-ʦi//	to hit a target (several people)
múla	to hit once, strike	múlla	to spank, whip

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Themes</u>	<u>English</u>
nóca	to cry several times ¹	nócca	to be crying
páka- //páka-Ŧi//	to pelt once	pákka //pákka-Ŧi//	to hit repeatedly to pelt repeatedly
pína- (pináaŦi)	to crack (an acorn)	pínna	to crack several things
p ^h íca- (p ^h icáaŦi)	to crush	p ^h icca	to crush several things
p ^h óba-, póbba- (p ^h obáaŦi, póbbaŦi)	to chop off, cut off	p ^h óbba, póbba	to chop up
p ^h úku- //p ^h úku-Ŧi//	to rise (bread)	//p ^h úkku-Ŧi//	to keep rising
póca-, póbca- (pócaŦi, póbcaŦi)	to chop off, cut off	pócca, póbca	to chop off, chop down
póma- (pomáaŦi)	to puff once	pómma	to puff, suck
şáawuŦe	to have, get	şáawuŦe	to have, keep
şéna- (şenáaŦi)	to cough some- thing out	şénna	to keep on trying to cough something out
şíka	to fill	şíkka	to put several things in

¹It is uncertain which of these is the semelfactive theme.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
şıpa- (şıpáaṭi)	to punch with the elbow; to jerk someone's hand	şıppa	to punch with the elbow; to jerk someone's hand repeatedly
şıta- (şıtáaṭi)	to smear	şıtta	to smear several things
şóca- (şocáaṭi)	to mash once	şócca	to mash, pound up, grind
şóma- (şomáaṭi)	to punch	//şómma-Mmṭi//	to box
tákah	to lie on one's back	tákkah	to lie on their backs (several people)
tálah	to stand, to stand up	tállah	to be standing (sev- eral objects); to stand up, one by one
téka- (tekáaṭi)	to take a slab off	tékka	to knock slabs off
ténu- //ténu-ṭi//	to raise fur or feathers	//ténnu-ṭi//	to raise fur or feathers repeatedly
tíku- //tíku-ṭi//	to jump	//tíkku-ṭi//	to be jumping
tíwa- (tiwáaṭi)	to scatter by hitting once	tíwwa	to scatter

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
túmu-		túmmu	to haul wood nearby
//túmu-ʦi//	to go after wood	//túmmu-ʦi//	to haul wood from a distance
túna-		túnna	to kick repeatedly
(tunáaʦi)	to kick once with the heel		
t ^h óká-		t ^h ókka	to bump several times
(t ^h okáaʦi)	to bump		
táka-		tákka	to slap several times
(takáaʦi)	to slap		
t ^h éda-		t ^h édda	to break off quickly (several small twigs)
(t ^h edáaʦi)	to break off (a small branch)		
tíka-		tíkka	to break things up
(tíkkaʦi)	to break		
wúčá-		wúčča	to switch someone several times
(wučáaʦi)	to switch someone once		

Class IV.A.2 iterative verbal stems take the basal suffix -ak "swift, careless action." Their roots are of the canon CVC-.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
póc-		póccak	to trim slowly
(póckaʦi)	to cut off fast		

434.2. Class IV.B iterative verbal stems take the iterative suffix -a with no basal suffix. Their roots are of the canon CV(V)C-.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
čák- (čákṣeṽi)	to split open	//čákka-paṭi//	to be ripped in several places
čúd- (čúdkaṭi)	to rip off a piece	//čúdda-paṭi//	to have several small rips
háp- (hápkāṭi)	to be split	háppa	to split into several pieces
hém- (hémkaṭi)	to dig out	hémma	to be digging
jéeb- (jéebkaṭi)	to slide down, cave in	jébba	to break off a bank
jóot- (jóotkaṭi)	to break a rope-like object	jótta	to pull or cut a rope-like object to pieces
núj- (nújkaṭi)	to stop up	nújje	to stop up (a large hole)
ṣít-		ṣítta	to sprinkle by hand
ṣól- (ṣólkaṭi)	to sharpen	ṣólla	to sharpen, grind
wáṭ- (wáṭkaṭi)	to split open by itself	wáṭṭa	to split something to pieces
wip-		wíppe	to unravel by itself

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
wóc-		wócca	to scrape clean, shave, plane
(wóckaṭi)	to scrape once, scratch once		
ʔát-		ʔátta	to cut open, oper- ate
ʔóḷ-		ʔóḷḷ	to fall down, let down (several things)
(ʔoḷkaṭi)	to fall down, let down		

434.3. Class IV.C iterative verbal stems take the iterative suffix -Sṭe with no basal suffix.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
hówo	to sit, sit down	hówoṭe	to be sitting around, sit down every day

434.4. Class IV.D iterative verbal stems take the iterative suffix -uUṭa with no basal suffix.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
lál-		lálluṭa	to touch, feel around
(lálén)	to touch		

434.5. Class IV.E iterative verbal stems take an iterative suffix which is the weak form of the verbal root. They take no basal suffix.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
húna	to be solitary	húnnahuna	one by one; dif- ferent kinds

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
núma	to be different	númmanuma	paraphernalia

434.6. Class IV.F iterative verbal stems take the iterative suffix -u with no basal suffix. The resultant iterative themes are always followed by the passive suffix -kU.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
hát-		//hát-t-u-kU// ¹	to explode
(hátkuṭi)	to burst		
túp-		//túp-p-u-kU//	to be broken off
(túpkuṭi)	to break in two		

435. Class V iterative verbal stems are derived from verbal roots by gemination of the second consonant and loss of final -V(C). Their roots are of the canon CVCV(C)-. They take no basal suffix.

435.1. Class V.A iterative verbal stems take the iterative suffix -u.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
lávut-		lávwu	to sweep
(lávutuṭi)	to sweep once		
málik	to put out a light	mállu	to put out several lights

¹//hát-t-u-kU// is /hátkuṭi/.

435.2. Class V.B iterative verbal stems take the iterative suffix -uUṭa.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
máṭa	to bite	máṭṭuṭa	to bite repeatedly

436. Class VI iterative stems are derived from verbal roots through reduction of the first vowel. They take the iterative suffix -uṭe with no basal suffix. Their roots are of the canon C[́]V[́]CVC-.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
háajap	to shout	hajáapuṭe	to shout several times
húujak	to whistle with the mouth	hajáakuṭe	to be whistling
jáalak	to squeal, yell	jaláakuṭe	to cry loud and fast
láataj- (láatjaṭi)	to crawl quickly	latáajuṭe	to crawl back and forth, go around

437. Class VII iterative verbal stems are formed by lengthening of the vowel in the first syllable and loss of final -V(C). They take no basal suffix. Their roots are of the canon C[́]V[́]CV(C)-, and their themes are associated with Class I.A.1 semelfactive themes.

437.1. Class VII.A iterative verbal stems take the iterative suffix -ṭeṭa.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
pūna	to dip (water)	púunṭeṭa	to dip a lot of water
tóla	to throw	tóolṭeṭa	to throw several things out
wóma	to fool someone	wóomṭeṭa	to fool someone several times

437.2. Class VII.B iterative verbal stems take the iterative suffix -uUṭa.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
ʔúkan	to enter	ʔúukuṭa	to go in, one at a time

438. Class VIII iterative verbal stems are derived from verbal roots by loss of gemination of the second consonant. Their roots are of the canon C'VCCV- and their themes always occur before the causative suffix -Spu or the directed action suffix -pa. Class VIII iterative themes form sets with Class I.A.1 semelfactive themes which also precede -Spu or -pa.

<u>Verbal</u>	<u>English</u>	<u>Iterative</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
jókku-		//jókku-Spu//	to hang several things up
//jókku-Spu//	to hang something up		
júkku	to get a hold of something	//júku-Spu//	to be twitching, jerking
//júkku-Spu//	to twitch, jerk		

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
mókku- //mókku-pa//	to pounce on something	//móku-pa//	to pounce on several things
móllu- //móllu-pa//	to cover one thing	//mólu-pa//	to cover several things
póttu- //póttu-Spu//	to pile something up	//pótu-Spu//	to put something into several piles
pémmu- //pémmu-Spu//	to stick something (gum) somewhere	//pému-Spu//	to stick several things onto something
tákku- //tákku-Spu//	to patch once	//táku-Spu//	to patch several things
wékka- //wékka-Spu//	to place something across	//wéka-Spu//	to put several things across
ʔéccu- //ʔéccu-Spu//	to turn something over on a spit	//ʔéccu-Spu//	to turn several things over on a spit

439. Each of the remaining iterative verbal stems falls into a separate class.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
hówo	to sit, sit down	hówoh	to sit, sit down (several people)
húna	to warm	húnhun	to be warm

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Iterative</u> <u>Theme</u>	<u>English</u>
kúčči, kúcci	to be small	kučúuj, kučúuj, kúcuuj- kucúuj	to be small (several people)
pótt-		póttola	to come out in piles
pút- (pútşeti)	to burst open (bloated animal)	púutşeti	to burst open (sev- eral bloated animals)
tútal- (tútlaşi)	to roll up	tú(u)tul	to roll out, be rolled up
tél?ew- (tél?ewe)	to be flat; plate	téléwtelew	to be flat; plates
wéeta	to go	wéwşıta	to go all the time, one person at a time
?áaşaw	to talk	?á(a)şwani	to be talking
?eméene	to be good	?eménne-	to be good (several things)

44C. Repetitive Stems.

A repetitive verbal stem always takes the repetitive suffix -Vşi and usually takes a basal suffix, e.g.,

cájcajaşi "to shake the head uncontrollably"

(said of an older person) from the verbal root cája- plus the basal suffix -C₁VC₂
"slow action"

Repetitive stems can be divided into classes by their process of derivation from the verbal root, and they can be further subdivided according to the basal suffix, if any, which occurs between the stem and the repetitive suffix.

441. Class I repetitive stems are formed from verbal roots by the reduction of these roots, if necessary, to the form C_1VC_2- .

