

TÜBATULABAL GRAMMAR

BY

CHARLES F. VOEGELIN

UNIVERSITY OF CALIFORNIA PUBLICATIONS IN
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PREFACE

THE TÜBATULABAL LANGUAGE is spoken at present by about a hundred Indians living, as their ancestors lived, in the southern part of the Sierra Nevada, in an area slightly larger than a triangle would inclose if lines were drawn between the present towns of Onyx, as the apex of the triangle, and Kernville and Isabella, all in Kern County, California. An area delimited in this way includes the North and South forks of the Kern River.

The linguistic material in this paper is from South Fork informants, Mrs. Legora Tungate (42 years), John Tungate (14 years), Joe Wells (16 years), Steban Miranda (87 years), and my chief informant, Mike Miranda (46 years), all living near Weldon, between Onyx and Isabella. According to these informants, there is a slight dialectic difference between their speech and North Fork speech, but the two dialects are said to be mutually intelligible.

Tübatulabal belongs to the Uto-Aztecan stock, and more specifically is one of the Shoshonean languages. Kroeber's classification of Shoshonean languages gives Tübatulabal the distinction of being one of the main Shoshonean branches, the other three groups being the Plateau Shoshonean (the most widespread group, ranging from languages spoken by the Comanche Indians to those spoken by the Bannock, including Southern Paiute); Hopi; and the Southern California Shoshonean languages (Serrano dialects, San Luisefio-Cahuilla dialects, Gabrielino dialects).

My field work with the Tübatulabal was done during the summers of 1931, 1932, and 1933. The University of California, through its Board of Research, provided funds for field expenses.

Finding myself unable to give an account of any of the historical developments of the language, I was obliged to write a grammar concerned only with the language as spoken at the time when I heard it. The resulting grammatical sketch was submitted as a doctorate thesis in November, 1932. The grammatical sketch which follows is a somewhat revised form of the thesis. Tübatulabal differs from other Shoshonean languages in many respects, but in no respect more strikingly than in the fact that Tübatulabal stems frequently end in consonants. In Southern Paiute, all stems end in vowels, and this would seem to be typical for Shoshonean languages in general. The explanation of the final stem consonant in Tübatulabal may possibly be found in the phenomena concerned with vowel increments (see §13). I trust that future study of Shoshonean languages will throw light on such points as this, and hope that the Tübatulabal material here presented may prove useful in the comparative study of Shoshonean languages.

The work was done under the direction of Professor A. L. Kroeber, of the University of California, and I owe him a debt of gratitude which this work does not well discharge. While spending a semester at Columbia University, I had the advantage of constructive criticism from Professor Franz Boas and

from Professor Louis H. Gray. Later, Professor Gray generously gave me more of his time and made extensive marginal criticisms in a copy of the thesis. Whatever I have learned of phonetic transcription is due to the gifted pedagogy of Mr. H. J. Uldall. Professor Sapir's Southern Paiute proved to be an ideal in the way of an exhaustively analyzed Shoshonean language.¹

University of California,
Berkeley, California,
June 17, 1933.

C. F. VOEGELIN.

¹ Edward Sapir, *The Southern Paiute Language: Southern Paiute, a Shoshonean Language; Texts of the Kaibab Paiutes and Uintah Utes: Southern Paiute Dictionary*, Proceedings of the American Academy of Arts and Sciences, 65:1-730 (nos. 1, 2, 3), 1930, 1931. This volume is hereafter referred to as "Sapir." In addition to the published Shoshonean material referred to by Sapir, p. 6, I have consulted Gifford's excellent paper, *Tübatulabal and Kawaiisu Kinship Terms*, UC-PAAE 12:219-248.

ABBREVIATIONS

abl., ablative	impers., impersonal	perm., permissive
abs., absolute form of noun (cf. §§25-27)	incr., increment	pers., personal
all., allative	ind., independent, indepen- dence, independently	pl., plural
asp., aspect	indir., indirect	poss., possessive
aux., auxiliary	iness., inessive case	post., postposition
caus., causative	instr., instrumental, instru- ment	pres., present tense
cf., compare	inter., interrogative	prog., progressive
cond., conditional	interj., interjection	pron., pronoun
conj., conjunctive	intr., intransitive	qt., quotative
d., dual	iter., iterative	redup., reduplicated
d. excl., dual exclusive	lit., literally	rel., relative form of noun (cf. §§25-27)
d. incl., dual inclusive	loc., locative postposition (inessive, ablative, or al- lative)	sing., singular
demon., demonstrative	morph., morphologically	st., stem
dep., dependent	mov., movement	sub., subordinate
dim., diminutive	n., noun, nominal	subj., subject case
dir., direct	neg., negative	suff., suffix
disc., discourse	obj., object case	tr., transitive, transitivizes
distr., distributive, distrib- utively	opt., optative	transl., translation
exhort., exhortative	part., particle	vb., verb
fut., future tense	pass., passive	voc., vocative
gen., genitive case		1, first person
imp., imperative		2, second person
		3, third person

§§1-7. PHONOLOGY

§1. PHONEMES

1. Vowel Phonemes

There are six vowel phonemes in Tübatulabal, *i*, *e*, *a*, *ɔ*, *u*, *ü*. The position of the principal member of each phoneme is shown in the following ideal diagram of the mouth²; the positions of some of the subsidiary members of each phoneme are also indicated and explained below.

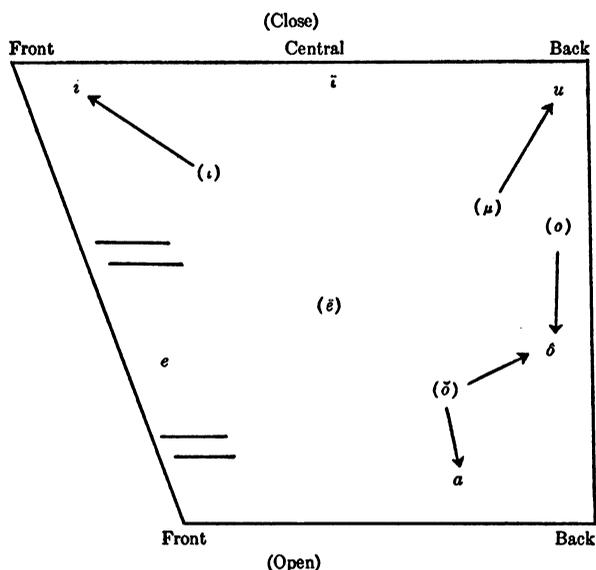


Fig. 1. Ideal diagram of the mouth, showing the position of the principal member of each of the six vowel phonemes in Tübatulabal.

The vowel symbols in the accompanying chart are so placed that they represent the position of the tongue when a given vowel is produced. All the vowels are unrounded, except *u*, *ü*, *o*, *ɔ*. The symbols inclosed in parentheses in the vowel chart are subsidiary vowels and are related to the fundamental vowels to which an arrow points. A special explanation is needed for the subsidiary vowel *ɔ* (somewhat like the vowel in English "up") which is related either to the fundamental vowel *ɔ* or *a*. From hearing a single word which contains *ɔ*, it is impossible to tell to which phoneme the vowel belongs; but when hearing the word under different accentual conditions, the phonemic affiliation becomes clear. Thus, the subsidiary vowel, *ɔ*, is frequently heard when stressed and

² The vowel diagram is one of the admirable pedagogic devices offered by the International Phonetic Association. The phonetic symbols employed in this paper conform as far as possible with the current American usage in transcribing American Indian languages. This current usage is described in the report of the Phonetic Committee of the American Anthropological Association, published in SI-MC 66 (no. 6), 1916.

when preceding *-w*, as in $\delta\text{'}b\delta\text{'}w\acute{i}ka\text{'}\eta$ he has strength. But when not stressed, the characteristic quality of the δ phoneme is apparent, as in $\delta\text{'}b\delta w\acute{i}\text{'}t$ the strength. The *a* phoneme is occasionally heard as δ when stressed and preceding a plosive or nasal consonant, as in $pihi\text{'}'in\delta\text{'}t$ he is breaking it. But when in unstressed position, the characteristic quality of the *a* phoneme is apparent, as in $pihi\text{'}'naki\text{'}$ I am breaking it. This shows that the δ in $pihi\text{'}'in\delta\text{'}t$ belongs to the *a* phoneme, and that the δ in $\delta\text{'}b\delta\text{'}w\acute{i}ka\text{'}\eta$ belongs to the δ phoneme. The fundamental vowel, *e*, has related vowels which range between the adjacent parallel lines shown in the vowel chart; no special subsidiary symbols are needed, however, because this family of sounds is sufficiently isolated from other vowels to avoid confusion. The symbol, \bar{e} , indicates a vowel produced when the tongue is at rest, completely relaxed; this vowel is heard chiefly as an optional glide breaking up what is theoretically a consonantal cluster. Thus, the word for BEING INTERRUPTED IN EATING has been heard as $\bar{t}\acute{i}\text{'}kakca\text{'}$ and also as $\bar{t}\acute{i}\text{'}kak\bar{e}ca\text{'}$ and also as $\bar{t}\acute{i}ka\text{'}\bar{k}\bar{e}ca\text{'}$. The vowel, \bar{e} , seems to be merely a glide without mora value in $\bar{t}\acute{i}\text{'}kak\bar{e}ca\text{'}$, but in $\bar{t}\acute{i}ka\text{'}\bar{k}\bar{e}ca\text{'}$ it appears to have mora value (§4, 2).

-i- phoneme

The *i* vowel, whenever it is long, and often when short, has the position shown in the vowel chart.

$pi\text{'}l$	the breast.
$pi\text{'}wi\text{'}l$	the breast feathers.
$ma\text{'}wic\mu\text{'}l$	the pine nut pole.
$pi\eta\eta\text{'}t$	he says.
$piga\text{'}t$	the stone knife.

In short stressed position, the more open related variant, ι , is used.

$a\text{'}tax\iota\text{'}n$	he slept. Cf. $ta\text{'}xkina\text{'}t$ he is sleeping.
$mi\text{'}lh\text{'}mihla\text{'}t$	it tastes good.
$\iota\text{'}ct$	coyote.

Quite sporadically, this variant, ι , is used in short, unstressed position.

$\iota\bar{k}\bar{i}\text{'}t$	he is getting water.
$pi\bar{k}\bar{i}\text{'}\ \eta\eta\iota\text{'}m$	then I came.
$pi\eta\iota\text{'}'in\bar{c}t$	the shirt.

But the ι preceding *- η -* and *- g -* is somewhat closer than the ι preceding *- c -*, though not so close as *i*.

-e- phoneme

The *e* vowel is shown on the vowel chart by a single symbol, with adjacent parallel lines to show the extent of its range. The variant members of the *e* phoneme are not transcribed in this paper, because the variants are formed under regular conditions.

When short and stressed and preceding a consonant, the *e* is closer than the position indicated on the vowel chart (shown in the examples below by the circumflex diacritic placed over the close vowel).

<i>mê</i> t	already.
<i>wê</i> 'le'í't	he is crawling.

When both long and rearticulated (see §2, below), the *e* is more open than the position indicated on the vowel chart (shown in the examples below by the period diacritic placed under the open vowel).

<i>wê</i> 'êha't	he is licking it.
<i>elê</i> 'égí't	he is looking out.
<i>wê</i> 'êli't	the open place.

In all other circumstances, the position of the *e* vowel is as shown in the vowel chart.

<i>e</i> 'ye'ú	he became ashamed.
<i>e</i> 'ne'í'n	he depended on him.

-a- phoneme

The *a* vowel, whenever it is long, or short and unstressed, and frequently when short and stressed, has the position shown on the vowel chart.

<i>to</i> 'haki'	I am hunting.
<i>to</i> ha't	he is hunting.
<i>patsa</i> 'ahi'l	the blackened pine nuts.
<i>tsa</i> 'ya'ú	he yelled.

Quite inexplicably, a more central variant of the *a* phoneme, *ø*, is sometimes but not always heard when the vowel is stressed and precedes a plosive or nasal consonant.

<i>ï</i> xko'wa'ø't	the wind is blowing.
<i>ya</i> 'la'ø't	it is warm.
<i>wi</i> 'la'ø'ŋ	your skirt feathers.

-ø- phoneme

The *ø* vowel, and its closer variant, *o*, are used almost interchangeably, with positions as shown on the vowel chart. No rules have been found to show when *ø* will be used, or when *o* will be used; the most that can be said is that *ø* is used more frequently, and that *o* tends to be used in medial position, but not to the exclusion of *ø*.

A more central and less rounded variant of the *ø* phoneme, indicated on the vowel chart by *ø*, is sometimes heard in stressed position, especially when preceding -w.

<i>ø</i> 'bø'wika'ŋ	he has strength.
<i>ø</i> 'wøhø'nt	the digger pine nuts in one place.
<i>ø</i> 'wøŋø'l	the many shoes in one place.
<i>ø</i> 'wøpø'l	the many gooseberries in one place.

-u- phoneme

The *u* vowel, whenever it is long, and often when short, has the position shown in the vowel chart.

<i>u'wuba't</i>	he is whipping him.
<i>uyu'k</i>	he fell.

In short stressed position, when preceding a consonant (except the semi-vowels), the more central variant, μ , is used; sometimes μ is also used in unstressed position.

<i>kμ'kt</i>	the mescal. (<i>-μ-</i> is also used in this word when unstressed, <i>kμkt'a'</i> .)
<i>ka'adzμ'l</i>	the clay pot. (But <i>-u-</i> is used in this word when not stressed, <i>ka'dzula'</i> .)
<i>μ'mbuwa'l</i>	the cradle.
<i>tsu$\eta$$\mu$'t</i>	he is afraid. (But the μ preceding the <i>-η-</i> is less central than the stressed μ preceding <i>-t</i> .)

-i- phoneme

The *i* vowel is completely unrounded, and formed with the position of the tongue midway between the position for forming the *i* and *u* vowels, as shown in the vowel chart. While the lips are always unrounded, there is a slight difference in the articulation of the short *i*, when the lips are merely neutral; and in the articulation of long *i*, when the lips are well spread.

The acoustic effect of this vowel is rather confusing to ears which have not heard a Shoshonean language spoken. On first acquaintance, the vowel tends to be incorrectly heard: when in short unstressed position, *i* sounds faintly like *u*; in short stressed position, *i* is somewhat suggestive of μ .

However, once one has mastered the production of this vowel, it becomes apparent that the slight acoustic differences are not caused by shifting the position of the tongue. The tongue is always held close to the roof of the mouth and in central position. The phoneme, *i*, has no conspicuous variants.

<i>cütdi'iga't</i>	he is restless.	<i>tüba'tulaba'l</i>	the Tübatulabal Indians.
<i>p'i'tüta't</i>	he is turning over.		
<i>c'i'l,</i>	the root of <i>umu'ubi'l</i>	yucca.	
<i>cimi'nt</i>	the rattlesnake.		

2. *Vocalic Length*

Tübatulabal vowels may be organically short or organically long. Short vowels have the value of one mora, and are transcribed without a length diacritic (*u*, *ö*, etc.); long vowels have the value of two morae, and are transcribed with the length diacritic \cdot placed after the vowel (*u \cdot* , *ö \cdot* , etc.).

Long vowels preceding a syllable containing a stressed vowel are generally rearticulated.

ka'adμ'l the clay pot.
a'ama'' *ka'dzula'* he touched the clay pot.

This is merely a stylistic characteristic of Tübatulabal, having no organic significance; the long rearticulated vowel, like the ordinary long vowel, has the value of two morae.

Diphthongs may have the value of one mora (*ai*, *au*, etc.), or two morae (*a'i*, *a'u*, etc.). In two-morae diphthongs, the first member of the glide is long; the second member of the glide is never long (*a'i*, but never **ai'*; *a'u*, but never **au'*, etc.).

3. Diphthongs

Beginning with any vowel, the tongue may move in a glide to *i* or *u*. In other words, the possible diphthongs are:

<i>ai</i>	<i>au</i>
<i>ɔi</i>	<i>ɔu</i>
<i>ui</i>	<i>iu</i>
<i>ei</i> (rare)	<i>eu</i>
<i>ii</i> (rare)	<i>üu</i> (rare)

There is no difference in phonological treatment between the single vowels (i.e., static vowels) and diphthongs (i.e., kinetic vowels). For example, in the peculiar process termed "initial reduplication," where the first vowel of the stem is repeated initially, the first vowel may be static or kinetic (diphthong). If the first vowel of the stem is kinetic, only the beginning of the glide is repeated initially (the first member of the glide).

u'i'a't it is smoking. *u''u'i'ica'* it will smoke.
i'i'a'ana't he is meat-fasting.
i''i'i'a'nica' he will meat-fast.
uinμ'l the sucker fish.
u''uinμ'l the many suckers in one place.
ha'i'ila't it is smelling.
aha'i'ila' it smelled.
ye'u'wa't it is getting daylight.
eye'u'wa' it became daylight.

4. Nasalization

Nasalization of vowels appears to be characteristically inorganic, and due to the assimilatory influence of a nasal consonant on a juxtaposed vowel which usually precedes a glottal stop, or less frequently the consonant, *h*. Nasalization of vowels is indicated by the diacritic ~ placed over the vowel nasalized.

mã'' hello.
ta'naha'ts ti' nō'h would he were roasting it in the ground.

5. Opening of Semivowels

 $w > u$

w opens to *u* when in final position and preceded by a vowel (§5, 3, i).

<i>ĩ'minĩ·'wami'n</i>	he spilled it here.	<i>ĩ'minĩ·'u</i>	he spilled it.
<i>e'pele·'wami'n</i>	he opened it here.	<i>e'pele·'u</i>	he opened it.
<i>ĩ'tsilĩ·'wami'n</i>	it flowed over here.	<i>ĩ'tsilĩ·'u</i>	it flowed over.
<i>ĩ'kiwa't</i>	it is being eaten.	<i>ĩ'tiki'u</i>	it got eaten.

 $y > i$

y opens to *i* when in final position (see §7).

<i>e'yami'n</i>	he won it here.	<i>e'i</i>	he won it.
<i>u'gu'yumi'n</i>	he hid it here.	<i>u'gu'i</i>	he hid it.
<i>a'ha'yami'n</i>	he stirred it here.	<i>a'ha'i</i>	he stirred it.

6. Primary Consonants

The following consonants have approximately the value of English consonants, except the voiceless plosives, which are not aspirated, and the glottal stop.

	<i>Bilabial</i>	<i>Alveolar</i>	<i>Palato-alveolar</i>	<i>Palatal</i>	<i>Velar</i>	<i>Glottal</i>
Plosives.....	<i>p, b</i>	<i>t, d</i>			<i>k, g</i>	'
Affricates.....		<i>ts, dz</i>	<i>tc, dʒ</i>			
Nasals.....	<i>m</i>	<i>n</i>			<i>ŋ</i>	
Lateral.....		<i>l</i>				
Fricative.....			<i>c</i>			<i>h</i>
Semivowels.....	<i>w</i>			<i>y</i>		

Consonants have no mora value, with the exception of the organic glottal stop, which has the value of one mora theoretically (§4, 2, iv); intrusive glottal stops have no mora value.

Secondary developments of consonants are treated in §5. These secondary developments are semantically more significant than the variant forms of vowel phonemes. If, through a slip of the tongue, one does not use the proper variant form of a vowel phoneme, but instead, the principal member of the phoneme (*i'ct* instead of *ĩ'ct* for coyote), one is nevertheless understood. But a slip of the tongue in which the primary consonant is substituted for the secondary development of the consonant is apt to result in unintelligibility.

However, one secondary development, gemination, appears to be quite comparable to variant forms of vowel phonemes in point of semantic insignificance, and may be treated here.

7. Gemination of Consonants

In medial position.

i. Voiceless plosives (except ') and affricates, nasal consonants, and *l* are always geminated after vowels having the value of one mora.

ii. Fricatives and semivowels are likewise geminated, but this is a theoretical ideal. In actual practice, fricatives and semivowels are most consistently geminated after vowels which are stressed.

iii. In consonantal clusters (*-ŋw-*, etc.), neither consonant of the cluster is geminated, unless the second consonant of the cluster is a voiceless plosive or affricate, in which circumstance the plosive or affricate is geminated; or unless the first member of the cluster is *h* and the second member of the cluster is a nasal consonant or a semivowel, in which circumstance *h* is geminated as usual. Whenever *h* is geminated, it has a velar fricative on-glide (for other circumstances in which *h* is velarized, cf. §5, 3, iv).

In final position.

iv. Voiceless and unvoiced plosives and affricates are always geminated in final position. This rule holds when the plosive or affricate is preceded by a two-morae vowel as well as when preceded by a one-mora vowel.

v. No consonant other than a plosive or affricate is ever geminated in final position.

Gemination is indicated by a special diacritic symbol only in the very narrow transcription of the text with interlinear translation, *The Power of Jimsonweed* (at end).

§2. QUALITATIVE VOCALIC CHANGE

1. Qualitative Effect of Verbal Stem on *-a-* Increment

The *a* vowel increment precedes certain verbal suffixes, while another vowel increment, *i*, precedes other verbal suffixes (see §13). The *i* increment never changes its quality; the *a* increment may become *i*, or *ɔ*, or *u*, under the influence of a preceding suffix or of a preceding verbal stem. Only the latter influence is considered here.

The qualitative influence of a verbal stem on a juxtaposed increment is always the same for both the basic form and the initially reduplicated form of the verbal stem. The *a* increment, when associated with the benefactive suffix, *-(a)n*, does not tolerate a qualitative change. When associated with other suffixes, the *a* increment shows no resistance to qualitative change.

i. Verbal stems ending in a consonant. By far the majority of verbal stems ending in a consonant do not change the primary quality of the *a* increment. Two or three score of exceptional stems, however, do have a qualitative influ-

ence on the juxtaposed *a* increment. In the following examples, the verbal stem is given, and then the stem with the present tense suffix, *-(a)t*, attached. The *a* preceding *t* is the vowel increment.

a > i

<i>a·ba'iw-</i> , <i>a·ba'iwit</i>	it is showing. (Not <i>*a·ba'iwat</i> .)
<i>ele·g-</i> , <i>ele·egit</i>	he is looking out. (Not <i>*ele·egat</i> .)
<i>ī·dī·'-</i> , <i>ī·dī·'it</i>	it is hot.
<i>ibi·'-</i> , <i>ibi·'it</i>	it is blooming.
<i>pai'idž-</i> , <i>pai'idžit</i>	he is swimming.
<i>pai'ig-</i> , <i>pai'igit</i>	he is turning around.
<i>tala·wic-</i> , <i>tala·ucit</i>	he is going around.
<i>tīb-</i> , <i>tībīt</i>	he is putting it (here). (Not <i>*tibat</i> , but cf. the n. st., <i>tība-</i> , and <i>-t</i> abs. suff.: <i>tībāt</i> pine nuts.)
<i>ciŋg-</i> , <i>ciŋgīt</i>	he is blowing his nose.
<i>ha'ibi·'-</i> , <i>ha'ibi·'it</i>	he is joking.
<i>ha'idži·bi·'-</i> , <i>ha'idži·bi·'it</i>	he is chewing his cud.
<i>heu'he·w-</i> , <i>heu'he·ewit</i>	he is trotting.
<i>mīck-</i> , <i>mīckit</i>	he is leading.

a > δ

<i>cidδ'dδ·'-</i> , <i>cidδ'dδ·'δt</i>	he is slipping. (Not <i>*cidδ'dδ·'at</i> .)
<i>nōh-</i> , <i>nōhδt</i>	he is roasting it in the ground. (Not <i>*nōhat</i> .)
<i>wδ'δtsδ·'-</i> , <i>wδ'δtsδ·'δt</i>	he is kneeling.

a > u

<i>pμŋgu·'-</i> , <i>pμŋgu·'μt</i>	he is domesticating him. (Not <i>*pμŋgu·'at</i> .)
<i>ma·ntsu·'-</i> , <i>ma·ntsu·'μt</i>	he is tame. (Not <i>*ma·ntsu·'at</i> .)
<i>kμtug-</i> , <i>kμtugμt</i>	he is gathering firewood. (Not <i>*kμtugat</i> , which does, however, occur as a noun: <i>kμtuga-</i> n. st.; <i>-t</i> abs. suff.; <i>kμtugat</i> firewood. Cf. <i>kμ-t</i> the fire.)
<i>kuy-</i> , <i>kuyμt</i>	he is hiding it.
<i>mu·hy-</i> , <i>mu·hyμt</i>	he is giving a fiesta.
<i>μkμc-</i> , <i>μkμcμt</i>	he is crowing.

The change from *a* to *δ* and from *a* to *u* may be made in order to secure vocalic harmony. In such a change the verbal stem preceding the juxtaposed increment contains a medial vowel, separated from the increment by the final stem consonant. The change of the increment to the quality of the medial vowel may be assimilatory. If so, such assimilation is peculiarly limited. It operates after the stem

<i>cidδ'dδ·'-</i> , <i>cidδ'dδ·'δt</i>	he is slipping. <i>-(a)t</i> changes to <i>-(δ)t</i> .
but not, for example, after the stem	
<i>tōgōgō·'-</i> , <i>tōgōgō·'at</i>	it is popping. <i>-(a)t</i> remains <i>-(a)t</i> .

The change from *a* to *i* occurs after many verbal stems whose medial vowel is not *i*, so that the hypothesis of vocalic harmony is quite ruled out here. It will be necessary, in the dictionary, to indicate the qualitative influence of verbal stems on the juxtaposed *a* increment by means of a superscript vowel. For example, *cidδ'dδ'-'^δ*. When no superscript follows a stem, the stem has no qualitative influence. For example, *tógδgδ'-'*.

ii. Verbal stems ending in a vowel. The majority of verbal stems ending in a vowel have a final *a* vowel. When, however, the final stem vowel is of a different quality, the juxtaposed *a* increment contracts with and assumes the quality of the final stem vowel. For example, *-i+a=ü*.

<i>pa·abi-</i> , <i>pa·abit</i>	he is tired. (Not * <i>pa·abat</i> .)
<i>pδ·δci-</i> , <i>pδ·δcīt</i>	it is white. (Not * <i>pδ·δcat</i> .)
<i>kahi-</i> , <i>kahīt</i>	he is lazy. (Not * <i>kahat</i> .)
<i>cδ·δlδ-</i> , <i>cδ·δlδt</i>	he is digging a hole. (Not * <i>cδ·δlat</i> .)

2. Qualitative Effect of Suffixes on *-a-* Increment

Just as certain verbal stems exert a qualitative influence on the juxtaposed *-a-* increment (see 1, above), so do certain medial suffixes (see §12) exert a progressive influence on the immediately following *-a-* increment.

a > *i* after the collective-intensive suffix, *-(i)wi·t*.

<i>tik-</i>	TO EAT.
<i>tikiwi·d-</i>	TO EAT LIKE A WOLF.
<i>tikiwi·idīt</i>	(the wolves) are eating. (Not * <i>tikiwi·idat</i> .)

a > *δ* after the suffix, *-(i)lδ·k* PRETENDING TO. . . .

<i>anaη</i>	TO CRY.
<i>anaηi·lδ·g-</i>	TO PRETEND TO CRY.
<i>anaηi·lδ·δgδt</i>	he is pretending he is crying. (Not * <i>anaηi·lδ·δgat</i> .)

a > *u* after the distributive suffix, *-(i)ni·nīm*.

<i>tik-</i>	TO EAT.
<i>tikini·nīm-</i>	TO GRAZE.
<i>tikini·nīmūt</i>	he is grazing. (Not * <i>tikini·nīmat</i> .)

3. Qualitative Changes in Noun Endings

Noun endings are subject to certain qualitative changes which are more clearly of an assimilatory nature than the qualitative changes already cited. Curiously enough, only the *i* vowel in noun endings is subject to qualitative change, while the *i* vowel resists all qualitative change after verbal stems and verbal suffixes (cf. 1 and 2, above).

i > a

i. In conjunctive pronouns beginning with an *-i-* when the pronoun is attached to nominal stems ending in long *-a-*.

<i>wi·la-</i> (n. st.)	SKIRT FEATHERS.
<i>wi·la'δ'η</i>	your skirt feathers. (The subsidiary member of the <i>a</i> phoneme, <i>δ</i> , is used, cf. §1, 1; for quantitative change, see §3.)

ii. In conjunctive pronouns beginning with an *-i-* when the pronoun is attached to the relative suffix, *-a-*.

<i>na·'adi''a'a'η</i>	your cat.
<i>hicti'ha'δ'η</i>	your unit of money.

iii. In case suffixes beginning with an *-i-* and followed by a nasal consonant when the case suffix is attached to a nominal stem ending in a short vowel.

<i>mane·'da'a'η</i>	of the nightshade berry.
<i>mane·'da'a'n</i>	of his own nightshade berry.

i > u

i. The objective relative case suffix, *yi*, becomes *yu* when followed by a conjunctive pronoun beginning with *-u-* (regressive assimilation).

<i>tca·'miyu''ulu'</i>	your (pl.) acorn gravy. (The glottal stop is intrusive, cf. §4, 2, iv.)
<i>na·'adi''ayu''ulu'</i>	your (pl.) cat.

ii. In case suffixes beginning with an *-i-* and followed by a nasal consonant when the case suffix is attached to nouns ending in *-e·p*, or *-o*, or *-δ·h*.

<i>le·'uce·'ebμ'η</i>	of the female water-spirit.
<i>tcδ'no'μ'η</i>	of the twins.
<i>tsδ·'δhμ'η</i>	of the gray fish.
<i>mδ·'δmδ·'hμ'n</i>	of his own jimsonweed.

iii. In conjunctive pronouns beginning with an *-i-* when the pronoun is attached to a nominal stem ending in *-δ·h*.

<i>mδ·'δmδ·'hμ'η</i>	your jimsonweed.
<i>tsδ·'hu'μ'η</i>	your gray fish. (The <i>-u'</i> following the stem is intrusive, cf. §4, 2, iv.)

The changes noted for ii and iii, above, take place when the case suffix or the pronoun is attached to nouns ending in long *-a-* or *-u-*, when the nouns are of the type which have zero absolute suffix (see §26).

<i>kμ'mu'μ'η</i>	your father.
<i>kμ'mu'μ'n</i>	of his own father.
<i>a·'na·'wici'wa'μ'η</i>	your stepdaughter.
<i>a·'na·'wici'wa'μ'n</i>	of his own stepdaughter.

$i > \bar{i}$

i. In conjunctive pronouns beginning with *-i-* when the pronoun is attached to the relative objective suffix, *-yi-*, which has itself changed to *-yī-* for some inexplicable reason.

tca'mi'yi'i'η your acorn gravy (obj.).

ii. In case suffixes beginning with an *-i-* and followed by a nasal consonant when the suffix is attached to a nominal stem ending in *-w*.

pδ'nihwī'η of the skunk.
pδ'nihwī'n of his own skunk.

The changes of both i and ii, above, take place when the case suffix or pronoun is attached to nominal stems ending in a nasal consonant or the vowel, *-ī-*; or to other suffixes ending in a nasal consonant, except after the objective suffix, *-nin-*, in which the *ι* of the suffix appears to cancel the effect of the nasal consonant.

to'hanī'η your uncle.
pδmni'η your egg.
cμ'lnū'η your fingernail.
ci'gawi'yami'n of the Koso Indians.
īci''īdī'n of his own robe.
ī'mī'ī'η your mother.
tsimi'lnū'η your mouse (obj.).

But compare:

culμ'nunnη your fingernail (obj.).

 $i > y$

The relative objective suffix, *-i-*, changes to *-y-* when it is attached to a nominal stem ending in a sibilant and when the objective suffix is followed by a conjunctive pronoun beginning with a vowel; but the objective suffix remains *-i-* when followed by a conjunctive pronoun beginning with a consonant.

mu'cyi'η your fish spear (obj.).
mu'cyulu' your (pl.) fish spear (obj.).

But compare:

mu'ci'p their fish spear (obj.).

§3. QUANTITATIVE VOCALIC CHANGE

1. *Quantitative Effect of Verbal Stem on Vowel Increments*

Either the *a* or *i* vowel increment precedes every verbal suffix (see §13). These increments have the primary value of one mora, but may be given an additional mora under various circumstances. One circumstance will be considered here, the effect of a verbal stem on a juxtaposed increment.

i. Verbal stems ending in a consonant. Most verbal stems which end in a consonant do not change the one-mora value of a juxtaposed increment. In the examples below, the increment is inclosed in parentheses.

<i>ala·w-</i>	TO TALK.
<i>ala·w-(a)n-</i>	to talk for him.
<i>puck-</i>	TO BLOW.
<i>puck-(a)n-</i>	to blow for him.
<i>taŋ-</i>	IT RAINS.
<i>taŋ-(a)n-</i>	it rains for him.
<i>kami·dž-</i>	TO CATCH.
<i>kami·dž-(a)n-</i>	to catch for him.
<i>naxpa'ad-</i>	TO MAKE A NOISE.
<i>naxpa'ad-(a)n-</i>	to make a noise for him.

ii. Verbal stems ending in a vowel. All verbal stems ending in a vowel cause the juxtaposed increment to add one mora, both when the increment is an *i* vowel and when the increment is an *a* vowel.

<i>ôxta-</i>	TO ASK.
<i>ôxt(a·)n-</i>	to ask for him.
<i>ela-</i>	TO JUMP.
<i>el(i·)n-</i>	to make him jump.

This would seem to be the result of contraction; the examples cited may be analyzed as: *-a* final stem vowel + *-a-* vowel increment = *a·*; *-a* final stem vowel + *-i-* vowel increment = *i·*. However, when the vowel increment is associated with certain suffixes (see §13 and §§14-19), such lengthening is resisted; an example is the present tense suffix, *-(a)t*.

<i>ôxta-</i>	TO ASK.
<i>ôxtat</i>	he is asking him.

The formula for the contraction here is: *-a* final stem vowel + *-a-* vowel increment = *a*.

iii. Verbal stems ending in a consonant which have lengthening effect. Stems of this type are not typical (see i, above).

<i>ob-</i>	TO DIVE.
<i>ob-(a·)n-</i>	to dive for him.
<i>ïxtsaw-</i>	TO HELP.
<i>ïxtsaw-(i·)ba'-</i>	to want to help.
<i>ïw-</i>	TO TRAP.
<i>ïw-(a·)n-</i>	to trap for him.
<i>pin-</i>	TO BRING IT.
<i>pin-(a·)n-</i>	to bring it for him.

<i>pic-</i>	TO GO OUT.
<i>pic-(i·)n-</i>	to cause him to go out.
<i>tikigu-i'-</i>	TO COOK.
<i>tikigu-i'-(a·)n-</i>	to cook for him.
<i>kmutug-</i>	TO GATHER FIREWOOD.
<i>kmutug-(a·)n-</i>	to gather firewood for him.

The quantitative influence of verbal stems cited above (i, ii, iii) applies equally to the basic verbal stem and to the initially reduplicated form of the verbal stem. The following verbal stems show one quantitative influence for the basic verbal stem and another influence for the initially reduplicated form of the stem.

iv. Verbal stems having the basic form end in a consonant and the initially reduplicated form in a vowel. In such stems, as might be expected, the vowel increment juxtaposed to the basic form is not changed quantitatively, while the vowel increment juxtaposed to the initially reduplicated form receives an extra mora of length as a result of contraction (see ii, above).

Basic Form	Initially Reduplicated Form	
<i>pe·'-</i>	<i>e·eba-</i> (<* <i>e·be·'a-</i>)	TO HIT.
<i>pe·'-(a)n-</i>	<i>e·eb(a·)n</i>	to hit for him.
<i>po·'-</i>	<i>ô·ôba-</i> (<* <i>ô·bô·'a-</i>)	TO KINDLE FIRE.
<i>po·'-(a)n-</i>	<i>ô·ôb(a·)n</i>	to put on extra wood.
<i>po·h-</i>	<i>opha-</i> (<* <i>opoha-</i>)	TO SMEAR.
<i>po·h-(a)n-</i>	<i>oph(a·)n</i>	to smear for him.
<i>kü·'-</i>	<i>ï·igï</i> (cf. §2, 1)	TO BITE.
<i>kü·'-(a)n-</i>	<i>ï·ig(a·)n</i>	to bite for him.
<i>cï·'-</i>	<i>ï·ïca</i> (<* <i>i·cï·'a</i>)	TO DRIVE.
<i>cï·'-(a)n-</i>	<i>ï·ïc(a·)n</i>	to drive for him.
<i>cu·'-</i>	<i>u·uca</i> (<* <i>u·cu·'a</i>)	TO DRY.
<i>cu·'-(a)n-</i>	<i>u·uc(a·)n</i>	to dry for him.
<i>no·'-</i>	<i>ô·no</i>	TO TURN BACK.
<i>no·'-(i)n-</i>	<i>ô·n(i·)n</i>	to turn back, tr.
<i>nu·'-</i>	<i>u·una</i> (<* <i>u·nu·'a</i>)	TO CLEAN.
<i>nu·'-(a)n-</i>	<i>u·un(a·)n</i>	to clean for him.
<i>wa·'-</i>	<i>a·awa</i>	TO BROIL.
<i>wa·'-(a)n-</i>	<i>a·aw(a·)n</i>	to broil for him.
<i>we·h-</i>	<i>e·weha</i>	TO LICK.
<i>we·h-(a)n-</i>	<i>e·weh(a·)n</i>	to lick for him.
<i>wo·h-</i>	<i>o·woha</i>	TO BURY.
<i>wo·h-(a)n-</i>	<i>o·wolh(a·)n</i>	to bury for him.

v. Verbal stems whose basic form has no lengthening effect, but whose initially reduplicated form has.

Basic Form	Initially Reduplicated Form	
<i>a·w-</i>	<i>a'aw-</i>	TO GOSSIP.
<i>a·w-(i)n-</i>	<i>a'aw-(i·)n</i>	to tell him.
<i>a·c-</i>	<i>a'ac</i>	TO BATHE (intr.).
<i>a·c-(i)n-</i>	<i>a'ac-(i·)n</i>	to bathe (tr.).
<i>pa·m-</i>	<i>ambam</i>	TO MAKE INTO A BALL.
<i>pa·m-(a)n-</i>	<i>ambam-(a·)n</i>	to make into a ball for him.
<i>pa·n-</i>	<i>amban</i>	TO CLOSE IT.
<i>pa·n-(a)n</i>	<i>amban-(a·)n</i>	to close it for him.
<i>pδ·η-</i>	<i>δmbδη</i>	TO CUT HAIR.
<i>pδ·η-(a)n-</i>	<i>δmbδη-(a·)n</i>	to cut hair for him.
<i>pu·n-</i>	<i>μmbμn</i>	TO TIE.
<i>pu·n-(a)n-</i>	<i>μmbμn-(a·)n</i>	to tie for him.
<i>ma·g-</i>	<i>amak</i>	TO KNOW.
<i>ma·g-(a)n-</i>	<i>amag-(a·)n</i>	to remember.
<i>wa·g-</i>	<i>awak</i>	IT IS DRY. (impers.)
<i>wa·g-(i)n</i>	<i>awag-(i·)n</i>	to dry it. (tr.)

vi. Verbal stems whose initially reduplicated form has no lengthening effect, but whose basic form has.

Basic Form	Initially Reduplicated Form	
<i>pδlδη-</i>	<i>δpδlδ·η</i>	TO HIT IT.
<i>pδlδη-(a·)n-</i>	<i>δpδlδ·η-(a)n</i>	to hit it for him.
<i>ta·wīg-</i>	<i>a·dawi·k</i>	TO SEE.
<i>ta·wīg-(a·)n</i>	<i>a·dawi·g-(a)n</i>	to see for him.
<i>īici·b-</i>	<i>īīici·p</i>	TO SCRAPE.
<i>īici·b-(a·)n</i>	<i>īīici·b-(a)n</i>	to scrape for him.
<i>mu·gin-</i>	<i>u·mugi·n</i>	TO HURT HIM.
<i>mu·gin-(a·)n-</i>	<i>u·mugi·n-(a)n</i>	to hurt him for him.
<i>yδ·līn-</i>	<i>δ·yδ·lī·n</i>	TO PLOW.
<i>yδ·līn-(a·)n-</i>	<i>δ·yδ·lī·n-(a)n</i>	to plow for him.

In the examples cited under v and vi, above, the medial vowel of either the basic form or the initially reduplicated form loses a mora of length. Such a loss of mora within a form of the stem itself would appear to be compensated for by an additional mora given to the vowel increment juxtaposed to the form from which the mora was lost. This is a type of alternation of length (see below, 2, ii).

Most quantitative influences of the verbal stem on a juxtaposed increment may be explained as resulting from either contraction or alternation of length. Still a certain few verbal stems remain which exert an inexplicable quantitative

influence. It is therefore necessary, in listing verbs in the dictionary, to place after verbal stems the superscript numeral "2" when an increment juxtaposed to a stem has the value of two morae; e.g.:

<i>ob</i> ²	(basic form), <i>δ'δp</i> ²	(init. redup.)	TO DIVE.
<i>ma'g-</i>	(basic form), <i>amak</i> ²	(init. redup.)	TO KNOW.
<i>yδ·lin</i> ²	(basic form), <i>δ·yδ·li·n</i>	(init. redup.)	TO FLOW.

When the form of a verbal stem is listed in the dictionary without the numeral "2" after it, that form does not exert a lengthening effect on the juxtaposed increment.

Finally, it must be remembered that the quantitative influence of forms marked with a superscript "2" operates only when the juxtaposed vowel increment is associated with a suffix which tolerates lengthening. As each verbal suffix is treated in the Verb Morphology (§§14-21), it is mentioned whether the vowel increment associated with the suffix tolerates or resists quantitative change.

2. Alternation of Length of Vowel Increments

The alternation of length of vowel increments is a very simple matter. Typically, the suffix juxtaposed to a naked verbal stem (which we may term the first suffix) is preceded by a vowel increment having the value of one mora; then in a series of successive suffixes, the second suffix is preceded by a vowel increment having the value of two morae, the third suffix is preceded by a vowel increment having the value of one mora again, and so on, the length of vowel increments associated with successive suffixes alternating in value between one mora, two morae, one mora, two morae, and so on.

Alternation of length is somewhat complicated in certain verbal themes when the increment juxtaposed to the naked verb receives an additional mora through the influence of the verbal stem (see 1, above); when the vowel increment is associated with a suffix which resists lengthening; and when a medial vowel of the suffix proper enters into the alternation of length pattern.

i. Simple alternation. The suffix juxtaposed to the verbal stem (first suffix) is preceded by a vowel increment having the value of one mora, the second suffix is preceded by a vowel increment having the value of two morae, the third suffix is preceded by a vowel increment having the value of one mora again, and so on. In the examples below, vowel increments preceding suffixes are inclosed in parentheses, and suffixes are set off from the verbal stem and from each other by dashes; such separation does not indicate syllabification.

<i>tik-</i> (vb. st.)	TO EAT.
<i>tik-(a)₁n-(i')w-(a)₁t</i>	"he is being fed."
<i>nōh-</i> (vb. st.)	TO ROAST IN THE GROUND.
<i>nōh-(a)₁n-(a')n-(a)₂t</i>	"she is always roasting it for him in the ground."
<i>a·dza·ya·w-</i> (vb. st.)	TO YELL.
<i>a·dza·ya·w-(i)₁n-(i')ba'-(a)₁t</i>	"he wants to yell at him."

ii. Alternation of vowel increments, beginning with a two-morae vowel. After certain naked verbs (see 1, above), the suffix juxtaposed to the verbal stem (first suffix) is preceded by a vowel increment having the value of two morae, the second suffix is preceded by a vowel increment having the value of one mora, the third suffix is preceded by a vowel increment having the value of two morae, and so on. This differs from simple alternation (i, above) merely in that the pattern of mora lengths is two-one-two-one, etc., instead of one-two-one-two, etc.

*anaŋ*² (vb. st.) TO CRY.
anaŋ-(i[·])*n*-(a)₁*l*-(i[·])*ba'*-(a)₁*t* "he wants to make him go along crying."

iii. Resistance to alternation of length. Alternation of length (as i and ii, above) operates only when the vowel increment is associated with a suffix which tolerates lengthening. Certain suffixes resist lengthening of the vowel increment preceding them (see §13). In the following examples, the same verbal stems are employed as were cited to illustrate alternation of length, but the suffixes appended resist lengthening.

tik-(a)₁*puw*-(a)₁*t* "he appears to be eating."
nōh-(δ)₁*puw*-(a)₁*t* "he appears to be roasting it in the ground."
a·dza·ya·w-(a)₁*puw*-(a)₁*t* "he seems to be yelling."
anaŋ-(a)₁*puw*-(a)₁*t* "he seems to be crying."

Suffixes which appear first in the order of verbal suffixes tend to be associated with vowel increments which tolerate lengthening; suffixes which appear last in the order of verbal suffixes tend to be associated with vowel increments which resist lengthening. As a result, alternation of length may be partly operative in a verbal theme, as when suffixes associated with vowel increments which tolerate lengthening are followed by suffixes associated with vowel increments which resist lengthening.

tik-(a)₁*n*-(a[·])₂*l*-(a)₁*puw*-(a)₁*t* "he seems to be going along feeding him."
anaŋ-(i[·])₂*n*-(a)₁*l*-(i[·])₂*ba'*-(a)₁*puw*-(a)₁*t* "he seems to want to make him go along crying."

iv. When a medial vowel of the suffix proper enters into the alternation of length. Vowels within the suffix proper (as opposed to the vowel increment preceding the suffix) generally resist quantitative change. However, a few suffixes tolerate such change. As these suffixes are treated (§§14-19), it is specified that the medial vowel of the suffix proper tolerates quantitative change. Practically, such vowels are not to be distinguished from vowel increments in the alternation of length pattern. It is even possible that some suffixes with variable medial vowels may be examples of syncretism and represent an archaic fusion of two suffixes into one, so that the variable vowel is, historically, an old vowel increment. However, in view of the general limitations of all quantity rules, this hypothesis of syncretism must not be pressed too hard.

Besides the medial vowels of suffixes which appear long or short, depending on the alternation of length of the verbal theme, other medial vowels of other suffixes have a constant quantity-value, but are included in the alternation of length system of the verbal theme.

In the following examples, true vowel-increments are inclosed in parentheses, as in the examples cited above, while medial vowels of suffixes which enter into the alternation of length of the verbal theme are underscored.

$\ddot{t}ik-(a)ma\dot{a}la$ "let us eat."
_{1 2}

$\ddot{t}ik-(a)l-(a')mala$ "let us go eat."
_{1 2 1}

The vowel of the suffix proper, *-ma-*, appears both long and short, depending on the alternation of length in the verbal theme.

$\ddot{t}ik-(i)l\dot{o}\cdot g-(\delta)ma\dot{a}la$ "let us go and pretend to eat."
_{1 2 1 2}

The vowel of the suffix proper, *-lō·g-*, has a constant value of two morae, but enters into the alternation of length pattern of the verbal theme.

$ana\eta-(i')l\dot{o}\cdot g-(i)ba'-(a)t$ "he wants to pretend he is crying."
_{2 2 1 1}

The vowel increment juxtaposed to the verbal stem has a value of two morae, thanks to the quantitative influence of the verbal stem (*anaη²*). The medial vowel of the first suffix, *-lō·g-*, has a constant value of two morae, and cannot therefore alternate in length with the preceding vowel increment, but does successfully cause the following vowel increment, associated with the suffix, *-ba'*, to have the value of one mora. The final suffix, *-t*, causes the vowel increment associated with it to resist lengthening which would be necessary for an alternation of length here. All alternation of length is thwarted, therefore, except that between the medial vowel of the first suffix (two morae) and the vowel increment preceding the second suffix (one mora).

$ana\eta-(a')l-(i)l\dot{o}\cdot g-(i)ba'-(a)t$ "he wants to go pretending to cry."
_{2 1 2 1 1}

This example differs from the one previously cited merely in that the vowel increment preceding the first suffix (two morae) alternates in length with the vowel increment preceding the second suffix (one mora). Yet in this example alternation of length is given free play, with one exception when the final suffix, *-t*, causes the vowel increment preceding it to resist lengthening.

3. Alternation of Length in Other Circumstances

In addition to the alternation of length which operates in a manner which can be described by giving regular rules (see 2, above), there is a tendency toward alternation of length in all classes of words in Tübatulabal, but this tendency manifests itself in an arbitrary way, so that it is not possible to give any generally applicable rules. Instances of this arbitrary alternation are:

i. Addition of one mora to the absolute objective case suffix, *-la-*, when the suffix is attached to a vowel counting for only one mora, and when the suffix is followed by the locative postposition, *-p*, or *-batsu* (cf. §§26-29).

<i>tca'mila'batsu</i>	away from the acorn gravy.
<i>tca'mila'p</i>	in the acorn gravy.
<i>ta'ha'wila'p</i>	in the summer.

But compare:

<i>tca'mila'</i>	the acorn gravy (obj.).
<i>ta'ha'wila'</i>	the summer (obj.).

ii. Addition of one mora to the locative postpositions when the postpositions are attached to a vowel counting for only one mora, and when the postpositions are followed by a conjunctive pronoun beginning with a consonant.

<i>μ'kuba'n</i>	on its peak.
<i>tca'mi'batsu'n</i>	away from his acorn gravy.

iii. Addition of one mora to the one-mora final (or last) vowel of "contracted" forms of certain particles (cf. §40), when the particle is "expanded."

<i>μndμ'k</i>	that.	<i>μndu'uga'l</i>	that.
<i>we't</i>	oh! (exclamation).	<i>we'edu'</i>	oh, so!
<i>miya'</i>	the mile (Sp. loan word).		
<i>miya'agi</i>	<i>i'mi'</i>		I went a mile.

iv. Addition of one mora to the one-mora vowel of certain suffixes and conjunctive particles which usually stand in final position when they are followed by an element containing a short vowel.

<i>i'mica'</i>	he will take leave.
<i>i'mica'agi'l</i>	we shall take leave.
<i>ma'abi'</i>	where are you?
<i>ma'abi'igi't</i>	"where are you?" he is saying.

v. The *a* vowel increment, which is regularly associated with verbal suffixes (see §13), may optionally be placed before a conjunctive particle to maintain the alternation of length. Incidentally, such an intrusive vowel-increment also maintains the alternation of stress (see §4).

<i>a'taxki'n</i>	<i>wa'h</i>	he slept there.
<i>a'taxki'ngi', a'taxki'na'agi'</i>	<i>wa'h</i>	I slept there.

The intrusive *a* increment seems to fulfill the tendency toward alternation of length, primarily because the *a* increment has the value of two morae; an intrusive *a* increment having the value of one mora would be sufficient to maintain the alternation of stress. But the optional form is *a'taxki'na'agi'*, never **a'taxki'nagi'*. The intrusive *-a-* increment, however, may have the value of two morae under the influence of the verbal stem (see 1, iii, and 2, ii, above).

4. Loss of Mora

When a vowel receives an additional mora, the effect is generally to maintain alternation of length (see especially 3, above). But when a vowel loses a mora, alternation of length does not characteristically result. Loss of mora is quite arbitrary and peculiarly limited. Examples are:

i. Loss of mora in stem compounding. Such loss occurs both in the compounding of nominal and verbal stems (§8, 4) and in the fusion of particle stems. The latter is more a matter of syncretism than of true compounding (see §40). A stem may also receive an additional mora when compounded.

<i>pa'ηa</i>	up.
<i>ta·l</i>	the sun.
<i>pa'ηata'l</i>	the god (lit., "above the sun").
<i>hani·-</i> (n. st.)	HOUSE.
<i>halī't</i>	he is sitting.
<i>hani'halī't</i>	he is visiting (lit., "he is house-sitting").

ii. Loss or addition of mora in stem reduplication (§15, 4). The first reduplicated stem frequently has one less mora than the stem it precedes.

<i>pūti'tpiti'ida't</i>	he is turning over repeatedly.
<i>pica't</i>	he is going out.
<i>pica'bica''a't</i>	he is going out repeatedly.

Sometimes the vowel of the repeated stem loses a mora, but a glottal stop, having the value of one mora, is given to the deprived stem by way of compensation.

<i>tulu'uma't</i>	it is rolling up.
<i>tulμ'm'tulu'uma't</i>	it is tangled.
<i>lōhō'ōma't</i>	he is entering.
<i>lōho'm'lōho'oma't</i>	he is going in and out.
<i>mō'n'mō'ōnō't</i>	it is boiling.

iii. Loss of one mora from the final two-morae vowel of certain nominal stems when the diminutive suffix is attached; other stems, in like circumstance, do not lose a mora.

<i>tu·mu·-</i> (n. st.)	OFFSPRING.
<i>tu'mμpi'n</i>	his little offspring.

But compare:

<i>pa·dzi·-</i> (n. st.)	OLDER BROTHER.
<i>pa'dzi'ibv'n</i>	his little (short) older brother.

iv. Loss of one mora from the final two-morae vowel of nominal stems when a conjunctive pronoun beginning with a vowel, or a case suffix beginning with a vowel and followed by a nasal consonant, is attached.

<i>hani-</i> (n. st.)	HOUSE.
<i>hani''ulu'</i>	your (pl.) house. (The glottal stop is intrusive.)
<i>ha'ni't'η</i>	your house.
<i>ha'ni't'n</i>	of his own house.
<i>a'na-</i> (n. st.)	FATHER.
<i>a'na't'η</i>	your father.
<i>a'na''ulu'</i>	your (pl.) father.
<i>a'na't'n</i>	of his own father.

v. Loss of mora in diphthongization. When a one- or two-morae vowel is followed by a vowel of different quality, without an intrusive glottal stop intervening, the resulting diphthong counts for one mora less than the arithmetical sum of the juxtaposed vowels.

<i>a'na</i>	FATHER; <i>-i</i> (suus obj. suff.)
<i>a'na'i</i>	his own father (obj.); the final diphthong counts for two, not three, morae.
<i>ηgi-</i> (n. st.)	FOOT; <i>-i</i> (suus obj. suff.)
<i>ηgi'i</i>	his own foot (obj.); the final diphthong counts for one, not two, morae.

vi. Loss of mora in contraction. Cf. §6.

5. Quantitative Change in Initial Reduplication

In the peculiar process termed "initial reduplication," the first vowel of the basic form of the stem is repeated initially. If the stem of the basic form begins with a consonant, the repeated vowel is placed before the first consonant (which assumes a secondarily developed form; see §5); if the stem of the basic form begins with a vowel, the repeated vowel is placed before this vowel, and an intrusive glottal stop keeps the repeated vowel apart from the first vowel of the stem proper. Usually there is no quantitative change in either the first vowel or the repeated vowel, but quantitative change is characteristic of the initially reduplicated form of certain stems. Since this type of quantitative change follows no regular rule, it will be necessary, in the dictionary, to list both the basic form and the initially reduplicated forms of stems.

i. Stems in which the repeated vowel has a mora value different from that of the first vowel of the stem proper.

<i>ta'twa'l</i>	the man.	<i>ata'twa'l</i>	the men in one place.
<i>hi·b-</i> (basic form), <i>ihī·b-</i>			TO MASSAGE.
<i>ciug-</i> (basic form), <i>i·ciug-</i>			TO COMB.
<i>ma'-</i> (basic form), <i>a'ma'-</i>			TO TOUCH.

If, in this instance, the organic glottal stop, having the value of one mora, is assumed to "belong" to the second syllable (cf. §4, 7), then the repeated syllable has the same morae value as the stem syllable ($a + ' =$ two morae).

ĩ'dzĩmi'- (basic form), *ĩ'ĩ'dzĩmi'*- TO STAY.

ii. Stems in which the repeated vowel has the same value as the first vowel of the initially reduplicated form of the stem, but in which the first vowel of the basic form of the stem has a value different from that of the first vowel of the initially reduplicated form of the stem.

ma'g- (basic form), *amag*- TO KNOW.
wi'c- (basic form), *iwic*- TO CAPTURE.
a'c- (basic form), *a'ac*- TO BATHE.
pa'm- (basic form), *ambam* TO MAKE INTO A BALL.
pu'n- (basic form), *umbun*- TO TIE A KNOT.

§4. STRESS AND THE SYLLABLE

Tübatulabal employs a free word-stress which expresses no systematic meaning: words are never distinguished by a difference in accentuation. The stress given to an element is not fixed, but may be changed according to a rhythmical pattern, the alternation of stress. This rhythmical pattern is modified in respect to a few elements which require a certain vowel to be stressed in all circumstances. Such a vowel is said to have fixed stress. Alternation of stress in general is oriented from the main stress, which is not acoustically more prominent than other stressed vowels, but merely serves as a convenient point of departure in describing the rhythmical pattern.

1. The Main Stress

With very few exceptions (cf. 3, 4, below), the main stress falls on the final vowel of the stem; or if suffixes are appended, on the final vowel of the last suffix. Thus the word, in Tübatulabal, is a phonetic entity delimited by the position of the main stress. Conjunctive particles which follow the main stress are either atonic or accented independently (cf. 3, below). Accordingly, conjunctive particles are not, strictly speaking, part of the word to which they are attached.

tĩ'kana'tni he is feeding me. (*-ni*, conj. part. 1 sing. obj. pron.)
ta'ʹtwa'lgĩ' I am the man. (N. predication, *-gi'*, conj. part. 1 sing. subj. pron.)

Since the alternation of stress is oriented from the main stress, a change in the position of the main stress brought about by the addition of a suffix may alter the accentuation of the entire word.

tci'niya'l the red thistle.
tiŋi'yala'p on the red thistle.
wita'ŋhata'l the Tejon Indians.
wi'taŋha'tala'ʹbatsu' away from the Tejon Indians.
ta'naha'ts ti' ana'ŋ I wish he would cry.
a'naŋa'liló'gôpi'gana'n he is the one who was going along pretending to cry.

2. *Alternation of Stress*

Counting backward from the main stress, every second mora is stressed where possible. This is not always possible because stress falls on the beginning of the accented vowel, so that an alternate stress will fall on the third mora when the series

long vowel (two morae) – short vowel (one mora)

is followed by a stressed vowel. Where the vowel receiving the main stress is preceded by short vowels (having a value of one mora each), or long vowels (having the value of two morae each), it is possible to stress every second mora.

i. Alternate stress falling on the second mora.

$i'mb\dot{i}\eta w\dot{i}'ba'a't$	he is wanting to roll string on his thigh.
C B A	
$yu'u'du'u'yu'uda't$	the fruit is mashing.
D C B A	

In both examples: A = main stress; B = first alternate stress, counting two morae backward from A; C = second alternate stress, counting two morae backward from B; D = third alternate stress, counting two morae backward from C.

ii. Alternate stress falling on the third mora. When a stressed vowel is preceded by a short vowel (one mora), which is in turn preceded by a long vowel (two morae), the alternate accent falls on the third mora counting backward from the stressed vowel.

$na'u'wic\mu'l$	the pine-nut pole.
B A	
$u'g\dot{i}b\dot{i}'l$	the bunch grass.
B A	
$ibi'm\ddot{u}ya'l$	the flower-month.
B A	
$p\ddot{u}t\dot{i}'tp\dot{i}t\dot{i}'dina't$	he is turning it over repeatedly.
C B A	

In these examples: A = main stress; B = first alternate stress, falling on third mora, counting backward from A; C = second alternate stress, falling on second mora, counting backward from B.

iii. Two vowels employed as an accentual unit. Two short vowels of the same phoneme which are kept separated by a glottal stop are treated in alternation of stress as a single accentual unit; but only if both belong to the same grammatical element—that is, if both belong to the same stem (the vowel repeated in initial reduplication is external) or if both belong to the same suffix. Examples are:

$ku'u'd\dot{z}ubi'l$	the little one. (Not $*ku'u'd\dot{z}ubi'l$.)
$uyu'\mu m$	it got word out. (Not $*u'yu'\mu'm$.)

But compare:

i'mbiŋwi'ba'a't. (The *-a'a-* is not treated as a single accentual unit because the vowels concerned belong to different grammatical elements: the first *-a'* belongs to the desiderative suffix, *-(i)ba'*, while the second *-a-* is the vowel increment associated with the present tense suffix. Vowels in certain stems which meet these formal requirements are nevertheless not treated as a single accentual unit.)

wa'a'nt the acorns (n. st., *wa'an-*).

iv. Glottal stop with mora value.

na'adi''i' the cat (obj.).
C BA

kδ''δci''i' the minnow fish (obj.).
C B A

In the examples cited: A = main stress, falling on *-i*, the objective case suffix; B = first alternate stress, falling on the second mora counting backward from A (the final glottal stop counts for one mora; the vowel preceding the glottal stop counts for the second mora); C = second alternate stress, falling on the second or third mora counting backward from B. The nominal stem, *kδ''δci''-*, always appears with two glottal stops; both glottal stops are therefore organic and each has theoretically the value of one mora. The part of the stem, *-δ'δ-*, is a single accentual unit, which means that stress must always fall on the first *-δ-*; theoretically, *-δ'δ-* counts for three morae (*-δ-*, one mora; *'-*, one mora; *-δ-*, one mora), but, acoustically, the duration of *-δ'δ-* is no longer than the duration of a long rearticulated vowel, which has the value of two morae.

v. Consonants in alternation of stress. Neither the intrusive glottal stop, nor any other consonant except the organic glottal stop has mora value; accordingly, consonants in general do not affect alternation of stress.

3. Elements other than Stems and Suffixes Which Are Included in the Alternation of Stress

i. Conjunctive particles, subject pronouns (§23), and the conjunctive quotative particle may be fused with the present tense suffix, and then function like true suffixes in point of alternation of stress (see §18, 1). The plosives of the resulting syncretism are peculiar in that they are not always heard to be geminated as they ought to be according to the rules for geminating consonants (§1, 7).

ii. The conjunctive particle possessive pronouns (§24) are generally included in the alternation of stress of the word to which they are attached; this is inevitable, practically, for with the exception of the second person, possessive pronouns consist of consonants without vowels, and accordingly could not be stressed independently, since only vowels may receive an accent. For second person possessive nouns, see §3, 4, iv.

iii. There is a certain tendency in fast speech to include conjunctive particles in the alternation of stress of the main word. This is accomplished chiefly by means of an intrusive vowel.

<i>i'hgi't</i>	"Here," he says (slow speech).
<i>i'higi't</i>	"Here," he says (fast speech).

Numerous examples of this phenomenon will be found in a text to be published later, Autobiography, which was transcribed from fast speech.

4. Fixed Stress

Alternation of stress is modified in certain elements which contain vowels that are stressed in all circumstances. The vowel having such fixed stress serves as a point of departure for alternation of stress in the word, counting backward.

Examples of nominal stems having a fixed stress on the final vowel of the nominal stem are:

<i>kɥtuga'</i> (n. st.)	FIREWOOD.
<i>kɥ'tuga't</i>	the firewood. (In this example the main stress coincides with the fixed stress; when suffixes are added, the main stress is shifted but the fixed stress remains on the final vowel of the nominal stem.)
<i>kɥtuga'ta'</i> (obj.)	not * <i>kɥtu'gata'</i> .
<i>tsambaha'</i> (n. st.)	CARRYING NET.
<i>tsa'mbaha'l</i>	the carrying net.
<i>tsambaha'la</i> (obj.)	not * <i>tsamba'hala'</i> .
<i>tugumba'</i> (n. st.)	BEADS.
<i>tɥ'gumba'l</i>	the beads.
<i>tɥ'gumba'la</i> (obj.)	not * <i>tugɥ'mbala'</i> .
<i>tuguwa'</i> (n. st.)	MEAT.
<i>tu'guwa'n</i>	his meat.
<i>tu'guwa'yu'n</i> (obj.)	not * <i>tugu'wayu'n</i> .

The suffix, *-püšana'*, has fixed stress on the final vowel. (§36, 4.)

<i>ti'kapü'gana'n</i>	<i>i'·bi'l</i>	the one who was eating arrived.
<i>a'dawi'k</i>	<i>ti'kapü'gana'yu'n</i>	he saw the one who was eating. (Not * <i>tika'püga'nayu'n</i> .)

The obscurely compounded noun, *tüba'tulaba'l*, has fixed stress on the final vowel and on the second vowel (which is the final vowel of the n. st., *tüba'*, PINE NUTS; but when *tüba-* is used as an ind. st., it is without fixed stress).

<i>tüba'tulaba'l</i>	the Tübatulabal Indians.	
<i>tüba'tulaba'la'p</i>	<i>i'mi'</i>	he went to the Tübatulabal Indians.

While fixed stress plays but an insignificant rôle in the language as spoken today, it is nevertheless interesting because it stands in such complete contradiction to the general phonetic pattern. Stems having fixed stress are generally trisyllabic (with each syllable counting for one mora), whereas stems of the language as a whole are fundamentally dissyllabic. Trisyllabic stems (whether having fixed stress or not) may possibly represent archaic compounds (see §8, 4).

5. Syllabic Boundaries

A syllable consists of a short vowel, or a long or long rearticulated vowel, or two short vowels of the same phoneme treated in alternation of stress as a single accentual unit; a consonant may or may not begin a syllable; a consonant may or may not close a syllable. The syllable appears to be built around the vowel.

Single consonants are always stressed as though beginning a syllable (except, of course, where the single consonant is the final sound of a word). Geminated consonants (§1, 7) give the acoustic impression of being split up in a division of syllables. For example, the imperative verb, *tikka'h* eat!, may be split up into two syllables: *tik-* (in which the *-k* is unreleased), first syllable, *-kah* (in which the *k-* is released), second syllable.

6. Variations of Syllabic Length Which Have No Mora Value

The most prominent of these variations are:

i. When vowel lengths in two syllables have the same mora value, a closed syllable is acoustically longer than a syllable ending in a vowel.

<i>hani-la'p</i>	in the house.
<i>hani-la'</i>	the house (obj.).

The syllable, *-lap*, is acoustically longer than the syllable, *-la*, though both have the value of one mora.

ii. A short stressed closed syllable is acoustically longer than a short unstressed closed syllable. An acoustically discernible pause without mora value occurs at the geminated consonant (§1, 7), which in this circumstance gives the impression of a very long consonant; however, the length of the pause varies with different individuals speaking, and is at least partly rhetorical.

<i>ð'tóð'lóka'n</i>	he kissed her.
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The syllable, *-ð't-*, being stressed, gives the acoustic impression of being longer than the unstressed syllable, *-lók-*, though both have the value of one mora.

iii. A syllable containing a long vowel has the same mora value as a syllable containing a long rearticulated vowel, although the latter gives an acoustic impression of being longer. (See §1, 2.)

7. The Organic Glottal Stop

The organic glottal stop "belongs" to a syllable in the sense that the syllable is in a way a unit of length when a glottal stop replaces a vocalic mora.

u'ugμ'l' he played.

When this stem is followed by suffixes, the organic glottal stop, having the value of one mora, is replaced by an additional mora given to the vowel of the syllable to which the glottal stop "belongs."

u'gu'lamu'n he played here.
δ'lδho'm' he entered.
δ'lδho'mamu'n he entered here.

In stem reduplication, an organic glottal stop commonly replaces a vocalic mora (cf. §3, 4, ii).

mδ'n'mδ'δnδ't it is boiling.
δmδ'n'mδ'n' it boiled.
tulu'm'tulu'uma't it is tangled.
lδho'm'lδho'oma't he is going in and out repeatedly.
nī'u'nī'wina't he is shaking hands. (In the first syllable of this instance, *nī·w->*nī·u->nīu'-.)
he'u'he'ewi't he is trotting. (In the first syllable, *he·w->*he·u->heu'-.)
cidδ''dδ''ina't he is making him slide. (In the second syllable of this instance, *dδ·->dδ'-.)

§5. SECONDARY DEVELOPMENT OF CONSONANTS

Not every consonant may be secondarily developed. Blank spaces opposite a given consonant in the table on page 81 indicate that the consonant is not changed from its primary form. With certain exceptions the primary consonants (cf. §1, 6) may occur in any position. The exceptions are -ŋ-, which never appears in initial position but only in medial or final position, and the voiced plosives and affricates, which appear only in medial position, never in initial or final position.

1. Voicing

Plosives and affricates which are voiceless in initial position become voiced when in medial position and preceded by a two-morae vowel.

pa'wili'iga'nt the goose.
a'ba'wili'iga'nt the many geese in one place.
tu'kt the mountain quail.
u'udu'kt the many mountain quail in one place.
ku'hμpi'l the elderberry.
u'gu'hμpi'l the many elderberries in one place.
tsa'iyina'ana't he is making lace.

a'dza'iyina'nica' he will make lace.
tci'ina'l the hailstones.
i'dži'ina'l the many hailstones in one place.

TABLE OF SECONDARY DEVELOPMENTS

Primary consonant	Voiced	Nasalized	Assimilated	Geminated
<i>p</i>	<i>b</i>	<i>mb</i>		See §1, 7
<i>b</i>				
<i>t</i>	<i>d</i>	<i>nd</i>	<i>td</i>	
<i>d</i>			<i>td</i>	
<i>k</i>	<i>g</i>	<i>ŋg</i>		
<i>g</i>				
<i>'</i>				
<i>ts</i>	<i>dz</i>	<i>ndz</i>	<i>tc, tdz</i>	
<i>dz</i>			<i>tdz</i>	
<i>tc</i>	<i>dž</i>			
<i>dž</i>				
<i>h</i>			<i>x</i>	
<i>c</i>			<i>s</i>	
<i>l</i>			<i>ll_o</i>	
<i>n</i>			<i>n_o, m, ŋ</i>	
<i>ŋ</i>			<i>n</i>	
<i>m</i>			<i>m_o, mm, mm_o, mŋ, mn</i>	
<i>w</i>			<i>w_o, u</i>	
<i>y</i>			<i>i</i>	

2. Nasalization

When a plosive or affricate is the first consonant of a syllable which is closed by a nasal consonant, and when this syllable (plosive-vowel-nasal consonant)

is the first syllable of a stem, the plosive or affricate is nasalized in the initially reduplicated form of the stem (for a description of initial reduplication, see §3, 5).

<i>pŋg-</i>	(basic form), <i>ɪmbiŋg-</i>	(initially redup. form)	TO SAY
<i>pŋga't</i>	the basket cap, <i>ð'mbŋga't</i>	the many basket caps in one place.	
<i>taŋ-</i>	(basic form), <i>andaŋ-</i>	(init. redup. form)	IT RAINS.
<i>tsuŋg-</i>	(basic form), <i>ɪndzɪuŋg-</i>	(init. redup. form)	TO BE AFRAID.
<i>kum-</i>	(basic form), <i>ɪŋum-</i>	(init. redup. form)	TO COME.
<i>kun-</i>	(basic form), <i>ɪŋun-</i>	(init. redup. form)	TO BRING.

Two forms have been found in which a plosive is not nasalized, but they may have been incorrectly given.

<i>kami·dž-</i>	(basic form), <i>akami·dz-</i>	(init. redup. form)	TO CATCH.
<i>komi·la-</i>	(basic form), <i>okomi·la-</i>	(init. redup. form)	TO BE CRAMPED.

Resistance to nasalization of the affricate, *ts-*, is shown in some words having a partly reduplicated stem. In the following examples, *tsi-* may possibly represent an archaic stem compound or prefix (cf. §8, 4).

<i>tsinini'·-</i>	(basic form), <i>itsinini'·-</i>	(init. redup. form)	TO SHAKE.
<i>tsimimü'·-</i>	(basic form), <i>itsimimü'·-</i>	(init. redup. form)	IT SHINES.

No example has been found in which the affricate, *tc-*, is nasalized.

3. Assimilatory Changes

i. Unvoicing. *n*, *m* are unvoiced when in final position and preceded by a voiceless consonant. The unvoicing of these consonants (and of *-l-* and *-w-*) is indicated by placing the diacritic, °, under the consonant.

<i>mu·'cŋ</i>	his fish spear. Compare: <i>mu·'ci'n</i>	his fish spear (obj.).
<i>ka·'wi'cm</i>	the Kawaiisu Indians. Compare: <i>ka·'wicmi'</i>	the Kawaiisu Indians (obj.).

-w- is unvoiced when in final position and preceded by a consonant, not necessarily a voiceless consonant.

<i>pü'ŋw</i>	he rolled string on his thigh. Compare: <i>püwa'n</i>	he rolled string on his thigh for him.
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When semivowels are in final position, but preceded by a vowel, they open to the homorganic vowel (see §1, 5). Plosives and affricates are always voiceless when geminated (§1, 7).

ii. Partial unvoicing. When *-m-* is in medial position, but followed by a voiceless consonant, it has a voiceless off-glide; when in medial position and preceded by a voiceless consonant, it has a voiceless on-glide.

<i>pð'mmt</i>	the egg. This word has also been heard as <i>pð'mnt</i> .
<i>yu'hm'juhmma't</i>	he is smiling.

Medial *-hl-* > **-lh-* > *l̥* in final position (cf. §7).

<i>α'ana·'l̥</i>	he fasted.
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Alveolar plosives and affricates have been found with a voiceless on-glide and a voiced off-glide (transcribed *-td-* and *-tdz-*). Usually it is obvious that these consonants represent gemination, and as such are theoretically voiceless (see §1, 7). However, since it is not always certain that these consonants are geminated, they have been transcribed as heard, *-td-* and *-tdz-*.

patdza'aha't he is shelling it.
ta'tdaha't it is bursting open.

The stem, *püita-*, has been heard reduplicated both as *pütdi'tpütdi'dina't* and *püi'tpüi'dina't* he is turning it over repeatedly.

iii. Alveolar and palato-alveolar consonants. It is curious that while affricates occur in both alveolar (*ts*) and palato-alveolar (*tc*) series as primary consonants, the homorganic fricative (*c*) occurs only in palato-alveolar position as a primary consonant. *-c-* becomes alveolarized when juxtaposed to the alveolar affricate, *-ts-*.

cü'nü'a'c the soldier.
cü'nü'a'sts our soldier.

A form has been found in which the alveolar affricate, *-ts-*, is drawn back, presumably under the assimilatory influence of the *-l-* in the stem.

a'li- (n. st.) BOW; *-ts-*, (suus obj. suff.)
a'lw'tc his own bow (obj.).

iv. Velarization of *-h-*.—*-h-* usually becomes a velar fricative when preceding a consonant; always when the consonant is a plosive or affricate and the *-h-* is preceded by a stressed one-mora vowel.

ta'xkina't he is sleeping.

Less frequently when the *-h-* follows a two-morae vowel.

mδ'δmδ'ht the jimsonweed. Also heard *mδ'δmδ'xt*.

Sometimes when the *-h-* is in final position (cf. §7).

δ'nδ'δla' δmδ'ix he went back himself.

v. Development of nasal consonants. *n* and *ŋ* are completely assimilated to the following plosive or affricate; *m* is only partly assimilated.

n > ŋ before a velar plosive or *-h-*.

wa'a'nt the acorns.
wa'a'ŋhayi't he is gathering acorns.
tü'nt the rock.
tüŋgi'l the rock ledge.
m- particle, "empty word." (Cf. §23, 1.)
ŋgi'la'a'ŋ we.

n > m before a labial plosive.

mbi' you.
çμlμn- (n. st.) FINGERNAIL.
çμlμmp their fingernail.

$\eta > n$ before an alveolar plosive or affricate.

hacki'la'a'η ala'wina't not we are talking to him.

hacki'la'a'ndi'η ala'wina't not we you are talking to. ("We are not talking to you.")

No example has been found of $\eta > m$, although the possibility of such a development before a labial plosive is not improbable.

$m > m\eta$ before a velar plosive.

δ'yōma't he is copulating.

δ'yōmngi't he is pulsating as in copulation.

$m > mn$ before an alveolar plosive or affricate.

pōm- (n. st.) EGG.

pōmnda' the egg (obj.).

pōmndzi'p their egg (obj.).

4. Gemination. See §1, 7

§6. CONTRACTION

1. Contraction in Verbal Endings

$V+i=i$

The final vowel of verbal stems contracts with the vowel increment preceding verbal suffixes; if the vowel increment is *-i-*, the vowel resulting from the contraction is *-i-*.

δpōlō'ōma- (vb. st.) IT IS BENDING; *-(i)n*, (suff.).

δ'pōlō''ōmi'n he caused it to bend.

wi'di- (vb. st.) TO BE ANGRY; *-(i)ba'at* (suffixes).

wi''idi'ba'a't he wants to be angry.

$V+a=V$

If the vowel increment is *-a-*, the vowel resulting from the contraction is usually of the quality of the final vowel of the stem.

wi'di- (vb. st.) *-(a)t* (pres. suff.).

wi''idi't he is angry.

tiiwili- (vb. st.) TO FIX.

tii'wili't he is fixing it.

$V+a=a$

But when the *-a-* increment is associated with the voice suffix, *-(a)n*, then the vowel resulting from the contraction is *-a-*.

wi'da'ana't he is angry with him.

tii'wila'ana't he is fixing it for him.