441.1. Class I.A repetitive verbal stems are derived from roots of the canons $CVC-$, $CVC^?-$, $CVCV(C)-$, and $CVCCV-$ (one instance). These stems take the basal suffix $-C_1VC_2-$, which means "slow action" when a Class I.A repetitive stem contrasts with a Class I.B repetitive stem, e.g.,

ɫáɫápaʃi "to flap slowly"

ɫapáapaʃi "to flap fast"

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Repetitive</u> <u>Theme</u>	<u>English</u>
bók-		bíkbokoʃi ¹	to boil, bubble
bót-		bótbotoʃi	to foam and pop
búh-		búhbuhuʃi	to puff (smoke)

¹/bókbokoʃi/ is //bók- C_1VC_2 -Vʃi//.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Repetitive</u> <u>Theme</u>	<u>English</u>
cája- (cajáaṭi)	to shake the head once ¹	cájcajaṣi	to be shaking the head uncontrollably
ćó?-		ćó'ćo'oṣi	to whine
ćúm- (ćúmkaṭi)	to suck slowly	ćúmćumuṣi	to be sucking
háka-		hákhakaṣi	to pant
hém- (hémkaṭi)	to dig out one thing	hémhemeṣi	to dig up around, dig things out
húk-		húkhukuṣi	to sniff around
kóma- (komáaṭi)	to stir once; splash once	kóm'komoṣi	to churn; splash around
lém?- (lémkaṭi)	to light up once	lémlemeṣi	to blink slowly (light), twinkle
łáp-		łápłapaṣi	to flap slowly
łáw- (łáwaw)	to gulp	łáw'ławaṣi	to slurp fast
máṣ-		máṣmaṣaṣi	to be biting at some- thing
pél?- (pélkaṭi)	to blink one's eyes once	pélpeleṣi	to keep on blinking one's eyes

¹Semelfactive themes are listed in parentheses under the verbal roots. Where no semelfactive appears, the set is defective.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Repetitive</u> <u>Theme</u>	<u>English</u>
púucli ¹	to be ticklish	púcpucuşi	to be itching
tóp-		tóptopoşi	to be knocking on something
típ-		típtipişi	to flop like a fish out of water
ták-		táktağaşi	to be clicking (typewriter keys)
tík- (tíkşeti)	to click once	tíktikişi	to tick (clock)
wóp- (wópkaşi)	to nod once	wópwopoşi	to be nodding uncontrollably, to nod fast
ʔδʔ-		ʔδʔoʔoşi	to be stuttering
ʔút-, ʔuť-		ʔútʔutuşi, ʔúťʔuťuşi	to sob

441.2. Class I.B repetitive verbal stems are derived from roots of the canons CVC(V)-, CVCʔ-, CVCVC- (one instance), CVCVCV- (one instance), and CVCVV- (one instance). These stems take the basal suffix -VVC₂-, which means "quick action" when a Class I.B repetitive stem contrasts with a Class I.A repetitive stem.

¹Verbal roots which are identical with their semelfactive themes will be cited without a following hyphen.

<u>Verbal</u>	<u>English</u>	<u>Repetitive</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
cája-		cacáajaşi ¹	to shake the head quickly and repeatedly
(cajáaşi)	to shake the head once		
cid-		cididişi	to rattle (rattlesnake)
cít-		cítitişi	to squeak (mouse), to rattle (rattlesnake)
cób-		cóboboşi	to be leaking, to run (water)
dól-		dolóloşi	to gargle
hén-		henéneşi	to be nervous ²
(hónkaşi)	to breathe once		
hól-		holóloşi	to make the sound of bees in a swarm
hól-		holóloşi	to make a scurrying noise (rat)
húm-		humúumuşi	to murmur
hún-		hunúunuşi	to buzz (bee)
kóm-		kómomoşi	to be making
(komáaşi)	to stir once; splash once		
locok	to do	locóokokoşi	to be moving around straightening things up

¹/cajáajaşi/ is //cáj-VVC₂-Vşi//.

²This set is questionable on semantic grounds.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Repetitive</u> <u>Theme</u>	<u>English</u>
lémʔ- (lémkaʔi)	to light up once	lemʔéemeʂi ¹	to go on and off fast (light), twinkle
ɬáp-		ɬapáapaʂi	to flap fast
pélʔ- (pélkaʔi)	to blink one's eyes once	pelʔéeleʂi ²	to be blinking one's eyes fast
ʂékjo	to whisper	ʂekéekeʂi	to whisper
ʂít-		ʂitíitiʂi	to be sprinkling (rain)
ʂoláa	to flow	ʂolóoloʂi	to roar (river)
ʂún-		ʂunúunuʂi	sound of someone hidden whispering
túk- (túkʂeʔi)	to spark	tukúukuʂi	to blaze up
túl-		tulúuluʂi	to be clear
túna- (tunáaʔi)	to kick once	tunúunuʂi	to kick something around
wíle	to fan hot air	wilfiliʂi	to breeze (wind)
ʔút-, ʔúʔ-		ʔutúutuʂi, ʔuʔúuʔuʂi	to sob fast

441.3. Class I.C repetitive stems take the basal suffix -VVtVt-. Their roots are of the canons C'V(V)C-

¹This form has the alternate lemʔéemeʂi.

²This form has the alternate pelʔéeleʂi.

and CVCV-.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Repetitive</u> <u>Theme</u>	<u>English</u>
cúul-		culúututuşi ¹	to slide and fall down, to slide down something
(cúulkaşi)	to slide and fall down		
čák-		čakáatataşi	to be dripping (rain)
číd		čidíititişi	to gush forth, be squirting
(čídkaşi)	to squirt once		
kíca-		kicíititişi	to be sprinkling (water), to gush; to sow
(kicáaşi)	to splash; to scatter once		

441.4. Class I.D repetitive verbal stems take the basal suffix -VVl-.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Repetitive</u> <u>Theme</u>	<u>English</u>
deʔílla	to have a turn	deʔéeleşi ²	to be crooked
jutul-		jutulúuluşi ³	to be shaky
póp-		popóoloşi	to be rolling (said of a ball)
(pópłeşi)	to bounce once		
wíp-		wipíilişi	to unroll (thread from a spool)
(wípkuşi)	to unravel one stitch, unwind thread once around from a spool		

¹/culúututuşi/ is //cúl-VVtVt-Vşi//.

²/deʔéeleşi/ is //déʔ-VVl-Vşi//.

³This theme is derived from the weak root jutul-.

441.5. Class I.E repetitive verbal stems take the basal suffix $-VC_2C_2-$.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Repetitive</u> <u>Theme</u>	<u>English</u>
lúmu	hole	lumúmmuşi ¹	to have holes
ʒukúnni	to spot	ʒukúkkuşi ²	to be spotted all over

441.6. Each of the remaining repetitive verbal stems takes a different basal suffix.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Repetitive</u> <u>Theme</u>	<u>English</u>
pác- (pácel)	to crackle once; talk loud	pacáacaşaşi ³	to crackle, be talking loud
şón- (şónkaşi)	to wipe some- thing off	şónáakakaşi ⁴	to wipe something off quickly
túulaj- (túuljaşi)	to go around something once	tulúujuşi ⁵	to circle something repeatedly

¹/lumúmmuşi/ is //lúm- VC_2C_2 -Vşi//.

²This form has the variant ʒupúkkuşi.

³/pacáacaşaşi/ is //pác- $VVC_2V\check{t}$ -Vşi//.

⁴/şónáakakaşi/ is //şón-aakak-Vşi//. Historically, this theme was probably derived from the iterative theme şónak "to wipe."

⁵/tulúujuşi/ is //túl- VVj -Vşi//. Historically, this theme was based on túulaj- with vowel harmony.

442. Class II repetitive stems are formed from verbal roots by the reduction of these roots, if necessary, to the form $C_1\acute{V}_1C_2V_2C_3-$.

442.1. Class II.A repetitive verbal stems take no basal suffix. Their roots are of the canons $C\acute{V}(V)CVC-$ and $C\acute{V}CCVCV$ (one instance).

<u>Verbal Root</u>	<u>English</u>	<u>Repetitive Theme</u>	<u>English</u>
cówaj-		cowáajajasi ¹	to move around
	//cówaj-nuka//		to move
čákal	to be cracked	čakáalaši	to be cracking apart
hópol-		hopóološi	to roll like a watermelon
lálaj	to feel around	laláajajasi	to work around, to move things around
lílilaw	to tell	liláawaši	to tell what one knows
péeloj	to fix	pelóojoši	to fix things up
póloj	to float down (a creek)	polóojoši	to float slowly down
p ^h úkkuju, púkkuju, púkkuju	to have a pot-belly	p ^h ukúujuši, pukúujuši, púkúujuši	to be running around with a potbelly
túupil- (túupliṭi)	to turn around once	tupíiliši	to whirl, swing around
wíciť-		wičíitiši	to have a convulsion

¹/cowáajajasi/ is //cówaj-Vši//.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Repetitive</u> <u>Theme</u>	<u>English</u>
ʔáaʔaw	to talk	ʔaʔáawaʃi	to talk on and on
ʔájaw	to gather, get	ʔajáawaʃi	to gather several things

442.2. Class II.B stems take the basal suffix $-VC_3-$.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Repetitive</u> <u>Theme</u>	<u>English</u>
čákal	to be cracked	čakáalalaʃi ¹	to be cracking apart
jútud-		jutúududuʃi	to quiver, be shaking
luwúud-, luwwúd-		luwwúududuʃi, luwwúduduʃi	to shiver from the cold

443. The remaining repetitive themes constitute separate classes.

<u>Verbal</u> <u>Root</u>	<u>English</u>	<u>Repetitive</u> <u>Theme</u>	<u>English</u>
kowóolod-		kowóolodoʃi ²	to growl (stomach)
lál- (lálén)	to touch	lállalaʃi ³	to feel around inside something

¹/čakáalalaʃi/ is //čákal- VC_3 -Vʃi//.

²/kowóolodoʃi/ is //kowóolod-Vʃi//.

³/lállalaʃi/ is //lál- C_2 -Vʃi//. Historically, lállalaʃi was derived from the iterative stem láll- in lálluʔa "to touch, feel around."

<u>Verbal</u>	<u>English</u>	<u>Repetitive</u>	<u>English</u>
<u>Root</u>		<u>Theme</u>	
púuc'- (púuc'leṭi)	to roll over once	pućéeleṣi ¹	to be rolling around
ʔijaćáa- (ʔijaćáaṭi)	bump	ʔijaćáaćaṣi ²	to be bumpy

450. Post-thematic Verbal Suffixes.

Post-thematic verbal suffixes follow verbal themes. Certain of these have never been found with other post-thematic suffixes, e.g.,

-ṭa "accidental action" in nowikṭa "to break something accidentally" from nówik "to break"

In other cases, two or more post-thematic suffixes may occur after the same verbal theme, in which case their relative order is usually rigidly determined for any one sequence, but may vary from sequence to sequence, e.g.,

//ʔúkan-nuka-po// = /ʔukánnukapo/ "to stick oneself" from ʔúkan "to go in" plus the causative suffix -nuka plus the reflexive suffix -ṣo

//hújka-Skṣu-po-nuka// = /hújkakṣuṣonuka/ "to make

¹/pućéeleṣi/ is //puć-éel-Vṣi//. Historically, this form contains a variant of the medio-passive suffix -elG.