The quantitative results of such contraction are treated in §3, 1, ii.

2. Contraction in Noun Endings

$$i + V = V$$

The final *-i* of the objective relative suffixes, *-yi-*, *-tsi-*, *-ni-*, *-nini-* (cf. §27), contracts with the initial vowel of conjunctive pronouns; the vowel resulting from the contraction has the quality of the initial vowel of the conjunctive pronoun.

<i>hani'yü'η</i>	your house (obj.).
<i>hani'yulu'</i>	your (pl.) house (obj.).
<i>tsô'h'yulu'</i>	your (pl.) fish (obj.).
<i>ma'ca'tsulu'</i>	your (pl.) sack (obj.).
<i>tsimi'lnulu'</i>	your (pl.) mouse (obj.).
<i>çü'lçuni'nulu'</i>	your (pl.) fingernail (obj.).

3. Elision of Medial Vowels

Medial *-i-*, having the value of one mora, is sometimes elided in fast speech; the alternation of stress operates as though the vowel were not elided.

<i>i'mica'</i>	he will take leave (careful speech);	<i>i'mca'</i>	(fast speech).
<i>ta'pici'l</i>	the bread (careful speech);	<i>ta'pci'l</i>	(fast speech).

A few forms have been found in which the short vowel, *-i-*, is elided when a juxtaposed semivowel is opened to a homorganic vowel in medial position. The significance of this elision is not understood; the opening of a semivowel in medial position is most exceptional.

<i>inihyi-</i> (vb. st.)	TO BE SICK; <i>-(a)t</i> (pres. suff.).
<i>i'nihya't</i>	he is sick.
<i>ta'la'</i>	the sun (obj.).
<i>ta'wigi'ibi'l</i>	the looker, the one who looks.
<i>ta'lata'ugibi'l</i>	the sunflower (lit., "the looker at the sun").
<i>tala'wic-</i> (basic form), <i>a'tala'uc</i> (init. redup. form)	he went around it.

4. Elision of Final Vowels

The final vowels of certain elements are elided more or less optionally. Final vowels which are dispensable in this way appear to be stylistic ornaments bearing no distinctive meaning; no general rules can be given for their elision. In certain constructions, they are always retained; in other constructions, always elided. The final vowels of personal pronoun conjunctive particles are good examples of this type of dispensable final vowel (see §§22-24).

5. Contraction of Consonants

$n+n=n$ in nouns ending in $-n$ to which the conjunctive pronoun, $-n$, is juxtaposed.

$c\mu l\mu n-$ (n. st.)	FINGERNAIL.
$c\mu l\mu'n$	his fingernail.

$t+g=k$; $t+b=p$; $t+d=t$ (cf. §18, 1).

6. Syncope

The imperative suffix, $-h$, is retained in final position, but syncopated when not in final position. (Cf. §16, 1.)

§7. METATHESIS

Metathesis is a process which expresses no grammatical category; it receives systematic expression in only one type of syllable.

1. Regular Metathesis

When $-h-$ begins a medial syllable, which is given final position, the $-h-$ is transposed so that it closes the syllable.

i. $-hw-$, medially, becomes $*-wh$ in final position.

$p\delta'nihw\ddot{i}'\eta$	of the skunk.
$p\delta ni'w\grave{h}$	the skunk. ($-hw->*-wh>-w\grave{h}$).

ii. $-hy-$, medially, becomes $*-yh$ in final position.

$h\ddot{i}'im\ddot{i}'hyi'$	the childless couple (obj.).
$h\ddot{i}'im\ddot{i}'ix$	the childless couple (subj.). $-hy->*-yh>*-ih>-ix$.

In forms like those cited under i and ii, above, semivowels open to the homorganic vowels just as they do in absolute final position (cf. §1, 5); in the second instance above, the $-h-$ becomes velarized, as it may in any final position.

iii. $-hl-$, medially, becomes $*-lh$ in final position.

$ha''ayahli'$	the trout (obj.).
$ha''aya'll\grave{h}$	the trout (subj.). $-hl->*-lh>-ll\grave{h}$, because the tongue is not released from the position assumed in articulating the $-l$, so that the final voiceless $-h$ is heard with lateral friction, transcribed $-l\grave{h}$.

iv. *-hn-*, medially, becomes **-nh* in final position.

<i>tsó'hní'í'η</i>	my gray fish.
<i>tsó'nn̥</i>	his gray fish. <i>-hn->*-nh->-nn̥</i> , because the tongue is not released from the position taken in articulating the <i>-n</i> , so that the aspiration for the final <i>-h</i> goes through the nose instead of through the mouth; this nasal aspiration is transcribed <i>-n̥</i> .

2. Metathesis of Grammatical Elements

Certain grammatical elements are transposed without change of meaning. Examples are:

	<i>en > ne</i>
<i>inda'</i>	they.
<i>nik</i>	I (cf. §23, 1).
	<i>bi > *ib</i>
<i>an</i>	(inter. part.).
<i>an + bi = anbi</i>	are you? Compare the optional form: <i>ani'p</i> are you? (<i>-bi > *-ib > ip</i> , because voiced plosives never appear in final position).
<i>tan</i>	(cond. part.).
<i>tani'p</i>	if you
	<i>gi > *ig</i>
<i>ani'k</i>	am I? (<i>-gi > *-ig > -ik</i> , because voiced plosives never appear in final position).
<i>tani'k</i>	if I
	<i>wi·d > *-dī·w</i>
Cf. §15, 2.	
	<i>-hyi- > *-hüy</i>

The metathesis in the following stem is the only occurrence found of transposition of sounds in stems, except the regular metathesis noted under 1, above.

<i>í'ínihyimu'n</i>	he became sick here.
<i>í'ínihí'i</i>	he got sick. <i>-hyi- > *-hüy > -híi</i> , because the semivowel opens to the homorganic vowel (see §1, 5).

§§8-40. MORPHOLOGY

§8. GRAMMATICAL PROCESSES

The four grammatical processes in Tübatulabal are reduplication, suffixation, conjunctive affixation of particles, which is a loose type of suffixation, and stem compounding. With these processes are involved certain incidental changes in vowels and consonants which do not directly express any grammatical notions, and are, accordingly, treated in the phonology with mechanical processes in general (§§1-7).

1. Reduplication

Stem reduplication may be complete or partial. Complete reduplication of verbal stems expresses the iterative aspect (§15, 4); reduplication of the final syllable of some nominal stems expresses an unusual notion termed "plural allegiance" (§34, 3). The term, "initial reduplication," is reserved for a peculiar type of partial reduplication in which only the first vowel of the stem is repeated initially; this extraordinary device is more freely used than any other kind of reduplication (§§11 and 34, 2).

In addition to stems, two affixed elements are subject to reduplication, a vowel increment which is primarily associated with verbal suffixes, and the benefactive suffix (§15, 5, 6).

2. Suffixation

Suffixation is the most freely used grammatical process in the language.

There is a fixed order of suffixes: for nouns, the derivative suffixes (§§30, 31) follow the nominal stem (§38, 4), and are in turn followed by the absolute or relative suffix (§26) and by the case suffix (§27); for verbs, there are medial suffixes which have a fixed order among themselves but as a type precede one of many possible final-position suffixes (§12).

Nouns never appear with a profusion of derivative suffixes; it is rare to find a noun with more than one derivative suffix appended. The verbal theme, on the contrary, may contain a whole string of derivative suffixes. A verb which contains several suffixes is something of a problem to translate. It is as though the proposition as stated by the naked verb were delimited by the first suffix, somewhat revised by the second suffix, made passive by the third suffix, further delimited and contradicted by the fourth suffix, and so on. Such constructions are described as "high language" characteristic of old-time speech-making in which the desideratum was eloquence rather than transparent intelligibility. In contrast, the use of an auxiliary verb followed by a naked verbal stem is characterized as "strong talk" (§20).

Whether a stem is followed by one or many suffixes, the resulting word is a very firm phonetic unit. Superimposed upon this unit, and, as it were, binding it together is the ever present alternation of stress (§4, 2) and the occasionally operative alternation of length (§3).

3. Conjunctive Affixation of Particles

Conjunctive particles may be distinguished from true suffixes in more than one way. In point of position, conjunctive particles always follow suffixes. Formally, the conjunctive particle does not necessarily form a meaningful unit with the word to which it is attached, but may refer primarily to a following word (see, e.g., §§22-24). Phonetically, the conjunctive particle is characteristically, but not always, kept outside of the alternation of stress which extends over the stem and suffixes. Whether the conjunctive particle is atonic, which it is infrequently, or stressed independently of the word upon which it leans, does not depend upon the particle itself. Every conjunctive particle may be stressed in some circumstance; accordingly, conjunctive particles are not enclitics, but appear to maintain an absolute final position and function formally like enclitics in other Shoshonean languages.

4. Stem-compounding

Stem-compounding is the most limited process in Tübatulabal; it might almost be said to be nonexistent as a grammatical process, for those compounds which have been found either give the feeling of being an inflexible unit of two stems, entirely closed to new combinations with other stems; or, in the forms where a stem is freely compounded, the stem has become for all practical purposes a stereotyped suffix (§§17, 4; 19, 3, 4; 16).

i. Nominal stem + verbal stem compound.

<i>hani-</i> (n. st.)	HOUSE.
<i>hal-</i> (vb. st.)	TO SIT.
<i>hanihal-</i> (vb. st.)	TO VISIT ("to house-sit").
<i>hani'hal'i't</i>	he is visiting.
<i>pundzi-</i> (n. st.)	SEED, EYE.
<i>ka'dza-</i> (vb. st.)	TO BOIL.
<i>pundziga'dza-</i> (vb. st.)	TO BOIL MUSH.
<i>pu'ndziga'adza't</i>	he is boiling the mush.

In the following examples, the verbal stem, *mu'g-*, TO DIE, TO BE UNCONSCIOUS, is used as the second member of the compound; the stems suggested as the first members of the compounds do occur independently but it is not entirely certain that it is these stems which are etymologically compounded. The meanings of the resulting words are only vaguely suggested by the members of the compound.

<i>yaxta-</i> (n. st.)	EVENING PRIMROSE.
<i>yaxtamug-</i> (vb. st.)	TO BE SLEEPY.
<i>ya'xtamu'ugmu't</i>	he is sleepy.
<i>ta-</i> (n. st.)	SUN.
<i>ta'mug-</i> (vb. st.)	TO BE THIRSTY.

<i>ta'mu'ugμ't</i>	he is thirsty.
<i>a'na'-</i> (n. st.)	FATHER.
<i>a'na'mu'g-</i> (vb. st.)	TO BE HUNGRY.
<i>a'na'mu'ugμ't</i>	he is hungry.

ii. Verbal stem + verbal stem.

<i>ikwī-</i> (vb. st.)	TO MENSTRUATE.
<i>ikwōmu'g-</i> (vb. st.)	TO MENSTRUATE FOR THE FIRST TIME.
<i>i'kwōmu'ugμ't</i>	she is menstruating for the first time.
<i>u'i'-</i> (vb. st.)	IT SMOKES (impers.).
<i>u'imu'g-</i> (vb. st.)	TO DROWN, TO SUFFOCATE.
<i>u'imu'ugμ't</i>	he is drowning.

iii. Nominal stem + nominal stem.

<i>pa'lap</i>	in the water (iness. case).
<i>ta'l</i>	the sun (subj. case).
<i>pa'la'bata'l</i>	the Yokuts ("sun in the water."—The Yokuts live to the west, where the sun goes into the water).

iv. Obscure compounding. Compounds in which verbal stems and nominal stems enter are not common (see i-iii, above). This shows that compounding is no longer a live process in the present-day Tübatulabal; there is, however, much evidence of archaic compounding. A stem which may be used independently is frequently found to occur with an element which is no longer used independently. The dependent element may just as possibly represent an archaic prefix or suffix as an archaic stem in composition.

<i>ma'-</i> (ind. n. st.)	HAND.
<i>tsó'-</i> (dep. element)	
<i>ma'atsó'l</i>	the forearm.
<i>-la'w-</i> (dep. element)	
<i>ma'la'awa't</i>	he is raising his hand.
<i>tōηδ'-</i> (ind. n. st.)	KNEE.
<i>-bi'd-</i> (dep. element)	
<i>tōηδ'bi'idi't</i>	he is kneeling.
<i>ku-</i> (ind. n. st.)	FIRE.
<i>-tuga-</i> (dep. element)	
<i>kμ'tuga't</i>	the kindling.
<i>ta'wī-</i> (ind. vb. st.)	TO BE BLIND.
<i>-g-</i> (dep. element)	
<i>ta'wīgī't</i>	he sees it.
<i>ci'-</i> (ind. vb. st.)	TO URINATE.
<i>-mi-</i> (dep. element)	
<i>ci'imil</i>	the penis.

<i>tik-</i> (ind. vb. st.)	TO EAT.
<i>-igu'i'</i> (dep. element)	
<i>tik'igu'i'a't</i>	he is cooking it.
<i>mii'ig-</i> (ind. vb. st.)	TO KILL.
<i>nim'</i> (dep. element)	
<i>nim'mii'iga't</i>	he is killing a human being, he is murdering.
<i>kuya-</i> (ind. n. st.)	YUCCA PLANT.
<i>-dibi-</i> (dep. element)	
<i>kuya'dibi'l</i>	the central stalk of a yucca plant.
<i>a'nin-</i> (ind. n. st.)	RED ANT.
<i>p-</i> (dep. element)	
<i>pa'anint</i>	the ant (generic).
<i>tuha-</i> (ind. n. st.)	WATER SNAKE.
<i>-awa-</i> (dep. element)	
<i>tuha'awa'l</i>	the earthworm.
<i>pa-</i> (ind. n. st.)	WATER.
<i>-'iwi-</i> (dep. element)	
<i>pa''iwi't</i>	the ocean.
<i>-dzi-wa-</i> (dep. element)	
<i>pa'dzi'wa't</i>	the lake.
<i>-tsu'a-</i> (dep. element)	
<i>pa'tsu'a't</i>	the pond.
<i>-ckic-</i> (dep. element)	
<i>packi'ct</i>	the well, the spring.
<i>-nugic-</i> (dep. element)	
<i>pa'nugic</i>	the water-spirit.
<i>-lab-</i> (dep. element)	
<i>pa'labi't</i>	he is soaking it in water.

In addition to being compounded with a half-dozen obscure elements, the independent nominal stem, *pa-*, WATER, may also be compounded with independent nominal stems.

<i>waya-</i>	STEEP SIDE OF A MOUNTAIN.
<i>pa'waya'l</i>	the cut made by water in the steep side of a mountain.
<i>mani-</i> (ind. n. st.)	ACORN.
<i>-'u-</i> (dep. element)	
<i>mani''u'l</i>	the acorn tree.
<i>ci'bi-</i> (ind. n. st.)	ACORN.
<i>-'i-</i> (dep. element)	
<i>ci'bi''i'l</i>	the acorn tree.
<i>takwa-</i> (ind. n. st.)	ACORN.
<i>-adzi-</i> (dep. element)	
<i>takwa'adzi'l</i>	the acorn tree.

<i>ca'</i> - (ind. vb. st.)	TO DEFECATE.
<i>pawu</i> - (dep. element)	
<i>pawu'</i> <i>ca'a't</i>	he is diarrhœic.
<i>cu'</i> <i>i</i> - (ind. n. st.)	JACKRABBIT.
<i>kawi</i> - (dep. element)	
<i>kawi'</i> <i>cu''i't</i>	the snowshoe rabbit.
<i>ciga</i> - (ind. n. st.)	CRACK IN A ROCK.
<i>tu</i> - (dep. element)	
<i>tμ'</i> <i>ciga'l</i>	the grave.
<i>tin</i> - (ind. n. st.)	ROCK, STONE.
<i>-gi</i> - (dep. element)	
<i>tin</i> <i>gi'l</i>	the rock ledge.
<i>ti'ba</i> - (ind. vb. st.)	TO GAMBLE.
<i>-im</i> - (dep. element)	
<i>tipi'</i> <i>ima't</i>	he is playing hand-game.
<i>naŋha</i> - (ind. n. st.)	EARS.
<i>-bi</i> - (dep. element)	
<i>na'ŋhabi'l</i>	the leaves.
<i>u'</i> - (ind. vb. st.)	WATER IS LEAKING (impers.).
<i>hu</i> - (dep. element)	
<i>hu''a't</i>	it (grain, sand) is leaking (impers.).

v. Particles in stem-compounding. See §40.

§9. CLASSIFICATION OF WORDS

Three types of words (parts of speech) may be clearly distinguished.

1. Verbs

The verb, as a part of speech, includes words having verbal stems and words having nominal stems which are verbalized (see §21). Only a limited number of nominal stems may be verbalized.

2. Nouns

The noun, as a part of speech, includes words having nominal stems and words having verbal stems which are nominalized (see §§31 and 38). Nothing is more common in Tübatulabal than the nominalization of verbal stems.

3. Particles

The particle, as a part of speech, includes all words, whether used independently (see §§20; 23, 1; 40) or in conjunctive affixation (see §§21, 4, 5; 22-24; 39), which are neither verbs nor nouns. Particles are comparatively uninflected words which appear only in syntactic collocation with nouns and verbs. And just as nominal stems may be generally distinguished from verbal stems (§38, 4), so particle stems may be generally distinguished from both nominal and verbal stems (§40).

As between nouns and verbs, there is not much choice in priority of treatment. The sections on Verb Morphology (§§10-21) treat of the derivational and relational categories expressed by the verb, and the processes involved in their expression which apply to verbalized bases no less than to regular verbal stems. The resulting verb must always express both aspect and voice, the obligatory verbal categories. The formation of nouns gives a superficial appearance of being complex, but this is only because nouns fall into classes comparable to the well-known "declensions" in Greek and Latin. The forms used to express the obligatory nominal categories depend on the class of noun used. Actually, there are only three main noun classes. The Noun Morphology (§§25-38) would be extremely simple if it were not for the fact that verbal stems are nominalized with extraordinary frequency. The resulting noun, no less than a noun with nominal stem, must express a syntactic case (subject, object, or genitive), and be either an absolute noun (with nonspecification of possessor) or a relative noun (with possessor specified). The case distinctions and the absolute-relative specifications are the obligatory nominal categories.

The distinction between nouns and verbs is, therefore, clear-cut. A verb is a word which expresses at least the obligatory verbal categories (aspect and voice); a noun is a word which expresses at least the obligatory nominal categories (syntactic case and absolute-relative specification).

§§10-21. VERB MORPHOLOGY

§10. OBLIGATORY VERBAL CATEGORIES

1. *Aspect*

Every verbal stem (and verbalized base) has two forms, which may be termed the telic (comparable to the momentaneous form in Southern Paiute), and the atelic (roughly comparable to the durative form in Southern Paiute). It is of utmost importance to be aware of the two forms, not merely because a slight difference in aspect is expressed, but mainly because a considerable variety of suffixes may follow the atelic and not the telic form, while a smaller group of suffixes may be attached to either form. Some suffixes of the latter group bear a different meaning when following the telic form than when following the atelic form. Thus, $-(i)ba'$ bears a desiderative meaning after the atelic form, but a kind of inceptive meaning after the telic form.

The formation of the two forms is on the whole quite regular in Tübatulabal.³ The telic form is generally an initially reduplicated form of the atelic. The telic form (initially reduplicated) is found both naked and with suffixes attached, while the atelic form (presumably the primary form) is found only with suffixes or an auxiliary verb accompanying it.

The telic is used for an action (e.g., TO TAKE A BITE) or condition (e.g., it got green) performed or arrived at in an instant (perfective without tense commitment), and for this reason the action or condition is generally, though not necessarily, felt to be completed at the time of talking. The atelic is sometimes used when an action requires some duration for its performance (TO EAT), but frequently the atelic is quite vague in respect to aspectual meaning. Since the telic and atelic are the only basic forms of the verb, verbal notions regarding these aspects must be first of all squeezed into one category or the other (telic or atelic) before the meaning of the verb is further defined by the optional categories of tense, mode, or even other aspects, as the habitative, distributive, or iterative.

2. *Voice*

Both the telic and the atelic form of a verbal stem share the same inherent voice and the same possible voice suffixes. Inherently, a verb is transitive or intransitive or impersonal. Some inherently transitive verbs may be used in an intransitive context, though this is not typical. Very rarely an impersonal verb (e.g., IT IS HOT) may be used intransitively (HE IS EROTIC). But the inherent distinctions in voice cannot be left to context for most verbs. The verb TO TALK is a characteristic example of an intransitive verb. If the need arises to use this verb transitively, a special transitivity suffix must be appended to the verbal stem.

³ But the Southern Paiute correlative aspects yield a much clearer contrast in meaning than the Tübatulabal telic and atelic. Cf. Sapir, 149.

3. Other Obligatory Categories

While the aspects (telic, atelic) and voice (tr., intr., impers.) already mentioned are, strictly speaking, the only obligatory verbal categories, the fact that an atelic form cannot stand in entire independence makes the elements accompanying the atelic form (suff. or aux. vb.) in a sense obligatory. These elements express a wide range of tense and modal notions (see §§11 and 12).

§11. FORMATION OF THE TELIC AND ATELIC

1. Regular Formation

As already mentioned, the telic form is generally an initially reduplicated form of the atelic. The process involved is a peculiar type of reduplication, which for want of a better term is called "initial reduplication" to draw attention to the fact that only the first vowel is repeated.

<i>ela-</i>	(atelic form),	<i>e'ela</i>	(telic form)	TO JUMP.
<i>tik-</i>	(atelic form),	<i>itik</i>	(telic form)	TO EAT.
<i>tana-</i>	(atelic form),	<i>andana</i>	(telic form)	TO GET DOWN.
<i>pa'abi-</i>	(atelic form),	<i>a'ba'abi</i>	(telic form)	TO BE TIRED.

Initial reduplication is concerned only with repeating a single vowel, the first of the basic form. Incidental mechanical effects of initial reduplication are treated in the phonology. These include the intrusion of a glottal stop (*e'ela*), quantitative and accentual change, gemination of the first consonant which assumes a medial position in the initially reduplicated form; if the first consonant is a plosive or affricate, it may be voiced (*a'ba'abi*) or nasalized (*andana*).

2. Reversed Formation

Curiously enough, the basic form of certain exceptional verbal stems is the telic form which is initially reduplicated for the atelic form. The following list pretty well exhausts verbal stems behaving in this way.

(atelic)	(telic)	
<i>a'dza'ya'w-</i>	<i>tsa'ya'u</i>	TO YELL.
<i>apatsa'h-</i>	<i>patsa'h</i>	TO SHELL NUTS.
<i>anaŋ-</i>	<i>naŋ</i>	TO CRY.
<i>anab-</i>	<i>nap</i>	TO THROW.
<i>a'na'yuw-</i>	<i>na'yuw</i>	TO FIGHT.
<i>a'ay-</i>	<i>ai</i>	TO PICK UP.
<i>a'ya'n</i>	<i>ya'n</i>	TO SING.
<i>acag-</i>	<i>ca'k</i>	TO ROAST.
<i>andaŋ-</i>	<i>taŋ</i>	TO KICK.
<i>aha'idž-</i>	<i>ha'itc</i>	TO CHEW.
<i>imbŋw-</i>	<i>pŋw</i>	TO ROLL STRING ON THIGH.

(atelic)	(telic)	
<i>imili'd-</i>	<i>mili't</i>	TO SCOLD.
<i>itsixk-</i>	<i>tsixk</i>	TO PRICK.
<i>ihib</i>	<i>hip</i>	TO MASSAGE.
<i>ihid-</i>	<i>hit</i>	TO PLUCK FEATHERS.
<i>iciy-</i>	<i>ci'i</i>	TO ROCK A CRADLE.
<i>indɪwa-</i>	<i>tiwa</i>	TO SUMMON.
<i>icib-</i>	<i>ci'p</i>	TO WHITTLE.
<i>icilu'b</i>	<i>cilu'p</i>	TO SPLIT WOOD.
<i>iciug-</i>	<i>ciuk</i>	TO COMB.
<i>otolo'h-</i>	<i>tolo'h</i>	TO GROAN.
<i>ocolo'η</i>	<i>colo'η</i>	TO SNORE.
<i>oyom-</i>	<i>yom</i>	TO COPULATE.
<i>μkμc-</i>	<i>ku'c</i>	TO GROW.
<i>μwuba-</i>	<i>wuba</i>	TO WHIP.
<i>μyugμ'-</i>	<i>yugμ'</i>	TO CUT.
<i>μndμmu'ga-</i>	<i>tμmu'ga</i>	TO DREAM.
<i>μndμma'w-</i>	<i>tμma'u</i>	TO FAIL.
<i>μtμc-</i>	<i>tu'c</i>	TO GRIND.
<i>μnμη-</i>	<i>nμη</i>	TO POUND.

3. Zero Formation

In another, but even smaller group of exceptional verbal stems, there is no outward difference between the telic and the atelic form. When dealing with such verbal stems, one infers that a given form is the telic, for example, because it stands in entire independence; or that a given form is the atelic, because a suffix is attached which never occurs with the telic form. The following list pretty well exhausts verbal stems in which there is no outward difference between the telic and the atelic form; each verbal stem, that is, is used for both telic and atelic.

<i>a'hy(-)</i>	TO QUIT.	<i>δ'yo'g(-)</i>	TO MOVE.
<i>i'y(-)</i>	TO STEAL.	<i>μyu'g(-)</i>	TO FALL.
<i>in(-)</i>	TO GATHER.	<i>u'(-)</i>	IT LEAKS.
<i>δ'l(-)</i>	TO GET UP.	<i>wahti'ac(-)</i>	TO BE BEHIND.
<i>δ'yomηg(-)</i>	TO PULSATE.	<i>taηdan(-)</i>	TO STAMP.
<i>δ'y(-)</i>	TO PASS BY.		

§12. ORDER OF VERBAL SUFFIXES

1. Final-position Suffixes

The following suffixes are used only after the atelic form, never after the telic form.

1. All nominalizing suffixes (§31).
2. All subordinating suffixes (§19).
3. All imperative suffixes (§16, 1, 2).

4. *-(a)t*, present tense suffix (§18, 1).
5. *-(a)ma*, exhortative suffix (§16, 5).
6. *-(a)ha*, permissive suffix (§16, 6).
7. *-(i)ukaŋ*, past habitative suffix (§15, 3).
8. *-(a')haiwit*, irrealis suffix (§16, 3).
9. *-(a)xtayat*, adversative suffix (§16, 4).

Those suffixes which form verbs (2-9, above) always stand last in the order of verbal suffixes. Obviously, only one of these final-position suffixes may be attached to a given atelic form.

2. Medial Suffixes

The order of verbal suffixes resolves itself essentially into the order of medial suffixes; suffixes not appearing exclusively in final position may be termed medial suffixes.

Medial suffixes, listed in order of position, are:

1. *-(i)n*, causative suffix (§14, 2).
2. *-(a)n*, benefactive suffix (§14, 3).
3. *-(a)la*, or *-(a)gi·m*, or *-(a)kɨn*, or *-(a)mɨn*, suffixes of movement (§17).
4. *-(i)ni·nɨn*, distributive suffix (§15, 1).
5. *-(i)lɔ·k*, PRETENDING TO. . . (§16).
6. *-(i)ba'*, desiderative suffix (§16, 7).
7. *-(i)ca*, future tense suffix (§18, 2).
8. *-(i)w-*, passive suffix (§14, 1).
9. *-(i)wi·t*, collective-intensive suffix (§15, 2).
10. *-(a)puw-*, similitive suffix (§16, 8).

All these suffixes may follow either the telic form or the atelic form, except the future tense suffix, *-(i)ca*, which is appended only to the telic form.

Not all the positions in the order given above are filled in any one verb, but the relative order in any given pair or trio of medial suffixes is adhered to.

How the medial suffixes are oriented in reference to the verb as a whole can be conveniently shown by establishing three main positions of verbal elements.

A. Naked verb: consists of either the telic or the atelic form without suffixes; the naked verb is either a single stem or a compound stem, or a verbalized base (§21).

B. Medial suffixes: see order of position above.

C. Final-position suffix: may be used only after the atelic form.

The first main position (A) must always be filled. If the first position (A) consists of a telic form, then a verb results when the first two positions are filled ($A+B$) or when only the first position is filled (A). If the first position (A) consists of an atelic form, then a verb results when the first and last positions are filled ($A+C$) or when all three positions are filled ($A+B+C$); the third position (C) must be filled or the resulting verb becomes an atelic form (A, or $A+B$) used in annexation with an auxiliary verb (§20).

§13. THE VOWEL INCREMENTS

It will have been noted that in the list of final-position and medial suffixes (§12), each suffix was preceded by an *i* or *a* vowel, enclosed in parentheses. These are the vowel increments. The *i* and *a* never alternate for a given suffix, unless the causative suffix *-(i)n* and the benefactive suffix *-(a)n* are regarded as one suffix, with an alternation of *i* and *a* to express differences in meaning. This does not seem probable because no generally discernible meaning can be otherwise assigned to the vowel increments.⁴

1. *Relation of Vowel Increment to Verbal Suffixes*

The vowel increments are primarily associated with verbal suffixes. A given verbal suffix is always preceded by an *i* or *a* increment, both when the suffix is juxtaposed to a naked verb, and when the suffix follows another (medial) suffix. Conversely, however, the vowel increments do not always precede verbal suffixes. The *a* increment may be reduplicated independently of the suffix with which it is primarily associated. Also, the vowel increments may appear without a verbal suffix, as when *a* is used before certain particles (§3, 3, v), and when *i* is used in nominalized bases (§38).

2. *Relation of Vowel Increment to Verbal Stem*

The verbal stem may influence both the *a* or *i* increment quantitatively (§3, 1), and the *a* increment qualitatively (§2, 1). Such influence is exerted on the increment juxtaposed to the naked verb; the resulting change expresses no grammatical notion. The sections referred to in the Phonology (§§2; 3; 6) explain a certain fraction of this influence as a result of contraction, vocalic harmony, and alternation of length. But by no simple rule can this quantitative and qualitative influence be learned. It is necessary to know arbitrarily that the stem *ik-*, for example, does not exert any qualitative influence on a juxtaposed increment (e.g., *a* primarily associated with the pres. suff. *-t*, *tikat* he is eating it) but that the stem *wik-*, for example, does exert the influence of changing a juxtaposed *a* to *i* (the pres. suff. *-(a)t* becomes *-(i)t* in *wiküt* he is grabbing it).

§14. VOICE

A given verbal stem will have no morphological feature to point out whether it is inherently transitive, intransitive, or impersonal (see §10, 2). But the inherent voice of a naked verb may be changed by appending specific voice suffixes. For example, when the passive suffix is attached to an inherently transitive verb (e.g. TO KICK HIM), the resulting verb is passive (TO BE KICKED); when the passive suffix is attached to an inherently intransitive verb (e.g., TO

⁴ In Southern Paiute a bewildering variety of meanings may be expressed by the curious device of alternating the final vowel stem from *a* (*a*, *o*, *u*) to *i*. Cf. Sapir, 237-240.

CRY), the resulting verb is impersonal (THERE IS CRYING); and the passive suffix is never attached to an inherently impersonal verb.

There are three voice-suffixes, which may be termed the passive, the causative, and the benefactive, although the actual meaning which a given suffix bears depends upon the voice of the verbal stem or verbal theme when the suffix is appended. It is sometimes possible to append two, or even all three, voice suffixes to a given verbal stem.

1. Passive Suffix, *-(i)w-*

-(i)- vowel increment, tolerates lengthening (cf. §3, 1 and 2). *-w-* suffix proper, opens to *-u* in final position (§1, 5).

i. Passive suffix attached to transitive verb. When the passive suffix is attached to a transitive stem or a transitivized theme, a passive verb results. In the examples below, the present tense suffix *-(a)t* completes the verb when the voice suffixes are attached to the atelic form of a verb (see §§11 and 12).

<i>we'h-</i> (atelic), <i>e'weha²</i> (telic)	TO LICK.
<i>we'hiwa't</i>	he is being licked (e.g., kitten by mother cat).
<i>e'wehi'u</i>	he got licked.
<i>wi'h-</i> (atelic), <i>i'wih²</i> (telic)	TO LOOK AFTER HIM.
<i>wi'hiwa't</i>	he is being looked after (e.g., by the sheriff).
<i>i'wih²'u</i>	he got looked after.
<i>anab⁻²</i> (atelic), <i>nap²</i> (telic)	TO THROW.
<i>a'nabi'wa't</i>	he is being thrown.
<i>nabi'u</i>	he got thrown.
<i>a'c-</i>	TO BATHE (inherently intr.).
<i>a'cin-</i>	TO BATHE HIM (tr.).
<i>a'cini'wa't</i>	he is being bathed.

ii. Passive suffix attached to an intransitive verb. When the passive suffix is attached to an intransitive verb, an impersonal verb results. Such impersonalized verbs must be accompanied by one or the other of the primary tense suffixes, *-(a)t*, present tense suffix, or *-(i)cam*, future tense suffix (§18).

<i>anaη⁻²</i> (atelic), <i>naη²</i> (telic)	TO CRY.
<i>a'naηi'wa't</i>	there is crying.
<i>naηi'cami'u</i>	there will be a cry (a ceremonial affair).
<i>ĩmbiηw-</i> (atelic), <i>pĩηy</i> (telic)	TO ROLL STRING ON THIGH.
<i>ĩmbi'ηwiwa't</i>	there is rolling of strings on thighs.
<i>pĩηwi'cami'u</i>	there will be string manufacture.
<i>kataxwa⁻²</i> (atelic), <i>akataxwa²</i> (telic)	TO BE SICK, DIE.
<i>ka'taxwi'wa't</i>	there is dying off.
<i>aka'taxwi'cami'u</i>	there will be an epidemic.

When an inherently transitive verb is also used in an intransitive context (see §10, 2), the suffix appended yields either a true passive verb (see i, above), or an impersonal verb, according to context.

<i>tika't</i>	he is eating it (tr.).
<i>tika't</i>	he is eating (intr. context).
<i>t'i'kiwa't</i>	it is being eaten (pass.).
<i>t'i'kiwa't</i>	there is eating (impers. context).

iii. Passive suffix and impersonal verbs. The passive suffix is not directly attached to an inherently impersonal verbal stem. But if the impersonal stem is first transitivized, the passive suffix may be appended.

<i>piha</i> ² (atelic), <i>ɪpiha</i> ² (telic)	IT BREAKS.
<i>piha't</i>	it (e.g., rope) is breaking (from tautness, impers.)
<i>pihi-n-</i>	TO BREAK IT (tr.).
<i>pihi'inō't</i>	he is breaking it (while pulling).
<i>pihi'niwa't</i>	it (e.g., rope) is breaking (when he pulls it).
<i>ɪ'pihi'ni'u</i>	it got broke (from pulling, pers.).

2. Causative Suffix, -(i)n

-(i)- vowel increment, tolerates lengthening (cf. §3, 1 and 2). -n suffix proper.

i. Limitations in the use of the causative suffix. The causative suffix is rarely used with transitive verbs; in addition, the causative suffix is somewhat arbitrarily limited in its use with intransitive and impersonal verbs. For example, while the causative suffix may be appended to most verbal stems, inherently intransitive, as

<i>nō'-</i> (atelic)	TO TURN BACK,
it may not be appended to the intransitive stem	
<i>welē'-</i> (atelic)	TO CRAWL.
<i>nō''ō't</i>	he is turning back.
<i>nō''ina't</i>	he is returning it (= causing it to be turned back).
<i>welē'i't</i>	he is crawling. But not <i>*welē''ina't</i> .

Also while the causative suffix may be attached to most impersonal stems, as

<i>tsupa</i> ²	IT (FIRE) IS OUT,
it may not be attached to the impersonal verb	
<i>ī'di.'</i>	IT IS HOT.
<i>tsupa't</i>	the fire is out.
<i>tsupi'ina't</i>	he is putting out the fire.
<i>ī'di''i't</i>	it (fire, water, weather) is hot. But not <i>*ī'di''ina't</i> . Such a construction makes sense; it is understood to mean "He is making it hot," but is regarded as a barbarism in Tübatulabal.

Generally speaking, when the causative suffix is not tolerated after a given verbal stem, the benefactive suffix is; some verbal stems tolerate the direct suffixation of both the causative and benefactive suffixes (see 4, below); other verbal stems tolerate neither the causative nor benefactive suffix. Examples of the last are:

<i>tómôtska</i> ⁻² (atelic),	<i>ótómôtska</i> ² (telic)	TO STUMBLE.
<i>ócóló·η</i>	<i>cóló·η</i>	TO SNORE.
<i>ó·yó·mηg-</i>	<i>ó·yó·mηk</i>	TO PULSATE.
<i>u'-</i>	<i>u'</i>	IT LEAKS.
<i>μnduma·w-</i>	<i>tuma·u</i>	TO FAIL.
<i>ixtau-</i>	<i>ixtau</i>	TO HELP.

ii. Causative suffix attached to transitive verbs. One rarely finds a causative suffix attached to a transitive verbal stem.

<i>hatda·w-</i> (atelic), <i>a·hatda·u</i> (telic)	TO CROSS.
<i>hatda·wina't</i>	he is helping him to cross it (river, bridge).
<i>a·hatda·awi'n</i>	he helped him (i.e., caused him) to cross it.

iii. Causative suffix attached to intransitive verbs. When the causative suffix is attached to an intransitive verbal stem, a transitive verb results, frequently in the sense of the actor causing the object to do the action.

<i>püüta</i> ⁻² (atelic), <i>ipüüta</i> ² (telic)	TO TURN OVER.
<i>pü'tüta't</i>	he is turning over.
<i>pü'tüti·'ina't</i>	he is making him turn over.
<i>ipü'tüti·'n</i>	he turned him over.
<i>pücika</i> ⁻² (atelic), <i>ipücika</i> ² (telic)	TO SLIP.
<i>pü'cüki·'ina't</i>	he is slipping (through the agency of a person or something impersonal, like ice).
<i>ipü'cüki·'n</i>	he made him slip.
<i>texma</i> ⁻² (atelic), <i>etexma</i> ² (telic)	TO BE SILENT.
<i>texmi·'ina't</i>	he is silencing him.
<i>e'texmi·'n</i>	he made him keep quiet.
<i>halai'</i> - (atelic), <i>a·halai'</i> (telic)	TO BE WET.
<i>halai'·'ina't</i>	he is wetting him.
<i>a·halai'·'n</i>	he made him wet.
<i>hó·h-</i> (atelic), <i>óhó·h</i> (telic)	TO COUGH.
<i>hó·'hina't</i>	he is coughing (through the agency of a crumb).
<i>óhó·'hu'n</i>	it made him cough.
<i>uyu·g-</i> (atelic), <i>uyu·k</i> (telic)	TO FALL.
<i>uyu·'ugi'n</i>	he dropped it (i.e., caused it to fall).

The verb may be merely transitivized, without any suggestion of the actor's causing the object to do the action.

<i>ma·la·w-</i> (atelic), <i>a·ma·la·u</i> (telic)	TO RAISE ONE'S HAND.
<i>ma·'la·wina't</i>	he is waving his hand at him.

<i>a'ma'la'awi'n</i>	he waved his hand at him.
<i>wini-g-</i> (atelic), <i>iwini-k</i> (telic)	TO LOOK BACK.
<i>wini'gina't</i>	he is looking back at him.
<i>i'wini'igi'n</i>	he looked back at him.
<i>cawh'ca'hw-</i> (atelic), <i>acawh'cawh'</i> (telic)	TO WHISPER.
<i>ca'wh'ca'hwina't</i>	he is whispering to him.
<i>aca'wh'ca'ahwi'n</i>	he whispered to him.

iv. Causative suffix attached to impersonal verbs. When the causative suffix is attached to an impersonal verbal stem, the resulting verb is transitive, and the subject of the impersonal verb becomes the object of the transitive verb whenever the context permits.

<i>wic-²</i> (atelic), <i>iwic²</i> (telic)	IT IS RIPE.
<i>wici'ina't</i>	he is causing it to ripen, he is cooking it.
<i>yu'um-</i> (atelic), <i>uyu'um</i> (telic)	IT WEARS OUT.
<i>yu'uma't</i>	it is wearing out.
<i>yu'umina't</i>	he is filing it.
<i>yu'udz-</i> (atelic), <i>uyu'uts</i> (telic)	IT FADES.
<i>yu'udza't</i>	it is fading.
<i>yu'udzina't</i>	he is washing it.
<i>apa'ana²</i> (telic)	IT IS PLUGGED UP.
<i>apa''ani'n</i>	he plugged it up.

3. Benefactive Suffix, *-(a)n*

-(a)- vowel increment, tolerates lengthening (cf. §3, 1 and 2), but resists qualitative change (§§2, 2; 6, 1). *-n* suffix proper, formally identical but etymologically distinct from the causative suffix, if association with the *a* increment instead of the *i* increment may be regarded as evidence of its etymological independence.

i. Benefactive suffix attached to transitive verbs. When the benefactive suffix is attached to a transitive verbal stem or transitivized theme (see 2, iii and iv, above), a verb results with two objects, the normal direct object of the transitive verb, and an indirect object expressing the person or thing⁵ for whose benefit the verbal action is done. Formally, there is no distinction between the direct and indirect objects, for both are expressed by the objective case-forms of nouns or pronouns; in the examples, as usual, only third person singular is given, a person which is expressed by zero form both as actor and as object.

<i>apatsa'h-</i> (atelic), <i>patsa'h</i> (telic)	TO SHELL.
<i>a'patsa'aha't</i> <i>ii'bata'</i>	he is shelling pine nuts.
<i>a'patsa'hana't</i> <i>ii'bata'</i>	he is shelling pine nuts for him.
<i>patsa'aha'n</i>	he shelled it for him.
<i>ha'itc</i> (telic)	he chewed it.

⁵ In Southern Paiute an indirective suffix, *-ŋqī-^a*, requires the indirect object to be animate. Cf. Sapir, 144. But it is possible in Tübatulabal to have an inanimate indirect object.

<i>ha'idža'n</i>	he chewed it for him.
<i>yô'm</i> (telic)	he copulated with her.
<i>yô'ôma'n</i>	he copulated with her for him (i.e., he committed adultery).
<i>hala'i'ina't</i>	he is wetting him (tr. vb.).
<i>hala'i'ina'ana't</i>	he is wetting him for her.
<i>wici'ina't</i>	he is cooking it (tr. vb.).
<i>wici'nana't</i>	he is cooking it for him.
<i>yu'umina't</i>	he is filing it (tr. vb.).
<i>yu'umina'ana't</i> <i>kuti'nicta'</i>	he is filing it for the key. (The indir. obj. is inanimate.)
<i>yu'udzina't</i>	he is washing it (tr. vb.).
<i>yu'udzina'ana't</i>	he is washing it for him.

ii. Benefactive suffix attached to impersonal and intransitive verbs. When the benefactive suffix is attached to an impersonal or to an intransitive verbal stem, the resulting verb is always transitive in the sense that an indirect object (morphologically expressed by the same forms as the dir. obj.) is enough to make a verb transitive. Such transitive verbs may have only an indirect object, or only a direct object, or both an indirect and a direct object. The result depends upon the verbal stem to which the benefactive suffix is appended.

<i>yilah</i> ⁻² (atelic), <i>iyilah</i> (telic)	TO BE HAPPY.
<i>ta'wigi'c</i> <i>yi'laha'ana't</i>	when he sees him, he is happy.
<i>iyi'laha'n</i> <i>wi'ina'η</i>	he got happy when she gave it to him.
<i>we'le'i't</i>	he is crawling (intr.).
<i>wele'ana't</i> <i>kô'imi'</i>	he is crawling to the woman. (Perhaps this is in the sense of "he is crawling there for the erotic benefit of the woman.")
<i>i'di'i't</i>	it is hot (impers.).
<i>i'di'ana't</i>	he is warming it. (Perhaps this is in the sense of "it is becoming hot for him.")
<i>tî'iba't</i>	he is gambling (intr.).
<i>tî'iba'ana't</i> <i>ô'yata'</i>	he is gambling for money.
<i>ha'ibi'i't</i>	he is joking (intr.).
<i>ha'ibi'ana't</i>	he is teasing him.
<i>pô'ôci't</i>	it is white (impers.).
<i>pô'ca'ana't</i>	he is making it white. (Perhaps in the sense of "it is becoming white for him.")
<i>lô'gô'ô't</i>	he is crazy (intr.). (Cf. Sp. <i>loco</i> .)
<i>lô'go'ana't</i>	she makes him crazy. (Perhaps in the sense of "he is crazy for her.")
<i>wi'ibi't</i>	he is becoming fat, he is fat (intr.).
<i>wi'bana't</i>	she is fattening him. (Perhaps in the sense of "he is becoming fat for her.")

<i>i''i't</i>	he is drinking (tr. which may be used in an intr. context).
<i>i''ana't</i>	he is giving him a drink.
<i>tika't</i>	he is eating (tr. which may be used in an intr. context).
<i>tī'kana't</i>	he is feeding him.

Some verbal stems have a notional object included in the sense of the stem but are classified as intransitive because they never appear with a separate object noun or object pronoun, unless transitivized. Such stems may append the benefactive suffix.

<i>i'mbīŋwī't</i>	he is rolling string on his thigh (intr.).
<i>imbī'ŋwana't</i>	he is rolling string on his thigh for him.
<i>i'ciuga't</i>	he is combing his own hair (intr.).
<i>i'ci'ugana't</i>	he is combing her hair.
<i>wi'lahō't</i>	he is measuring beads around his hand (intr.).
<i>wi'la'hana't</i>	he is measuring beads around his hand for him.

In the following example, the verb has an impersonal subject when the benefactive suffix is appended to the intransitive stem.

<i>pa'abi't</i>	he is tired (intr.).
<i>pa'aba'ana't</i>	it (e.g., hunting) makes him tired. (Perhaps in the sense of "he is tired because of the hunt.")

4. Relation of the Use of the Causative and Benefactive Suffixes

It may be said that the benefactive suffix is used after virtually all transitive verbal stems or verbal themes which are transitivized by means of the causative suffix (see 3, i, above). It may be said, with less assurance, that the causative suffix is generally used after intransitive and after impersonal verbal stems (see 2, iii and iv, above). However, a certain number of intransitive and impersonal stems remain which do not tolerate the causative suffix, but which do tolerate the benefactive suffix (for examples, see 3, ii, above). In addition, there are a relatively small number of intransitive verbal stems to which either the causative or the benefactive suffix may be directly appended. The following list is not exhaustive.

<i>a'dza'ya'w-</i> (atelic), <i>tsa'ya'u</i> (telic)	TO YELL.
<i>tsa'ya'awa'n</i>	he yelled for him.
<i>tsa'ya'awi'n</i>	he yelled at him.
<i>tsuŋg-</i> (atelic), <i>undzŋk</i> (telic)	TO BE FRIGHTENED.
<i>tsu'ŋgana't</i>	he is frightened for him (lest he get hurt).
<i>tsu'ŋgina't</i>	he is frightening him.
<i>wa'ad-</i> (atelic), <i>awa'at</i> (telic)	TO RUN AWAY.
<i>wa''adana't</i> <i>kō'imi'</i>	he is running away with the woman.
<i>wa''adina't</i>	he is losing it (causing it to run away).

<i>ma'ig-</i> (atelic), <i>a'ma'ik</i> (telic)	TO GO AHEAD.
<i>ma'igana't</i>	he is going ahead for him (as guide).
<i>ma'igina't</i>	he is making him go ahead.
<i>hal²</i> (atelic), <i>a'hal²</i> (telic)	TO SIT, TO LIVE.
<i>hala'ana't</i>	he is sitting for her (waiting for her).
<i>hali'ina't</i>	he is seating her (giving her a chair).
<i>ala-w-</i> (atelic), <i>a'ala'u</i> (telic)	TO TALK.
<i>ala'wana't</i>	he is talking for him (acting as agent).
<i>ala'wina't</i>	he is talking to him.

Finally, it must be said that these generalizations are only suggestive. To discover the absolute limits of the use of the causative and benefactive suffixes would require more textual material than I possess. Such limits cannot be established through direct questioning of informants, since it is impossible for an informant to say categorically that the causative suffix is never used with a given intransitive stem, for example; all he can say is that a construction which I may offer him does not sound idiomatic; but at a later time he may use the censored construction in a context which satisfies his feeling for correct idiom.

§15. OPTIONAL ASPECTS

Every verbal stem has two forms; one form expresses a telic aspect, the other an atelic aspect (see §§10; 11; 18). In addition to these obligatory aspects (telic and atelic), certain other aspects may be optionally expressed.

The optional aspects are true "aspects," concerned with the extensity of action, as whether the action requires a moment or several repeated moments or a continuous duration, in distinction to "tense" which is concerned with the time of the action (whatever its extensity) in relation to the time of speaking, as before speaking (past), while speaking (pres.), after speaking (fut.). The optional aspects are clearly enough distinguished from tense (but see 2, below), yet are not so clearly distinguished from the expression of plurality. Sometimes, as might be expected, an optional aspect will express number as well as aspect, as when the extensity of the action is short and jerky (asp.), but the short and jerky actions are repeated a number of times (number). That is to say, number⁶ and aspect are involved in the expression of the optional aspects.

1. *Distributive Suffix, -(i)ni'nim*

-(i)- vowel increment, tolerates lengthening (cf. §3, 1 and 2). *-ni'nim* suffix proper; the first medial vowel of this suffix, *i*, has the value of either one or two morae, depending on the alternation of length in the verbal theme (cf. §3, 2, iv); the suffix also exerts a progressive qualitative influence, changing the quality of a juxtaposed *a* increment from *a* to *u* (cf. §2, 2).

⁶ Number has no inherent expression in verbal stems. A rather curious exception to this is found in one intransitive verbal stem, which is used only with a plural subject: *kataxwa²* (atelic), *akataxwa²* (telic) TO BE SICK, TO DIE.

<i>wac-</i> (atelic), <i>awac</i> (telic)	TO DIG.
<i>wa'cini'niṃṃt cuwa'la'</i>	he is digging the ground here and there.
<i>awa'cini'ini'm</i>	he dug first here, then there (distr.).
<i>anaṅ²</i> (atelic), <i>naṅ²</i> (telic)	TO CRY.
<i>a'naṅi'ni'niṃṃt</i>	he is crying wherever he goes (distr.).
<i>naṅi'ni'ini'm</i>	he cried out first here, then there.

The distributive suffix is never attached to an impersonal verbal stem.

2. Collective-Intensive Suffix, *-(i)wi't*

-(i)- vowel increment, tolerates lengthening (cf. §3, 1 and 2). *-wi't* suffix proper; this suffix exerts a progressive qualitative influence, changing the quality of a juxtaposed *a* increment from *a* to *i* (cf. §2, 2).

i. Collective meaning. When following some verbal stems, the suffix *-(i)wi't* bears merely a collective meaning, a group of actors (pl. subj.) performing the action of the verb.

<i>paṅkan-</i> (atelic), <i>apaṅkan</i> (telic)	TO SPEAK TÜBATULABAL.
<i>paṅka'niwi'idi't</i>	they are speaking Tübatulabal.
<i>a'paṅka'niwi'dica'</i>	they will speak Tübatulabal.

ii. Intensive meaning. When following some verbal stems, the suffix *-(i)wi't* bears an intensive meaning; the actor does the action of the verb intensively, which means that the extensity of action is short and sharp.

<i>ixk-</i> (atelic), <i>i'ixk</i> (telic)	TO BREATHE.
<i>i'xkiwi'idi't</i>	he is taking short, sharp breaths, as in sexual intercourse.
<i>i'ixkiwi't</i>	he took a sharp breath.

iii. Collective-intensive meaning. When attached to most verbal stems, the suffix *-(i)wi't* bears both a collective and an intensive meaning, usually with emphasis on the collective side (pl. subj.). Intensive action seems to result because a group of actors perform the verbal action.

<i>ukuc²</i> (atelic)	TO CROW.
<i>μ'kuci'wi'dita'</i>	they are crowing.

Compare the sense of a singular subject:

<i>a'naṅi'wi'idi't</i>	he is crying (in a way which suggests a whole group of mourners).
<i>ti'kiwi'idi't</i>	he is eating it (in a way which suggests a whole pack of wolves).

The collective-intensive meaning is preserved after the verb TO RUN, *ma'igūla-* (<*ma'ig-*>), but the form of the suffix proper is transposed from *-wi'd-* to *-dμw-*. This appears to be a case of metathesis: *-wi'd->*-di'w->-dμw*.

<i>ma'igü't</i>	he is going ahead.
<i>ma'igüla't</i>	he is running.
<i>ma'igüli'dµwa't</i>	he is racing.
<i>a'ma'igüli'idu'w</i>	he raced.

The collective-intensive suffix is never used after an impersonal verbal stem.

3. Past Habitutive Suffix, -(i)ukan

-(i)- vowel increment, resists lengthening (cf. §3, 1 and 2). -ukan suffix proper.

The past habitutive suffix bears a meaning of continued action of considerable extensity, repeated in an habitual way; in addition, the action referred to takes place entirely in the past and is no longer performed habitually at the time of speaking.

<i>ne'in²</i> (atelic)	TO DEPEND ON HIM.
<i>ne''i'niuka'η</i>	he used to depend on him.
<i>tsa'iyina'n-</i> (atelic, <tsa'iy-)	TO MAKE LACE.
<i>tsa'iyina'niuka'η</i>	he used to make lace.
<i>yo.'-</i> (atelic)	TO BE LAME.
<i>yo''iuka'η</i>	he used to be lame.
<i>yu'umin-</i> (atelic, <yu'um-)	TO FILE IT.
<i>yu'umi'niuka'η</i>	he used to file it.

The past habitutive suffix may be attached to impersonal verbal stems if the context permits.

<i>ixkowa'</i> (atelic)	WIND BLOWS.
<i>i'xkowa''iuka'η</i>	it used to blow (e.g., at this time of day).
<i>ibi.'-</i> (atelic)	IT BLOSSOMS.
<i>ibi''iuka'η</i>	it used to blossom (e.g., at this time of year).
<i>wic²</i> (atelic)	IT IS RIPE.
<i>wi'ciuka'η</i>	it used to ripen.
<i>wi.'-</i> (atelic)	WATER RUNS.
<i>wi''iuka'η</i>	it used to run here.

4. Iterative Aspect, Expressed by Stem Reduplication

Iterative aspect is expressed when the verbal stem is reduplicated.⁷ Usually only the atelic form of the verbal stem may be reduplicated to express iterative aspect. Sometimes a special meaning, more or less related to the iterative, results. Some stems occur only in reduplicated form, being onomatopoeic or expressing a notion which is felt to be necessarily iterative; other stems are never reduplicated. All these possibilities appear to be determined by the meaning of the verbal stem, but no hard and fast rules can be given.

⁷ The matter under discussion has, of course, nothing to do with the peculiar type of initial reduplication used in the formation of the telic form of a verbal stem.

Nor can any hard and fast rules be given for the incidental mechanical effects which accompany stem reduplication. These include loss of mora, especially from a vowel in the first of the repeated stems; intrusion of glottal stop between the repeated stems; intrusion of a vowel increment between the two stems; change of the quantitative influence of a stem in its reduplicated form.

i. Complete stem reduplication, expressing iterative aspect.

<i>tsupa</i> ⁻² (atelic)	FIRE IS OUT.
<i>tsupμ'ɪdzupa</i> 't	it (fire) is going out repeatedly.
<i>tci</i> 'd- (atelic)	TO SCOOP UP.
<i>tci</i> 'idi'dži'ida't	he is scooping up (water) repeatedly in one place.
<i>waca</i> ·g- (atelic), <i>awaca</i> ·k (telic)	IT FLAMES.
<i>waca</i> 'kwaca'aga't	it is lightning.
<i>awacaka</i> ² (special telic form)	lightning flashed.
<i>pic</i> ⁻² (atelic)	TO GO OUT.
<i>pica</i> 'bica''a't	he is going out repeatedly.
<i>yu</i> ·da ⁻² (atelic)	FRUIT IS CRUSHING.
<i>yu</i> 'udu'yu'uda't	the fruit (pl. subj.) is crushing.
<i>loh</i> δ·m- (atelic), <i>δlhom</i> ' (telic)	TO ENTER.
<i>loho</i> 'm'lohδ'ōma't	he is going in and out.
<i>cu</i> ·uba ⁻² (atelic)	TO PULSATE ONCE.
<i>cu</i> 'ubu''cu'uba't	he is pulsating repeatedly.
<i>ela</i> ⁻² (atelic)	TO JUMP.
<i>ele</i> 'ela'ala't	he is jumping on both legs like a deer.

ii. Complete stem reduplication, as the only possible form of the verbal stem.

<i>w</i> δ'x'wδha't	he is barking (onomatopoetic).
δwδ'x'wδ'x'	he barked (once).
<i>letce</i> 'letca't	he is skipping.
<i>e</i> 'letce'letca'	he skipped (once).
<i>pu</i> 'hm'puhma't	it is thick, broad (no telic form).
<i>ce</i> 'ega''ce'ega't	he is panting repeatedly.
<i>lu</i> 'lu'a't	he is playing the flute.
<i>li</i> 'imī''li'ima't	he is blinking.
<i>heu</i> 'he'ewi't	he is trotting.
<i>hμ</i> 'l'hula't	it is green.
<i>u</i> 'hμ'l'hμ'l'	it became green. (This verb is always reduplicated, but a related noun is found in a form not reduplicated. <i>hu</i> 'ulδ- [n. st.]; -t [abs. suff.]; <i>hu</i> 'ulδt the green place.)

Color verbs are generally found to have reduplicated stems.

<i>me</i> 'l'meli't	it is red.
<i>eme</i> 'l'melica'	it will get red.
<i>li</i> 'u'li''iwa't	it is purple.

iii. Partial reduplication. In verbs showing partial reduplication, the reduplicated element is supposed to be an independent stem, while the element not reduplicated is assumed to be evidence of an archaic prefix or suffix or stem compound (§8, 4).

kδxkδhwin⁻² (atelic), *δkδxkδhwin*² (telic) TO POUND.
kδ'xkδ'hwina't he is pounding it repeatedly.

This verb is generally reduplicated; a special telic form, with an extra mora of length for the final vowel, occurs in an unreduplicated form.

δ'kδhwi'n he pounded him once.
wi'wi'gina't he is stirring it.
i'wi'wi'ig'n he stirred it.

This verb occurs only with a reduplicated stem, but a related stem of uncertain meaning occurs in a form not reduplicated.

wi·w- (atelic), *iwiμ* (telic) TO LADLE ACORN MUSH.
tsi'mimi''a't it shines (from being polished).
tsi'bibi''a't it shines (from reflected light).
tsi'nini''a't he is shaking (from fright).
mīni'nī''a't it is rolling.

5. Iterative Aspect, Expressed by Reduplication of the *-a-* Increment

No general distinction can be made between the iterative notion expressed by stem reduplication (see 4, above) and the iterative notion expressed by repeating the *a* increment associated with a verbal suffix (§13, 1). When the *a* increment is repeated, specialized meanings are practically limited to an expression of plurality of the subject, or possibly of the object, if a transitive verb is concerned. Sometimes when, in the same verb, the stem is reduplicated and the *a* increment is also reduplicated, the former device appears to express iteration, and the latter to express plurality of subject or object.

If more than one suffix follows a verbal stem, the *a* increment associated with the suffix juxtaposed to the verbal stem is repeated. If passive suffixes are included in the verbal theme, the first *a* increment after the passive suffixes is reduplicated. Certain exceptions must be made in the case of the benefactive suffix.

The *a* increment is not generally reduplicated after the telic form of the verbal stem.

An inorganic glottal stop (without mora value) clearly separates the reduplicated increments, which participate fully in the alternation of length system of the verbal theme (§3, 2).

anaη⁻² (atelic) TO CRY.
a'naηa't he is crying.
a'naηa''a't he is crying iteratively.

<i>anab</i> ⁻² (atelic)	TO THROW.
<i>a'naba't</i>	he is throwing it.
<i>a'naba''a't pa'la'</i>	he is throwing lots of water (pl. obj.).
<i>andaŋ</i> ⁻² (atelic)	TO KICK.
<i>a'ndaŋa't</i>	he is kicking him.
<i>a'ndaŋa''a't</i>	he is kicking him repeatedly.
<i>a'ndaŋa'puwa't</i>	he seems to be kicking him.
<i>a'ndaŋa''apuwa't</i>	he seems to be kicking him repeatedly.
<i>lahya</i> ⁻² (atelic)	IT IS LOOSE.
<i>lahya't</i>	it is loose.
<i>lahya''a't</i>	they (pl. subj.) are loose.
<i>la'ixlahya't</i>	it is getting loose repeatedly.
<i>la'ixla'hya'a't</i>	they (pl. subj.) are getting loose repeatedly.
<i>maha</i> ⁻² (atelic)	TO GIVE.
<i>maha''a't</i>	he is giving them (pl. obj.).
<i>nu·l-</i> (atelic)	TO PUSH.
<i>nu'ula't</i>	he is pushing him.
<i>nu'la'a't</i>	he is pushing him repeatedly.
<i>wi·'-</i> (atelic)	IT RUNS.
<i>wi''a't</i>	it (liquid) is running.
<i>wi''ina't</i>	he is pouring the liquid.
<i>wi''ina''a't pa'la'</i>	he is pouring lots of water.
<i>we·ega</i> ⁻² (atelic)	IT BREAKS.
<i>we'ega't</i>	it is breaking.
<i>we'ga''a't</i>	they (pl. subj.) are breaking.
<i>we'gi'ina't</i>	he is breaking it.
<i>we'gi'na'a't</i>	he is breaking them (pl. obj.).
<i>tī·yidza</i> ⁻² (atelic)	TO SELL.
<i>tī'yidza''a't</i>	he is selling them (pl. obj.).
<i>tī'yidza''ana't</i>	he is selling them (pl. obj.) for him. (In this example, the <i>a</i> incr. preceding the benefactive suff. is reduplicated; in the following example, the <i>a</i> incr. following the benefactive is reduplicated, but alternation of length does not operate as usual.)
<i>a'dza'ya'wa'na'a't</i>	he is yelling for him repeatedly.

A few impersonal verbal stems ending in *short-vowel-ha* express the iterative notions by changing the ending of the verbal stem from *short-vowel-ha* to *long-vowel-glottal stop*. This may possibly be related to the device of repeating the *a* increment.

<i>tatdaha</i> ⁻² (atelic), <i>atatdaha</i> ² (telic)	IT BURSTS OPEN.
<i>tatda''a't</i>	they (pl. subj.) are bursting open.
<i>a'tatda''</i>	they (pl. subj.) burst open.

<i>tibiha</i> ⁻² (atelic), <i>iiibiha</i> ² (telic)	IT BREAKS.
<i>tiba</i> '' <i>a't</i>	it is breaking in many places.
<i>i'tiba</i> ''	it broke in many places.
<i>tidiha</i> ⁻² (atelic), <i>iiidiha</i> ² (telic)	IT IS SAWED UP.
<i>tidi</i> '' <i>a't</i>	the sticks (pl. subj.) are sawed up.
<i>i'tidi</i> ''	the sticks (pl. subj.) got sawed up.
<i>tsabaha</i> ⁻² (atelic), <i>atsabaha</i> ² (telic)	IT IS TORN.
<i>tsaba</i> '' <i>a't</i>	it is torn in many places.
<i>a'tsaba</i> ''	it got torn in many places.
<i>amaha</i> ⁻² (atelic), <i>a'amaha</i> ² (telic)	TREE IS FELLED (through an impersonal agent).
<i>ama</i> '' <i>a't</i>	the trees (pl. subj.) are being felled (through wind, for example).
<i>a'ama</i> ''	the trees (pl. subj.) got felled (in the wind).

6. Continuous Benefaction, Expressed by Reduplication
of the Benefactive Suffix

<i>ka·adza</i> ⁻² (atelic)	TO BOIL MEAT.
<i>ka·adza't</i>	he is boiling meat.
<i>ka'adza'ana't</i>	he is boiling meat for him.
<i>ka'adza'nana't</i>	he is boiling meat for him all the time.
<i>wa'</i> - (atelic)	TO BROIL MEAT.
<i>wa''ana't</i>	he is broiling meat for him.
<i>wa''ana'ana't</i>	he is broiling meat for him all the time.

Normally, the repeated benefactive suffix is not found after the telic form of the verbal stem; however, when the first benefactive suffix transitivizes an intransitive or impersonal verbal stem, the second benefactive suffix, adding a true benefactive meaning, is found after the telic form as well as after the atelic form of the verbal stem.

<i>ô·bô·cî</i> ⁻² (telic)	IT IS WHITE.
<i>ô'bô'ôca'n</i>	he whitened it.
<i>ô'bô'ca'ana'n</i>	he whitened it for him.
<i>i'idi'</i> - (telic)	IT IS HOT.
<i>i''idi''a'n</i>	he warmed it.
<i>i''idi''ana'n</i>	he warmed it for him.
<i>a·da·wi</i> ⁻² (telic)	TO BE BLIND
<i>a'da'awa'n</i>	he blinded him.
<i>a'da'wa'ana'n</i>	he blinded him for her (i.e., as her agent).

§16. MODAL SUFFIXES

Mode is expressed in Tübatulabal by special modal particles, among which must be counted the auxiliary verbs (§20), and by syntactic modal suffixes (Subordinating Suffixes, §19), and by derivative modal suffixes. Only the derivative modal suffixes are treated in this section.

One of the derivative modal suffixes, $-(i)l\acute{o}g-$, is probably a contracted form of the verbal stem, $l\acute{o}go'$ - TO BE CRAZY. The suffix generally bears the meaning, PRETENDING TO . . . do the action of the stem to which it is suffixed. However, both for the independent stem and for the suffix, the meaning is elastic. Morphologically, $-(i)l\acute{o}g-$ is used like any other derivative suffix: it is preceded by a vowel increment which tolerates lengthening (§3, 1, 2); the medial vowel, $-\acute{o}-$, always has the value of two morae, but enters in the alternation of length system of the verbal theme (§3, 2, iv); the suffix exerts a progressive qualitative influence, changing a juxtaposed a to \acute{o} (§2, 2). Whatever its etymological origin, $-(i)l\acute{o}g-$ functions like a true suffix.

<i>ĩĩ'kil\acute{o}'g\acute{o}ma'ala'</i>	let's pretend we are eating.
<i>ĩĩ'kil\acute{o}'gĩca'</i>	he will pretend to eat.
<i>a'daŋi'l\acute{o}'\acute{o}g\acute{o}'t</i>	he is pretending to kick him.
<i>a'naŋa'lil\acute{o}'gi'ba'a't</i>	he wants to go along pretending he is crying.
<i>ĩici'l\acute{o}'\acute{o}g\acute{o}'t</i>	he is making believe he is bad.

1. Imperative Suffix, $-(a)h$

$-(a)$ - vowel increment, resists lengthening if the suffix proper, $-h$, is retained; tolerates lengthening when the suffix proper is syncopated (§§3, 1; 6, 6). $-h$ suffix proper, retained only in absolute final position; when a conjunctive particle follows the imperative suffix, $-h$ is syncopated.

i. Intransitive imperative verbs.

<i>ala'w-</i> (atelic)	TO TALK.
<i>ala'wa'h</i>	talk!
<i>taŋdaŋ²</i> (atelic)	TO STAMP.
<i>ta'ŋdaŋa'h</i>	stamp!
<i>a'c-</i> (atelic)	TO BATHE.
<i>a'aci'h</i>	bathe!
<i>a'ya'n-</i> (atelic)	TO SING.
<i>a'ya'ni'h</i>	sing!
<i>ob²</i> (atelic)	TO DIVE.
<i>oba'h</i>	dive in!
<i>oba'abμ'm</i>	dive in, you fellows! ($-b\mu m$, conj. part. 2 pers., pl. pron.).
<i>\acute{o}l-</i> (atelic)	TO GET UP.
<i>\acute{o}'li'h</i>	get up!
<i>\acute{o}'libμ'm</i>	get up, you fellows! ($-b\mu m$, conj. part.).

ii. Impersonal imperative verbs.

<i>wa'g-</i> (atelic)	IT IS DRY.
<i>wa'agi'h yo'buni'</i>	get dry, then! (said in disgust to some plants which will not freshen when irrigated).

<i>hóbbó'</i> - (atelic)	IT IS IN LITTLE PIECES.
<i>hóbbó''a'h yo'bini'</i>	get in little pieces, then! (said to firewood which will not stay together).
<i>waca-g-</i> (atelic)	IT FLAMES.
<i>waca'aga'h yo'bini'</i>	flame on, then! (said to a camp fire which resists all attempts to extinguish it).

The particle, *yo'bini*, is not a conjunctive particle, but an independent word which seems to be generally used with impersonal imperative verbs.

iii. Transitive imperative verbs. The object of a transitive imperative verb may be expressed by either a personal pronoun or a noun. If a personal pronoun is used, the notional object of the imperative verb is expressed by an objective personal pronoun (§24); if a noun is used, the notional object of the imperative verb is expressed by a noun formally in the subjective case.⁸

<i>wi·c-</i> (atelic)	TO CATCH.
<i>wi'ca'h</i>	catch him! (zero form for 3 pers. sing. obj.).
<i>wi'ca'tipi'</i>	catch them! (<i>tipi</i> , conj. part. 3 pers. pl. obj.).
<i>w'ca'h kuyu'l</i>	catch the fish! (<i>kuyu'l</i> , n., formally in subj. case).
<i>pa'agin-²</i> (atelic)	TO HIT.
<i>pa'agina'h</i>	hit him!
<i>pa'agina'ani</i>	hit me! (<i>ni</i> , conj. part. 1 pers. sing. obj.).
<i>pa'agina'h ta'twa'l</i>	hit the man! (<i>ta'twal</i> , n., formally in subj. case).
<i>tóha-²</i> (atelic)	TO HUNT.
<i>tóha'h</i>	hunt him!
<i>tóha'ani'</i>	hunt me!
<i>tóha'h tohi'l</i>	hunt the deer! (<i>tohi'l</i> , n., formally in subj. case).

2. Future Imperative Suffix, *-(a)hi

-(a)- vowel increment, tolerates lengthening (cf. §3, 1 and 2). *-*hi* suffix proper, probably represents a syncretism which is the fusion of the regular imperative suffix, -*h* (see 1, above), and **i*. The suffix *-*hi* retains the *h* only when preceded by a long vowel-increment; and when so preceded, the long *a·* increment tends either to retain its vocalization after the lightly aspirated -*h*, giving a diphthongal glide to the *i* vowel of the suffix -(a)*hai*, or the *h* of the suffix appears to be inserted bodily into the preceding increment, yielding the acoustic effect, *aha'i* or *ahai*. When the preceding vowel-increment has the value of one mora, the *h* of the suffix is elided, and the resulting form of the suffix is -(a)*i*,

⁸ This peculiar syntactic behavior has a parallel in Southern Paiute, where "syntactically, imperatives are remarkable in that they take an object in the subjective form. The pronominal subject or object, as usual, may be appended either to the verb or to a preceding element." Cf. Sapir, 235.

which may be followed by an intrusive glottal stop and vowel before a conjunctive particle to maintain the alternation of length pattern (§§3, 3; 4, 3, iii).

tika'i'ibi' tapci·la' you eat the bread after a while.

The future imperative verb expresses a command which need not be obeyed immediately but should be obeyed sometime; future tense is implied rather than explicitly stated; the command is not, by virtue of this, regarded as being either milder or more polite than the regular imperative.

Syntactically, the future imperative differs from the regular imperative in that not only the personal pronoun object but also the nominal object is in the objective case (cf. 1, iii, above).

<i>wi·c-</i> (atelic)	TO CATCH.
<i>wi'ca'i kuyu·la'</i>	catch fish after a while. (<i>kuyu·la</i> , n., notionally and formally in the obj. case.)
<i>pa'agin-²</i> (atelic)	TO HIT.
<i>pa'agi'na'ha'i ta'twala</i>	hit the man after a while.
<i>tōha-²</i> (atelic)	TO HUNT.
<i>tōha'ha'i tohi·la'</i>	hunt the deer after a while.

Unlike the regular imperative (cf. 1, ii, above), the future imperative suffix never follows impersonal verbal stems.

3. Irrealis Suffix, *-(a·)hiwīt

-(a)- vowel increment, tolerates lengthening (cf. §3, 1 and 2) but resists qualitative change when it has the value of one mora (§6, 1).

*-hiwīt suffix proper, probably represents a syncretism which is the fusion of the future imperative suffix *-hi and the element *wīt. The irrealis suffix *-hiwīt retains the initial *h*- only when preceded by a long increment, and, as in the future imperative suffix, the long vowel-increment preceding the *h* tends to be vocalized after the light *h* aspiration, giving an acoustic effect of -(a·)haiwīt or -(a)haiwīt. When the vowel increment preceding the irrealis suffix is short, the *h* of the suffix proper is elided, resulting in the form *-(a)iwīt. But after the medial *i* vowel of the suffix, an inorganic glottal stop and an intrusive vowel are added to maintain the alternation of length pattern (§3, 3), so that the form actually found is -(a)i'iwīt.

A verb with the irrealis suffix attached refers to an action which was not actually performed, but was almost performed. The shades of meaning which the translations give are probably too precise for the rather vague irrealis suffix.

<i>anab-²</i> (atelic)	TO THROW.
<i>a'naba'haiwīt</i>	he should have thrown it.
<i>nōh-</i> (atelic)	TO ROAST IN THE GROUND.
<i>nōha'i'iwīt</i>	he should have roasted it in the ground. he would have roasted it in the ground, if. . . .

<i>ïk-</i> (atelic)	TO EAT.
<i>ïka'i'iwit</i>	he should have eaten it.
<i>mi'ig-</i> (atelic)	TO KILL.
<i>mi'iga'i'iwitti'η</i>	he might kill you, if . . . (- <i>tη</i> , conj. part., 2 pers. sing. obj. pron.).
<i>mu·daka</i> ² (atelic)	TO DODGE.
<i>mu'daka'haiwit</i>	he should have dodged.

The irrealis suffix may be attached to impersonal verbal stems if context permits.

<i>ïkowa'</i> (atelic)	WIND BLOWS.
<i>meti' i'ïkowa'aiwit</i>	already wind blows. ("The wind should have blown by this time.")
<i>meti' ibi''a'iwit</i>	it should have blossomed by this time.
<i>wa'aga'iwit</i>	it should have dried by this time.
<i>wic</i> ² (atelic)	IT IS RIPE.
<i>wici'ha'iwit</i>	it should have ripened.
<i>mi'll'mihl-</i> (atelic)	IT TASTES GOOD.
<i>mi'll'mihla'iwit</i>	it should taste good.

4. Adversative Suffix, -(a)*xtayat*

-(a)- vowel increment, resists lengthening (cf. §3, 1 and 2). -*xtayat* suffix proper, probably represents a syncretism which is the fusion of the element *-*xtay-* and the present tense suffix, -(a)*t* (see §18, 1).

A verb with the adversative suffix attached refers to an action which is (present tense) actually performed but under adverse circumstances. The adversative is not frequently found in the textual material.

<i>no''δ'xtaya't</i>	he is turning back (despite the fact that he is tired and would rather stop for a while at his friend's house).
<i>ma'ntsu'ana'xtaya't</i>	he is taming him (despite the fact that the horse is very wild).
<i>pi'mina'xtaya't</i>	he is making it full (despite the fact that the thing to be filled is very large).
<i>waca'xtaya't</i>	he likes to dig (digging is always difficult; therefore when anyone is digging, he likes it).

The adversative suffix is never attached to impersonal verbal stems.

5. Exhortative Suffix, -(a)*ma*

-(a)- vowel increment, tolerates lengthening (cf. §3, 1 and 2). -*ma* suffix proper; the vowel of this suffix has a value of one or two morae, depending on the alternation of length of the verbal theme (cf. §3, 2, iv). The exhortative suffix is followed by syncopated forms of the subject conjunctive pronouns

(§23, 2), and requires a special form for the third person singular; the zero form, which usually expresses third person singular, expresses first person singular after the exhortative suffix.

<i>anab</i> ⁻² (atelic)	TO THROW.
<i>a'naba'ama'</i>	let me throw it.
<i>a'čila-</i> (atelic, < <i>a'c-</i>)	TO GO AND BATHE.
<i>a'čila'ama'</i>	let me go and bathe.
<i>wac-</i> (atelic)	TO DIG.
<i>wa'cama'ala'</i>	let's dig it. (<i>-la</i> , syncopated form of the 2 pers. sing. conj. part.)

When a conjunctive particle other than a syncopated personal pronoun is attached to the exhortative suffix, the final *a* of the suffix is elided.