²/ʔijaćáaćaṣi/ is //ʔijaćáa-C₃V-Vṣi//.

oneself happy" from *hújka* "to be happy" plus the transitivizing suffix *-Skşu* plus the reflexive suffix *-po* plus the causative suffix *-nuka*

Extremely long sequences do occur, though rarely. The longest ever elicited contained five post-thematic suffixes:

//ʔiʔi ka-létoj-M-pa-ʦi-po-nuka-SNʔina// =

/ʔiʔi kalétjopaşiponukanʔina/ "I'm going to make him go outside and lick himself"¹ from ʔiʔi "him" and ka- "I" plus *létoj* "to lick" plus the semelfactive suffix *-M-* plus the directed action suffix *-pa* plus the reflexive suffix *-po* plus the causative suffix *-nuka* plus the future tense marker *ʦ-nʔinajʦ*

The post-thematic suffixes will be discussed in alphabetical order. A description of their relative order will follow.

450.1 *ʦ-akʦ*, best translated as "to possess," is *-kak*

¹My informant remarked, however, that one would hardly ever say this.

after múu "breast,"¹ and as -Sak elsewhere.² †-ak‡ is a verbalizing suffix most frequently found after nominal roots, nominal compounds, or nominal themes, e.g.,

//jómi-Sak// = /jómik/ "to live" from jómi
"village, place"

//jómu-nGaka-Sak// = /jomúnnakak/ "to experience
beauty" from jómu "to laugh" plus the
indirect causative suffix -nGaka³

//teléeka-?aje-Sak// = /teléeka?ajek/ "to have
three sticks" from teléeka "three" plus
-?aje "stick"

Further examples follow:

<u>Root</u>	<u>English</u>	<u>Root + †-ak‡</u>	<u>English</u>
cók	bank	cókkak	to have banks
čálaj	bug	čaléajak	to have bugs
háli	plan	hálik	to be efficient
-hela	not (weak form)	-helak ?alókhelak	to be without to be deaf: "to be with- out ears"
hälla	not	hállak	to not have

¹There was some hesitation concerning the allomorph of †-ak‡ after roots of the canon CVV-.

²Monosyllabic roots ending in stops or affricates have the allomorph C₁VC₂C₂- before †-ak‡; míw "husband" has the allomorph míww- before †-ak‡, and tii "claw" has the allomorph tíkk- before †-ak‡.

³jomúnnaka means "to be beautiful" or "beauty."

<u>Root</u>	<u>English</u>	<u>Root + {-ak}</u>	<u>English</u>
héna	breath, spirit	hénak	to be good-hearted
húk	nose	húkkak	to have a nose
káa	door	káak	to have doors
káac	fish	káccak	to have fish
káaj	sea shell	káajak	to have sea shells
káal	clover	káalak	to have clover
kájaw	tobacco	kajáawak	to have tobacco
kíik	water	kíkkak	to be juicy
kúkuh	flea	kúkuk	to have fleas
kút	teeth	kúttak, e.g., kúttak pódwaj	to be fanged, e.g., rattlesnake: "fanged snake"
kúpum	finger	kupúumak	to have fingers
lakte	name	laktek	to have a name
lúppe	mouth, barrel of a gun	lúppek, e.g., ʔóttá lúppek múttani	barreled, e.g., double-barreled shot- gun: "two-barreled spreader"
málak	design	maláakak	something with a design
míiw	husband	míiwak	to be married to a man
múk	trail	múkkak	to have trails
múu	breast	múukak	to have breasts
pódwaj	snake	pódwajak	to have snakes
şúle	baby	şúlek	to be pregnant
şút	eye	şúttak	to have eyes
tájh	man	tájak	to have men

<u>Root</u>	<u>English</u>	<u>Root + t-akɿ</u>	<u>English</u>
téma	enemy, opponent	témak	to be against, play against
tíi	claw	tíkkak	to have claws
ʔéɿaj	child	ʔeláajak	to have a baby
ʔójjja	friend	ʔójjjak	to make friends
ʔútu	beard	ʔútuk	bearded

450.2. -co is a second person plural suffix found only after the imperative suffix t-miɿ, q.v.

450.3. -coc is a second person dual suffix found only after the imperative suffix t-miɿ, q.v.

450.4. -eeja is a rare intransitive suffix, e.g.,

//pól-eeja// = /poléeja/ "to float in still
water

//wót-eeja// = /wotéeja/ "to be easy to bend,
to bend back and forth, to wobble"

450.5. -ja has a vague resultant meaning, difficult to formulate. So far it has been found only in the following:

k^hábbaja "to be bald" from the iterative verbal
theme k^hábba "to bump one's head repeatedly"

ʔináaja "to approach, get close" from ʔinaj "to
reach"

450.6. -ja, another post-thematic suffix homonymous

with the preceding one, is an interrogative suffix which translates as "shall" or "should" in the sense of requesting a correct course of action. -ja occurs only in verbal units which contain the first person pronominal prefix ka-. Usually -ja is found after verbal themes, e.g.,

kaʔupúhja? "Shall I take a bath?" from ʔúpuh
"to bathe"

Occasionally, -ja follows sequences which usually function as nominal themes, e.g.,

kahíntikaşaja? "What shall I do?" from híntikaşa
"how," which consists of hínti "what?"
plus -kaşa "this kind of"

A few illustrative sentences now follow:

hínti kahínteja? "What should I do?"

híntikaştu kaʔokájja? "How do you want me to
make it?"

kahíccuwja? "Shall I run?"

ʔálwa kaʔéttuja ʔaje nít kahíntikaşaja? "Should
I climb this tree, or what should I do?"

450.7. -ko is a rare suffix denoting quality, e.g.,

//lák-ko// = /lákko/ "to be thirsty"¹

//ʔéec-ko// = /ʔéeco/ "to be sleepy" from

ʔéec "to sleep"

¹Cf. lákmuʔi "to swallow."

450.8. -ku is a passive suffix, e.g.,

//káwik-ku// = /kawíkku/ "to be cut, circumcised" from káwik "to cut"

//káwul-ku// = /kawúlku/ "to get dark on someone" from káwul "to be dark"

//líilaw-ku// = /líilawku/ "to be told," as in mákşaṭu nenúunin líilawku. "That's the way this story is told."

//pákka-ku// = /pákkaku/ "to be nailed up" from the iterative theme pákka "to hammer"

//pínna-ku-waja// = /pínnakuwaja/ "cracked acorns"

//túw-en-ku// = /tuwénku/ "to get shot once" from the semelfactive theme túwen "to shoot once"

//wítte-ku// = /wítteku/ "to be closed" in ?iṭṭṭúw wítteku. "His eyes are closed."

//wúčča-Nṭi-ku// = /wuččaṣiku/ "to get switched once" from the semelfactive theme wuččaṣi "to switch once"

//wúčča-ku// = /wuččaku/ "to get switched" from the iterative theme wučča "to switch repeatedly"

//?ujée-ku// = /?ujéeku/ "to be passed over" from ?ujée "come in," e.g., ?ujéeku mikajépkuṭi. "Give me that; I'll break it for you";

literally, "If that is passed, I'll break it for you."

An active construction is generally preferred to a passive one, e.g.,

?iṭi kontúwen. "They shot him."

450.9. -ma is a rare suffix denoting invisibility or action from a distance, e.g.,

//?áaṭaw-ma// = /?áaṭawma/ "to speak over the telephone" from ?áaṭaw "to speak"

//?álu-ma// = /?alúuma/ "to overhear" from ?álu "to hear"

//?álu-pa-ma// = /?alúupama/ "to eavesdrop" from ?alúupa "to listen"

//?élu-ma// = /?elúuma/ "to look at something from a distance" from ?élu "to look at something"

450.10. {-miṭ} is -n after vowels and -mi ^f -min after consonants, with -mi being the preferred alternate. It is a second person singular imperative suffix.¹ Examples now follow:

¹Historically, -n is probably related to the second person singular subjective allomorph -n (see 310), and -mi is the second person singular objective pronoun added as a suffix. -min is doubtless a combination of the two.

//híccuw-mi ^f híccuw-min// = /híccuwmi ^f
 híccuwmin/ "Run."

//ʔélu-n// = /ʔélu/ "Look."

A pronominal prefix does not occur in a verbal unit containing $\{ -mi \}$ except for emphasis, e.g.,

//ʔin-híccuw-mi// = /ʔinhíccuwmi/ "You run."

In second person dual and plural imperatives, -coc "dual" and -co "plural" occur respectively after $\{ -mi \}$, e.g.,

//híccuw-mi-coc ^f híccuw-min-coc// = /híccuwmicoc
^f híccuwmincoc/ "Run, you two."

//ʔélu-n-coc// = /ʔelúncoc/ "Look, you two."

//híccuw-mi-co ^f híccuw-min-co// = /híccuwmico
^f híccuwminco/ "Run, you all."

//ʔélu-n-co// = /ʔelúnco/ "Look, you all."

450.11. -ne is a benefactive suffix, e.g.,

//híccuw-ne// = /híccuwne/ "to run for someone,"

e.g., ʔiṭi kahíccuwneʔinaj. "I'm going to run for him."

//lílaw-ne// = /líláwne/ "to tell someone something" from lílaw- "to tell"

//tútal-Mṭi-ne// = /tútlaṣine/ "to roll something for someone," e.g., kajáawuc kanic tútlaṣinen. "Roll me a cigarette."