<i>a'naba'mbi'c</i>	let me throw it immediately.
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When a verbal theme which includes the suffix, *-(a)la-* (cf. §17), is directly nominalized (§38, 1), the resulting noun may be used as a kind of interrogative exhortative, much as one says in English, "Coffee?" meaning, "Let's go get coffee."

<i>a'čili'l</i>	let's go bathe. (Lit., "the gone to bathing.")
<i>wa'cali'l</i>	let's go dig it. (Lit., "the dug hole gone to.")

The exhortative suffix is never attached to impersonal stems.

6. Permissive Suffix, *-(a)ha-*

-(a)- vowel increment, tolerates lengthening (cf. §3, 1 and 2). *-ha-* suffix proper; this suffix is followed by the regular, not syncopated, conjunctive personal pronouns (§23), and like the exhortative suffix, by a special, not zero, form for third person singular, but unlike the exhortative suffix, the permissive suffix never appears with a zero personal pronoun. When a permissive suffix is attached to a verb, the actor is granted either permission or power, sometimes doubtful power, to carry out the verbal action. The precise meaning depends mainly on context.

<i>a'naba'habi'</i>	you may throw it.
<i>hatda'w-</i> (atelic)	TO CROSS.
<i>hatda'wa'habi'</i>	you may cross it.
<i>wô'ic-</i> (atelic)	TO BE JEALOUS.
<i>wô''ici'hadza'</i>	he might get jealous.
<i>ya'awa</i> ⁻² (atelic)	TO FINISH.
<i>ya''awa'hagi'</i>	I can finish it.

The permissive suffix may be attached to impersonal verbal stems.

<i>wa'gi'hadza'</i>	it might get dry.
<i>wi''a'hadza'</i>	it might run.
<i>waca'aga'hadza'</i>	it might flame up.
<i>yu''uma'hadza'</i>	it might wear out.

7. *Desiderative Suffix, -(i)ba'*

-(i)- vowel increment, tolerates lengthening (cf. §3, 1 and 2). -ba' suffix proper.

When the desiderative suffix is attached to the atelic form of a verbal stem, the actor of the resulting verb desires, but does not actually perform the verbal action at the moment of speaking. When the desiderative suffix is attached to the telic form of the verbal stem, the suffix bears a kind of inceptive meaning. The notion to be expressed is that the actor "got ready to. . ." do the action of the verb; here again the actor does not actually perform the verbal action at the moment of speaking, but when a verb is used in the inceptive sense, the subsequent performance of the verbal action is a foregone conclusion.

<i>wa·hay-</i> (atelic), <i>a·wa·hai</i> (telic)	TO WORK.
<i>wa'·hayi'ba'a't</i>	he wants to work.
<i>a'·wa'·ha'yiba''</i>	he got ready to work.
<i>ma·g-</i> (atelic), <i>amak²</i> (telic)	TO KNOW.
<i>ma'·gi'ba'a't</i>	he wants to know it.
<i>a'magi'·iba''</i>	he is on the verge of learning about it.
<i>δ·l-</i> (atelic), <i>δ·l</i> (telic)	TO GET UP.
<i>δ'·li'ba'a't</i>	he wants to get up.
<i>δ'·li'ba''</i>	he got ready to get up.
<i>andaη²</i> (atelic), <i>taη²</i> (telic)	TO KICK.
<i>a'ndaηi'·ba'a't</i>	he wants to kick him.
<i>taηi'·iba''</i>	he got ready to kick him.
<i>a'ndaηi'·ba''iwa't</i>	he wants to be kicked.
<i>taηi'·ba'i'u</i>	he got ready to be kicked.
<i>a'ndaηi'·ba'a'puwa't</i>	he looks as though he were wanting to kick him.
<i>taηi'·iba''apu'w</i>	he looked as though he got ready to kick him.

The desiderative suffix may be attached to impersonal verbs.

<i>ibi'·-</i> (atelic), <i>i'ibi'·'</i> (telic)	IT BLOSSOMS.
<i>ibi''i'ba'a't</i>	it wants to blossom (said of plants in spring).
<i>i''ibi'·''iba''</i>	it is just about to blossom.
<i>ixkowa'-</i> (atelic), <i>i'ixkowa'</i> (telic)	WIND BLOWS.
<i>i'ixkowa''i'ba'a't</i>	the wind wants to blow (said when little breezes begin to blow).

8. *Similative Suffix, -(a)puw-*

-(a)- vowel increment, resists lengthening. -puw- suffix proper.

When the similative suffix is attached to a verbal theme, the actor of the resulting verb gives the impression of performing the verbal action. Whether or not the verbal action is actually performed depends entirely upon context.

<i>cóló·ŋ</i> (telic)	TO SNORE.
<i>cóló·ŋópu'w</i>	he seemed to snore.
<i>íik-</i> (atelic), <i>ííik</i> (telic)	TO EAT.
<i>íika'puwa't</i>	he looks as though he were eating it.
<i>ííi'kapu'w</i>	he looked as though he ate it.
<i>póhóla</i> ² (atelic)	TO GET BLISTERS.
<i>pó'hóla'puwa't</i>	he looks as though he were getting blisters.

The similitive suffix may be attached to impersonal stems.

<i>íbi·''i'puwa't</i>	it seems to be blossoming.
<i>wa·'agí'puwa't</i>	it seems to be drying.
<i>wíci'puwa't</i>	it seems to be ripening.
<i>waca·'ga'puwa't</i>	it seems to be flaming up.

§17. SUFFIXES OF MOVEMENT

There are four suffixes of movement. In some contexts, the actor of the resulting verb may be moving along in a certain direction while performing the action described by the verbal stem; he may, in another context, have arrived before verbal action takes place or he may have moved away in a certain direction after the action described by the verbal stem. The essential notion expressed is direction of movement relative to the person speaking. In addition, the meaning which a suffix of movement bears depends to some extent upon whether the suffix follows the telic form or the atelic form of the verbal stem.

1. Suffix Expressing GOING. . . , -(a)la

-(a)- vowel increment, tolerates lengthening (cf. §3, 1 and 2). -*la* suffix proper; the *a* vowel of this suffix has the value of either one or two morae, depending upon the alternation of length of the verbal theme (cf. §3, 2, iv).

After the atelic form, the notion expressed is usually that the actor is going away while performing the verbal action; after the telic form, the notion is often that the actor went away in order to perform the verbal action. In some of the texts no translation is given to the suffix.

<i>píçika</i> ² (atelic), <i>ípíçika</i> ² (telic)	TO SLIP.
<i>pí'çika·'ala't</i>	he is going along slipping.
<i>ípí'çika·'ala'</i>	he went and slipped.
<i>çí·' (atelic), í·ca</i> ² (telic)	TO DRIVE.
<i>çí·''ala't</i>	he is going along driving it.
<i>í·'ca·'ala'</i>	he went in order to drive it.
<i>ka·'adza·'ala't</i>	he is going there in order to boil it.
<i>a·'ga·'adza·'ala'</i>	he went in order to boil it.
<i>pa''agína·'ala't</i>	he is going along hitting him.
<i>pa''agína·'li'ba'a't</i>	he wants to go there in order to hit him.

This suffix is rarely attached to impersonal stems.

<i>wí·''ala't</i>	water is running that way.
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2. Suffix Expressing TO . . . HERE AND AWAY, *-(a)min*

-(a)-vowel increment, resists lengthening (cf. §3, 1 and 2). *-min* suffix proper.

This suffix is freely used after the telic form of verbal stems, frequently with no more meaning than that the action was done near the person speaking; the suffix is not often used after the atelic form of the verbal stem, but when so used the full meaning of the suffix is emphasized.

<i>itik</i> (telic)	TO EAT.
<i>iti'kami'n</i>	he ate it here and went away.
<i>apawac</i> (telic)	TO PLAY SHINNY.
<i>a'pawa'cami'n</i>	he played shinny here.
<i>a'ac</i> ² (telic)	TO BATHE.
<i>a'a'cimi'n</i>	he bathed here.
<i>ca'</i> - (atelic), <i>a'ca'</i> (telic)	TO DEFECATE.
<i>ca'a'mini'ba'a't</i>	he wants to defecate here and go away.
<i>a'ca'ami'n</i>	he defecated here.
<i>ci'</i> - (atelic), <i>i'ci'</i> (telic)	TO URINATE.
<i>ci'i'mini'ba'a't</i>	he wants to urinate here and go away.
<i>i'ici'imi'n</i>	he urinated here.

After some verbal stems, a very special meaning results.

<i>i'ikwa'</i> (telic)	TO BLEED.
<i>i'ikwa'ami'n</i>	he bled a little (as from a scratch, a little blood comes out and then goes away).

The suffix also generally bears a special meaning when attached to impersonal stems.

<i>kita</i> ² (atelic), <i>ikita</i> ² (telic)	IT IS LOCKED.
<i>kita'mina't</i>	it always locks by itself.
<i>iki'tami'n</i>	it just locked by itself.
<i>iwi</i> ² (telic)	IT IS RIPE, IT IS COOKED.
<i>ma'n iwi'cimi'n</i>	his hand got burned (in the sense that he put his hand on the fire: it got burned here and went away).

3. Suffix Expressing TO . . . THERE AND COME HERE, *-(a)kin*

-(a)-vowel increment, resists lengthening (cf. §3, 1 and 2). *-kin* suffix proper, identical in form with the atelic form of the verbal stem TO BRING *kin-* (atelic) *ngin* (telic). (See 4, below.)

Like the suffix, *-(a)min*, this suffix enjoys a very free use after the telic form of the verbal stem, and is rarely used after the atelic form. The following examples employ the same transitive and intransitive verbal stems that were used with the suffix *-(a)min*.

<i>i'i'kaki'n</i>	he ate it there and came here.
<i>a'pawa'caki'n</i>	he played shinny there.

<i>a'a'ciki'n</i>	he bathed there.
<i>ca'a'kini'ba'a't</i>	he wants to defecate there and come here.
<i>a'ca'aki'n</i>	he defecated there.
<i>ci'i'kini'ba'a't</i>	he wants to urinate there and come here.
<i>i'ici'iki'n</i>	he urinated there.
<i>i'ikwa'aku'n</i>	he bled profusely (in the sense that blood came out all the way from there to here).

Impersonal stems which will tolerate the suffix *-(a)min* will not generally tolerate the suffix *-(a)kin*.

<i>i'waku'n</i>	water ran from there to here.
<i>i'ibi'iki'n</i>	it blossomed quickly again (in the sense that the blossoms were cut but came again from the cutting).

4. Suffix Expressing COMING . . ., *-(a)gi'm*

-(a)- vowel increment, tolerates lengthening (cf. §3, 1 and 2). *-gi'm* suffix proper; the medial *i* vowel may have the value of one or two morae, depending on the alternation of length of the verbal theme (§3, 2, iv). When the medial vowel has the value of one mora, this suffix is formally identical with the atelic form of the verbal stem TO COME *kim-* (atelic), *ingum* (telic), except that the plosive in the suffix is always voiced. Since the meaning of the suffix and the verbal stem is also the same, there can be no question that we are dealing, strictly speaking, with a compound consisting of *verbal stem (telic or atelic form) + verbal stem (atelic form)*. However, the fact that stem compounds are never freely used, as is this compound, and the fact that the vowel increment preceding *-gi'm* operates in the same manner as for true suffixes shows that *-gi'm* is used as a stereotyped suffix.

<i>wi·di⁻²</i> (atelic), <i>i·wi·di²</i> (telic)	TO BE ANGRY.
<i>wi'idi'gima't</i>	he is angry as he comes along.
<i>i'wi'di'igu'm</i>	he got angry as he came.
<i>wo·h-</i> (atelic), <i>o·woha²</i> (telic)	TO BURY.
<i>wo'hagi'ima't</i>	he is coming in order to bury him.
<i>o'woha'agu'm</i>	he came to bury him.
<i>ya'awa⁻²</i> (atelic), <i>a·yawa²</i> (telic)	TO FINISH.
<i>ya'awa'gima't</i>	he is coming to finish it.
<i>a'yawa'agu'm</i>	he came to finish it.
<i>cu⁻²</i> (atelic), <i>u·ca²</i> (telic)	TO DRY.
<i>cu'agi'ima't</i>	he is coming along drying it.
<i>u'uca'agu'm</i>	he came to dry it.
<i>hamaca⁻²</i> (atelic), <i>ahamaca²</i> (telic)	TO BE SAD.
<i>ha'maca'gima't</i>	he is coming along being sad.
<i>aha'maca'agu'm</i>	he came and got sad.

Sometimes *-gim* bears a special meaning when attached to an impersonal stem.

<i>wa'gigi'ima't</i>	it is getting dry (half dry, half green).
<i>wiči'gima't</i>	it is getting ripe.
<i>i'wici'igu'm</i>	it just got ripe.
<i>wi''agi'ima't</i>	water is running down this way.
<i>i'wa'agi'm</i>	water ran down this way.

§18. TENSE SUFFIXES

Tense is implied in a variety of ways, but is directly expressed in the verb by only two tense suffixes, the present tense suffix, *-(a)t*, which follows the atelic form of the verbal stem, and the future tense suffix, *-(i)cam*, which follows the telic form of the verbal stem.

Curiously enough, a pure past tense, unmixed with other verbal notions of aspect or mode, is never expressed by the Tübatulabal verb, but may be expressed by the noun (see §37). The past tense translations which are given to the telic form of verbs are somewhat misleading but are resorted to to emphasize the fact that the action of the telic verb is accomplished (perfective) in contrast to the more transitional action of the atelic verb. But the relative time (tense) of the telic verb is never specifically in the past; often, indeed, an accompanying particle indicates that it cannot be in the past.

<i>i'ct</i>	<i>kī't</i>	<i>wδ''ōka'n</i>	<i>aka'tarwa'gilu'ts</i>
Coyote says		“Pretty soon	we get slaughtered.”

The fact that the future tense suffix is appended to the telic form indicates clearly enough that the telic form does not *per se* express past tense.

1. Present Tense Suffix, *-(a)t*

-(a)- vowel increment, resists lengthening (cf. §3, 1 and 2). *-t* suffix proper. This suffix is peculiar in that it is syncopated when either the subject conjunctive personal pronouns or the conjunctive quotative particle is juxtaposed. Not only is the *-t* syncopated in this circumstance, but the juxtaposed particle is included in the alternation of stress of the verbal theme, instead of being stressed independently as conjunctive particles otherwise are.

<i>tik-</i> (atelic)	TO EAT.
<i>tika't</i>	he is eating. (3 pers. sing. expressed by zero form <i>-(a)t</i> , pres. suff.)
<i>tī'kapi'</i>	you are eating. (<i>-bi</i> 2 pers. sing. conj. part.; <i>-t</i> is syncopated in the example, and the plosive of the conj. part. unvoiced.)
<i>tī'kaki'</i>	I am eating. (<i>-gi</i> 1 pers. sing. conj. part.)
<i>tī'kata'</i>	they are eating. (<i>-da</i> 3 pers. pl. conj. part.)
<i>tika'kidža'</i>	he is eating, it is said. (<i>-gidža</i> , qt.; 3 pers. expressed by zero form.)

All this suggests a syncretism, which would be the fusion of the present tense suffix, *-t*, and *-gi*, for example (1 pers. sing. subj. conj. part.); the result of this fusion is *-ki*, an element which bears the meaning of both the present tense suffix and the personal pronoun particle, and is treated phonetically like a true suffix. Fusion of the present tense suffix with conjunctive particles is limited to the following:

Pres. tense suff.		Conj. part.	=	Syncretism
<i>-t</i>	+	<i>-gi</i> (1 sing.)	=	<i>-ki</i>
<i>-t</i>	+	<i>-gilu'ts</i> (1 pl.)	=	<i>-kilu'ts</i>
<i>-t</i>	+	<i>-gila'aŋ</i> (d. excl.)	=	<i>-kila'aŋ</i>
<i>-t</i>	+	<i>-gila</i> (d. incl.)	=	<i>-kila</i>
<i>-t</i>	+	<i>-bi</i> (2 sing.)	=	<i>-pi</i>
<i>-t</i>	+	<i>-bu·mu</i> (2 pl.)	=	<i>-pu·mu</i>
<i>-t</i>	+	<i>-da</i> (3 pl.)	=	<i>-ta</i>
<i>-t</i>	+	<i>-gidža</i> (qt.)	=	<i>-kidža</i>

In contrast to this syncretism, when the object personal pronoun conjunctive particles are juxtaposed to the present tense suffix, the suffix, *-t*, is retained and the object pronouns are stressed independently of the verbal theme.

ōxta⁻² (atelic) TO ASK.
ōxta'tni' he is asking me (*-ni*, 1 pers. sing. obj. conj.).

i. Durative present. The considerable extensity of the verbal action performed at the time of speaking is owing not to the present tense suffix, which merely expresses relative time, but rather to the atelic form of the verbal stem which the present tense suffix follows.

ōxta't he is asking him (rather than, "he asks him").
tika't he is eating it (rather than, "he eats it").

Examples of this most common use of the present tense suffix are profusely scattered in the preceding sections.

ii. Eternal present. When the need arises, the present tense in Tübatulabal, as in English, may (to borrow an apt phrase) "be elongated fore and aft, so as to take in all eternity."

cu·l wini't tu'gumba'la·p the stars are in the sky.
ku''udžubi'tcwana·p pa·ala·p wi''i't wi''a't at South Fork at the
 water a river is running.

iii. Historical present. The "historical present" is characteristically used in the narration of myths (*ti''ibi'nuga''adawa·l*) where it is clearly recognized that the time of action is in the distant past before Coyote and all his friends and relations gave way to the Tübatulabal Indians.

i'ct hali't kudi·' tiba'itc Coyote is living and also Wolf.

2. Future Tense Suffix, *-(i)cam*

-(i)- vowel increment, resists lengthening (cf. §3, 1 and 2), but is sometimes elided (§6, 3). *-cam* suffix proper. The medial vowel of this suffix has the constant value of one mora when the final *-m* is retained; when the final *-m* is dropped, the medial vowel may have the value of two morae in alternation of length (cf. §3, 2, iv). The status of the final *-m* of this suffix is puzzling. It is always retained when the future tense suffix is followed by the passive suffix.

ʔiʔikiʔcamiʔu it will be eaten (cf. §14, 1).

It is rarely retained in final position.

ʔiʔiʔkicaʔm, ʔiʔiʔkicaʔ he will eat it.

On one occasion I pressed my informant as to the difference in meaning between pairs of future verbs, as in the example cited, and he attributed a vague meaning of "also" to the form which includes the final *-m*, but he recanted later.

How pure a tense is formed by the future tense suffix, and how much of modal feeling, such as probability, is expressed, it is difficult to say. Direct translation of informants suggests a pure tense; hesitancy to admit certain verbs or verbs in certain contexts to a future tense suggests some vaguely felt modal requirement. *ʔiʔiʔciʔwaluʔ* (telic) TO DISRESPECT HIM. But the future verb, **ʔiʔiʔciʔwaluʔicaʔ*, while understood to mean "he will not respect him," is said never to be used. It is nevertheless safe to say that virtually every verbal stem will tolerate the future tense suffix.

<i>apaʔana⁻²</i> (telic)	IT GOT PLUGGED.
<i>apaʔanicaʔ</i>	it will get plugged up.
<i>amban⁻²</i> (telic)	TO CLOSE IT.
<i>ambaʔnicaʔ</i>	he will close it.
<i>andambiʔ</i> (telic)	TO LIE.
<i>aʔndambiʔicaʔ</i>	he will lie.

§19. SUBORDINATING SUFFIXES

Syntactically, two types of subordinate verbs result from suffixation. In the first and more common type, the subject of the verb in the main clause is identical with the subject of the subordinate verb (see 1 to 3, below). In the second type, the subject of the subordinate verb is distinctly not identical with the subject of the verb in the main clause of the sentence. The nonidentical subordinate verb has some extraordinary syntactic possibilities (see 4, below). Suffixes listed under 3 and 4, below, have correlative meanings, and differ only in that in one type (3), the subject of the main verb and the subordinate verb are identical; while in the other type (4), the subject of the main verb and the subordinate verb are not identical.

1. *Identical-actor Subordinating Suffix, -(i)'ima*

-(i)- vowel increment, resists lengthening (cf. §3, 1 and 2). -'ima suffix proper.

The action of a subordinate verb, formed by the suffix, -(i)'ima, extends before and after the action of the main verb. In other words, the action of the main verb is accomplished during the action of the subordinate verb.

<i>kimi''ima'</i>	<i>tika't</i>	while coming	he is eating it. ("He is eating it while coming along.")
<i>ala.'wi''ima</i>	<i>tika't</i>	while talking	he is eating. ("He is eating while talking.")
<i>a'nan̄i''ima'</i>	<i>tika't</i>	while crying	he is eating. ("He is eating while crying.")
<i>tohi''ima'p</i>	<i>tika'i</i>	hunting you	eat after a while. ("You eat after a while, while you are hunting.")
<i>wele'hani''ima'</i>	<i>ala'wina't</i>	<i>o'wani'ila'</i>	while fishing
			he reads the book. ("He is reading the book while fishing.")

2. *Identical-actor Subordinating Suffixes, -(i)bi'yu and -(a)kibi'yu*

i. -(i)bi'yu. -(i)- vowel increment, tolerates lengthening (cf. §3, 1 and 2). -bi'yu suffix proper. The final *u* of this suffix is usually dropped (with the preceding *y* then opening to *i*) when a conjunctive particle is juxtaposed.

The action of a subordinate verb, formed by the suffix, -(i)bi'yu, is mentioned without being performed during the action of the main verb. The main verb which accompanies this subordinate verb employs the telic form of the verbal stem, to the exclusion of the atelic form.

<i>ɛŋɪ'm</i>	<i>t̄i'kibi'iyu'</i>	he came	without eating.
<i>a''ala'u</i>	<i>a'nan̄i'ibi'yu'</i>	he spoke	without crying.
<i>a'na'yuw̄i'bi'igi'</i>	<i>i'mi</i>	without fighting I	went.

ii. -(a)kibi'yu. -(a)- vowel increment, resists lengthening (cf. §3, 1 and 2). -kibi'yu suffix proper, obviously a fusion of the element **k-* and the suffix, -(i)bi'yu (see i, above).

The action of a subordinate verb, formed by the suffix -(a)kibi'yu, is scarcely completed before the action of the main verb begins.

<i>a'nan̄a'kibi'iyu'</i>	<i>μ'tsulu'm</i>	right after crying,	he slept.
<i>a'nan̄a'kibi'igi'</i>	<i>a''ala'u</i>	right after crying, I	talked. ("I talked when I had scarcely stopped crying.")
<i>tika'kibi'igi'</i>	<i>ɛŋɪ'mica'</i>	after eating I	will come. ("I will come almost before I finish eating.")

3. Identical-actor Subordinating Suffixes, *-(a)c*, *-(i)ya'awac*, and *-(a)kca*

i. *-(a)c*. *-(a)*- vowel increment, resists lengthening (cf. §3, 1 and 2). *-c* suffix proper.

A subordinate verb, formed by the suffix, *-(a)c*, is used in two different senses which are not always clearly distinguished. In the first sense, the subordinate verb is an infinitive, and this sense is always used after the main verb, to KNOW, and sometimes after other main verbs.

<i>ma'aga't</i>	<i>ala'awa'c</i>	he knows	how to talk.
<i>ma'aga't</i>	<i>a'daŋa'c</i>	he knows	how to kick.
<i>ma'aga't</i>	<i>pa'i'idž'i'c</i>	he knows	how to swim.

<i>wela'hana'c</i>	<i>wah</i>	<i>ta'twa'l</i>	<i>hali't</i>
to fish	there	the man	is sitting.

("The man is sitting there in order to fish.")

In the second sense, the action of the subordinate verb gives much the same feeling as an English "when . . ." clause.

<i>ta'wigi'ila'c</i>	<i>hani'la'</i>	<i>uyu'k</i>
when he went to see	the house,	he fell down.

<i>a'dza'ya'awa't</i>	<i>a'aci'c</i>
he yells	when he is bathing.

<i>pi'ckitc</i>	<i>i'ct</i>	<i>apa'laka'n</i>	<i>pili'ila'c</i>
then it is said	Coyote	threw it down	when he arrived.

<i>apa'laka'nica'</i>	<i>pili'ila'c</i>
he will throw it down,	when he arrives.

<i>pi'ckitc</i>	<i>a'ŋhani'l</i>	<i>awa'at</i>	<i>tsuŋgμ'c</i>
then it is said	the people	ran away,	being frightened.

ii. *-(i)ya'awac*. *-(i)*- vowel increment, tolerates lengthening (cf. §3, 1 and 2). *-ya'awac* suffix proper, obviously a fusion of the atelic form of the verbal stem, *ya'awa*⁻² TO FINISH, and the suffix *-(a)c* (see i, above). The stem *ya'awa*⁻² appears as a stem compound only when fused with a subordinating suffix (see 4, ii, below).

The action of a subordinate verb, formed by the suffix, *-(i)ya'awac*, is completed before the action of the main verb begins.

<i>ta'twa'l</i>	<i>wa'ciya'awa'c</i>	<i>ŋgum</i>
man	having finished digging	came.

("The man came when he had finished digging.")

<i>a'naŋi'ya'awa'c</i>	<i>ŋgum</i>
having finished crying,	he came.

iii. *-(a)kca*. *-(a)*- vowel increment, resists lengthening (cf. §3, 1 and 2). *-kca* suffix proper, probably a fusion of the element **-k-* and the suffix *-(a)c* (see i, above), with a transposition from *ac* to *ca*. That is, **-kac* > *-kca*. Sometimes an indistinct vowel glide is heard between the two consonants, giving an effect of *-kēca*.

The action of a subordinate verb, formed by the suffix, *-(a)kca*, is interrupted by the action of the main verb.

i'ct *δwδ'i'wδ'i'agim* *tani'ba''akēca'*

Coyote fell off when he wanted to get down.

(“Coyote came and fell off when he wanted to get down”—his proper descent was interrupted by the fall.)

anbi' *hatda'awa'c* *wi''ita'* *kyuy'la* *wi'c*
did you crossing the river fish catch.

(“When crossing the river, did you catch fish?”—the crossing would be interrupted by the catching of fish.)

4. Non-identical-actor Subordinating Suffixes, *-(a)η*, and *-(i)ya'awaη*, and *-(a)kan*

i. *-(a)η*. *-(a)*- vowel increment, resists lengthening (cf. §3, 1 and 2). *-η* suffix proper.

A subordinate verb, formed by the suffix, *-(a)η*, is used much like the second sense of the subordinate verb formed by the suffix, *-(a)c* (see §3, i, above), except that the subject of the main verb is not identical with the subject of the subordinate verb. The notional subject of the *-(a)η* subordinate verb is expressed by a personal pronoun or by a noun formally in the objective case.

ta'twa'l *a'dza'ya'awa't* *kδ'imi'* *a'aci'η* the man (notional and formal subj. of main vb.) is yelling (main vb.) when the woman (notional subj. of sub. vb.; formally in obj. case) is bathing (sub. vb.).

kδ'imi' *a'nana'η* *ηgi'm* *ta'twa'l* when woman (notional subj. of sub. vb. in obj. case) was crying (sub. vb.), came (main vb.) the man (notionally and formally the subj. of the main vb.).

ta'twa'l *ηgi'm* *kδ'imi'* *tsulu'uma'η*
man came woman sleeping.

(“The man [notionally and formally the subj. of main vb.] came when the woman [subj. of sub. vb. in obj. case] was sleeping [sub. vb.]”)

ha'cpum *ala'awa'i* *tsulu'uma'ηdzi.'*
not you (pl.) talk after a while sleep us.

(“Do not talk [in future] when we [expressed by obj. pron.] are sleeping.”)

kδ'imi' *wele'hana'η* *wah* *ta'twa'l* *hali't*
woman fishing there man sitting.

(“When the woman [notional subj. of sub. vb. in obj. case] is fishing, the man is sitting there [not fishing].”)

If the main verb is transitive, the object of the main verb (obj. case) is formally the subject of the subordinate verb.

có'ibit' a'ha' mi'gitihi' ciku'ka'η
old woman heard Migitih when he whistled.

("The old woman [formally and notionally the subj. of main vb.] heard Migitih [formally in the obj. case; notionally the obj. of the main vb. and the subj. of the sub. vb.] when he whistled [sub. vb.]")

ii. *-(i)ya'awaη*. *-(i)*- vowel increment, tolerates lengthening (cf. §3, 1 and 2). *-ya'awaη* suffix proper, obviously a fusion of the atelic form of the verbal stem, *ya'awa⁻²* TO FINISH, and the suffix *-(a)η* (see 4, i, and 3, ii, above).

The action of a subordinate verb, formed by the suffix, *-(i)ya'awaη*, is completed before the action of the main verb begins (cf. 3, ii, above).

kó'imi' a'nan'i'ya'awa'η ɪŋi'm ta'twa'l
woman having finished crying, came man.

("When the woman [subj. of sub. vb. in obj. case] had stopped crying, the man [subj. of main vb. in subj. case] came.")

ta'twa'l kó'imi' imi''ik tsulu'miya'awa'η
man (subj.) woman (obj.) killed when she finished sleeping.

("The man [subj. of main vb.] killed the woman [obj. of main vb., in obj. case, but notional subj. of sub. vb.], when the woman had finished sleeping.")

iii. *-(a)kaη*. *-(a)*- vowel increment, resists lengthening (cf. §3, 1 and 2). *-kaη* suffix proper, obviously a fusion of the element **-k-* and the suffix *-(a)η* (see 4, i, and 3, iii, above).

The action of a subordinate verb, formed by the suffix, *-(a)kaη*, is interrupted by the action of the main verb (cf. 3, iii, above).

kó'imi' i'kaka'η apa'agu'n ta'twa'l
woman (obj.) eating hit (main vb.) man (subj.)

("The man [subj. of main vb.] hit the woman [obj. of main vb., in obj. case, but notional subj. of sub. vb.], when the woman was eating" [and as a result her eating was interrupted].)

ta'twa'l kó'imi' imi''ik tsulu'uma'η
man (subj.) woman (obj.) killed sleeping.

("The man [subj. of main vb.] killed the woman [obj. of main vb., in obj. case, but notional subj. of sub. vb.], when the woman was sleeping" [and as a result her sleeping was interrupted].)

§20. AUXILIARY VERBS

1. Auxiliary Verbs in Annexation with Atelic Forms

Auxiliary verbs are used in annexation with atelic forms of verbal stems or verbalized bases (§21). In its independent use, the atelic form always has a

final-position suffix attached (cf. §12); when used in annexation with an auxiliary verb, the atelic form may appear with a medial suffix attached (cf. §12), or the atelic form may be used nakedly, but never with the final-position suffix attached. The reason for this is to be found in the formation of auxiliary verbs.

2. Formation of Auxiliary Verbs

An auxiliary verb may be analyzed as a fusion of at least two elements: an independent particle (*an-*, inter. part.; *hac-*, neg. part.; *tan-*, cond. part., etc.) or more rarely a noun, plus a modal suffix, either the exhortative suffix, *-ma-* (§16, 5), or the permissive suffix, *-ha-* (§16, 6); both the exhortative and the permissive are final-position suffixes (cf. §12). If the combination of auxiliary verb and atelic form of the verbal stem be regarded as a single unit, a verbal formula, then it may be said that without exception the atelic form of a verb is accompanied by a final-position suffix, either disjunctively in the verbal formula or actually suffixed when the atelic form is used without an auxiliary verb.

3. Meaning Expressed by Auxiliary Verbs

Since a modal suffix (either the exhort. or the perm.) always enters into the formation of auxiliary verbs, the auxiliary verb may be said to be a special device for expressing modality. A considerable range of modal expression is possible. The following list of auxiliary verbs is probably not exhaustive, but will illustrate the type of formation and characteristic range of meaning of auxiliary verbs.

tanaha- *-ti'* (expresses an opt. mode).—*tan-* (cond. part.); *-(a)ha-* (perm. suff.); *-ti'* (part. usually meaning "and, also"). Personal pronoun conjunctive particles (subj. pron. and obj. pron.) are placed between the elements *-ha-* and *-ti'*.

<i>ta'naha'gilu'ts ti'</i>	<i>ti'k</i>	would we were eating.
<i>ta'naha'ts ti'</i>	<i>ti'k</i>	would he were eating.
<i>ta'naha'ts tipidi'</i>	<i>tika'n</i>	would he were feeding them.

anaha- *-hac* (asking permission).—*an* (inter. part.); *-(a)ha-* (perm. suff.); *-hac* (neg. part.). Personal pronoun conjunctive particles (subj. pron. and obj. pron.) are placed between the elements *-ha-* and *-hac*.

<i>a'naha'gilu'ts ha'c</i>	<i>ki'm</i>	may we come?
<i>a'naha'tsni'n ha'c</i>	<i>ala'awi'n</i>	can he talk to me?
<i>a'naha'ts ha'c</i>	<i>ti'k</i>	may he eat it?

agi'mats (asking for volunteers).—*agi'* (rel. pron. "who"); *-ma-* (exhort. suff.); *-ts* (special 3 pers. sing. conj. part., here used in a neutral sense for any person).

<i>agi'ima'ts</i>	<i>ki'm</i>	who wants to come?
<i>agi'ima'ts</i>	<i>ti'k</i>	who wants to eat?
	<i>-mats</i>	(answer to the above).

First element: absolute noun or independent personal pronoun. *-ma-* (exhort. suff.); *-ts* (special 3 pers. sing. conj. part., here used in a neutral sense for any person).

<i>ta'twalma'ts ki'm</i>	let the man come.
<i>ictma'ts ki'm</i>	let Coyote come.
<i>i'ngilu'tsma'ts ki'm</i>	let us come.
<i>i'ndama'ts ti'k</i>	let them eat.

ihma- (exhort.).—*ih-* (demon. part., “here”); *-ma-* (exhort. suff., followed by pers. prons.).

<i>i'hmalu'ts ki'm</i>	let us come here.
<i>ihma'ts ti'k</i>	let him eat here.

atsuma- (exhort.).—*atsu-* (part. meaning “away from”); *-ma-* (exhort. suff., followed by pers. prons.).

<i>a'tsuma'alu'ts ti'k</i>	let us eat away from here.
<i>a'tsuma'ts tsulu'm</i>	let him sleep away from here.
<i>atsmu'm tsulu'm</i>	let me sleep away from here. (1 pers. sing. is expressed by zero form pers. pron.; final vowel of the exhort. suff., <i>-ma-</i> , is elided.)

haca- (neg. perm.).—*hac-* (neg. part.); *-ha-* (perm. suff., with initial *h* syn-copated; pers. prons. follow the perm. suff.).

<i>haca'ts δ'l</i>	he can't get up.
<i>haca'k a'cina'n na'adi'i'</i>	I can't bathe the cat for him.

§21. VERBALIZING SUFFIXES AND PARTICLES

It is possible to distinguish between verbalizing suffixes and verbalizing particles.

Verbalizing suffixes, when attached to nouns, form a verbalized base which for all practical purposes may be treated like a true verbal stem (see 1 to 3, below). Like the verbal stem, the verbalized base appears in a telic form and in an atelic form, and the regular verbal suffixes may follow the verbalized base.

Verbalizing particles, however, are not followed by verbal suffixes, nor is the combination, noun plus verbalizing particle, capable of appearing in telic and atelic form. This means that the combination, noun plus verbalizing particle (see 4 and 5, below), is not a true verb but rather a compound which gives a verbal feeling, yet does not meet the formal requirements of a verb (cf. §9). Logically, such compounds ought perhaps to be treated with particle compounds, since they share the characteristic of particles in being uninflected.

1. Verbalizing Suffix, TO PREPARE . . . , -u'-

The suffix, -u'-, is attached to the absolute form of nouns belonging to class A2 (cf. §26), and exerts a progressive qualitative influence, changing a juxtaposed *a* increment from *a* to *u* (cf. §2, 2).

<i>tca'mi'l</i>	The acorn gravy (final -l, abs. suff.).
<i>tca'milu'-'</i> (atelic), <i>a'dža'milu'-'</i> (telic)	TO PREPARE ACORN GRAVY.
<i>tca'milu''μ't</i>	he is preparing acorn gravy.
<i>a'dža'milu''ica'</i>	he will prepare acorn gravy.
<i>ka'dzμ'l</i>	the clay pot (final -l, abs. suff.).
<i>ka'dzulu'-'</i> (atelic), <i>a'ga'dzulu'-'</i> (telic)	TO MAKE CLAY POTS.
<i>ka'dzulu''μ't</i>	he is making clay pots.
<i>a'ga'dzulu''ica'</i>	he will make clay pots.
<i>wδηδ'l</i>	the shoes (final -l, abs. suff.).
<i>wδηδlu'-'</i> (atelic), <i>δwδηδlu'-'</i> (telic)	TO MAKE SHOES.
<i>wδ'gδlu''μ't</i>	he is making shoes.
<i>δwδ'ηgδlu''ica'</i>	he will make shoes.

After all other classes of nouns which have an absolute suffix (-l or -t), the verbalizing suffix, -u'-, is reduced to -u.

<i>pa'hu'l</i>	the arrow (final -l, abs. suff.).
<i>pa'hu.lu-2</i> (atelic), <i>a'ba'hu.lu2</i> (telic)	TO MAKE ARROWS.
<i>pa'hu'ulμ't</i>	he is making arrows.
<i>a'ba'hu'ula'n</i>	he made an arrow for him.
<i>hani'l</i>	the house (final -l, abs. suff.).
<i>hani.lu-2</i> (atelic), <i>ahani.lu2</i> (telic)	TO BUILD A HOUSE.
<i>hani'lμ't</i>	he is building a house.
<i>hani'la'ana't</i>	he is building a house for him.
<i>nawi'l</i>	the apron (final -l, abs. suff.).
<i>nawi.lu-2</i> (atelic), <i>anawi.lu2</i> (telic)	TO MAKE AN APRON.
<i>nawi'ilμ't</i>	he is making an apron.
<i>nawi'li'ba'a't</i>	he wants to make an apron.
<i>talv'uma't</i>	the breechclout (final -t, abs. suff.).
<i>talv.matu-2</i> (atelic), <i>atalv.matu2</i> (telic)	TO MAKE A BREECHCLOUT.
<i>talv'matμ't</i>	he is making a breechclout.
<i>a'talu'matu'</i>	he made a breechclout.
<i>mδxka't</i>	the belt (final -t, abs. suff.).
<i>mδxkatu-2</i> (atelic), <i>δmδxkatu2</i> (telic)	TO MAKE A BELT.
<i>mδ'xkatμ't</i>	he is making a belt.
<i>δmδ'xkata'n</i>	he made a belt for him.