//ʔáškaj-ne// = /ʔáškajne/ "to get angry at
someone"

//ʔóniG-nuka-ne// = /ʔonínnukane/ "to bring some-
thing for someone" from ʔóniG- "to come"
plus the causative suffix {-nuka}.¹

450.12. {-nuka} is -nka after the semelfactive
suffix {-V-} and -nuka elsewhere. It is a causative suf-
fix, "to tell someone to do something or to cause some-
thing to be done," e.g.,

//cúpp-V-nka// = /cúppnuka/ "to burn something"
from the semelfactive stem cúpp- "to burn"
plus the semelfactive suffix -V-

//cúp-VV-nuka// = /cupúnuka/ "to burn things
one by one" from the iterative stem cúp-
"to burn" plus the iterative suffix -VV-

//cúṭul-nuka// = /cuṭólnuka/ "to dry something"
from cúṭul "to be dry"

//jólum-nuka// = /jolólnuka/ "to feed" from jólum
"to eat"

//jómu-nGaka-nuka// = /jomúnnakanuka/ "to make
something pretty, smoothe something" from
jomúnnaka "to be pretty, nice" (See -nGaka.)

¹ʔonínnuka "to bring" is a fossilized construction
which is treated as a verbal theme. The normal order of
these suffixes is -ne-nuka.

- //júkku-nuka// = /júkkunuka/ "to drag something"
 from júkku "to jerk," e.g., ?iṭi konjúk-
 kunuka. "They let (them) drag him."
- //ṣáka-nuka// = /ṣakáanuka/ "to fulfil" from
 ṣáka "to be full"
- //tóka-Mṭi-nuka// = /tokáaṣinuka/ "to bump" from
 tóka- "to hit" plus the semelfactive suf-
 fix -Mṭi, e.g., kawáj katokáaṣinuka. "I
 bumped into a horse (with an automobile)."
- //?áaṭaw-nuka// = /?áaṭawnuka/ "to play" from
 ?áaṭaw "to talk," e.g., tampóol kon?áaṭaw-
 nuka. "The band is playing"; literally,
 "They are playing the band."
- //?óniG-nuka// = /?onínnuka/ "to bring" from
 ?óniG- "to come"
- //?óniG-nuka-nuka// = /?onínnukanuka/ "to tell
 someone to bring something," with a double
 occurrence of the causative suffix¹
- //?úkan-nuka-po// = /?ukánnukapo/ "to stick one-
 self" from ?úkan "to go in" and the reflex-
 ive suffix -po
- //?úṣṣu-nuka// = /?úṣṣunuka/ "to water something"
 from ?úṣṣu "to drink"

¹Cf. footnote on p. 221.

//ʔúteh-nuka// = /ʔutéhnuka/ "to drop something"
from ʔúteh "to fall"

//ʔúteG-nuka// = /ʔuʔénnuka/ "to let someone see
something, to reveal something" from
ʔúteG- "to see"

450.13. {-nʔenajʃ} = -SNʔena(j) is a rare inchoative
suffix,¹ e.g.,

//máak-SNʔena(j)// = /máakʔena(j)/ "to get sick"
from máak "to be sick"

//jóok-SNʔena(j)// = /jóokʔena(j)/ "to be on the
point of death" from jóok "to die"

450.14. The future tense marker {-nʔinajʃ} is -SNʔina(j)
f -SNa(n). These are free variants, except that the
commonest is -SNʔina, and -SNa(n) occurs only in rapid
speech.

{-ʔinajʃ} is used for any action subsequent to the
time of discourse, e.g.,

mamán welíkʔina (//wélik-SNʔina//). "That's the
one you're going to get."

man túnnanan (//túnna-SNan//) miʃi kénneć máć
ʔekeć. "He was going to kick in one of
the heads somewhere."

¹Cf. the common inchoative suffix -tGuma.

şémmit ?úpan?ina (//?úpa-SN?ina//) ?aje ka
 húunih. "Yesterday, I thought it was
 going to rain."

†-n?inaj† sometimes has an inchoative meaning,¹ e.g.,
 //lilu-†i-SN?ina// = /lilúu†in?ina/ "He's about
 to fly."

†-n?inaj† is also a future tense interrogative suffix
 used with persons other than the first person/^{singular}to translate
 "shall" or "should" in the sense of requesting a correct
 course of action, e.g.,

hínti hínten?inaj (//hínte-SN?inaj//) ?ekal?
 "What should he do?"

péwlut ?icwéetana (//?ic-wéetana-SNa//)? "Shall
 we go to town?"

†-n?inaj† can also indicate future knowledge of past
 action, e.g.,

mákşat ma?o†ó††a cána ?u†ée miti henúu ma
 kátt-en-SN?ina (//kátt-en-SN?ina//) muhínti.
 "If he finds these four heads, then he
 really did kill him," i.e., the speaker
 will know that the person in question had
 actually killed the many-headed monster.

¹Cf. the inchoative suffix †-n?enaj†.

450.15. -nGaka is an indirect causative suffix,¹
e.g.,

//jólum-nGaka-po// = /jólúmnakapo/ "to let some-
one eat one up" from jólum "to eat" and
-po "reflexive suffix," e.g., kanic hella
mi kajólúmnakapon?ina. "I'm not going to
let you eat me up."

//jómu-nGaka// = /jomúnnaka/ "to be pretty,
pleasant, nice" from jómu "to laugh"

//şélip-nGaka// = /şelípnaka/ "to be dangerous"

//?úkan-nGaka-po// = /?ukánnakapo/ "to set" (said
of the sun) from ?úkan "to go in" and -po
"reflexive suffix"

//?úteG-nGaka// = /?uţénnaka/ "to be visible"
from ?úteG- "to see"

//?úteG-nGaka-po// = /?uţénnakapo/ "to show one-
self"

Sometimes -nGaka is found after roots of unique
occurrence, e.g.,

//hólih-nGaka// = /holíhnaka/ "to be difficult"

450.16. -pa is a suffix of limited occurrence mean-
ing "directed or intensive action," e.g.,

¹James Knight often uses -nuka instead of -nGaka.

- húwɥipa "to poison"¹
- henúhpa "to believe, trust; to concentrate" from
hénuh "to ask questions"
- húkɥupa "to smell at something" from húkɥu "to
smell something"
- létjopa "to lick one thing" from létoj- "to lick"
plus the semelfactive suffix -K-
- letójpa "to lick things" from the iterative theme
létoj "to keep on licking"
- mókkupa "to pounce on one thing"
- mokúupa "to pounce on several things"
- móllepa "to douse something"²
- móllupa "to cover up one thing"
- molúupa "to cover up several things"
- ʔalúupa "to listen" from ʔálu "to hear"
- ʔálwipa "to be tangled" from ʔáliw "to miss the
mark" plus the semelfactive suffix -K-
- ʔócɥupa "to spray one thing"
- ʔocóhpa "to spray several things" from ʔócoh "to
urinate"

¹Where the verbal theme is not defined, it has no separate occurrence.

²Cf. moléetɥi "to pour once."

450.17. -paṭi is an intensive adjectival suffix of limited occurrence, e.g.,

čákkapaṭi "to be ripped in several places"¹

čúddapaṭi "to have several small rips"²

ténnapaṭi "to be mussed, tangled up" (hair)

tútlapaṭi "to be wrapped up" from tútal- "to

roll up" plus the semelfactive suffix -M-

ʔálwipaṭi "to be all tangled up" from ʔáliw "to

miss the mark" plus the semelfactive

suffix -M-

ʔéskopaṭi "to oversleep, be sound asleep" from

ʔésko "to be sleepy"

450.18. -po is a reflexive suffix,³ e.g.,

//hóoj-e-po// = /hóojepo/ "to save for oneself"

from the semelfactive theme hóoje "to put"

//lilaw-po// = /liláwpo/ "to tell something about

oneself, to claim," e.g., šémmit keṭútʔina

liláwpo. "He said he was going to quit

yesterday." ʔijómta liláwpo. "He claims

he's a doctor."

¹Cf. //čák-še-Mṭi// = /čákšeṭi/ "to be torn."

²Cf. //čúd-ak-Mṭi// = /čúdkaṭi/ "to rip."

³James Knight often uses -pu instead of -po.

//wánuk-e-po// = /wanúukepo/ "to take something off" from the semelfactive theme wanúuke "to take off," e.g., máac wanúukepon!
"Take that off!"

//weléete-Skşu-po-n// = /weléetekşupon/ "Look out!" from weléete "to look at" plus the transitivizing suffix -Skşu plus -po plus the imperative suffix -n

//ʔáaṭaw-po// = /ʔáaṭawpo/ "to speak for oneself," e.g., hunáa ʔáaṭawpon. "Speak for yourself."

//ʔújja-po// = /ʔújjapo/ "to pick one's teeth" from ʔújja "to pick at"

//ʔúkan-nuka-po// = /ʔukánnukapo/ "to stick oneself, as with a needle" from ʔúkan "to go in" plus the causative suffix -nuka

//ʔúkan-nGaka-po// = /ʔukánnakapo/ "to set" (said of the sun) from ʔúkan "to go in" plus the indirect causative suffix -nGaka

//ʔúṭeG-po// = /ʔuṭéppo/ "to find for oneself, discover" from ʔúṭeG "to see"

-po is sometimes found after roots of unique occurrence, e.g.,

//lómma-po// = /lómmapo/ "to masturbate"

450.19. -tGuma is an inchoative suffix,¹ e.g.,

//cáne-tGuma// = /canéttuma/ "to increase" from
cáne "many"

//hélla-Sak-tGuma// = /héllaktuma/ "to disappear"
from héllak "to be without"²

//káac-tGuma// = /káactuma/ "to turn into a fish"

//káccu-tGuma// = /káccutuma/ "to harden" from
káccu "to be hard"

//núma-tGuma// = /numáttuma/ "to change" from
núma "to be different"

//ʔáde-tajh-tGuma// = /ʔadéetajhtuma/ "to get to
be a big man" from ʔáde "to be big" plus
-tajh "man"

//ʔééja-tGuma// = /ʔééjatuma/ "to become sexually
excited" from ʔééja "to like, love"

//ʔóbu-tGuma// = /ʔobúttuma/ "to spoil" from
ʔóbu "to be bad"

450.20. -ʔa is a rare suffix usually denoting
accidental action, e.g.,

//cáad-uk-ʔa// = /cáadukʔa/ "to catch someone"
(said of barbed wire) from cáaduk "to
scratch in several places"

¹Cf. the inchoative suffix {-ʔenajʔ}.

²héllak "to be without" is from hélla "no, nothing"
plus {-akʔ}.