What form of the verbalizing suffix, -u'-, would assume after class C nouns (cf. §26), it is impossible to say, since the nouns of this class never denote things which may be prepared or manufactured.

2. Verbalizing Suffix, TO WEAR . . . TO PUT ON . . . , -'

The suffix, -', is attached to the nominal stems of nouns of all classes; if the nominal stem ends in a long vowel, this vowel loses one mora; if the nominal stem belongs to class B2 (cf. §26), a parasitic *-ad-*, characteristic of class B2, follows the glottal stop. The suffix exerts a progressive qualitative influence, changing, usually, a juxtaposed *a* increment from *a* to *ĩ*, or from *a* to *ô* if the nominal stem ends in *ô* (cf. §2, 2). The atelic form of the resulting verbalized base bears the meaning, TO WEAR . . . ; the telic form bears the meaning, TO PUT ON. . . .

<i>nawi'l</i>	the apron (final -l, abs. suff.).
<i>nawi'</i> - (atelic), <i>anawi'</i> (telic):	
<i>na'wi''i't</i>	he is wearing an apron.
<i>a'nawi''</i>	he put on an apron.
<i>wôngô'l</i>	the shoes (final -l, abs. suff.).
<i>wôngô'</i> - (atelic), <i>ôwôngô'</i> (telic):	
<i>wô'ngô'ô't</i>	he is wearing shoes.
<i>ô'wôngô''ôla'</i>	he went there to put on shoes.
<i>ya'abi'l</i>	the skirt (final -l, abs. suff.).
<i>ya'bi'</i> - (atelic), <i>a'ya'bi'</i> (telic):	
<i>ya'bi''ila't</i>	he is going along wearing a skirt.
<i>a'ya'bi''ica'</i>	he will put on a skirt.
<i>talumu'at</i>	the breechclout (final -t, abs. suff.).
<i>talumu'ad-</i> (atelic), <i>atalumu'at</i> (telic):	
<i>talumu'adi't</i>	he is wearing a breechclout.
<i>a'talumu'at</i>	he put on a breechclout.
<i>ele'lina't</i>	the hat (final -t, abs. suff.).
<i>ele'lina'ad-</i> (atelic), <i>e'ele'lina'at</i> (telic):	
<i>ele'lina'adi't</i>	he is wearing a hat.
<i>e'ela'lina''adica'</i>	he will put on a hat.
<i>môxka't</i>	the belt (final -t, abs. suff.).
<i>môxka'ad-</i> (atelic), <i>ômôxka'at</i> (telic):	
<i>môxka'adi't</i>	he is wearing a belt.
<i>môxka'adila't</i>	he is going along wearing a belt.
<i>ô'môxka'adila'</i>	he went there to put on a belt.
<i>ïci't</i>	the blanket (final -t, abs. suff.).
<i>ïci'id-</i> (atelic), <i>ï'ïci'it</i> (telic):	
<i>ïci''idi't</i>	he is wearing a blanket. He is in between blankets (as when sleeping).
<i>ï''ïci''idica'</i>	he will put on a blanket.

In the following example, the suffix, -', is retained only in final position, and is otherwise syncopated. Perhaps the suffix, -', is always syncopated in this way when attached to nominal stems ending in a consonant. This is difficult to

check, since nouns denoting articles of clothing generally have nominal stems ending in a vowel.

<i>pigi'inu'ct</i>	the shirt (final <i>-t</i> , abs. suff.).
<i>pigi'nuc'</i> - (atelic), <i>ipigi'nuc'</i> (telic):	
<i>pigi'nuci't</i>	he is wearing a shirt.
<i>i'pigi'inuc'</i>	he put on a shirt.
<i>i'pigi'nu'cila'</i>	he went there to put on a shirt.

3. Verbalizing Suffix, TO GATHER . . . , *-gay-*

This suffix is attached to the nominal stems of nouns of flora, including parts of plants (bulbs, seeds, etc.); the suffix is also attached to a few other nouns denoting things which are gathered, as salt. The suffix, *-gay-*, exerts a progressive qualitative influence, changing a juxtaposed *a* increment from *a* to *i* (cf. §2, 2). No simple rule will account for the quantitative effect of the suffix, which is felt in the final vowel of the nominal stem, change of mora value of the medial vowel of the suffix itself, and progressively; but all quantitative change seems determined by alternation of length (cf. §3).

<i>μ'muca't</i>	the arrow feather (final <i>-t</i> , abs. suff.).
<i>umu'caka'yila't</i>	he is going along getting arrow feathers.
<i>ma'wicμ'l</i>	the pine-nut pole (final <i>-l</i> , abs. suff.).
<i>ma'wi'cuga'yü't</i>	he is gathering pine-nut poles.
<i>ma'ct</i>	the wild oats (final <i>-t</i> , abs. suff.).
<i>ma'cka'yila't</i>	he is going to gather wild oats.
<i>a'ma'cka'yüki'n</i>	he gathered wild oats there and came here.
<i>μηα'l</i>	the salt (final <i>-l</i> , abs. suff.).
<i>μηα'gayi't</i>	he is gathering salt.
<i>μηα'gayi'gima't</i>	he is coming to gather salt.

In the following example, the final *-n* of the nominal stem changes to *-η* under the assimilatory influence of the initial consonant of the suffix, which changes from *g* to *h*; the reason for the latter change is not understood.⁹

<i>wa'a'nt</i>	the acorns (final <i>-t</i> , abs. suff.).
<i>wa'anhayila't</i>	he is going to gather acorns.

4. Conjunctive Verbalizing Particle, Expressing TO OWN . . . , *-kanη*

The particle, *-kanη*, is attached to nominal stems and participates in the alternation of stress of the nominal stem (§4, 3, iii); the regular subject conjunctive personal pronouns may follow *-kanη*.

⁹ "Tübatulabal *h* seems always to go back to Shoshonean *k*, while Shoshonean *h* disappears."—Sapir, Southern Paiute and Nahuatl—A Study in Uto-Aztekan. Part 2. AA, n.s., 17:322, 1915.

<i>ð'ðya't</i>	the money (final <i>-t</i> , abs. suff.).
<i>ð'yaka'η</i>	he owns money.
<i>ð'yaka'ηgi'</i>	I own money.
<i>ma'aca't</i>	the sack (final <i>-t</i> , abs. suff.).
<i>ma'caka'η</i>	he owns a sack.
<i>kaηa'l</i>	the facial hairs (final <i>-l</i> , abs. suff.).
<i>kaηa'aga'η</i>	he has a beard.
<i>a'na'</i>	father.
<i>a'na'aga'η</i>	he owns a father (in the sense that his father is still living).
<i>pa'adzi'</i>	older brother.
<i>pa'adzi'iga'η</i>	he owns an older brother (in the sense that he is not the oldest).

5. Hypothetical Conjunctive Particle, *-gic*

The particle, *-gic*, is attached to the absolute form of nouns and does not participate in the alternation of stress of the noun (§4, 1).

hac *ii'k* *tca'mila'* *mücma'lgic*
 not ate acorn gravy poison supposing it.
 ("He did not eat the acorn gravy, supposing it to be poison.")

tüba'itc *ii'k* *tu'umu'mu'i* *tohi'lgic*
 Wolf ate his own children deer supposing them.
 ("Wolf ate his own children, supposing them to be deer.")

§§22-24. PERSONAL PRONOUNS

§22. CATEGORIES EXPRESSED BY PERSONAL PRONOUNS

Personal pronouns are conjunctive particles which occur in three series, subject, object, and possessive pronouns. These particles form more or less firm phonetic units with the preceding noun or verb or particle to which they are attached. The subject pronouns alone may be firmly fused with a meaningless particle, *in* ("empty word"), and then be used in an independent series.

Other than this, the subject pronouns are attached either to the verb with which they form a formal unit, as

tī'kaki' ta'pici'la' I am eating the bread.

or—and this more commonly—they are attached to a word preceding the verb to which they have formal reference, as

ta'pici'la'gi' tika't the bread I am eating.

Like the subject pronouns, the object pronouns may be used disjunctively, but this is not common practice for object pronouns.

The possessive pronouns, except for the first person, are always attached to the word with which they form a formal unit. The first person singular may be used disjunctively, and a special independent particle may be used for first person plural.

The pronoun conjunctive particles sometimes participate in the alternation of stress of the word to which they are attached; sometimes they are attached enclitically to this word; but characteristically, subject and object conjunctive particles are stressed independently of the word to which they are attached, while possessive pronouns characteristically participate in the alternation of stress of the word proper.

The possessive pronouns are without case significance, but the subject pronouns and object pronouns are used syntactically much as nouns in subjective and objective cases.

Besides syntactic case and possession, the notions expressed by personal pronouns are limited to persons and number. No expression is possible for such categories as visible and invisible, animate or inanimate, nearness or remoteness. The classification of person and number includes:

1 pers. sing.	2 pers. sing.
1 pers. d. incl.	2 pers. pl.
1 pers. d. excl.	3 pers. sing.
1 pers. pl. incl.	3 pers. pl.

§23. SUBJECT PRONOUNS

	Independent series	Conjunctive series
1 pers. sing.	<i>nik</i>	<i>-gi</i>
d. incl.	<i>ɨŋila</i>	<i>-gila</i>
d. excl.	<i>ɨŋila'aŋ</i>	<i>-gila'aŋ</i>
pl. incl.	<i>ɨŋilu'ts</i>	<i>-gilu'ts</i>
2 pers. sing.	<i>ɨmbi</i>	<i>-bi</i>
pl.	<i>ɨmbu'mu</i>	<i>-bu'mu</i>
3 pers. sing.	<i>ɨn</i>	<i>(-dza)</i>
pl.	<i>ɨnda</i>	<i>-da</i>

1. Formation of the Independent Series

The regular subject conjunctive pronouns are attached to the particle, *ɨn*, which apparently carries no meaning in itself. The resulting independent pronouns form firm phonetic units: the nasal consonant of the "empty word," *ɨn*, is assimilated to the initial plosive of the conjunctive pronoun, except for the first person, when *ɨn+gi > nigi* by metathesis, and *nigi > nik* because the final vowel is lost. The final vowel of all conjunctive particles having final vowels is frequently elided.

2. Special Series

When the subject pronouns occur with the exhortative suffix, *-ma-* (see §§16, 5; and 20), the initial element of the first-person forms is syncopated as follows:

1 pers. sing.,	zero form
d. incl.,	<i>-la</i>
d. excl.,	<i>-la'aŋ</i>
pl. incl.,	<i>-lu'ts</i>

The second person is not, of course, expressed by exhortative verbs. The third person is expressed by *-dza*, or, when the final vowel is elided, *-ts*. This form is used for the singular, to which the regular third person plural form, *-da*, must be added (*-tsta*) for the plural.

The regular forms are employed with the permissive suffix, *-ha-* (see §§16, 6; and 20), except that the third person *-dza* or *-ts* is used as with the exhortative suffix.

3. Formation of First Person

The essential first-person element is *-g-* (*-k* in final position). The vowel of *-gi* is frequently elided.

a'naha'k ha'c ki'm may I not come?

The dual inclusive element appears to be *-l*; the final vowel in *-la* and *-gila* is freely elided.

<i>angi'l</i>	<i>iti'kica'</i>	shall we (d. incl.) eat?
<i>ihma'l</i>	<i>ki'm</i>	let us (d. incl.) come.

The dual exclusive element appears to be *-'aŋ*, but is always preceded by another pronominal element (*-la* or *-gila*, with subj. prons.). The plural inclusive element appears to be *-u'ts*, but is always preceded by another pronominal element (*-l* or *gil*, in the case of subj. prons.).

The first person singular may be expressed by a zero form when the exhortative suffix is used (see 2, above).

4. Formation of Second Person

The essential second-person element is *-b-* (*-p* in final position.) The vowel of *-bi* is freely elided.

<i>ta'naha'p</i>	<i>ti'</i>	<i>ki'm</i>	would you were coming.
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The second person plural element appears to be *-u'm*; when the final vowel of *-u'mu* is elided, the medial *-u'-* loses a mora.

<i>a'naha'bu'm</i>	<i>ha'c</i>	<i>kim</i>	may ye not come?
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5. Formation of Third Person

The third person singular is usually expressed by a zero form; that is, when the pronouns expressing other persons or number do not appear, third person singular is indicated. However, after exhortative and permissive suffixes, a special third person conjunctive particle is used (neutral as to number), namely, *-dza*, which is retained when the regular third person plural particle is attached. The final vowel of *-dza* is elided more often than not.

<i>a'naha'ts</i>	<i>toha'ala'</i>	may he go hunting?	
<i>a'naha'tsta'</i>	<i>ha'c</i>	<i>ki'm</i>	may they come?

The sibilant of the affricate, *ts*, may be transposed so that it precedes the alveolar plosive before the third person plural form, *-ta*.

a'naba'hacta' they can throw it. (*s > c*, because *s* appears normally only in an affricate.)

6. Use of the Independent Series

Independent pronouns are used when the person needs to be emphasized and, in answer to a question, predicatively.

<i>nik</i>	it is I.	Etc.
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Ordinarily only conjunctive pronouns will be attached to particles or to other independent words, but with the interrogative particle, *an-*, the independent pronouns may also be attached when the person needs to be emphasized.

anbi' *tika't* are you eating? (conj. pron., *-bi*, attached to *an-*).
a'numbi' *hó-'nóka'η* have you a baby? (ind. pron., *umbi*, attached to *an-*).
 Etc.

7. Use of Conjunctive Series

- i. As subject of a verb. No special examples are needed for this normal use.
- ii. In nominal predication, whenever context permits.

ta-'twa'lgi' the man I. ("I [am] the man.")

§24. OBJECT AND POSSESSIVE PRONOUNS

While the object pronouns express a syntactic case, and the possessive pronouns express possession without reference to case, the two series are, nevertheless, listed in parallel columns to show graphically certain morphological resemblances.

	Object pronouns	Possessive pronouns
1 pers. sing.	<i>-ni</i> (<i>nin</i>)	<i>-ni''iη</i>
d. excl.	<i>-džiya'aη</i>	<i>-tc</i>
pl.	<i>-dzi'</i>	<i>-ts</i>
2 pers. sing.	<i>-diη</i>	<i>-iη</i>
pl.	<i>-dulu</i>	<i>-ulu</i>
3 pers. sing.		<i>-n</i>
pl.	<i>-tipi</i>	<i>-p</i>

The form, *nin*, is probably pleonastic. In addition to the foregoing, the particle, *a'yamu'ts*, is used as an independent first person plural inclusive possessive pronoun. When this independent pronoun is used, or when the first person singular possessive pronoun, *-ni''iη*, is used disjunctively, the noun which is possessed has the third singular element, *-n*, attached; *-n* is then used in a neutral sense, being a concordance device to indicate which noun is possessed.

1. Use of Possessive Pronouns

- i. Possession. The normal function of possessive pronouns is to express the person of the possessor.

có-'óyin ala-'wina'tni' his wife is talking to me.

- ii. Nominal predication. Nominal predication is indicated when a possessive noun occurs without a verb.

hani-'ni''iη house my. ("[It is] my house.")
có-'óyi'n wife his. ("[It is] his wife.")

iii. Internominal reference. The third person singular form, *-n*, is attached to nouns used in annexation with a genitive noun.

μkμ'n hani'ln its edge of the house. ("The edge of the house.")
hani'n ta'twa'la'a'n his house of the man. ("The man's house.")

2. Use of Object Pronouns

i. Object of transitive verbs. An object pronoun may serve as the object of a transitive verb, or a transitive verb which is nominalized. Verbs which are nominalized may yet retain certain verbal characteristics, as taking an object.

ta'pici'la' *ti'kibi'l* *a'naηa't*
 the bread (obj.) the eater (subj.) is crying.
 ("The eater (of) the bread is crying.")

ti'kani'bi'lni' *a'naηa't*
 the feeder me is crying.
 ("The one who feeds me is crying.")

ii. Indirect object. No formal distinction is made between direct and indirect objects. Both the object pronouns and nouns in objective case are used for the indirect object.

a'naba'ana'tni' he is throwing it for me.
ti'kana't tīpi' ta'pici'la' he feeds them the bread.

iii. Notional subject. Object pronouns, as well as nouns in objective case, are used as notional subject of nonidentical-actor subordinate verbs (cf. §19, 4).

iv. Object of imperative verbs. There is one difference in the syntactic use of nominal and pronominal objects. The personal object of an imperative verb is expressed by an object pronoun, whereas the nominal object of an imperative verb is expressed by a noun which is formally in the subjective case.

ti'kana'h tīpi' feed them.
ti'kana'h ta'pici'l feed the bread.

3. Combination of Subject and Object Pronouns

Some combinations of subject and object pronouns are more or less firmly fused.

tciya'aη + *-da* = *tciya'anda*
tciya'aη + *-bi* = *tciya'ambi*
bi + *-ni* = *bin*
bu·mu + *-ni* = *bumin*
gi + *-diη* = *gilη*

hactci'ya'a'nda' *ala'wina't*
 not us they are talking. ("They are not talking to us.")

a'nhactci'ya'a'mbi' *ala'wina't*
 not us you are talking. (“Are you not talking to us?”)

ha'ckili'η *ala'wina't*
 not I you am talking. (“I am not talking to you.”)

hacpi'n *ala'wina't*
 not you-me are talking. (“You are not talking to me.”)

a'nbumnu'n *ha'c* *ala'wina't*
 ye me me not are talking (“Are ye not talking to me?”)

§§25-38. NOUN MORPHOLOGY

§25. CATEGORIES EXPRESSED BY NOUNS

A noun must appear either as an absolute noun (nonspecification of possessor) or as a relative noun (with possessor or internominal reference specified).

A noun must be in one of three fundamental syntactic cases: subject, object, or genitive case.

The obligatory categories (abs.-rel. and subj.-obj.-gen. distinctions) hold for nominalized verbs as well as for nouns having nominal stems.

In addition to these obligatory categories, four secondary cases (iness., abl., all., instr.) may be expressed by attaching postpositional suffixes to the object noun. Several derivational suffixes may be attached to nominal stems, expressing a diminutive, augmentative, absentive, "last surviving relative," past tense, and plurality. Number may also be expressed by stem reduplication. Nominalizing suffixes yield an extraordinary variety of nouns of agency and instrumentality.

§26. CLASSES OF NOUNS

Nouns fall into three main classes, with various subclasses, depending on the formation of the obligatory categories (syntactic cases and abs.-rel. distinctions). Normally, a noun may be stated either in the absolute or in the relative. A few special terms, a few body parts, and all kinship terms are used only in the relative. A limited number of nouns are used only in the absolute; these include proper names and some specific terms, as names of animals or plants which would not usually be regarded as being possessed.

The formation of the absolute and relative of a noun underlies the formation of the syntactic cases. For this reason, the absolute suffix may be taken as the criterion of the three main nominal classes.

Class A = nouns having *-l* for the absolute suffix.

Class B = nouns having *-t* for the absolute suffix.

Class C = nouns having a zero absolute suffix; that is, when a specific relative suffix is not used, and when a possessive pronoun is not attached, these nouns are in absolute form.

Each of these main classes has certain subclasses, with a very unequal distribution of the nouns in the language. The significance of this unequal distribution is not apparent.

Class A: nouns having -l for the absolute suffix.

A1, with the noun ending in a long vowel.

A2, with the noun ending in a short vowel.

A1 and A2 include more than half of the nouns in the language, but for subclasses 1 and 2 there seems to be about an equal number of nouns. When verbs are directly nominalized and used as absolute nouns, the *-l* absolute suffix is most often used, so that such nominalized verbs belong to classes A1 and A2.

Examples, A1:

<i>a'dzowa'l</i>	the shaman.
<i>a'nambï'l</i>	the feather headband.
<i>u'gäbi'l</i>	the bunch grass.
<i>kaṇa'l</i>	the facial hair.
<i>kïyi'l</i>	the arrowhead.
<i>mana'l</i>	the metate.
<i>wi'xniäbi'l</i>	the rabbitskin blanket.
<i>muwa'l</i>	the mountain.
<i>nawi'l</i>	the apron.
<i>pa'hu'l</i>	the arrow.
<i>pa'alu'l</i>	the poison root.
<i>pawa'adzu'l</i>	yellow seed.
<i>pi'wi'l</i>	the breast feathers.
<i>cuwa'l</i>	the earth.
<i>cu'l</i>	the stars.

A2:

<i>ïci''iga'l</i>	the blue squirrel.
<i>u'una'l</i>	the bear.
<i>u'uci'l</i>	the sticker cactus (<i>Opuntia</i> sp.).
<i>hôm'mô'l</i>	the cooking-basket.
<i>ku'hμpi'l</i>	the elderberry.
<i>ma'wicμ'l</i>	the pine-nut pole.
<i>pôho'owa'l</i>	the pestle.
<i>cu'na'wa'l</i>	the sibling between the older and younger one.
<i>cu'una'l</i>	the heart.
<i>tci'ṇiya'l</i>	the red thistle.
<i>u''μμμ'l</i>	the cordage brush.
<i>ha'awa'l</i>	the wood-rat.
<i>ka'adzμ'l</i>	the clay pot.
<i>nita'yu'l</i>	the roof rafters.
<i>cikô'l</i>	the lizard.
<i>taba'ya'l</i>	the chipmunk
<i>wa''a'l</i>	the big hawk.

Class B: nouns having -t for the absolute suffix.

B1, with the noun ending in a long vowel.

B2, with the noun ending in a short vowel.

B3, with the noun ending in *-n*.

B4, with the noun ending in *-m*.

B5, with the noun ending in a voiceless consonant.

The sum of all class B nouns probably includes one-third of the nouns in the language. Most of these nouns belong to B2 and B3; B5 contains a considerable number of nouns; nouns are infrequently found to belong to B1, and rarely to B4. It may be worth mentioning that in addition to specific names of plants and animals, which fall into most classes of nouns, a considerable portion of B2 nouns are concerned with objects of material culture, while B3 nouns conspicuously lack specific plant names. However, from the material in hand no significance can be attached to a semantic classification.

Examples, B1:

<i>ka'awĩ't</i>	the grasshopper.
<i>kô'ôyô't</i>	the turtle.
<i>wi'la't</i>	the skirt feathers.
<i>tci'ut</i>	the lime.
<i>tu't</i>	the salt grass.

B2:

<i>hô'ôya't</i>	the brush enclosure.
<i>ô'ôya't</i>	the money.
<i>wa'ala't</i>	the basket seed-beater.
<i>ca'anô't</i>	the pitch.
<i>pônga't</i>	the basket cap.
<i>naha't</i>	the cane.

B3:

<i>pi'a'agü'nt</i>	the worm.
<i>pô'nt</i>	the hide, skin, body hair.
<i>pa'wili'iga'nt</i>	the goose.
<i>tahpü'nt</i>	the cottontail hare.

B4:

<i>pômt</i>	the egg.
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B5:

<i>tsulü'ct</i>	the woodpecker.
<i>ni'xt</i>	the tule raft.

Class C: nouns having a zero absolute suffix; i.e., when a specific relative suffix is not used, and when a possessive pronoun is not attached, these nouns are in absolute form. The method of forming relative cases determines the subclasses.

C1, nouns which form the relative by attaching possessive pronouns directly to the nominal stem or to the case suffixes.

C2, nouns which form the relative by attaching a relative suffix to the nominal stem before the possessive pronouns are attached.

Examples, C1:

<i>tsim'l</i>	the mouse.
<i>cü'na'a'c</i>	the soldier.
<i>tsô'h</i>	the white fish.

(All kinship terms.)

C2:	<i>na'adi''</i>	the cat.
	<i>kô'ôci''</i>	the minnow fish.
	<i>hüci'h</i>	the unit of money.
	<i>tcõnõ''</i>	the twins.

Kinship terms are never used as absolute nouns. Their method of forming the relative is the same as that of other nouns in class C1. In contrast to other nouns of class C1, the nominal stem of kinship terms, without suffixes and without possessive pronouns attached, instead of expressing the absolute subject case, expresses the vocative, which is used as a relative. Thus, *mã'' a'ana'* 'hello father, means, of course, "hello, my father."

When kinship is established by virtue of marriage, the terms for such kin (with the exception of "husband" and "wife") cannot be used vocatively, but must appear with possessive pronoun attached.

<i>a'na'wici'wa'n</i>	his stepdaughter.
<i>aya'wi'täwa'n</i>	his stepson.
<i>wa'cumbi'cñ</i>	his spouse's parent.
<i>taci'n</i>	her son's wife.
<i>wô''l'cñ</i>	her co-wife (her husband's mistress); his co-husband (wife's lover).
<i>piya'n</i>	his wife's brother.

Comparative data may some day show that the absolute suffixes, *-l* and *-t*, go back historically to one absolute suffix, probably *-l* for the typical Shoshonean stems ending in a vowel, with the absolute suffix *-t* as a special development for stems ending in a consonant; and with the zero absolute suffix as a special development for personal names. This prophecy is based on the inadequate evidence of Tübatulabal. In Tübatulabal the *-l* absolute suffix is used only after nominal stems or suffixes ending in a vowel, while the *-t* absolute suffix is used after nominal stems or suffixes ending in either a consonant or a vowel. In the latter circumstance, when the *-t* absolute suffix is used after a vowel, there is some reason for wondering whether the nominal stem as it appears at present may not represent a syncopated form, having an historical antecedent stem which ended in a consonant. In the following pair of nouns, the nominal stem is *tu'*. The first noun has *-l* for the absolute suffix, the second *-t*.

<i>tu'l</i>	the embers.
<i>tu't</i>	the salt grass (after being pulled out).

Semantically related to the second noun is

<i>tu'ubu'l</i>	the salt grass (as it grows, before being pulled out).
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It is just possible that *tu't* may be derived from *tu'ubu'l*, with the absolute suffix changing from *-l* to *-t* when juxtaposed to a consonant: *tu'bu:l* > **tu'pt* >

tu-t. Semantically related pairs of nouns do occur in which the *-t* absolute suffix appears after the nominal stem ending in a consonant, while the *-l* absolute suffix appears after the nominal stem ending in a vowel.

<i>tint</i>	the rock.
<i>tɪŋgi-l</i>	the rock ledge.

§27. FORMATION OF SYNTACTIC CASES

The formation of syntactic cases is fundamentally different for absolute and relative nouns. This causes the expression of syntactic cases and the relative-absolute distinctions to be inextricably bound up together. For example, in most nouns (classes A and B) the absolute is expressed primarily by a special suffix (*-l* or *-t*), but the absolute is again, though secondarily, expressed by the case suffixes (obj., *-a*; ge., *-tɪ*) which differ from the case suffixes used for the relative (obj., *-yɪ-*; gen., *-ɪn*).

Accordingly, in the following tables, the "case suffix" is given in full, and then analyzed as consisting of the absolute (or rel.) suffix proper, and the case suffix proper.

When dealing with relative nouns, it is necessary to distinguish between the *ejus* object or genitive noun, and the *suus* object or genitive noun, to borrow a pair of terms from Latin grammar.

Relative nouns in the objective and genitive cases may express the possessor by means of a regular possessive pronoun, and the resulting noun is then termed the *ejus* object or *ejus* genitive. For example,

<i>a'dawɪ-'k</i>	<i>hani-'yɪ'n</i>	he saw	her house (<i>ejus</i> obj.).
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The possessor of the *ejus* object or genitive noun is a different person from the actor of the verb.

Or relative nouns in the objective and genitive cases may express the possessor by means of a zero possessive pronoun, and then the resulting noun is termed a *suus* object or *suus* genitive. For example,

<i>a'dawɪ-'k</i>	<i>hani-'</i>	he saw	his own house (<i>suus</i> obj.).
<i>nɪk a'dawɪ-'k</i>	<i>hani-'</i>	I saw	my own house (<i>suus</i> obj.).

The possessor of the *suus* object or genitive noun is the same person as the actor of the verb.

Synoptic Chart of Case Suffixes

Class A nouns, absolute

Subclass	Case	Suffix	Analysis
1, 2	SUBJ.	<i>-l</i>	<i>-l</i> , abs. suff.
1, 2	OBJ.	<i>-la</i>	<i>-l</i> , abs. suff. + <i>a</i>
1	GEN.	<i>-lɪŋ</i>	<i>-l</i> , abs. suff. + <i>ɪŋ</i>
2	GEN.	<i>-la'aŋ</i>	<i>-l</i> , abs. suff. + <i>a'aŋ</i>

Examples are:

<i>hani'ł</i>	the house (subj., A1).
<i>tca'mi'ł</i>	the acorn gravy (subj., A2).
<i>a'dawü'k hani'la'</i>	he saw the house (obj., A1).
<i>iti'k tca'mila'</i>	he ate the acorn gravy (obj., A2).
<i>hani'ł'ŋ</i>	of the house (gen., A1).
<i>tca'mi'la'a'ŋ</i>	of the acorn gravy (gen., A2).

Class A nouns, relative

Subclass	Case	Suffix	Analysis
1, 2	SUBJ.	Zero	Poss. pron. necessary.
1, 2	EJUS OBJ.	-yi-	Poss. pron. necessary.
1, 2	SUUS OBJ.	Zero, -i-	Zero pron.
1, 2	GEN.	-in	Zero pron. for suus gen. Poss. pron. for ejus gen.

Examples are:

<i>hani'n</i>	his house (subj., A1).
<i>tca'mi'n</i>	his acorn gravy (subj., A2).
<i>a'dawü'k hani'yi'p</i>	he saw their house (ejus obj., A1).
<i>iti'k tca'miyi'n</i>	he ate her acorn gravy (ejus obj., A2).
<i>a'dawü'k hani'</i>	he saw his own house (suus obj., A1).
<i>iti'k tca'mi'</i>	he ate his own acorn gravy (suus obj., A2).
<i>ha'ni'i'n</i>	of his own house (suus gen., A1, with loss of mora from final st. vowel).
<i>μkμ'n ha'ni'i'nni'i'ŋ</i>	its end of my house (ejus gen., A1, with loss of mora from final st. vowel).
<i>tca'mi'i'n</i>	of his own acorn gravy (suus gen., A2, without loss of mora).
<i>ma'a't tsômô'i</i>	he is touching his own hair (suus obj., A1; st. ends in -ô).
<i>ma'a't iŋgi'i</i>	he is touching his own foot (suus obj., A2; st. ends in -i).

Class B nouns, absolute

Subclass	Case	Suffix	Analysis
1-5	SUBJ.	-t	-t, abs. suff.
2, 5	OBJ.	-ta	-t, abs. suff. + a
1, 3, 4	OBJ.	-da	-d, abs. suff. + a
2, 5	GEN.	-tŋ	-t, abs. suff. + tŋ
1, 3, 4	GEN.	-dŋ	-d, abs. suff. + tŋ

Examples are:

<i>pi'tcili't</i>	the squirrel (subj., B1).
<i>ma'aca't</i>	the sack (subj., B2).
<i>cu'lu'nt</i>	the fingernail (subj., B3).
<i>po'mt</i>	the egg (subj., B4).
<i>mu'ct</i>	the fish spear (subj., B5).
<i>iwi'k ma'cata'</i>	he took the sack (obj., B2).
<i>iwi'k mu'cta'</i>	he took the fish spear (obj., B5).
<i>a'dawi'k pi'tcili'ida'</i>	he saw the squirrel (obj., B1).
<i>a'dawi'k cu'lunda'</i>	he saw the fingernail (obj., B3).
<i>iti'k po'mda'</i>	he ate the egg (obj., B4).
<i>ma'cati'η</i>	of the sack (gen., B2).
<i>mu'cti'η</i>	of the fish spear (gen., B5).
<i>pi'tcili'idi'η</i>	of the squirrel (gen., B1).
<i>cu'lundi'η</i>	of the fingernail (gen., B3).
<i>po'mdi'η</i>	of the egg (gen., B4).

Class B nouns, relative

Subclass	Case	Suffix	Analysis
1-5	SUBJ.	Zero	Poss. pron. necessary.
1	EJUS OBJ.	<i>-yi-</i>	Poss. pron. necessary.
2	EJUS OBJ.	<i>-tsi-</i>	Poss. pron. necessary.
3	EJUS OBJ.	<i>-nini-</i>	Poss. pron. necessary.
4	EJUS OBJ.	<i>-dzi-</i>	Poss. pron. necessary.
5	EJUS OBJ.	<i>-i-, -yi-</i> <i>-iyi-</i>	Poss. pron. necessary. (Form of suff. depends on whether st. ends in <i>-c</i> , <i>-h</i> , or plosive.)
1, 3, 4, (5)	SUUS OBJ.	Zero	Poss. pron. not possible.
2	SUUS OBJ.	<i>-ts</i>	Poss. pron. not possible.
(5)	SUUS OBJ.	<i>-i</i>	Poss. pron. not possible.
1, 2, 3, 5	GEN.	<i>-in</i>	Zero pron. for suus gen.; poss. pron. for ejus gen.

Examples are:

pi'tcili'n his squirrel (subj., B1), etc. All the possessive pronouns are attached regularly to nominal stems, except the second person, singular and plural, after class B2 nouns. The second person, in this class of nouns, is preceded by a parasitic, 'ad; this parasitic element is characteristic of class B2 nouns, and occurs in various circumstances (cf. §21, 2), but with possessive pronouns only before the second person.

<i>ma'aca'n</i>	his sack (subj., B2).
<i>ma'aca'p</i>	their sack (subj., B2).
<i>ma'ca''adi'η</i>	your sack (subj., B2).

<i>ma'ca'adulu'</i>	your (pl.) sack (subj., B2).
<i>a'dawï'k pi'tcili'iyi'p</i>	he saw their squirrel (obj., B1).
<i>a'dawï'k ma'catsi'p</i>	he saw their sack (obj., B2).
<i>a'dawï'k cµlµ'nini'p</i>	he saw their fingernails (obj., B3).
<i>ïti'k pômzɪ'p</i>	he ate their eggs (obj., B4).
<i>a'dawï'k mu'ci'p</i>	he saw their fish spear (obj., B5, st. ends in -c).
<i>i''i't mδ'ômδ'hyi'p</i>	he is drinking their jimsonweed (obj., B5, st. ends in -h).
<i>ïti'k wi'piyi'p</i>	he ate their fat (obj., B5, st. ends in plosive).
<i>a'dawï'k pi'tcili'ï</i>	he saw his own squirrel (suus obj., B1).
<i>a'dawï'k culµ'n</i>	he saw his own fingernail (suus obj., B3).
<i>ïti'k pδ'm</i>	he ate his own egg (suus obj., B4).
<i>a'dawï'k mu'c</i>	he saw his own fish spear (suus obj., B5, st. ends in -c).
<i>ïwi'k ma'aca'ts</i>	he took his own sack (suus obj., B2).
<i>i''i't mδ'ômδ'ix</i>	he is drinking his own jimsonweed (suus obj., B5, st. ends in -h, plus suff. -i, *mδ'ômδ'hi'.
<i>putci'li'ï'n</i>	But final *hi is transposed to -ih or -ix [§7]. of his own squirrel (suus gen., B1, with loss of one mora from final vowel of st.).
<i>ma'ca'adi'n</i>	of his own sack (suus gen., B2, with the parasitic -'ad-, characteristic of class B2, preceding suff. -ï'n).
<i>cµ'lun'ï'n</i>	of his own fingernail (suus gen., B3).
<i>mu'ci'n</i>	of his own fish spear (suus gen., B5).

No examples were found for the relative genitive of B4 nouns. All relative genitive nouns are made ejus genitives merely by adding possessive pronouns to the suus genitive forms.

Class C nouns, absolute

Subclass	Case	Suffix	Analysis
1, 2	SUBJ.	Zero	Expresses voc. in kinship terms.
1, 2	OBJ.	-i	Zero abs. suff. + -i
1, 2	GEN.	-ïη	Zero abs. suff. + -ïη

Examples are:

<i>ta'hambic</i>	the old man (subj., C1).
<i>na'adi''</i>	the cat (subj., C2).
<i>a'dawï'k taha'mbici' na'adi''i'</i>	he saw the old man (obj., C1) the cat (obj. C2).
<i>taha'mbici'η</i>	of the old man (gen., C1).
<i>na'adi''ï'η</i>	of the cat (gen., C2).

Class C nouns, relative

Subclass	Case	Suffix	Analysis
1	SUBJ.	Zero	Poss. pron. necessary.
2	SUBJ.	-a-	Poss. pron. necessary. Zero subj. suff., a rel. suff.
1	EJUS OBJ.	-i-, -ni-, -iyi-	ni- or -iyi- if st. ends in -l, or -h. Poss. pron. necessary.
2	EJUS OBJ.	-ayi-	Poss. pron. necessary.
1	SUUS OBJ.	-i	Zero poss. pron.
2	SUUS OBJ.	-ai	Rel. a+obj. i, zero poss. pron.
1	GEN.	-'in	Zero pron. for suus gen.; poss. pron. for ejus gen.
2	GEN.	-a'in	Rel. a+gen. 'in.

Examples are:

<i>ta'hamb'i'cp</i>	their old man (subj., C1).
<i>na'adi''a'p</i>	their cat (subj., C2).
<i>taha'mbic'i'p a'dawi'k</i>	their old man he saw (obj., C1, st. ends in -c).
<i>a'dawi'k tsimu'lni'n</i>	he saw her mouse (ejus obj., C1, st. ends in -l).
<i>a'dawi'k tsô'hiyi'n</i>	he saw her fish (ejus obj., C1, st. ends in -h).
<i>a'dawi'k na'adi''ayi'n</i>	he saw her cat (ejus obj., C2).
<i>a'dawi'k a'na'i</i>	he saw his own father (suus obj., C1).
<i>ïi'k tsô''i'h</i>	he ate his own fish (suus obj., C1, *tsô''hi' be- comes tsô''ih by metathesis, cf. §7).

Nominal stems not ending in a vowel or -h, as in the two examples cited, have a zero suffix for the suus object, i.e., the naked nominal stem is used. This means that most nouns of class C1 express the absolute subject form by the naked nominal stem (zero abs. suff.), and also the suus object form by the naked nominal stem (zero suus suff.).

<i>a'dawi'k ta'hamb'i'c</i>	he saw his own old man (suus obj., C1).
<i>a'dawi'k tsimu'l</i>	he saw his own cat (suus obj., C1).

Actually, little confusion results, because words like *ta'hamb'i'c* (abs. subj. or suus obj.) are rarely used as relative nouns.

<i>a'dawi'k na'adi''a'i</i>	he saw his own cat (suus obj., C2).
<i>ta'hamb'i'c'i'n</i>	of his own old man (suus gen., C1).
<i>na'adi''a'i'n</i>	of his own cat (suus gen., C2).