//nówik-ṭa// = /nowikṭa/ "to break something
accidentally" from nówik "to break"

//wócca-ṭa// = /wóccaṭa/ "to plane something once"
from wócca "to scrape, shave, plane"

//wóoca-ṭa// = /wóocaṭa/ "to be scratched" from
wóoca "to scratch with the fingernails"

450.21. ṭ-ṭiṭ is -ṣi after wílik "to get." Else-
where, ṭ-ṭiṭ is -ṭi. ṭ-ṭiṭ is an adative suffix, indi-
cating movement on the part of the subject.

//káampu-ak-ṭi// = /káampukṭi/ "to go camping"
from káampuk "to camp"

//líku-ṭi// = /kikúuṭi/ "to pass a place" (said
of one person)¹

//wílik-ṣi// = /wilíkṣi/ "to go and get something"
from wílik "to get"

//ʔéec-ṭi// = /ʔéecṭi/ "to go to bed and sleep"

//ʔók-en-ṭi// = /ʔokénṭi/ "to go after someone"
from ʔóken "to catch"

//ʔúpuh-ṭi// = /ʔupúhṭi/ "to go swimming" from
ʔúpuh "to bathe"

//ʔúṣṣu-ṭi// = /ʔúṣṣuṭi/ "to go get water" from
ʔúṣṣu "to drink"

¹This is an example of ṭ-ṭiṭ following a root of
unique occurrence.

450.22. -wa is a rare suffix occurring in verbal themes denoting certain human states, e.g.,

//hún-wa// = /húnwa/ "to ache," e.g., hanalúuma húnwa. "His back aches"; literally, "He aches his back." Cf. húna "to hurt, be sharp."

//tíiṣ-wa// = /tíiṣwa/ "to be cold" (said of a person). Cf. típmuṭi "to be cold" (said of the weather or a thing).

//ʔéet-wa// = /ʔéetwa/ "to be hot" (said of a person). Cf. ʔéetaw "to be hot" (said of the weather or a thing).

450.23. -we is an adjectival suffix of unique occurrence, e.g.,

//híccuw-we// = /híccuwwe/ "to be fast" from híccuw "to run"

450.24. -welak expresses hope or possibility,¹ e.g.,
 hélla matujéwelak. "Let's not take a rest."
 kahájun ʔekée wéeṭawelak. "I hope my dogs go
 somewhere else."

máahintet kapáatal ṣukúuhinten kołáaṭiwelak.
 "You might knock off the scabs there."

¹Cf. the benefactive nominal suffix -welak.

nihóppam katakéewelak. "I wish I could get out
of this hole."

450.25. -Nm̄ṭi is a reciprocal suffix, e.g.,

//wákut-Nm̄ṭi// = /wáktum̄ṭi/ "to scramble after
something, like dogs after food" from
wákut "to be stingy"

//ʔóppoj-Nm̄ṭi// = /ʔóppjom̄ṭi/ "to go around each
other" from ʔóppoj "to go around"

//ʔúbu-M̄ṭi-Nm̄ṭi// = /ʔubúuṣim̄ṭi/ "to separate"
(said of a man and wife) from ʔubúuṭi "to
leave"

//ʔúun-e-Nm̄ṭi// = /ʔúunem̄ṭi/ "to bet each other"
from ʔúune "to put, place"

Sometimes -Nm̄ṭi is found after a root of unique
occurrence, e.g.,

//hápo-Nm̄ṭi// = /hápóm̄ṭi/ "to play handball"

//hónna-Nm̄ṭi// = /hónnam̄ṭi/ "to have sexual inter-
course"

//lámta-Nm̄ṭi// = /lámtam̄ṭi/ "to wage war"

//líkká-Nm̄ṭi// = /líkkam̄ṭi/ "to have a contest"

//ʔáíwu-Nm̄ṭi// = /ʔáíwum̄ṭi/ "to fight"

450.26. -Sk̄ṣu is a transitivizing suffix which
usually occurs before the reciprocal suffix -Nm̄ṭi or the
reflexive suffix -po, e.g.,

- //héenuh-Skşu-Mmṭi// = /héenukşumṭi/ "to ask each other" from héenuh "to ask a question"
- //hújka-Skşu-po// = /hújkakşupo/ "to have a good time" from hujka "to be glad"
- //jólci-Skşu-po// = /jólciikşupo/ "to pity oneself" from jólci "to feel sorry"
- //ʔójja-Skşu-Mmṭi// = /ʔójjakşumṭi/ "to be friends, to go around together; to mate" from ʔójja "friend"
- //ʔóoni-Skşu-Mmṭi// = /ʔónikşumṭi/ "to come together" from ʔóoni "to come"¹
- //ʔúune-Skşu-Mmṭi// = /ʔúunekşumṭi/ "to bet each other" from ʔúune "to place"

450.27. -Snika is a rare suffix denoting gradual intransitive action, e.g.,

- //háccah-Snika// = /háccanika/ "to come to a stop" (said of people walking or horse-back riders) from háccah "to stop" (intransitive)
- //tállah-Snika// = /tállanika/ "to rise up, like a dead person or a spirit" from tállah "to stand"

¹John Knight says this should be ʔónimṭi.

//tújje-Snika// = /tújjenika/ "to rest" from
tújje- "to rest"¹

450.28. -Spu is a non-productive causative suffix with the meaning "to cause something to happen, to tell someone to do something,"² e.g.,

//cápa-Spu// = /capáapu/ "to ask for something"³

//cáppa-Spu// = /cáppapu/ "to ask for several things"

//cátteh-Spu// = /cáttepu/ "to lay" from cátteh
"to lie"

//háccah-Spu// = /háccapu/ "to tell someone to stop" from háccah "to stop"

//hója-Spu// = /hojáapu/ "to haul," e.g., jolém tumáajuc hojáapun. "Haul that wood from close by."

//hówo-Spu// = /howópu/ "to put, station someone" from hówo "to sit"

//hówwo-Spu// = /hówwopu/ "to put, station someone" from hówwo- "to sit"

//jóku-Spu// = /jokúupu/ "to hang things"

¹John Knight says the correct form is túje "to rest."

²Cf. -nuka, a productive causative suffix.

³Where the verbal theme is not defined, it has no separate occurrence.

//jókku-Spu// = /jókakupu/ "to hang something"

//póttu-Spu// = /póttupu/ "to pile up something"

//pótu-Spu// = /poúupu/ "to pile up a lot of
piles"

//tálah-Spu// = /taláapu/ "to stand up several
things" from tálah "to stand"

//tállah-Spu// = /tállapu/ "to stand something
up" from tállah "to stand"

//?éccu-Spu// = /?éccupu/ "to turn something over
once on a spit"

//?écu-Spu// = /?ecúupu/ "to turn something over
and over on a spit"

//?úune-Spu// = /?úunepu/ "to put something on"
from ?úune "to put"

450.29. -Spuṭi is an intensifying suffix, e.g.,

//hínnah-Spuṭi// = /hínnapuṭi/ "to be just right"
from hínnah "spot, right place"

//jók-Ṣe-Spuṭi// = /jókṣepuṭi/ "t. grab onto some-
thing" from jók- "to hang" plus the medio-
passive suffix -Ṣe-

//tóppa-Spuṭi// = /tóppapuṭi/ "to be too late for
something" from tóppa "afterwards"

//?áajuh-Spuṭi// = /?áajupuṭi/ "to gather together"
from ?áajuh "to be left"

450.30. -Stukşe is a suffix of unique occurrence which apparently denotes movement, e.g.,

//tálah-Stukşe// = /taláatukşe/ "to stand up"
from tálah "to stand"

451. Order of post-thematic verbal suffixes.

451.1. The future tense marker {-nʔi} and the imperative suffix {-mi} (plus any dual or plural marker) follow all other suffixes, and they never occur together.

451.2. The following suffixes have not been found with any other post-thematic suffixes:

-ja "Shall I?"
-ma "invisibility"
-ʔa "accidental action"

451.3. All other post-thematic suffixes and sequences of post-thematic suffixes, except those containing the imperative suffix {-mi}, may occur before the future tense marker {-nʔinaj}, e.g.,

//ka-tálah-Stukşe-SNʔina// = /kataláatukşenʔina/
"I'm going to stand up."

//koc-kátt-en-ku-SNʔina// = /kockáttenkunʔina/
"They (dual) are going to get killed."

//ʔiʔi-ka-létoj-M-pa-ʔi-po-nuka-SNʔinaj// =
/ʔiʔikaletjopaʃiponukanʔinaj/ "I'm going
to make him go outside and

lick himself."¹

451.4. The following suffixes, and all sequences ending in them, may precede the imperative suffix {-mi}:

-ne

{-nuka}

-pa

-po

{-ti}

-Stukse

Examples now follow:

//háju-Suc létoj-nGaka-po-n// = /háju letójnaka-pon/ "Let the dog lick himself."

//káni-Suc tútal-Mti-ne-n// = /kanic tútlaşinen/ "Roll it (a cigarette) for me."

//lóklo-Suc ?úşşu-nuka-n// = /lókloc ?úşşunukan/ "Water the garden."

//taláh-Stukse-n// = /taláatukşen/ "Stand up."

//?álu-pa-n// = /?alúpan/ "Listen."

451.5. The following are the recorded sequences involving post-thematic suffixes other than the future tense marker {-n?inaj} and the imperative suffix {-mi}:

¹See page 213.

-ko-Spaṭi

-ne	
-nGaka	
ḥ-nʔenajḥ	ḥ-nukaḥ
-tGuma	
-paṭi	
-Spu	

-nGaka-po

-pa-ḥṭiḥ-ḥnukaḥ-po, or any two of these suffixes
in sequence¹

-Skṣu

-po
-Mmṭi

 -nuka, or any two of these suffixes
occupying two positions in sequence except
-po-nuka

Examples now follow:

//ʔéc-ko-paṭi// = /ʔéckopaṭi/ "to be sleepy, to
be in a sound sleep" from ʔéc- "to sleep"
plus -ko

//ʔáṣkaj-ne-nuka// = /ʔáṣkajnenuka/ "to let some-
one get mad at someone else" from ʔáṣkaj

¹The sequence -pa-ḥṭiḥ-ḥnukaḥ-po varies freely with
-pa-ḥṭiḥ-po-ḥnukaḥ.

"to get angry" plus the benefactive suffix
-ne plus the causative suffix {-nuka}

//ʔúkan-nuka-po// = /ʔukánnukapo/ "to stick one-
self" (as with a needle) from ʔúkan "to
go in" plus the causative suffix {-nuka}
plus the reflexive suffix -po

//jómu-nGaka-nuka// = /jomúnnakanuka/ "to make
something pretty, to smoothe something"
from jómu "to laugh" plus the indirect
causative suffix -nGaka plus the causative
suffix {-nuka}

//ʔúkan-nGaka-po// = /ʔukánnakapo/ "to set" (said
of the sun) from ʔúkan "to go in" plus the
indirect causative suffix -nGaka plus the
reflexive suffix -po

//ʔálu-pa-ma// = /ʔalúpama/ "to eavesdrop" from
ʔálu "to hear" plus the intensive suffix
-pa¹ plus the suffix of invisibility -ma

//ʔálu-pa-nuka// = /ʔalúpanuka/ "to tell someone
to listen" from ʔálu "to hear" plus the
intensive suffix -pa plus the causative
suffix {-nuka}

¹ʔalúpa is translated as "to listen."

//létoĵ-M-pa-nuka-po// = /létjopanukapo/ "to make someone (such as a dog) lick himself once" from létoĵ "to lick, lap" plus the semelfactive suffix -M- plus the intensive suffix -p. as the causative suffix {-nukaĵ} plus the reflexive suffix -po

//létoĵ-M-pa-po// = /létjopapo/ "to lick oneself once"

//ʔálu-pa-Ŧi// = /ʔalúpaŦi/ "to go outside and listen" from ʔálu "to hear" plus the intensive suffix -pa plus the andative suffix {-Ŧiĵ}

//létoĵ-M-pa-Ŧi-po// = /létjopaŦipo/ "to go outside and lick oneself"

//létoĵ-M-pa-Ŧi-po-nuka^f létoĵ-M-pa-Ŧi-nuka-po// = /létjopaŦiponuka^f létjopaŦinukapo/ "to let someone go outside and lick himself"

//ʔáde-tGuma-nuka// = /ʔadéttumanuka/ "to make something big" from ʔáde "to be big" plus the inchoative suffix -tGuma plus the causative suffix {-nukaĵ}

//máak-SNʔenaj-nuka// = /máakʔenajnuka/ "to make someone sick" from máak "to be sick" plus the inchoative suffix {-nʔenajĵ} plus the causative suffix {-nukaĵ}

//ʔálwu-Mmṭi-nuka// = /ʔálwumṣinuka/ "to make people fight each other" from ʔálwumṭi "to fight each other" (with the reciprocal suffix -Mmṭi) plus the causative suffix {-nuka}

//jólci-Skṣu-po// = /jólciḱṣupo/ "to pity oneself" from jólci "to feel sorry" plus the transitivizing suffix -Skṣu plus the reflexive suffix -po

//hújka-Skṣu-po-nuka// = /hújkakṣuponuka/ "to make oneself happy" from hújka "to be happy" plus the transitivizing suffix -Skṣu plus the reflexive suffix -po¹ plus the causative suffix {-nuka}

//wóoca-Skṣu-Mmṭi// = /wóocakṣumṭi/ "to scratch each other" from the iterative stem wóoca "to scratch repeatedly" plus the transitivizing suffix -Skṣu plus the reciprocal suffix -Mmṭi

//wóoca-Skṣu-Mmṭi-nuka// = /wóocakṣumṭinuka/ "to make people scratch each other"

//ténna-paṭi-nuka// = /ténnapaṭinuka/ "to muss (a person's hair)" from ténnapaṭi "to be

¹hújkakṣupo is "to be glad."

mussed" (with the intensifying suffix
-paṭi) plus the causative suffix -nuka
//tákku-Spu-ku// = /tákkupuku/ "to be patched"
from tákkupu "to patch" (with the causa-
tive suffix -Spu) plus the passive suffix
-ku

//tákku-pu-nuka// = /tákkupunuka/ "to have some-
thing patched" from tákkupu "to patch"
plus the causative suffix {-nuka}

//páka-ṭi-nuka// = /pakáṣinuka/ "to tell someone
to pelt something once" from pakáṣi "to
pelt once" (with the andative suffix {-ṭi}
plus the causative suffix {-nuka}

460. A schematic representation of the verbal unit
now follows:

Verbal unit

Verbal theme

thematic suffixes

subjective pronominal prefix	verbal root or verbal stem	basal suffix	aspectual suffix	post- thematic suffixes
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500 EXCLAMATIONS, PARTICLES, AND SYNTAX

510. Exclamations.

Exclamations take no suffixes, do not form compounds, and are separated from the rest of the discourse by junctural and intonational criteria. They are rarely in immediate constituency with words of other form classes. Some exclamations occur alone; others are found only in exclamatory phrases. A list now follows:

cokóo kóo	sound of a quail
fjúuu	Scat!
háah, háah	(1) What? (2) What!
há(a)j, héej	What? (response of someone hailed)
háccih	No!
haháa	exclamation of approval
hanáh ¹ ?aje ¹	Wait a minute!
hée	no
hehéh	exclamation of emphasis
hélla	No!
híi ¹ ?u	sound of mule or donkey
hów hów	exclamation of invocation
jóo	Here!

¹James Knight sometimes uses hanáaj, hanáaja.

káAAAA	Bah !
kóol kol kol kol	the noise Coyote makes as he is running
kúule	sound of a bear
kínkin kínkin	sound of a chipmunk
kússi	My !
láwwuh	I don't want to !
léep, léeeep	sound of large mythical game animal
pssssss	sound of a chicken hawk flying
şóow	Scat !
tenúutenu	part of an invocation
t ^h ánananana	sound of Coyote coming angrily
t ^h ánananana	
t ^h ónononononono	sound of thunder or Coyote running
t ^h óolololololo	sound of a large animal falling
t ^h úuuuu	Scat !
tél tél	part of a chant
ţé ţé ţéţ	sound of a certain insect
wáj(h)	exclamation of emphasis or regret
waţáak, waţáat, waţáat	sound of a frog
wék wék wék wék	sound of Bullet Hawk's wings
wičap, wiča, wičap	sound of a robin
?áaj	Ouch !
?adiij	Ouch !
?éeco	Come on !

ʔém ʔém ʔém ʔém ¹	exclamation of Coyote falling
ʔíṣṣa	Not yet!
ʔáaj ʔóow	Oh, yeah?
ʔóow(h)	(1) All right. (2) a cheer
ʔúṭe	(1) You see? (2) Look here.
ʔúuj hújh	a dance signal

520. Particles.

Particles are a class of words which do not take suffixes but enter into immediate constituency with other items in the sentence. They may be stressed or unstressed, and certain particles have both stressed and unstressed alternates. Simple particles are monomorphemic, and compound particles consist of two morphemes, the first of which belongs to another form class and the second of which is a particle. Particles form a closed class.

521. Some clauses have introductory particles. They occur clause initially.

he	"and, or"
húna	"so that; with the result that"
jóo	"here is"
jóoṣuwe,	"I wish"
jóo ṣúwe ²	

¹James Knight says ʔép ʔép hép hép hép hép.

²Particle phrases which function as single particles will be included in the lists.

júu	"let me"
mahíntal	"why, how come"
mákşajok	"for just that purpose"
mákşak ¹	"then"
mákşak ²	"but, but then"
miṭi	"and"
şowáa, şuwáa ³	"don't" (negative command particle)
wée	"all right"
ʔáj(h), ʔaj(h)	"well, now; then; now"
ʔaj ʔúuh ⁴	"yes"
ʔak	"but, contrast"
ʔíjah	"I hope, I wish"
ʔunu	"but"
ʔúu(h)	"yes; well . . ."

Examples now follow:

jóo ʔinpápel. "Here is your paper."

mác tukéeṭin hunáa héllan páatal. "Spit on it
(poison oak) so that you won't get
sores."

mahíntal tawhal? "Why is he working?"

¹James Knight often says mákşak.

²James Knight sometimes says mákşun.

³James Knight often says şowa, şuwa.

⁴James Knight sometimes says ʔajúu.

miṣi ʔekáal máa konjolúmtu konwéeṣa. "And then
 . . . they would eat it."

ṣowáa káhin lóook. "Don't bother me."¹

wée ʔicwéeṣa. "All right, let's go."

ʔíjah ʔánwe ti kani húunine he. "I wish he would
 tell a story for me tomorrow."

522. Temporal particles usually occur at the beginning of clauses, immediately after any introductory particles, or at the end of clauses, before any clause markers.

há(a)li (ko)	"still, yet"
hójot, hojot	"quite a while ago"
húke, huke	"a while ago"
jóllejole	"often"
káṣa	"still"
keláckelac, kiláckilac	"long, long ago"
máahuke	"a while ago"
máate	"soon, until"
maháli	"still"
née	"now"
nih	"now"
niháli ko	"still"

¹The negative imperative particle occurs with a declarative verb.

ʔeká(a)l, ká(a)l, "now, then, at that time"
 ʔekal¹

Examples now follow:

cúmcum háali. "It's still bitter."
 háali máa konlákíh. "They're still dancing it."
 hojót ʔiʔi kaʔúʔe. "I saw him quite a while ago."
 miʔi ʔekáal konhéwwa. "And then they dig it up."

523. Preverbal particles precede verbal units.

húna "for oneself, by oneself, separately."
 ʂoláa "slowly"

Examples now follow:

kaleróos ʂoláa híccuw. "My watch is slow."
 ʔujée miʔi hunán ʔálu. "Come and taste it your-
 self."

524. Post-verbal particles follow verbal units.

he(h) "possibility, mistaken certainty,
 desire"
 kóne(h), "I don't know."
 kone(h)
 láktek "too much"
 man "without"
 wáce, wace "probability, opinion of speaker"
 ʔak² "appearance or emphasis"

¹James Knight often says ʔaká(a)l, ʔakal.

²Cf. the introductory particle ʔak "but."

ʔáwwe(h), ʔáwe	"I think; maybe"
ʔéé	"why, how come"
ʔúʔa, ʔuʔa	"ought; almost"

Examples now follow:

čóowte wace.	"That must have tasted good."
hélla ʔéec man kawééʔa.	"I went without sleeping."
híin hicúwwe láktek.	"Time goes too fast."
hinúu ʔiʔóoni he.	"I was sure he'd come."
káʔʔa : ahólʔi ʔak.	"It seems as if I don't understand this."
kó . . a ʔáaʔawʔu ʔikonun ʔáʔwani ʔúʔa máa.	"You ought to talk to them in Lake Miwok."
ʔinʔeméene ʔáwweh.	"I think you're well."