Genitive nouns are made ejus genitives merely by adding possessive pronouns to the suus genitive forms.

Very infrequently a noun will be found with morphologically relative case inflections which express a notionally absolute noun. Such nouns are incapable of expressing the relative notionally.

<i>yô'lapi'n</i>	the buzzard (abs. subj., lit., "his baldness, past").
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§28. USE OF SYNTACTIC CASES

1. Use of Subject Case

i. As actor. Nouns in the subject case are most commonly used as subjects of transitive or intransitive or impersonal verbs.

<i>yí'xpa'l</i>	<i>leca't</i>	
the door	is opening.	
<i>ta'twa'l</i>	<i>leci'ina't</i>	<i>yí'pala'</i>
the man (subj.)	is opening	the door.
<i>ta'twa'l</i>	<i>ha'maca't</i>	
the man	is sad.	

The subject may at the same time be the subject of an identical-actor subordinate verb (cf. §19, 1-3).

<i>tsulu'uma'c</i>	<i>kó'im</i>	<i>ala'awa't</i>	<i>tci'tcwa'na'a'c</i>
sleeping	the woman	is talking	all the time.
("The woman talks whenever she sleeps.")			

ii. In a nominal sentence. When a noun is used without a verb, the noun is used predicatively.

<i>ta'twa'lgi'</i>	man I.	("I [am] the man.")
<i>ta'twa'l</i>	man.	("He [is] the man.")

iii. As notional object of an imperative verb. A noun in subjective case is used as the notional object of an imperative verb (see §16, 1, iii).

<i>i''i'h pa'l</i>	drink	the water!
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2. Use of Object Case

i. As object of verb. Nouns in the object case are most commonly used as objects of transitive verbs (except the imp. vb.; see 1, iii, above).

<i>i''i't pa'la'</i>	he is drinking	the water.
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ii. As object of a noun (n. vb.). A transitive verb which is nominalized (and is a true noun because it expresses the obligatory nominal categories) may still have as its own object a separate noun. Also, a nominalized verb, as well as a true nominal stem, may appear with a past tense suffix.

<i>pucki'</i>	<i>ama'gami'n</i>	<i>μ'ndumu'gapi'</i>	<i>u'nala'</i>
then I	remembered	my own dream, past (suus obj.)	the bear (abs. obj.)
("Then I remembered my dream [about] the bear.")			of suus obj.)

Compare the following construction, in which the verb, TO DREAM, is used transitively, with a direct object.

μ'ndumu-'uga't *u-'nala'*
he is dreaming the bear.

("He is dreaming [about] the bear.")

iii. As object of a particle. Certain particles, comparable to English prepositions, are followed by nouns in the object case.

a'kadzi-'p *δ'xδla-'la'*
across the canyon (obj.).

i-'mi' *ci-'gawi'yami'* *a-'ma-'yu'*
he went Koso Indians with.

("He went with the Koso Indians.")

iv. As notional subject of a subordinate verb. A noun which is formally in the object case may serve as the notional subject of a nonidentical-actor subordinate verb (cf. §19, 4).

ηγi'm *wa'h* *kδ-'imi'* *tsulu-'uma'η*
he came there woman sleeping.

("He came there [when] the woman [formally in obj. case; notionally, the subj. of the sub. vb.] was sleeping [sub. vb.]")

<i>ta-'twa'l</i>	<i>ala-'wina't</i>	<i>kδ-'imi'</i>	<i>tsulu-'ma'η</i>
the man	is talking	to the woman	while sleeping
(subj. main vb.)	(main vb.)	(obj. main vb., subj. sub. vb.)	(sub. vb.)

("The man is talking to the woman while the woman is sleeping.")

3. Use of the Genitive Case

A noun in the genitive case is never used alone, but always in annexation with a relative noun to which the third person singular possessive pronoun, *-n*, has been attached.

wi-'ici'n *wδ'hδmbδ-'li'η*
its root (rel. n.) of the bull pine (gen. n.).

("The bull-pine root.")

The genitive noun may be absolute, as in the example cited, or relative, as in the following example.

a-'dawi-'k *μ'kuyi'n* *wihni-'bi'i'n*
he saw its edge of his own rabbitskin blanket.

("He saw the edge of his rabbitskin blanket.")

The relative noun used in annexation with a genitive may be in the subject case or in the object case (see the preceding examples), or in one of the secondary cases of local reference (see §29.)

miya't *μ'kuba'n* *muwa'luη*
he goes on its top of the mountain.

(“He is going on top of the mountain.”)

miya't *uku'muni'iga'n* *muwa'lu'η*
he goes toward its top of the mountain.

(“He is going toward the mountain top.”)

The preferred order is genitive noun followed by the relative noun, but this, like word order in general, is stylistic rather than obligatory.

picki'l *hali't* *wa'h* *hani'lu'η* *hawa'aba'n*
then we are sitting there of the house in its neighborhood
(abs. gen.) (rel. n.).

(“Then we are sitting there next to the house.”)

No construction has been found in which a word is interposed between a genitive noun and the relative noun used in annexation with the genitive.

It is difficult to define the limits of meaning expressed by the genitive-relative noun annexation. Perhaps the partitive genitive notion is most commonly suggested, but sentences do occur in which the genitive noun “owns” the relative noun.

i'mi' *kδ'imin* *hani'iba'n*
he went of the woman in her house.

(“He went in the woman’s house.”)

§29. SECONDARY CASES

Secondary cases are formed by suffixing postpositions to nouns which are usually in the objective case before the postposition is suffixed. These postpositions may be related to particles of a prepositional nature which precede objective nouns as independent words (see §28, 2, iii). However this may be, there are four postpositions which are firmly suffixed to the noun.

	Absolute form	Relative form (poss. pron. attached)
<i>Inessive</i> TO, IN, ON	-p	-ba-
<i>Ablative</i> away from	-batsu	-batsu-
<i>Allative</i> toward	-mi·k	-muni'ga-
<i>Instrumental</i> with	-c	

The instrumental postposition, *-c*, is attached only to absolute nouns. The ablative postposition, *-batsu*, seems to be a fusion of the inessive, *-p*, and the independent particle, *-atsu*. A few examples have been found in which *-atsu* is compounded with the allative.

a'kadzi'muni'gatsu' away from here toward the other side.

-atsu is sometimes attached to other particles.

wana'η far away.
wana'ηatsu' kima't he is coming from far away.

1. Use of Postpositions with Absolute Nouns

Postpositions are attached to the objective case suffix of absolute nouns. There are no exceptions.

<i>a'dawi'k hani'la'</i>	he saw	the house (obj., A1).
<i>i'mi' hani'la'p</i>	he went	in the house (iness., A1).
<i>i'mi' hani'la'batsu'</i>	he went	away from the house (abl., A1).
<i>i'mi' hani'lami'k</i>	he went	toward the house (all., A1).
<i>a'dawi'k ma'wi'cula'</i>	he saw	the pine-nut pole (obj., A2).
<i>ii'p ma'wi'cula'p</i>	he put it	on the pole (iness., A2, obj. <i>-a-</i> receives extra mora).
<i>ii'k ma'awi'cula'batsu'</i>	he took it	away from the pole (abl., A2, obj. <i>-a-</i> receives an extra mora of length).
<i>ii'p ma'wicμ'lami'k</i>	he put it	toward the pole (all., A2).
<i>e'eba' ma'wi'cula'c</i>	he hit him	with the pole (instr., A2).

Nouns in the instrumental case have a quite limited use; they are generally found in connection with verbs implying some destruction, as in the example cited.

<i>pi'tcili'ida'p</i>	on the squirrel (iness., B1).
<i>ma'cata'p</i>	in the sack (iness., B2).
<i>cμ'lunda'p</i>	on the fingernail (iness., B3).
<i>pōmda'p</i>	in the egg (iness., B4).
<i>mu'ctap</i>	on the fish spear (iness., B5).
<i>tsō'hi'p</i>	on the fish (iness., C1).
<i>na'adi''i'p</i>	on the cat (iness., C2).

2. Use of Postpositions with Relative Nouns

Locative postpositions (i.e., all the post. except the instr.) are attached directly to the nominal stem, with the exception of nouns belonging to class C2, in which the postpositions are attached after the relative suffix. The locative cases may be *ejus*, when possessive pronouns are attached finally; or *suus*, without possessive pronouns, when the final *-a* of the inessive (*-ba*) and the

allative (*-mini·ga*) postposition is dropped, and the final vowel of the ablative postposition (*-batsu·*) loses one mora.

<i>a'dawī'k hani'</i>	he saw his own house (suus obj., A1).
<i>hani'p</i>	in his own house (suus iness., A1).
<i>hani'iba'nī'ī'η</i>	in my house (ejus iness., A1).
<i>hani'batsu'</i>	away from his own house (suus abl., A1).
<i>hani'batsu'n</i>	away from his house (ejus abl., A1).
<i>hani'mini'k</i>	toward his own house (suus all., A1).
<i>hani'mini'iga'n</i>	toward his house (ejus all., A1).
<i>pi'tcili'p</i>	on his own squirrel (suus iness., B1).
<i>ma'ca'p</i>	in his own sack (suus iness., B2).
<i>culμ'mp</i>	on his own fingernail (suus iness., B3).
<i>mu'cp</i>	on his own fish spear (suus iness., B5).
<i>tsô'hp</i>	on his own fish (suus iness., C1).
<i>na'adi'a'p</i>	on his own cat (suus iness., C2).

§30. DERIVATIONAL NOMINAL SUFFIXES

The following derivative suffixes include all derivative suffixes which may be attached to nominal stems (except verbalizing suffixes, which are treated in §21).

1. Plural suffix, *-mī-*.
2. Past tense suffix, *-pī-*.
3. Diminutive suffix, *-bi-*.
4. Kinship suffix, *-bai'i-*.
5. Augmentative suffix, *-bicvī-*.
6. Suffix expressing, . . . OWNER, *-gana-*.
7. Absentative suffix, *-bi-*.

Of these suffixes, 1 is treated in connection with number in general, §34; 2 is treated in connection with tense in nouns, §37; 3 is treated in §32; 4 in §33; 5-7 form nouns of agency, which are all treated together in §36.

It is of course unusual to treat a nominal stem plus a derivative suffix as an agentive noun. But in Tübatulabal, the true agentive nouns, derived from verbs (TO HUNT > the hunter) differ neither in feeling nor usage from a nominal stem with agentive suffix attached (THE HOUSE > the house-owner, etc.).

§31. NOMINALIZING SUFFIXES

The following list includes all suffixes which nominalize verbs. These suffixes do not, however, exhaust the possibilities of nominalizing verbs. In addition, a verbal stem may be changed into a nominal base by means of a vowel increment (see §38).

1. Agentive suffix, *-(a)pī'l*.
2. Agentive suffix, *-(i)bī'l*.
3. Past agentive suffix, *-(a)pīgana-*.

4. Recent past agentive suffix, *-(a)p̄ina-*.
5. Partner of action suffix, *-(a)tsuŋwa-*.
6. Inanimate instrument of action suffix, *-(t)c-*.
7. Animate instrument of action suffix, *-(t)cka-*.

Of these nominalizing suffixes, 1-5 form nouns of agency which are treated in §36; 6 and 7 are treated in §35, concerned with nouns of instrumentality.

§32. THE DIMINUTIVE SUFFIX

-bi- suffix proper; the diminutive noun belongs to class B2 (abs. suff., *-t*). The diminutive suffix is never used in verb forms, nor with nominalized verbs; it is found only with nouns having a nominal stem.

<i>tu'umu'n</i>	his offspring.
<i>tu'mupi'n</i>	his little offspring. (The final vowel of the st. loses one mora for an inexplicable reason; <i>b > p</i> after a one-mora vowel.)
<i>pa'adzi'n</i>	his older brother.
<i>pa'dzi'ibi'n</i>	his little (in stature) older brother.

In reciprocal kinship terms (e.g., *aka'* father's father; son's son) the diminutive is used only for the younger generation.

<i>aka'abi'nni'ŋ</i>	my little grandson.
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My chief informant used the diminutive sparingly, and only to indicate actual smallness.

<i>pigi'ini'ct</i>	the shirt.
<i>pigi'nicpi't</i>	the little shirt.
<i>ela'lina't</i>	the hat.
<i>ele'li'napi't</i>	the little hat.
<i>ela'li'napi'n</i>	his little hat.

Women employ the diminutive more freely, and, as applied to things which do not vary in size, presumably to express affection rather than smallness.

<i>hôm'mô'l</i>	the cooking-basket.
<i>hô'm'môpi't</i>	the dear little cooking-basket (the basket referred to was of standard size).

Smallness expressed by a separate stem is rare.

<i>muwa'l</i>	the mountain.	<i>mu''i'ct</i>	the hill.
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§33. THE DEATH OF KIN

There is only one suffix used exclusively with kinship terms, *-bai'i-*; the past tense suffix, *-pi-*, is used with certain kinship terms in a special sense.

1. Kinship Suffix, *-bai'i-*

-bai'i- suffix proper, always used in a relative noun. This suffix indicates that all the kin expressed by the noun to which the suffix is attached are dead, except the one referred to; and when used in the same generation, that all the connecting relatives are dead in addition.

<i>piya' n</i>	his wife's brothers.
<i>piya'bai' i' n</i>	his wife's last surviving brother (all the other brothers are dead, as is his wife, the connecting relative).

In reciprocal kinship terms, *-bai'i-* is used only for the younger generation.

<i>tsaga'</i>	great-grandparent; great-grandchild.
<i>tsaga'bai' i' n</i>	his last surviving great-grandchild, all the others having died.
<i>hō'ōgi'bai' i' n</i>	his last surviving grandchild.
<i>μtsu'bai' i' n</i>	her last surviving daughter's child.
<i>a'agi'cpai' i' n</i>	his last surviving daughter's child.

2. Past Tense, Special Sense

The past tense suffix, *-pi-*, followed by a possessive pronoun, is used in a special sense when suffixed to kinship terms concerned with a relationship which has been established by virtue of marriage: then the suffixed term indicates that the connecting relative has died, but that the kin directly mentioned is still living, as well as other people (his sibling, for example) referred to by the same term.

<i>piya''api' n</i>	his wife's brother, used to be (used after his wife has died, when the brother is still living).
<i>wa'cumbi'c'ipi' n</i>	his spouse's parent, used to be (used after the spouse has died, when the parent is still living).

3. Past Tense, Normal Sense

The past tense suffix, *-pi-*, is used with other kinship terms in the same sense as with other nouns: that is, to express past existence of the noun suffixed.

<i>ku'udzi''ipi' n</i>	his older sister, now dead.
<i>na'lawi''ipi' n</i>	his younger brother, now dead.

4. Special Stems

At the death of a child, the parent receives a new kinship term.

<i>a'ana' n</i>	his father (before the death of an offspring).
<i>kumu' n</i>	his father (after the death of an offspring).
<i>a'abu' n</i>	his mother (before the death of an offspring).
<i>i'imü' n</i>	his mother (after the death of an offspring).

§34. NUMBER

Nouns appear to be essentially lacking the expression of number *per se*. Thus, *ta'wa'l* means "the man" or "the men" according to context or whether a quantifying adjective is found in the sentence.

Number is specifically expressed in the noun very rarely, and then only when combined with some related concept. When the need arises to express a considerable quantity of possession, a plural suffix, *-mī-*, followed by a possessive pronoun, is attached to the nominal stem; when the need arises to express a collectivity, the nominal stem is initially reduplicated; final reduplication expresses plural allegiance.

1. Intensive Plural

Plural suffix, *-mī-*, followed by a possessive pronoun; the vowel of the suffix, *-mī-*, is lengthened when the suffix follows a short stem-vowel.

<i>pμηγμ'n</i>	his horse, his pet.
<i>pμ'ηγumī'n</i>	his very many horses.
<i>cō'δyμ'n</i>	his wife.
<i>cō'yimī'n</i>	his very many wives.
<i>ya'abi'l</i>	the skirt.
<i>ya'bimī'n</i>	her very many skirts.
<i>anga'mu'umī'n</i>	his very many relations. (The pl. suff. is inseparably attached to the n. st., * <i>anga'mu-</i> , because one always has many relations.)

2. Collective Plurality

Collective plurality is expressed by initial reduplication. Initial reduplication is the term applied to the peculiar type of reduplication in which the first vowel of the stem is repeated initially. Usually, initial reduplication of nominal stems is very regular.

<i>kō'δyō't</i>	the turtle.
<i>ō'gō'δyō't</i>	the many turtles in one place.
<i>kμla'abi'ct</i>	the duck.
<i>μ'kula'abi'ct</i>	the many ducks in one place.

Examples of irregular reduplication are:

<i>ta'twa'l</i>	the man.
<i>ata'twa'l</i>	the many men in one place. (Not * <i>a'da'twa'l</i> .)
<i>kō'im</i>	the woman.
<i>ō'kōkō'im</i>	the many women in one place. (Not * <i>ō'gō'm</i> .)

It is possible that certain nouns appear only in an initially reduplicated form. For example, *ī'tica'l* the clothes (collective, generic). Neither the form **tica'l*, nor the concept "an article of clothing," is ever actually used.

3. Plural Allegiance

Plural allegiance is expressed by final reduplication.

<i>ti'miwa'l</i>	the chief.	<i>ti'miwa'p</i>	their chief.
<i>ti'miwawa'l</i>	the chief who has many followers.		
<i>ti'miwawa'p</i>	their chief who has many followers.		

The final syllable, *wa*, of the nominal stem, *tumiwa*, is reduplicated; the additional mora found in the repeated final syllable (*-wa-*) occurs because of an alternation of length; if *-wa-* is an archaic suffix, it is inseparably attached in the stem, *tumiwa-*.

My chief informant, who is very conservative, would not admit that nouns other than *tumiwa-* could express plural allegiance; other speakers of the language reduplicate *-wa-* whenever it occurs as the final syllable of a nominal stem, and even when it occurs as the final syllable of the suffix, *-tsiŋwa-*.

<i>toha'tsiŋwa'n</i>	his hunting partner.
<i>to'hatsi'ŋwawa'n</i>	his hunting partner (in the sense that the partner referred to, being very proficient, has many companions in hunting).

§35. NOUNS OF INSTRUMENTALITY

The limited use of the instrumental case, formed by attaching the postposition, *-c*, to an absolute object noun, has been described (§29, 1). With a much wider range of meaning and usage, two nominalizing suffixes form nouns of instrumentality when attached to verbal stems or verbal themes.

1. Inanimate Instrument of Action Suffix, *-(t)c-*

-(t)- vowel increment, resists lengthening. *-c-* suffix proper; the resulting inanimate instrument noun belongs to class B5 (abs. suff., *-t*).

<i>yandz-</i> (atelic)	TO SIT DOWN.
<i>yandzi'ct</i>	the chair (i.e., the instrument for sitting down).
<i>ku'l-</i> (atelic)	TO PLAY.
<i>ku'ul'ct</i>	the bullroarer (i.e., the instrument for playing; the bullroarer is used as a toy).
<i>tša'yina'n-</i> (atelic)	TO MAKE LACE, NETS.
<i>tša'yina'ni'ct</i>	the shuttle (i.e., the instrument for making lace, nets).
<i>ku'g-</i> (atelic)	TO POINT.
<i>ku'ugi'cŋ</i>	his finger (i.e., the instrument for pointing).
<i>aha'idž-</i> (atelic)	TO CHEW.
<i>aha'idži'cŋ</i>	his molar tooth (i.e., the instrument for chewing).
<i>lu'lu'-</i> (atelic)	TO FLUTE, TO PLAY THE FLUTE.
<i>lu'lu'ct</i>	the flute.
<i>lu'lu'cŋ</i>	his flute.

In one verb the suffix, $-(i)c-$, was found to follow the telic instead of the atelic form of the verbal stem.

i·ciug- (atelic), *ciuk* (telic) TO COMB HAIR.
ciugi'ct the comb (i.e., the instrument for combing hair).

When the instrument of action is designated by a special nominal stem, the verb describing the activity may not usually suffix $-(i)c-$.

μ'nyηa't pa'hala'p he is pounding in the mortar.

**μ'nyηi'ct*, which would mean "the instrument for pounding, the pestle," is not possible, because a separate nominal stem is used for this instrument:

pōhō'ōwa'l the pestle.

Since there is no special nominal stem for "the muller, the instrument for grinding," the verbal stem, TO GRIND, may be nominalized with $-(i)c-$.

utμ'c- (atelic) TO GRIND.
μ'tuci'ct the muller.

Sometimes, but not frequently, the "instrument of action" is used so loosely that "the place of action" would express the notion more exactly.

nōh- (atelic) TO ROAST IN THE GROUND.
nohi'ct the roasting pit.
īik- (atelic) TO EAT.
īiki'ct the restaurant.

A noun formed by the suffix, $-(i)c-$, may still have a direct object, in common with nominalized transitive verbs in general.

ki·g- (atelic) TO PLACE IN A RECEPTACLE.
ki'igi'ct cō'ōgōnṅta' the instrument for sacking tobacco. ("The tobacco box." [A mountain sheep horn].)

2. Animate Instrument of Action Suffix, $-(i)cka-$

$-(i)-$ vowel increment, resists lengthening. $-cka-$ suffix proper, possibly a fusion of the instrumental element, $*-c-$, and the element, $*-ga-$ TO POSSESS; the resulting noun belongs to class B2, and is used only as a relative noun. That the resulting noun belongs to class B2 may be inferred from the fact that the parasitic, $-ad-$, characteristic of B2 nouns, precedes second person possessive pronouns; and from the fact that the relative objective suffixes, $-tsi-$ and $-ts$, may be attached to the resulting nouns (see §27).

hacki' ma'aga't kimi'ckatsi'n
 not I know instrumentality of coming (is) his.

This example illustrates the difficulty of translation. A free English translation, "I do not know if he will come," wrongly emphasizes tense; "I do not know if it is his business to come," is better.

Animate instrument nouns gain their meaning as to duty, futurity, intention, necessity, and so on, from context. Regarded morphologically, a non-committal translation, "the instrumentality of coming (roasting it, hunting, taming him, etc.) is his (mine, yours, etc.)," seems most nearly exact.

kim- (atelic) TO COME.

ma'aga't *kimi'ckatsi'ni'i'ŋ*

he knows the instrumentality of coming is mine.

ma'aga't *kimi'ckatsi'p*

he knows the instrumentality of coming is theirs.

When the animate instrument noun is used in the subject case, it is generally used in a sentence without a verb (nominal sentence).

to'hicka'n the instrumentality of hunting is his, his business (is) to hunt.

ti'miwa'l *ŋxta'ttciya'ŋ* *ki'micka''adulu'*

the chief is asking us "Is the instrumentality of coming yours?"

Some intransitive verbs must be transitivized before they may be nominalized with the suffix, *-(i)cka-*.

ma'ntsu'- (atelic) TO BE TAME.

ma'ntsu'an- (atelic) TO TAME HIM (tr.).

ma'ntsu'a'nicka'n the instrumentality of taming her is his.

A transitive verb, nominalized by means of the suffix, *-(i)cka-*, may appear with a direct object.

ma'aga't *nohi'ckatsi'ŋ* *cu''ita'* he knows the instrumentality of roasting in the ground is yours the rabbit (obj.). ("He knows you ought to roast the rabbit in the ground.")

§36. NOUNS OF AGENCY

The following list includes all suffixes which form nouns of agency; these suffixes were listed in other connections in §§30 and 31.

1. Agentive suffix, *-(i)bi'l*.
2. Agentive suffix, *-(a)pi'l*.
3. Partner of action suffix, *-(a)tsiŋwa-*.
4. Past agentive suffix, *-(a)piŋana-*.
5. Recent past agentive suffix, *-(a)piŋa-*.
6. Suffix expressing, . . . OWNER, *-gana-*.
7. Augmentative suffix, *-bicwi-*.
8. Absentative suffix, *-bi'-*.

Of these suffixes, 1-5 follow only after verbal themes or verbal stems, which are then nominalized; 6 and 7 follow nominalized bases (see §38) as often as nominal stems; 8 follows only after nominal stems.

1. Agentive Suffix, $-(i)b\ddot{i}l$

$-(i)$ - vowel increment, tolerates lengthening. $-b\ddot{i}$ - suffix proper; the plosive of this suffix is never unvoiced. $-l$ absolute suffix. The resulting noun belongs to class A1, and is used only as an absolute noun.

Agentive nouns formed by this suffix correspond in meaning and usage to the agentive nouns in English ending in $-er$, "the hunter," "the fighter," etc.

$\delta c\delta l\delta\eta$ - (atelic)	TO SNORE.
$\delta'c\delta l\delta'\eta i b\ddot{i}'l$ $i'mica'$ $ye'ewa'\eta$	the snorer will take leave tomorrow.
$\delta t\delta lo\cdot hin^{-2}$ (atelic)	TO CAUSE HIM TO GROAN.
$\delta't\delta lo\cdot hini\cdot'ib\ddot{i}'l$	the one who causes him to groan.
$t\dot{s}a\cdot yina\cdot n$ - (atelic)	TO MAKE LACE.
$a\cdot daw\ddot{i}\cdot'k$ $t\dot{s}a\cdot yina\cdot'nib\ddot{i}\cdot'la'$ $toha'\eta$	she saw the lace-maker when he was hunting.

2. Agentive Suffix, $-(a)p\ddot{i}l$

$-(a)$ - vowel increment, resists lengthening. $-p\ddot{i}$ - suffix proper, corresponds in form to the past tense suffix (see §37), but is probably etymologically distinct; the plosive of this suffix is never voiced. $-l$ absolute suffix. The resulting noun belongs to class A1, and is used only as an absolute noun.

Agentive nouns formed by this suffix give much the same feeling as agentive nouns in English ending in $-er$ ("the hunter," etc.) but are applied only during the time that the agent is concerned with the action described. Thus, one says, "The hunter is coming," when a man is returning from a hunting trip; or, "The hunter is sleeping," when the sleeper is on a hunting trip, but not if a man who occasionally hunts or has hunted is sleeping at home (for this situation, one must use the agentive suff., $-(i)b\ddot{i}l$; see 1, above).

Agentive nouns concerning an action which is performed occasionally will be formed by the suffix $-(a)p\ddot{i}l$.

no' - (atelic)	TO TURN BACK.
$no''\delta p\ddot{i}'l$	the turner back.
$l\delta\cdot g\delta'$ - (atelic)	TO BE CRAZY.
$l\delta\cdot g\delta''\delta p\ddot{i}'l$	the crazy one. ("Crazy" in the sense of turbulent rather than insane.)

Compare the following examples with those cited under 1, above.

$\ddot{i}l\ddot{i}\cdot'gina\cdot'ala't$	$\delta'c\delta l\delta\cdot'\eta\delta p\ddot{i}\cdot'la'$	
he is going there to wake up	the snorer.	
$\delta't\delta lo\cdot'hu\cdot'napi\cdot'l$	$taha\cdot'mbici'$	$kima't$
the causer of groaning	the old man (obj.)	is coming.
	("The one who causes the old man to groan is coming.")	
$a\cdot daw\ddot{i}\cdot'k$	$t\dot{s}a\cdot yina\cdot'napi\cdot'la'$	$t\dot{s}a\cdot yina\cdot'ana'\eta$
she saw	the lace maker	when he was making lace.

3. Partner of Action Suffix, *-(a)tsuŋwa-*

-(a) vowel increment, resists lengthening. *-tsuŋwa-* suffix proper. The resulting noun belongs to class A2, and is always used as a relative noun.

<i>no'</i> (atelic)	TO TURN BACK.
<i>no''a'tsuŋwa'n</i>	his partner in turning back.
<i>kabɔba'in²</i> (atelic)	TO RATTLE.
<i>ka'bɔba''ina'tsuŋwa'n</i>	his partner in rattling (split-stick rattle).
<i>anbi' a'dawi'k</i>	<i>ka'bɔba''ina'natsi'ŋwayi'nii'ŋ</i>
did you see	my partner in rattling for it? (the dance).
<i>tsulu'm-</i> (atelic)	TO SLEEP.
<i>tsulu'uma'tsuŋwa'n</i>	his partner in sleeping (i.e., his mistress).

4. Past Agentive Suffix, *-(a)pīgana-*5. Recent Past Agentive Suffix, *-(a)pīna-*

-(a)- vowel increment, resists lengthening before both suffixes. *-pīgana-* and *-pīna-*, suffixes proper; the former is probably a fusion of the past tense suffix, *-pī-* (see §37) and **-ga-* TO OWN and the element, **-na-*; the latter is a comparable fusion, without the element **-ga-*. After both suffixes, the third person singular possessive pronoun, *-n*, is inseparably attached. The case inflections follow the pattern of class A2 nouns. Despite the relative morphology, nouns formed by these suffixes are used as notionally absolute nouns, and may never express relative notions.

i. Past agentive nouns used as subject.

<i>nōh-</i> (atelic)	TO ROAST IN THE GROUND.
<i>nō'hōpī'gana'n</i>	<i>tsulu'uma't</i>
the ground-roaster (past)	is sleeping.
	("The one who roasted it in the ground is sleeping.")
<i>nōhō'pīna'n</i>	<i>a'ya'anī't</i>
the ground-roaster (recently)	is singing.
	("The one who just roasted it in the ground is singing.")

ii. Past agentive nouns used as object.

<i>ɔxta't</i>	<i>nō'hōpī'gana'yi'n</i>
he is asking	the ground-roaster (past).
	("He is asking the one who roasted it in the ground.")
<i>ɔxta't</i>	<i>nōhōpī'nayi'n</i>
he is asking	the ground-roaster (recent past).
	("He is asking the one who just roasted it in the ground.")

The past agentive suffixes may be attached to impersonal or impersonalized verbs, if the context permits.

<i>tik-</i> (atelic)	TO EAT.
<i>tikiw-</i> (atelic, impers.).	
<i>ma'aga't</i>	<i>tiki'wapi'nayi'n</i>
he knows	there was eating here recently.

iii. Past agentive nouns used in nominal sentences. Nouns formed by the past agentive suffixes are used predicatively when in the subject case without a verb in the sentence.

<i>tikapi'gana'ngi</i>	eater (past), I.
("I [am] the one who ate.")	
<i>tiki'gana'n</i>	eater (past).
("He [is] the one who ate.")	

When the verbal theme includes certain verbal suffixes, as the distributive, *-(i)ni'nim*, or the passive-impersonalizing suffix, *-(i)w-*, the past agentive suffixes nominalize the verb, but the resulting noun retains much of a verbal feeling.

<i>tikini'ni'mupi'gana'ngi'</i>	eater (distrib.-past) I.
("I [am] the one who was eating here and there.")	
<i>tikiwa'pina'n</i>	eater (impers.-past).
("There was eating recently.")	

6. Suffix Expressing, . . . OWNER, *-gana-*

-gana- suffix proper, probably a fusion of **-ga-* TO OWN and the element, **-na-*. Like the past agentive suffixes (see 4 and 5, above), this suffix is always followed by the third person singular possessive pronoun, *-n*; the case inflections of the resulting noun follow the pattern of class A2 nouns; and despite the relative morphology, the resulting noun is notionally absolute, and may never express relative notions.

i. *-gana-* used with nominalized bases (cf. §38).

<i>tik</i> (atelic)	TO EAT.
<i>tiki-</i> (n. base)	THE FOOD.
<i>tiki'gana'n kima't</i>	the food-owner is coming.
<i>oxta't tiki'gana'nayi'n</i>	he is asking the food-owner.

ii. *-gana-* used with nominal stems.

<i>na'nhabi'l</i>	the leaf.
<i>na'nhabi'gana'n a'maha't</i>	the leaf-owner is falling (impers. vb.).
("The tree having leaves is falling down.")	

<i>hani'l</i>	the house.
<i>hani'gana'n</i>	the house-owner.
<i>naha'l</i>	the lice.
<i>naha'gana'n</i>	the lice-owner, the louse-infested man.

iii. *-gana-* used in nominal sentences.

<i>hani'gana'ngi</i>	house-owner I.	(“I [am] the house-owner.”)
<i>na'ñhabi'gana'n</i>	<i>μ'tuhμ'l</i>	the leaf-owner the cottonwood tree.

(“The cottonwood tree [is] the leaf-owner” [in the sense that the tree is covered with leaves].)

The element *-wa-* is attached to certain nominal stems before *-gana-*, with no additional meaning.

<i>yu'mu'ugμ'l</i>	the oak tree.	
<i>yu'mu'guwa'gana'n</i>	<i>muwa'l</i>	the oak tree owner the mountain.

(“The mountain [is] the oak tree owner” [in the sense that the mountain is forested with oak trees].)

<i>maci'l</i>	the grass.	
<i>ma'ciwa'gana'n</i>	<i>mu''i'ct</i>	the grass-owner the hill.

(“The hill [is] the grass-owner” [in the sense that the hill is covered with grass].)

7. *Augmentative Suffix, -bicwi-*

-bicwi- suffix proper, possibly a fusion of the diminutive suffix, *-bi-*, and the element, **-cwi-*. The augmentative noun belongs to class B2 (with *-t*, abs. suff.). The initial plosive of the suffix is sometimes unvoiced, and the final stem vowel preceding the suffix is shortened in a sporadic fashion—that is, not all preceding vowels are shortened.

i. Augmentative suffix attached to nominal stems.

<i>naha'l</i>	the lice.	
<i>naha'picwi't</i>	<i>kima't</i>	the very lousy one is coming.
<i>pμndzi'l</i>	the eyes.	
<i>δxta't</i>	<i>pμ'ndzibi'cwita'</i>	he is asking big-eyes (the one having big eyes).

ii. Augmentative suffix attached to nominalized base (cf. §38).

<i>tik-</i> (atelic)	TO EAT.	
<i>tiki-</i> (n. base)	THE FOOD.	
<i>tiki'picwi't</i>	<i>tsulu'uma't</i>	the one having much food is sleeping.
<i>tsulu-m-</i> (atelic)	TO SLEEP.	
<i>tsulu'mi'bicwi't</i>	<i>tika't</i>	the one who sleeps too much is eating.

8. *Absentative Suffix, -bi-*

-bi- suffix proper; the initial plosive of this suffix is unvoiced after a vowel of one mora. The absentative noun belongs to class B1 (with *-t* abs. suff.), and is used only as an absolute noun.

<i>mμpi't</i>	the nose.
<i>mμ'pīpi't</i>	the wildcat (the one who is without a nose).
<i>kaṇa'l</i>	the facial hair.
<i>ōxta't kaṇa'bi'ida'</i>	he is asking the beardless youth (the one who is without facial hair).

The element, *-wa-*, is attached to certain nominal stems before *-bi-* is suffixed, with no additional meaning.

<i>maci'l</i>	the grass.
<i>i'mi' ma'ciwa'bi'ida'p</i>	he went on the grassless one (hill, mountain, valley, depending on context).

§37. TENSE IN NOUNS

Nouns of agency express past tense, recent past, and, by implication, present tense (see §36, 2, 4, 5). A noun of instrumentality may express futurity, if the context demands it (see §35, 2). But the only direct grammatical expression of tense in nouns, not primarily involved with other concepts, is by means of the past tense suffix, *-pi-*. It happens that this is the only pure past tense expressed in the language, Tübatulabal verbs being unable to express an unmixed past tense (see §18).

-pi- past tense suffix. The past tense noun belongs to class A1 (with *-l* abs. suff.).

i. Past tense suffix used with nominal stems. The past tense suffix following a nominal stem expresses the past existence of the noun.

<i>hani'l</i>	the house.
<i>hani'pi'l</i>	the house (past; the house which used to be, now in ruins).
<i>i'mi' hani'pi'lami'k</i>	he went toward the house, now in ruins.
<i>a'dawi'k hani'pi'yu'ni'i'η</i>	he saw what used to be my house (the ruins of my former house).
<i>ti'miwa'l</i>	the chief.
<i>tumi'wapi'l</i>	the former chief, now dead.
<i>na'lawi'n</i>	his younger brother.
<i>na'lawipi'n</i>	his younger brother, now dead.

ii. Past tense suffix with nominalized base (cf. §38). The past tense suffix following a nominalized base generally expresses the place at which the action occurred in the past.

<i>a'dawi'kki'</i>	<i>to'hapi'yu'n</i>	I saw the place of his past hunting (ejus obj.).
<i>a'dawi'kki'</i>	<i>to'hapi'la'</i>	I saw the place of the past hunting (abs. obj.).
<i>ō'nō'ōla'</i>	<i>ci'uba' to'hapi'p</i>	he went back again to the place of his own past hunting (suus iness.).

iii. Past tense nouns in nominal sentences. The past tense suffix following a nominalized base is very rarely used in a nominal sentence. Only one such use has been found, and in this an interrogative particle, *ha'ica*, must be included in the sentence. Possibly the negative particle, *ha'ic*, is a contracted form of the interrogative particle, *ha'ica*.

<i>pδ'δdz-</i> (atelic)	TO TARGET-PRACTICE.
<i>pδ'δdza-</i> (n. base)	THE TARGET-PRACTICE.
<i>ha''ica' pδ''δdzapī'n</i>	not (question) his target-practice past.
	(“How long ago has he been target-practicing?”)

§38. THE NOMINALIZED BASE

Verbs may be changed into nouns by means of two distinct devices. Verbal stems or verbal themes may be nominalized by appending suffixes which not only nominalize but also bear a derivative meaning (cf. §31). In the second type of nominalization, the verbal stem or verbal theme is changed into a nominalized base without the addition of a derivative notion. This direct nominalization appears to be brought about by attaching to the verbal stem or to the verbal theme a vowel increment, generally *-i-*, but for some stems and in special circumstances, *-a-*; the verbal stem or verbal theme, with the vowel increment attached, is termed the nominalized base.¹⁰ The nominalized base is treated in general like a true nominal stem; it may be inflected for all the obligatory nominal categories (abs. rel. distinctions and the syntactic cases, subj., obj., gen.); the secondary case postpositions (§29), and some of the derivational nominal suffixes (§30), may follow the nominalized base just as they may follow the nominal stem.

1. *Nominalized Base in -i-, Forming Class A Nouns*

Transitive and intransitive verbs, and impersonal verbal stems which have been transitivized, are very freely nominalized by appending the *-i-* increment to the atelic form of the verbal stem or verbal theme (see §11). The nominalized base is then inflected like other nouns in class A1 (if the *-i-* incr. in the n. base has the value of two morae) or class A2 (if the *-i-* incr. has the value of one mora).