525. Emphatic particles occur after the verb and follow any post-verbal particles.

máa(h), máh, ma	"emphasis"
muhínti	"you know?"
múu	"emphasis or certainty"
ʔíi	meaning undetermined

Examples now follow:

hélla mántin cáket ʔedáakpat ʔíʔʔiʔa ʔóonin témma	
muhinti.	"There's no one that can get there fast, you know."
máan hinti láktek kone ʔíi.	"I wonder what his name is, you think?"

ʃulúulum ʔak múu. "Gee, that's thin."

teléeka lánup máa níh. "Three of them are lost
now."

ʔoléenawa wáce máh. "That must have been Coyote."

526. Clause markers occur clause finally, following everything except quotative particles.

cupi "condition contrary to fact"

miʔi¹ "when, if"

Examples now follow:

mákʃaʔunu kawólsan ʔadéejolet cupi...lúppuc mát
kaʔúune. "If my pockets were a little bigger . . . I would have put a lot of money
in them."

néen ʔojáh miʔi malíilewan ʔalíwnukan témma. "If
you're timid about this, you might make
more mistakes than that."

pínna konmelén miʔi ʔekal héwwa. "When they
finish cracking them, then they dig a hole."

527. Quotative particles often occur utterance finally, but they may be found in other positions.

kaʃa direct quotative particle

kaʃa weno direct quotative particle plus

¹Cf. the introductory particle miʔi "and."

narrative quotative particle

wéno, weno narrative quotative particle: "it is
said"

Examples now follow:

kaṣuwéh kaṣa. "I said, 'I wish.'"

ṣuwáa ṣe mákṣaṣu kanímpaton ?áaṣaw cácco kaṣa
weno. "'Don't talk like that to me again,
Grandson," she said, ' it is said."

?ekáal ?itoláa weno. "'Then he threw it,' it is
said."

miṣi se wéno rée suluk kon?únepu miṣi weno kelac.
"'And again,' it is said, 'whenever they
put the skin on,' it is said."

528. Special statements can be made about certain
other particles.

528.1. kaṣi "you know; just like" is in immediate
constituency with a preceding unit, e.g.,

mat wéṣa ?éjajaṣu ?áaṣaw kaṣi. "He talks as if
he might want to go over there."

puṣán kaṣi ?edáakṣu wéṣa. "You know, where the
grass is tall."

528.2. ?éeh "just like" is in immediate constituency
with a following unit, e.g.,

?éeh kánni "just like me"

528.3. he "and, or" and miṭi "and" sometimes connect coordinate nominal constructions, e.g.,

jolúmic kaʔúnu he kaʔappic welíkṣinen. "Get my mother and father some food."

529. Other particles are of relatively unrestricted distribution.

hélla, hela	"not"
hélla ʔóoki	"not so much, not so many"
kaṭu	"thus"
keláa, kiláa, kela kela	"already"
máaṣe, máṣṣe	"because of that"
maṭu	"just as if; like"
men	"just; certainly, but (German sondern)"
níṣe	"here again"
ṣáahiko	"as long as"
ṣéwi, ṣewi, ṣe	"also, too; again"
ti	hortative particle
ʔaje	"however; just; to resume . . ."
ʔawéecu, ʔawecu	"just; to the extent that; all"
ʔéje	"just"
ʔiṣṣa	"still, anyway, even if, just"
ʔiṣṣiṣa	"quickly, always"

Examples now follow:

kahúuk púcpucuſi men \int kahúuk men púcpucuſi.

"My nose is just itching; that's all."

numáa pódwaj ſe "a different kind of snake"

ſuwáa ſe makſaſu kanſimpaton ?áaſaw. "Don't speak
like that to me again."

?ijáh ti. "I hope so."

?ijah ?áwwe ti kani húunine he. "I wish he would
tell a story for me tomorrow."

530. Syntax.

531. The basic syntactic units are the syntactic affix and the word, excluding any syntactic affix. The SYNTACTIC AFFIX is in immediate constituency with a phrase or a clause, e.g., the allative case suffix {-to} in

kani kátten? inato "if he is going to kill me"

Syntactic affixes are {-m} "appositive case," {-nu} "subjective case," {-uc} "objective case," {-to} "allative case," {-mu} "ablative case," and {-tu} "instrumental case" (330).

532. A NOMINAL PHRASE is an immediate constituent construction composed of two or more nouns, e.g.,

jolúmic ka?únu (he) ka?appic welikſinen. "Get
my mother and father some food."

in which {-ucʒ} "objective case" is in immediate constituency with the phrase kaʔúnu (he) kaʔáppi "my mother and my father."

A VERBAL PHRASE is an immediate constituency construction composed of two or more verbs, e.g.,

hélla mahenúu kóoca "we're not really Indians" in which the subjective pronominal prefix ma- "we" is in immediate constituency with the phrase henúu kóoca "to be real Indians."

533. A CLAUSE is an immediate constituent construction containing a verbal unit, e.g.,

//kani kátt-en-ʔina// = /kani káttenʔina/ "they're going to kill me"

//kon-lémaj// = /konlémaj/ "they're calling"

533.1. A RELATIVE CLAUSE is followed by an inflected form of hín̄te ^f -hín̄te "that, which," -hín̄te being the commoner alternate, e.g.,

halíhali konlocókhinten {-hín̄te-nuʒ} ʔomáaʒu
şúkuh. "Everything they do requires
fasting."

hénan hín̄te...ʔóbu; mulúumulu míwwakʔinajhintec
{-hín̄te-ucʒ}. "She feels . . . bad (her
spirit is that way . . . bad) because
she's going to marry the black man."

hokii neʔoʔóʔʔan cánnac ʔékétton hóojehintet
 {-hinte-toʔ}. "Go wherever you put those
 four heads."

kalíilaw kanéenut hintec {hinte-ucʔ}. "I'm tell-
 ing what I know."

konlemájhintekon {-hinte-ko-SNʔ} wantéera "the
 flagpole of those whom they invited"

533.2. A NOMINAL CLAUSE is followed by a case suf-
 fix, e.g.,

ʔictáwhal makóoca katúuʔa {-mʔ}.
 our work those people killing appositive case
 "That's our job, killing people."

ʔictáwhal makóoca katúuʔan {-nuʔ}.
 our work those people killing subjective case¹

kani wilíiku {wilik-ucʔ} ʔéjeja.
 me catch obj. case he wants

"He wants to catch me."

hunás lákih ʔokájʔu {-ʔokaj-ʔuʔ} konwéeta.
 themselves dance make instr. case they go

"They would make the dance up by themselves."

533.3. A TEMPORAL CLAUSE is followed by miʔi "when,
 after," or by cupi "if" (condition contrary to fact), e.g.,

mákʂaʔunu kawólsan ʔadéjejolet cupi "if my pockets
 were a little bigger"

¹The subjective case is used by James Knight.

máa wanúuke miṭi "when he took it out"

533.4. An INDEPENDENT CLAUSE is not followed by any clause marker.

534. An UTTERANCE is a maximum immediate constituency unit. A SENTENCE is a sequence between the onset of speech and the first instance of final juncture or between any two successive instances of final juncture (110). Sentences do not always coincide with utterances, e.g.,

kénneṣa máat kaʔóoni ʔáwweh. konlakihto. "I came there one time. When they were dancing."

534.1. A MAJOR UTTERANCE contains a verbal unit; a MINOR UTTERANCE does not. The latter may consist of exclamations, or nominal units or nominal phrases in isolation, e.g.,

fjúuu! "Scat!"

kánni. "Me."

kaʔúnu he kaʔáppi. "My mother and my father."

535. Word order is quite free. A schematic representation of the commonest sentence type now follows:

introductory particle	(temporal) particle	noun subject	unit in ¹ oblique case	noun object
preverbal particle	verbal unit	post-verbal particle	emphatic particle	(temporal) particle quotative particle

¹These units may be nominal units, nominal phrases, or relative clauses. If two or more occur, their relative order is free.

The commonest clause type is identical with the commonest sentence type except that a temporal clause has a clause marker after any temporal particle and before any quotative particle, and a relative clause has no particles following the verb.

535.1. A nominal construction following the verbal unit usually expresses emphasis, clarification, or afterthought, e.g.,

máa kon'áamuptu konwéeta riikukonnu. "They would pay him; the rich people, that is."

miṭi 'ekal máḡḡu cíppa kon'ókaj wajáa cíppac.

"And then they made bread with that, acorn bread."

535.2. Other variations from the common order do not seem to signal specific shifts in meaning, e.g.,

néec 'álwam konwílik f 'álwam née konwílik. "They got this from the tree."

600 ANALYZED TEXT

GATHERING AND FIXING ACORNS

- (1) kelac wajáa konlimáaʔi miʔi káampukʔiʔu
 long ago acorns they go seek when go camping
 konwéeʔa. (2) ʔedáкто. (3) kénne semáanu
 they do habitually. far away. one week
- he ʔóʔʔa semáanu máʔ konʂukúhʔu konwéeʔa.
 or two weeks there they stay they do habitually.
- (4) mahíntet kénne ʔóʔʔa deléeka koméenawat máʔ
 at that place one two three months there
- konʂukúhʔu konwéeʔat ʔekal wajáa konjupíh
 they stay they do habitually then acorns they get
- miʔi konʔánwaʔiʔu konwéeʔa. (5) wénoh.
 enough when they go back they do habitually. they say.
- (6) kal jomíit ʔonínnuka miʔi ʔekal máa konpínna.
 then home bring when then that they crack.
- (7) pínna konmelén miʔi ʔekal héwwa.
 cracking they finish when then dig.
- (8) ʔiʔicuʔúlto ʔekal máa konʔúʔuk. (9) miʔi
 its dryness at then that they pound. and
- ʔekal máʂʂu cíppa konʔókaj wajáa cíppac.
 then with that bread they make acorn bread.
- (10) ʔúlki konʔókaj. (11) miʔi ʔekáal máa
 acorn mush they make. and then that

konjolúm̄tu konwéeta mák̄sātu konšúk̄uh.
 they eat they do habitually that's the way they live.

(12) wénoh. (13) mīti ʔekáal wajáa konpínna
 I guess. and then acorns they crack

konmelén mīti ʔekáal máa konmelén mīti ʔekál
 they finish when then that they finish when then

ʒe konpínnātu konwéeta. (14) mīti ʔekáal
 again they crack they do habitually. and then

ʒe máa koncūtúl mīti máa konʔūtúk̄tu
 again that they dry when that they pound up

konwéeta. (15) mīti ʔekáal ʔūtúk̄
 they do habitually. and then pounding up

konmuʔén konwóolētītu konwéeta. (16) wóole
 they finish they go leach they do habitually. leach

konmuʔén mīti ʔekáal ʔúlki konʔokáj̄tu
 they finish when then acorn mush they make

konwéeta. (17) mīti ʒe ʔekáal kon . . .
 they do habitually. and again then they . . .

máakonnu . . . kusnéerut mīti ʔekál konjolúm̄tu
 those ones . . . cook when then they eat

konwéeta. (18) kāsa kaʔálu.
 they do habitually. that's the way I hear.

(19) mák̄saʔunu hälla máa kaʔú̄te. (20) kahúkec.
 but not that I see. before my
 time.

(21) níʔʔaje hélla mántin mákşa lócok.
 now not someone that way does.

(22) ʔawéecu máh.
 all (emphatic).

(1) When they went looking for acorns long ago, they used to go camping. (2) Far off. (3) They used to stay there two or three weeks. (4) After they had been staying in that place one, two, or three months, then when they got enough acorns, they would go back. (5) That's waht I heard. (6) When they brought them home, then they cracked them. (7) After they finished crack- ing them, then they spread them out. (8) When it was dry, then they pounded it up. (9) And then they made bread with that, acorn bread. (10) They made acorn mush. (11) And then they would eat that; that's the way they lived. (12) I guess. (13) And then, when they finished cracking acorns; then when they finished that, then they would crack some more. (14) And then when they dried them, they would pound them up again. (15) Then after they finished pounding them, they would go leach them. (16) After they finished leaching them, then they would make acron mush. (17) And then they . . . those ones . . . when they had cooked it, then they would eat it. (18) That's the way I heard it. (19) But I didn't see

it. (20) It was before my time. (21) Now, however, no one does that sort of thing. (22) That's all.

(1) The particle *kelac* "long ago" is the only overt marker of past time.

wajáa is wája "acorns" with optional morphophonemic stress shift across the word boundary. Plurality is rarely indicated for inanimate nouns. There is, however, a zero representation of the objective case morpheme {-ucɔ}, since the object, *wája*, immediately precedes the verbal unit in a declarative sentence.

//*kon-líma-ʔi*// = /*konlimáaʔi*/ "they went seeking," a verbal unit composed of the subjective pronominal prefix *kon-* "they" plus the verbal root *líma* "to seek" plus the post-thematic andative suffix {-ʔi} with obligatory morphophonemic stress shift across the morpheme boundary.

miʔi "when" is a dependent clause marker which is in immediate constituency with *kelac wajáa konlimáaʔi* "they went looking for acorns long ago."

The preceding sequence illustrates a common word order within clauses: object, verbal unit, and clause marker if it is a dependent clause. The position of *kelac* is free.

//*kámpu-kU-ʔi-ʔu*// = *kámpukʔiʔu*/ "by means of going

camping" from kámpu- "country"¹ plus the passive suffix -kU plus the andative suffix {ɣiɣ} plus the instrumental suffix {-tuɣ}. This is a nominal unit in the instrumental case derived from the verbal unit kámpukɣi "to go camping."

//kon-wéeta// = /konwéeta/ "they do habitually: they go."

Repeated or customary action is expressed by the instrumental case of the verbal unit plus wéeta (with an optional subjective pronominal prefix).

(2) //ʔédak-t0// = /ʔedákto/ "far off" from ʔédak "far" plus the allative case suffix {-toɣ}. This nominal unit and the preceding sentence comprise an utterance. ʔedákto "far off" follows the verb as an afterthought.

(3) kénne "one, to be one" is an adjective. It is a verbal unit, in this case a root, which has no pronominal prefix and which precedes the noun with which it is in immediate constituency.

semáanu "week"² is a noun in the appositive case denoting duration of time.

kénne semáanu "one week" is a nominal phrase.

he "or, and" is a connective particle which usually joins coordinate constructions.

¹From Spanish campo "country" (not city).

²From Spanish semana "week"?

ʔóʔʔa "two, to be two"

The second instance of *semáanu* "week" is also in the appositive case.

//má-tO// = /mát/ "there" from má- "that" plus the allative case suffix {-to}.

//kon-ʒúkúh-ʔu// = /konʒúkúhʔu/ "by means of their staying." This is another instance of a verbal unit plus the instrumental case occurring before *wéeʔa* "to go" to indicate habitual action.

(4) //ma-hínte-tO// = /mahíntet/ "at that place" from the compound ma- "that" plus *hínte* "place" followed by the allative suffix {-to}.

kénne ʔóʔʔa deléeka "one, two, or three" is a series of adjectives.

//kóme-nawa-tO// = /koméenawat/ from *koméenawa*¹ "month" plus the allative case suffix {-to}. The appositive case appears to vary freely with the allative case in nouns expressing duration of time.

The sequence *mát konʒúkúhʔu konwéeʔa* "they would stay there" has been discussed above.

The allative suffix {-to} (here -t) "when, after" is in immediate constituency with the clause *mahíntet kénne*

¹*koméenawa* "month, moon" is a fossilized compound from *kóme-*, an archaic word for "moon," plus *-nawa* "old man."

ʔóʔʔa deléeka koméenawat mât konʂukúhʔu konwéeʔa "they would stay there at that place one, two, or three months." The new clause can be translated as follows: "after they had been staying there at that place one, two, or three months."

ʔekal "then" is a common connective particle in narratives.

ʔekal wajáa konjupíh miʔi "then when they got enough acorns" is another dependent clause marked by miʔi "when," with two instances of optional morphophonemic stress shift across word boundaries.

//kon-ʔánwa-ʔi-ʔu kon-wéeʔa// = /konʔánwaʔiʔu konwéeʔa/ "they would go back." ʔánwa- is a verbal root found only before the andative suffix {-ʔiʔ}.

(5) wénoh "they say; that's what I heard" is one variant of the narrative quotative particle, commonly used when the speaker has not witnessed what he is relating.

(6) kal "then" is a variant form of the common connective particle.

//jómi-tó ʔoníg-nuka// = /jomíit ʔonínnuka/ "(they) bring home" with optional morphophonemic stress shift across the word boundary. This is a rare case in which //CVCVC C...// is /CVCVCVC C.../ instead of /CVCVC C.../.

ʔónig- "to come" occurs only with the causative suffix -nuka.

//ʔekal máa konpínna// = /ʔekal máa konpínna/ "then they crack them." máa "he, she, it, them, that, those" is the third person pronoun for a previously mentioned antecedent.

(7) /héwwa/ "they dig." The pronominal prefix may be omitted when there is no ambiguity in the context.

(8) //ʔiʔi-cúʔul-t0// = /ʔiʔicúʔúlto/ "when it is dry" from ʔiʔi "its" plus cúʔul "to be dry, state of being dry" plus the allative case suffix {-toʔ}. This is a nominal unit in the allative case, expressing place or time.

ʔekal máa konʔúʔuk "then they grind that." máa has a previously mentioned antecedent, ʔiʔi.

(9) miʔi ʔekal "and then." In sentence initial position, miʔi is "and."

//ná-ʂʂu// = /náʂʂu/ "with that" from na- "that" plus -ʂʂu, an allomorph of the instrumental case {-ʔuʔ} found only after a few pronouns.

//cippa kon-ʔókaʂ wáʂa cippa-Suc// = /cippa konʔókaʂ wáʂa cippac/ "they make bread, acorn bread." The objective case is overtly represented after the second instance of cippa "bread," which follows the verb. Normal word order is object, verbal unit. The object follows the verb as an afterthought or for clarification.

(11) ʔekáal "then" is another variant of the connective particle.

(12) wénoh "I guess, that's what they say" is another instance of the quotative particle.

(13) The clause wajáa konpínna "they crack acorns" is the object of the verbal unit konmélen "they finish." This clause is also the antecedent of the pronoun máa in the following clause.

?ékal, with stress, is another variant of the connective particle.

The position of the particle ʒe "again" is free (see sentence 17).

(15) //kon-wóole-ʒi-ʒu// = /konwóoleʒiʒu/ "by means of going to leach" from kon- "they" plus wóole "to leach" (iterative stem) plus the andative suffix {-ʒiʒ} plus the instrumental case suffix {-ʒuʒ}.

(16) //?úlki kon-?ókaj-ʒu// = /?úlki kon?ókajʒu/ "by means of their making acorn mush." ?úlki "acorn mush" is the object of ?ókaj "make," which in turn is part of the nominal unit kon?ókajʒu "by means of their making."

(17) miʒi ʒe ?ekáal kon . . . máakonnu . . . "and then they again . . . those ones . . ." is an incomplete utterance. kon- "they, their" is a pronominal prefix. //máa-kon-nU// = máakonnu "those ones" from máa "third person pronoun, antecedent previously mentioned" plus the plural marker -kon- plus -nU, an allomorph of the subjective case after nouns following the verb. The usual

word order is subject, verb. The subject, like the object, follows the verb as an afterthought or for clarification. máakonnu apparently is the subject of a verb in the preceding sentence.

//kusnéeru-t0 miṭi// = /kusnéerut miṭi/ "when they had cooked it" from kusnéeru "to cook"¹ plus the allative case suffix -t0 "at, in, to, when, after" plus miṭi "when."

(18) kaṣa "that's the way" is a particle.

(19) mákṣa[?]unu "but, but then" is a complex particle from mákṣa "that way" plus [?]unu "but."

There is no overt antecedent to máa "that."

(20) //ka-húuke-uc// = /kahúukec/ "before my time," literally, "my before" from the first person possessive pronominal prefix ka- plus húuke "before" plus -uc, an allomorph of the objective case which occurs after verbs.

(21) ní[?]?aje "now" is a compound particle from ní[?]- "here" plus [?]aje "however." ní[?]- "here" is a variant of unique occurrence.

//mánti-Sn// = /mántin/ from mánti "someone" plus -Sn, an allomorph of the subjective case after nouns preceding the verb.

mántin mákṣa lócok "someone does that" illustrates the normal word order: subject, object, verb.

¹kusnéeru "to cook, a cook" is from Spanish cocinero "a cook."

(22) The particle 'awéecu "that's all" plus the emphatic particle máh commonly closes a narrative.