¹⁰ The vowel increment, as it is employed in Verb Morphology (§§10-21), precedes each verbal suffix (the suffix juxtaposed to the verbal stem and also each successive suffix); but the vowel increment in the nominalized base is only juxtaposed to the verbal stem or verbal theme and does not seem to be associated with any particular suffix. Just as the nominal stem may be used nakedly, so the nominalized base may be used nakedly. The vowel increments (*i* and *a*) in association with verbal suffixes bear no discernible meaning (cf. §13, 1); the vowel increments (*i* and *a*) in the nominalized base bear no derivational meaning, but at least express nominalization. This function might tempt one to regard the vowel increment in the nominalized base as etymologically distinct from the vowel increments associated with verbal suffixes. The present interpretation does not incline in this direction, but assumes that the phonetic identity of the vowel increments in both circumstances is evidence that the same elements are being put to different uses.

<i>mu·luw</i> ⁻² (atelic)	TO DANCE.
<i>mu'luwi·l</i>	the dance (n. base, <i>mu·luwi</i> ⁻ , plus the abs. suff., <i>-l</i>).
<i>uŋi'm mu'luwi·ila'p</i>	he came to the dance (abs. iness. case, A1 n.).
<i>tīk-</i> (atelic)	TO EAT IT
<i>tīki·l</i>	the food (n. base, <i>tīki-</i> , plus abs. suff., <i>-l</i>).
<i>tīka't tī'kila'</i>	he is eating the food (abs. obj. case, A2 n.).
<i>tīka't tīki'</i>	he is eating his own food (suus obj. case, A2 n.).

In the following examples, the absolute suffix, *-l*, is attached to the nominalized base; the resulting nouns are therefore given in absolute form, subject case (§§26 and 27).

i. The meaning of transitive verbs directly nominalized. In general it may be said that in direct nominalization of transitive verbs (see §§10, 2; and 14), the object of the transitive verb becomes the denominating substantive.

<i>ōxta</i> ⁻² (atelic)	TO ASK (tr.).
<i>ōxti·l</i>	the person asked.
<i>wac-</i> (atelic)	TO DIG (tr.).
<i>waci·l</i>	the hole, the thing dug.
<i>wele·h-</i> (atelic)	TO SWALLOW (tr.).
<i>wele·hi·l</i>	the thing swallowed.
<i>ya·l-</i> (atelic)	TO THRESH (tr.).
<i>ya·ali·l</i>	the grain threshed.
<i>anab</i> ⁻² (atelic)	TO THROW (tr.).
<i>a'nabi·l</i>	the thing thrown.
<i>andaŋ</i> ⁻² (atelic)	TO KICK (tr.).
<i>a'ndaŋi·l</i>	the person or thing kicked.
<i>nōh-</i> (atelic)	TO ROAST IN THE GROUND (tr.).
<i>nohi·l</i>	the thing roasted.

All except a few impersonal verbal stems (see 2, below) must be transitivized (see §14) before they may be directly nominalized.

<i>wa·g-</i> (atelic)	IT IS DRY (impers.).
<i>wa·gin</i> ⁻² (atelic)	TO DRY (tr.).
<i>wa'gini·l</i>	the thing dried.
<i>waca·g-</i> (atelic)	IT FLAMES, IT SMOKES (impers.).
<i>waca·gin</i> ⁻² (atelic)	TO SMOKE (tr.).
<i>waca'gini·l</i>	the thing smoked (cigar, pipe, cigarette).
<i>yu'udz-</i> (atelic)	IT FADES (impers.).
<i>yu'udzin</i> ⁻² (atelic)	TO WASH (tr.).
<i>yu'udzini·l</i>	the washed clothes.

When a few transitive verbs are directly nominalized, the general place of action, rather than the object of the verb, becomes the denominating substantive.

<i>wi·g-</i> (atelic)	TO DISCARD (tr.).
<i>wi'iqi'l</i>	the dump, the place of discarding.
<i>hada·w-</i> (atelic)	TO CROSS (tr.).
<i>hada'awi'l</i>	the bridge, the crossing place.

ii. The meaning of intransitive verbs directly nominalized. In direct nominalization of intransitive verbs (see §§10, 2; and 14), a more or less abstract concept of the action of the intransitive verb becomes the denominating substantive. It is sometimes difficult to give an appropriate English translation to the resulting noun.

<i>a·c-</i> (atelic)	TO BATHE (intr.).
<i>a'aci'l</i>	the bathing, the bath.
<i>ótólo·h-</i> (atelic)	TO GROAN (intr.).
<i>ótólo'hi'l</i>	the groaning.
<i>ócóló·η-</i> (atelic)	TO SNORE (intr.).
<i>ócóló'ηi'l</i>	the snoring.
<i>tsumηg-</i> (atelic)	TO BE FRIGHTENED (intr.).
<i>tsumηgi'l</i>	the fear.
<i>cī·b-</i> (atelic)	TO BE COLD (intr.).
<i>cī'ibi'l</i>	the shivering.
<i>wó'ic-</i> (atelic)	TO BE JEALOUS (intr.).
<i>wó'ici'l</i>	the jealousy.
<i>ihī·b-</i> (atelic)	TO MASSAGE (intr.).
<i>ihī'ibi'l</i>	the massage.
<i>ó·l-</i> (atelic)	TO GET UP (intr.).
<i>ó'ól'i'l</i>	the arising.
<i>ó·yómηg-</i> (atelic)	TO PULSATE (intr.).
<i>ó'yómηgi'l</i>	the pulsation.
<i>mu·g-</i> (atelic)	TO DIE, TO BE UNCONSCIOUS (intr.).
<i>mu'ugi'l</i>	the sickness.
<i>hal²</i> (atelic)	TO SIT (intr.).
<i>hali'l</i>	Sunday (the sitting day).
<i>wa·hay-</i> (atelic)	TO WORK (intr.).
<i>wa'hayi'l</i>	the work.
<i>ha'ibi'-</i> (atelic)	TO JOKE (intr.).
<i>ha'ibi'i'l</i>	the joke.
<i>ye·w-</i> (atelic)	TO BE ASHAMED (intr.).
<i>ye'ewi'l</i>	the shame.
<i>yaxtamu·g-</i> (atelic)	TO BE SLEEPY (intr.).
<i>ya'xtamu'ugi'l</i>	the sleepiness.
<i>kataxwa²</i> (atelic)	TO BE SLAUGHTERED (intr.).
<i>ka'taxwi'l</i>	the epidemic.

When verbal stems which are classified as intransitive have a notional object included in the sense of the verb, this notional object becomes the denominating concept of the substance.

<i>paxkan-</i> (atelic)	TO SPEAK TÜBATULABAL (intr.).
<i>pa'xkan'i'l</i>	the Tübatulabal language.
<i>i'ciug-</i> (atelic)	TO COMB ONE'S HAIR (intr.).
<i>i'ciugi'l</i>	the combed hair.
<i>ĩmbiñw-</i> (atelic)	TO ROLL STRING ON ONE'S THIGH.
<i>i'mbiñwi'l</i>	the rolled string.

iii. The meaning of directly nominalized verbs with optional inherent voice (cf. §§10, 2; 14). Some inherently transitive verbs may be used in an intransitive context without an object. When such verbs are directly nominalized, the resulting noun also enjoys two meanings (following i, or ii, above).

<i>tik-</i> (atelic)	TO EAT (tr. or intr.).
<i>tiki'l</i>	the food, or the eating.
<i>ma:g-</i> (atelic)	TO KNOW (tr. or intr.).
<i>ma'agi'l</i>	the thing known, or the knowledge.

The impersonal verbal stem, *i'di'*- (atelic) IT IS HOT, may be used in an intransitive context, meaning, TO BE EROTIC. Only the intransitive sense may be directly nominalized: *i'di''i'l* the passion.

iv. Nominalization of verbal stems with reversed formation (cf. §11, 2). For some exceptional verbal stems, the atelic form represents an initial reduplication of the telic form. E.g.: *anañ²* (atelic), *nañ²* (telic) TO CRY (intr.). Whenever this type of reversed formation occurs, it is not entirely certain that the atelic form will be used in nominalization. Informants are rather inconsistent when dealing with these verbs. For the verbal stem cited, the directly nominalized form is theoretically: *a'nañi'i'l* the crying. This form is generally given by informants, but occasionally the telic form (which is the basic form in reversed formation verbs) is given instead: *nañi'l* the crying. When the informant's attention is drawn to the two nominalizations, the latter (based on the telic form) is pronounced incorrect, with the significant information, however, that some people use the incorrect form (*nañi'i'l*).

One of the agentive suffixes, the augmentative, *-bicwi-* (§36, 7), is attached either to nominal stems or to nominalized bases. When attached to a nominalized base, the basic form of the verbal stem (which means the telic form for reversed formation stems, and the atelic form for all other stems) is used for the nominalized base. Examples are:

<i>nañi'-</i> (n. base).	
<i>nañi'picwi't</i>	the cry-baby. (The vowel preceding the suff. loses one mora, and the initial plosive of the suff. is unvoiced.)

$\delta\cdot y\delta m$ - ² (atelic), $y\delta\cdot m$ (telic)	TO COPULATE (tr. or intr.).
$y\delta\cdot mi$ - (n. base)	copulation.
$y\delta\cdot mi'bi'cw'i't$	the one who copulates too much, the Don Juan.

Also one of the nominalizing suffixes (§35, 1) follows the telic instead of the atelic form of the reversed formation verb:

$i\cdot ciug$ - (atelic), $ciug$ - (telic)	TO COMB ONE'S HAIR.
$ci'ug'i'ct$	the comb, the instrument for combing.

2. Nominalized Base in *-i*, Forming Class B2 Nouns

A few impersonal verbal stems are directly nominalized by appending the *-i*-increment to the atelic form of the verbal stem; the resulting noun belongs to class B2 (with *-t*, abs. suff.) and not to class A (cf. 1, above).

wi' - (atelic)	WATER RUNS (impers.).
$wi'\cdot i$ - (n. base).	
$wi''i't$	the river.
$papulu'$ - (atelic)	IT IS WHIRLWINDING (impers.).
$pap\mu'lu'i't$	the whirlwind.

3. Nominalized Base in *-a*

i. Forming class B2 nouns. Very rarely a verb is found which is nominalized by appending the *-a*-increment to the atelic form of the verb.

$pa\eta ham$ - (atelic)	TO HIDE IN THE WILLOW BLIND (intr.).
$pa\eta hama$ - (n. base).	
$pa'\eta hama't$	the willow blind.
$p\delta\eta g$ - (atelic)	TO HAVE ONE'S HEAD COVERED WITH A CAP (intr.).
$p\delta\eta ga$ - (n. base).	
$p\delta\eta ga't$	the basket cap.

ii. With nominal suffix following. Only one nominal suffix, the past tense suffix, $-pi$ - (§37, ii), requires the atelic form of the verbal stem to be nominalized by the *-a*-increment; other nominal suffixes follow the nominalized base in *-i*- (cf. 1, above).

$tsulu\cdot m$ - (atelic)	TO SLEEP (intr.).
$tsulu\cdot ma$ - (n. base).	
$a'dawi'k$ $tsulu'mapi'i$	he saw the place of his own past sleeping (suus obj., A1).

4. Distinction Between Nominal Stems and Verbal Stems

On the whole, verbal stems and nominal stems are quite distinct. In a limited way, nominal stems may be verbalized (§21). Verbal stems, however, may be nominalized very freely, either by appending nominalizing suffixes (§31) or by appending the *-i*-increment to the verbal stem or verbal theme (see 1, above).

The verbal stem is not often nominalized by appending the *-a-* increment to the verbal stem (see 3, above). This nominalized base in *-a-* should not be sharply distinguished from a small group of stems for which the most that can be said is that the nominal stem is related to the verbal stem. For this small group of stems, there is little formal distinction between the verbal stem and the nominal stem; in one or two occurrences, the verbal stem has the same form as the nominal stem. Examples are:

<i>yï̄xp̄a-</i> (n. st.).	
<i>yï̄xp̄a'l</i>	the door.
<i>yï̄xp̄a⁻²</i> (atelic), <i>ï̄yï̄xp̄a²</i> (telic)	TO SHUT IT (tr.).
<i>ma'-</i> (n. st.).	
<i>ma'n</i>	his hand.
<i>ma'-</i> (atelic), <i>a'ma'</i> (telic)	TO TOUCH (tr.).
<i>ta'twa-</i> (n. st.).	
<i>ta'twa'l</i>	the man.
<i>ta'twi⁻²</i> (atelic), <i>ata'twi²</i> (telic)	TO SOBER UP (intr.).
<i>ka'dzu-</i> (n. st.).	
<i>ka'adzμ'l</i>	the clay pot.
<i>ka'dza⁻²</i> (atelic), <i>a'ga'dza²</i> (telic)	TO BOIL (tr.).
<i>ku·ŋa-</i> (n. st.).	
<i>ku'una'l</i>	the husband.
<i>ku·ŋu⁻²</i> (atelic), <i>u'gu·ŋu²</i> (telic)	TO MARRY (tr.).
<i>ôlôn-</i> (n. st.).	
<i>ôlô'nt</i>	the staff.
<i>ôlôn-</i> (atelic), <i>ô'ôlôn</i> (telic)	TO POKE (tr.).
<i>ma'ca-</i> (n. st.).	
<i>ma'aca't</i>	the bag.
<i>maca⁻²</i> (atelic), <i>amaca²</i> (telic)	TO COVER (tr.).
<i>ï̄xkowa'-</i> (n. st.).	
<i>ï̄'xkowa'l</i>	the wind.
<i>ï̄xkowa'-</i> (atelic), <i>ï̄'ï̄xkowa'</i> (telic)	IT BLOWS (impers.).
<i>wi·p</i> (n. st.).	
<i>wi'pt</i>	the fat.
<i>wi'b-</i> (atelic), <i>iwi·p</i> (telic)	TO BE FAT (intr.).

§§39-40. PARTICLES

§39. CONJUNCTIVE PARTICLES

Particles are comparatively uninflected words which appear in syntactic collocation with nouns and verbs, but themselves do not meet the formal requirements of either nouns or verbs (see §9). The formal characteristic of particles is their lack of inflection, or their sparing use of inflection as compared to nouns and verbs. Concerning particle stems, a distinction can generally be made between particles which are

i. Stereotyped case- or verb-forms (see especially 2 and 4, below; and §40, 2, 4, 5).

ii. Words showing no indication of having been case- or verb-forms.

Conjunctive particles differ from independent particles merely in that they always follow an independent word: a noun or verb or independent particle (see §8, 3).

1. Indirect Discourse

Sentences in indirect discourse differ from normal narrative sentences only in that the quotative conjunctive particle, *-gidža*, is attached to some word in the sentence for indirect discourse.

<i>pu'c</i>	<i>i'mi'</i>	then he went (dir. disc.).
<i>pu'cki'tc</i>	<i>i'mi'</i>	then it is said that he went (indir. disc.).
<i>ku'gidža'</i>	<i>uŋgi'm hani'p</i>	and, it is said, he came to his own house (indir. disc.).

The quotative particle behaves phonetically like some conjunctive personal pronouns (see §23): the final *-a* of *-gidža* is frequently elided, and the initial consonant of the quotative particle may be fused with the present tense suffix (see §18, 1).

<i>hani'p</i>	<i>kima't</i>	he is coming home (dir. disc.).
<i>hani'p</i>	<i>kima'kidža'</i>	it is said he is coming home (indir. disc.).

2. Direct Quotation

Sentences, phrases, or words directly quoted are usually preceded by a kind of orientation sentence in which it is stated that someone is talking, or asking, or writing. The words directly quoted will, nevertheless, have the conjunctive particle, *-güt* HE IS SAYING, attached with a frequency which gives a peculiar stylistic effect; generally every third word, sometimes every word or every second word directly quoted, has this particle attached.

-güt is a stereotyped verb-form, a contraction or the second element of the regular verb, *puŋgüt* HE IS SPEAKING; *-güt* may be analyzed as: *-g-i* (atelic) plus the present-tense suffix, *-(a)t* (see §§2, 1, i; and 11). The form, *-güt*, is rarely inflected when used as a conjunctive particle; the present-tense suffix behaves normally (see §18, 1).

Examples of the typical use of this particle are:

pi'c tci'tc ta'twa'l umbi'ηk wa'awi'in' yuka'ya'higi't ti'wigi't wa'lgi
ku'yi'atki't then one man spoke "That is Yukaya," he is saying.
 "Good," (the shaman) is saying, "that I am desiring," he is saying.

wi'kigi'ma'kili'ηgi't pi'c ma' a'li'idi'ηgi't i'h cu'naba'ngi'ki "I am
 coming to get you," he is saying; then, "Where (is) your gun?" he is
 saying. "Here inside," I am saying.

pi'c wa' kδ'im δ'δwa'n wa' δgδ'n ti'wi kima'h ci'uba'igi't then
 that woman wrote "That (is) good come back again," she is saying.

An exception to the uninflected nature of this particle is found in an instance
 when the telic form, presumably, is followed by the suffix of movement, *-min*
 (see §17, 2), which is in turn followed by the quotative particle (see 1, above).

ka··k iki'mina'gidza' "caw," said (the bird) going from here to there,
 it is said.

When used with certain independent negative particles, the conjunctive particle,
-güt, will give the feeling of indirect discourse in rare instances.

ha'c-ki-ha'c-k-igi't not-I-not-I-am saying. ("I am saying nothing.")
haca'tcagi't ha'inda' kδ'im "nothing" saying "nothing" woman. ("The
 woman is saying nothing.")

3. Modal Particles

There are three common modal conjunctive particles: *-bi·c* IMMEDIATELY;
-be· AFTER A WHILE, FIRST; *-ni·* "empty word," that is, no additional mean-
 ing results when this particle is attached to a word.

pi'ckini' i'li'i'η i'mi' then I in the evening went.
a'tsumni' ti'k let me eat it.

-ni· is more limited than the other modal particles; it is generally used in
 connection with a first person singular notion.

wica' later on.
wica'abe' later on after a while.
a'nipμ'mbe' ala'wi'ba'a't do ye after a while want to talk?
ti'kabe' eat after a while!
ti'kabi'c eat immediately!
ti'kama'tspe' let him eat first.

-bi·c and *-be·* are used most frequently after imperative verbs; the former
 almost exclusively so, the latter in connection with other modal verbs, desider-
 ative, exhortative, permissive, and auxiliary verbs.

4. Formative Particles

There are no clear-cut instances of formative particles. The verbalizing conjunctive particles, *-kaŋ* and *-gic*, give some feeling of suffixes (see §21, 4, 5). The former may possibly be a stereotyped verb-form: **-ka-* TO OWN (a stem which does not occur in an independent verb) and the subordinating suffix, *-ŋ* (see §19, 4); the latter appears to be a stereotyped verb-form: **-g-* (see 2, above) and the subordinating suffix, *-(a)c* (see §19, 3).

The element, *-wa-*, should possibly be counted as a conjunctive particle when used with independent particles, but not when used with absentative nouns, an etymologically identical element being assumed (see §36, 8). It is not certain whether *-wa-* is a contracted form of *-twa-*, or whether it is related to the independent demonstrative particle stem, *-wa'* (§40, 9). At any rate the element *-wa-* is always followed by the third person singular possessive conjunctive pronoun (see §24); as a subject form the element is *-wan* or *-twan*; as an object form, *-wayin* or *-twayin*. The meaning of an independent particle is usually not changed when *-wa-* is attached; sometimes it is used in a special sense, the independent particle being used as an adjective or adverb without *-wa-*, but only as an adjective when *-wa-* is attached.

<i>tī'wī</i>	good, well.
<i>tī'wīwa'n</i>	good.
<i>ma</i>	where.
<i>matwa'n</i> (subj. form)	what kind.
<i>ma'twayi'n</i> (obj. form)	what kind.
<i>tabu''μpi'l</i>	SHORT.
<i>tabu''μpi'wa'n</i> (subj. form)	
<i>tabu''μpi'lwayi'n</i> (obj. form)	
<i>tabu''μpi'tc</i>	SHORT.
<i>tabu''μpitcwa'n</i> (subj. form)	
<i>tabu''μpi'tcwayi'n</i> (obj. form)	
<i>tī'wīpi'l</i>	PRETTY.
<i>tī'wīpi'lwa'n</i> (subj. form)	
<i>tī'wīpi'lwayi'n</i> (obj. form)	
<i>podō.'yibi'tc</i>	SOFT, TENDER.
<i>podō.'yi'butcwa'n</i> (subj. form)	
<i>podō.'yibi'tcwayi'n</i> (obj. form)	
<i>ku''udžubi'l</i>	LITTLE.
<i>ku''udžubulwa'n</i> (subj. form)	
<i>ku''udžubi'lwayi'n</i> (obj. form)	
<i>ku''udžubi'tc</i>	LITTLE.
<i>ku''udžubutcwa'n</i> (subj. form)	
<i>ku''udžubi'tcwayi'n</i> (obj. form)	

-*wa-* is most frequently attached to particles ending in *-pul* and *-putc*. These endings may possibly be diminutive and augmentative suffixes; according to all informants, however, these endings bear no meaning.

5. *Personal Pronoun Conjunctive Particles. See §§22-24*

§40. INDEPENDENT PARTICLES

Independent particles differ from conjunctive particles (see §39) in that they are not dependent upon a preceding word for their position. A sentence may begin with an independent particle; again, several independent particles may be bunched together with conjunctive particles in a way which suggests an elaborate compound (see 10, below).

Independent particles generally occur in one form only. Sometimes a special subject and object form is found; one particle, at least, has a genitive form in addition. In some circumstances, not easy to delimit, particles will appear in "contracted" and "expanded" forms. The "contracted" form may result from fast speech. Examples are:

<i>we'edu</i>	so (careful speech).
<i>we't</i>	so (fast speech).
<i>ha''i'c</i>	no, not (careful speech).
<i>ha'c</i>	no, not (fast speech).
<i>mi''i'm</i>	right here (careful speech).
<i>mi'm</i>	right here (fast speech).

It is difficult to account for the "contracted" form in occurrences like the following.

<i>undu'uga'l</i>	that.
<i>undμ'k</i>	that (contracted form).
<i>tiyu</i>	and.
<i>ti</i>	and (contracted form).
<i>pμ'uma'n</i>	its edge.
<i>pμ'mapa'n</i>	on its edge.

1. *Attributive Devices*

Adjectival notions are most commonly expressed in Tübatulabal by means of impersonal and intransitive verbs. Examples are:

<i>ti'nt</i>	<i>pδ'δci't</i>	the rock	is white.
<i>ta'twa'l</i>	<i>ha'maca't</i>	the man	is sad.

If the noun needs to be the subject of another verb, the descriptive impersonal or intransitive verb is nominalized by means of the agentive suffix (see §36, 2), and then the resulting noun is used in apposition with the subject noun.

<i>pδ'cipi'l</i>	<i>ti'nt</i>	<i>i'di''it</i>	the white one	=	the rock	is hot.
<i>hama'capil</i>	<i>ta'twa'l</i>	<i>iika't</i>	the sad one	=	the man	is eating it.

In the same way attributive particles appear to be used in apposition with nouns. When two nouns appear together, or when a particle and noun appear together, the two words convey an identity. When context permits, attributive particles are used in this way as adjectives, and also as adverbs. Examples are:

<i>yo'wi' ta'twa'l</i>	the many = the men. ("The many men.")
<i>ma'pita'l wóηgó'l</i>	the new ones = the shoes. ("The new shoes.")
<i>ĩĩ'k ĩ'ibi'l</i>	he ate it slowly.
<i>ĩ'ibi'l ta'twa'l</i>	the slow one = the man. ("the slow man.")
<i>ewe'wibi'l ta'twa'l</i>	the light one = the man. ("The light man.")
<i>miya't ewe'wibi'l</i>	he is going lightly.

Some attributive particles have a subject form and an object form. Such particles will be in the same case as the appositional noun. However, no attributive particle has a genitive form, and most particles are without an object form; the one form of most particles will fit all circumstances.

<i>ĩwi'k pĩli'' tohi'la'</i>	he took the heavy one = the deer. ("He took the heavy deer.")
<i>pĩli'' tohi'l a'aci't</i>	the heavy one = the deer is bathing. ("The heavy deer is bathing.")
<i>tabu''upilwa'n ĩ'mi'a't pó'óci't</i>	the short one = the rope is white. ("The short rope is white.")
<i>a'dawi'k tabu''upilwayi'n ĩ'mi'ata'</i>	he saw the short one = the rope. ("He saw the short rope.")

2. Attributive Devices in Comparison

The attributive devices in Tübatulabal (see 1, above) normally indicate a positive degree, without any suggestion of comparison. Thus, "The rock is white," not more or less white; or, "The heavy deer is bathing," without any suggestion as to the degree of heaviness of the deer.

A comparative and superlative degree may be expressed in Tübatulabal, but a special nominal sentence must be spoken for such an expression. It would be impossible to say directly, "The heaviest deer is bathing." It would be necessary to say, "The deer is heavier than others," and only then, "He is bathing." A special independent particle, *δ·yanac*, is used in nominal sentences (i.e., sentences without a verb) to express the comparative degree. *δ·yanac* may possibly be a stereotyped verb-form, *δ·y-* (atelic) TO PASS BY, plus the benefactive suffix (§14, 3), followed by the subordinating suffix, *-(a)c* (§19, 3). The noun preceding *δ·yanac* is in the subject case; the noun following *δ·yanac* is in the object

case. A special particle, *tambil*, is used in annexation with a noun which needs to be described superlatively.

pili' *tohi'l* *δ'yana'c* *pa'imṃ* the heavy one = the deer than some.
("The deer [is] heavier than some.")

pili' *tohi'l* *tambi'l* *δ'yana'c* *pa'imṃ* the heavy one = the deer most
than some. ("The deer [is] the heaviest of all.")

yo'wi *ta'twa'l* *δ'yana'c* *kδ'imi'* the many = the men than the
women. ("[There are] more men than women.")

ma'pita'l *wδngδ'n* *δ'yana'c* *wδ'ngδyi'η* the new ones = his shoes than
your shoes. ("His shoes [are] newer than your shoes.")

When verbs are involved in the positive degree of description, the verbs must be directly nominalized (see §38, 1) and then treated morphologically like other nouns; that is, in the subject case when preceding *δ'yanac*, and in the object case when following *δ'yanac*. Examples are:

tiki'ni'i'η *i'ibi'l* *δ'yana'c* *i'ikiyi'n* my eating slowly than his eating.
("I am eating more slowly than he is eating.")

wδ'δka'n *miyi'η* *δ'yana'c* *mi'yiyi'n* pretty soon your going than his
going. ("You are leaving sooner than he.")

3. Particles of a Prepositional Nature

Certain particles govern the object case of nouns; other particles govern a locative case. Examples are:

<i>miya't</i> <i>a'ma'yu</i> <i>kδ'imi'</i>	he is going with the woman.
<i>na'wida'm</i> <i>wδ' hani'la'</i> <i>i'winit</i>	between two houses he is standing.
<i>miya't</i> <i>tcδ'δmi'k</i> <i>yitami'k</i>	he is going down toward the valley.
<i>miya't</i> <i>wahki'k</i> <i>kampu'i</i>	he is going toward his own valley.

4. Stereotyped Case-forms used in Annexation with Genitive Nouns

Particles used in this manner differ from the normal relative noun used in annexation with a genitive noun (see §28, 3) only in that the particle is used exclusively as a relative noun, and has no other inflection. Sometimes the genitive noun is not used in annexation with such particles.

<i>pμ'uma'n</i> <i>pa'li'η</i>	its edge of the water. ("The edge of the water.")
<i>pμ'mapa'n</i> <i>pa'li'η</i>	on its edge of the water. ("On the edge of the water.")
<i>wa'taηa'aba'n</i> <i>hani'li'η</i>	on its top of the house. ("On the top of the house.")
<i>wa'taηa'n</i> <i>hani'li'η</i>	its top of the house. ("The top of the house.")

<i>μkμ'n muwa'li'η</i>	its point of the mountain. ("The point of the mountain.")
<i>δ'mhδlδ'δga'n cuwa'li'η</i>	its under side of the ground. ("Underneath the ground.")
<i>δ'mhδlδ'gaba'n pa'li'η δ'δ'p</i>	in its under side of the water he dived. ("He dived under the water.")
<i>δ'mhδlδ'k i'mi</i>	under he went. ("He went under.")
<i>tδ'g'i'n hani'li'η</i>	its corner of the house. ("The corner of the house.")
<i>hawa'aba'n ta'twa'la'a'η</i>	in its neighborhood of the man. ("Next to the man.")
<i>cu'naba'n i'mi</i>	inside he went. ("He went inside" [without gen.])
<i>cu'naba'n hani'li'η</i>	in its heart of the house. ("Inside the house" [with gen.])

cu'naban bears the special meaning of inside when used as a relative potentially capable of being used in annexation with a genitive noun. In other forms, the nominal stem, *cu'na-*, signifies HEART. Doubtless the stereotyped case-forms are all etymologically nominal stems which are at present limited to the relative form used in annexation with genitive nouns.

5. Stereotyped Verb-forms

Probably many of the attributive particles (see 1, above) are stereotyped verb-forms which are at present no longer inflected like the regular intransitive and impersonal verbs. In a few forms, the atelic form of a verbal stem is used as an attributive particle and is also inflected like a regular verb.

<i>pīli''ta'twa'l</i>	the heavy man.
<i>pīli''t</i>	he is heavy.
<i>yδ''ta'twa'l</i>	the lame man.
<i>yδ''δla't</i>	he is going along limping.
<i>ma'ntsu''pμηγμ'l</i>	the tame pet.
<i>ma'ntsm''ana't</i>	he is taming him.

6. Nexus and Modal Particles

The particles of this group are characterized by a vague meaning; when no translation is possible, the particle is termed an "empty word." Examples are:

<i>yo'bini'</i>	well, then. (Frequently said in disgust after exhort. or imp. vbs.)
<i>tan</i> (cond. part.)	if.
<i>an</i> (inter. part.)	
<i>tu'ci'</i> (contr. form)	
<i>tu'cipi'l</i>	straight, straightaway; also used in sentences as an "empty word."

<i>ðmð'k</i>	in vain; also used as an "empty word."
<i>a'ma'abi'tc</i>	merely.
<i>mapi'l</i>	now, today.
<i>na'a'c</i>	just.
<i>ĩmbi'</i>	again.
<i>pi'ga'a'c</i>	perhaps.
<i>mina'</i>	too.
<i>wetcu'</i>	next.
<i>yets</i>	or.
<i>ku, kudi, ti, tiyu</i>	and.
<i>yah</i>	now.
<i>hã</i>	yes.
<i>wð.'gami'</i>	yet.
<i>wica'</i>	later.
<i>pic</i>	then.

hac, ha''i'c, ha'yi, ha'yiha'n, ha'int, ha'inda, ha''ica' no, not, nothing. A single particle does not bear a single meaning; it is most difficult to delimit the range of meaning of these negative particles. The most that can be said is that all negative particles bear some sort of negative meaning.

7. Numeral Particles

i. Numerals. The numerals, one to ten, are:

<i>tci'tc</i>	one.	<i>napa'i</i>	six.
<i>wð.'</i>	two.	<i>nðmndzi'n</i>	seven.
<i>pa'i</i>	three.	<i>na'bμ'ndziŋa'</i>	eight.
<i>na'na'u</i>	four.	<i>la'agi'h</i>	nine.
<i>ma'ha'idžŋa'</i>	five.	<i>amha'idžŋa'</i>	ten.

ii. Formation of ordinals. When the suffix, *-ami*, is attached to numeral particles, the resulting word is used in an adverbial sense. In forming the decades (twenty, thirty, and so on), the adverbial suffix, *-ami*, is contracted to *-am* after numeral particles ending in a consonant, and to *-m* after numeral particles ending in a vowel; and an intrusive glottal stop precedes the multiplicand (ten).

<i>tci'džami'</i>	once.
<i>wð.''ami'</i>	twice.
<i>pa'i'ami'</i>	thrice.
<i>na'na'u'ami</i>	four times.
<i>ma'ha'idžŋa''ami'</i>	five times.
<i>napa'i'ami'</i>	six times.
<i>nðmndzi'nami'</i>	seven times.
<i>na'bμ'ndziŋa''ami'</i>	eight times.
<i>la'agi'hami'</i>	nine times.
<i>amha'idžŋa''ami'</i>	ten times.

<i>a'mhaidži'η ti' tci'tc</i>	ten and one = eleven.
<i>wδ'm 'amha'idžiŋa'</i>	twice ten = twenty.
<i>nδ'mndzina'm 'amha'idžiŋa'</i>	seven times ten = seventy.

iii. Hours of the day. In forming hours of the day, the conjunctive particle, *-twanap*, or *-wanap* (see §39, 4), is attached to the numeral particle.

<i>tci'tcwana'p</i>	one o'clock (lit., "on the one").
<i>wδ'twana'p</i>	two o'clock (lit., "on the two").
<i>pa'twana'p</i>	three o'clock. (The <i>-i-</i> of the part. st. is elided.)
<i>na'na'wa'twana'p</i>	four o'clock. (An additional vowel, <i>-a-</i> , is given to the part. st.)
<i>ma'ha'idžiŋa'twana'p</i>	five o'clock.
<i>napa'twana'p</i>	six o'clock. (The <i>-i-</i> of the part. st. is elided.)
<i>nδmndzi'wana'p</i>	seven o'clock.
<i>na'bu'ndziŋa'twana'p</i>	eight o'clock.
<i>la'agi'hwana'p</i>	nine o'clock.
<i>amha'idžiŋa'twana'p</i>	ten o'clock.

iv. Days of the week. In forming days of the week, the subordinating suffix, *-(a)η* (see §19, 4), is attached to the numeral particles, two, three, four, five; Monday and Saturday are designated by Spanish loan-words; Sunday is descriptively known as "The sitting (day)."

<i>hali'l</i>	Sunday.
<i>lu'una'c</i>	Monday (Sp.).
<i>wδ'δ'η</i>	Tuesday (lit., "It being two [days]").
<i>pa'i'η</i>	Wednesday (lit., "It being three [days]").
<i>na'na'u'μ'η</i>	Thursday (lit., "It being four [days]").
<i>ma'haidži'ŋa'a'η</i>	Friday (lit., "It being five [days]").
<i>sa'varu'</i>	Saturday (Sp.).

v. Other formations with the numeral particles, one, two, three, four. Examples are:

<i>tci'tcwa'n</i>	the one-star constellation.
<i>wδ'twa'n</i>	the two-star constellation.
<i>pa'itwa'n</i>	the three-star constellation. No one counts more than three stars in a constellation, on pain of death. Three happens to be the pattern or ceremonial number for the Tübatulabal.
<i>tci'tcu'</i>	alone.
<i>tci'tcwa'na'a'c</i>	all the time.
<i>tci'tci'džitci'tc</i>	each one.
<i>itci'idža'm</i>	sometimes.
<i>tci'tck</i>	nearly.

<i>wδ''i'cŋ</i>	his co-wife (her husband's mistress), her co-husband (his wife's lover).
<i>wδ''ici't</i>	he is jealous.
<i>wδ'δyδ't</i>	both.
<i>wδ'ba'ana't</i>	he is halving it.
<i>pa'atsμ't</i>	three alone.
<i>a'paba'i'ani'gana'n</i>	the three-year-old deer (lit., "The one having three [points]").
<i>na'na'watsμ't</i>	four alone.
<i>a'nana'u'μni'gana'n</i>	the four-year-old deer (lit., "The one having four [points]").

8. Exclamatory Particles

Only a few exclamations are commonly used in everyday speech. These include:

<i>we'edu</i>	so, oh.
<i>mā''</i>	hello.
<i>tδ'</i>	I don't know; search me!

A few other exclamatory particles have been gleaned from mythical texts.

<i>'i'ni''</i>	help! (an exclamation of old women when frightened).
<i>ibu', ibi'h</i>	horrors! (said when an improper remark is made).
<i>yu'</i>	oh, well!
<i>i'cehe'</i>	go on! (exclamation of listeners when the narrator of a myth pauses).
<i>idi'h</i>	ouch!
<i>a'i</i>	oh!
<i>i'nēbi'c</i>	oh bother! (<* <i>inbi'c</i> , possibly a compound of the particles <i>in</i> and <i>-bi'c</i>).
<i>ha'lala'</i>	bravo! (a favorite exclamation of Coyote's).
<i>tse'etsumμ'k</i>	do as you please! (usually with reference to amorous behavior).

9. Pronominal Particles

i. Personal pronouns. Personal pronouns occur in subject, object, and possessive series as conjunctive particles (see §§22-24). The pronouns of the subject series may be firmly attached to the independent particle, *in*, forming an independent series of personal pronouns. In addition, other independent particles express personal relations of a pronominal nature. Examples are:

<i>ki'ma'</i>	somebody.
<i>pa'imŋ</i>	some, others.
<i>i'ndama'</i>	someone, something (subj. form).
<i>i'ndama''i</i>	(obj. form).

<i>pi'niyu</i>	everyone, everything (subj. form).
<i>pini''ik</i> (obj. form).	
<i>agi'</i>	who (subj. and obj. form).
<i>a'gidi'η</i>	who (gen. form).
<i>δmδ'ix</i>	himself.
<i>δmδ'ixp</i>	by himself.
<i>δ'mδhi'ts</i>	each other.
<i>wanda'</i>	those.
<i>wa'</i>	that one, that thing (subj. form).
<i>wal</i>	that one, that thing (obj. form).
<i>wa''adi'η</i>	of that one, of that thing (gen. form).

The demonstrative particle, *wa'*, is unique among particles in that it has three forms to express formally all the syntactic cases; but no formal distinction is made between the absolute and the relative (see §25).

ii. Demonstrative particles. Demonstrative particles are less specific than the stereotyped case-forms used in annexation with genitive nouns (see 4, above). Other than this they generally indicate a direction, without a genitive noun for internominal reference. They are characteristically vague in all respects, and are often left untranslated in the texts. Examples are:

<i>tsu.''aηa</i>	back there.
<i>wa'h</i>	there (related to the demon. st., <i>wa'</i>).
<i>eh</i>	right there.
<i>ih</i>	here.
<i>waha'mina'c</i>	downward.
<i>waha'i</i>	from there.
<i>wandzi'l</i>	that.
<i>μndμ'k</i>	that.
<i>ama'η</i>	any place, some place.
<i>igδ'δci'k</i>	away, outside.
<i>iki'k</i>	this way.

10. Particles in Composition

Very rarely particle stems appear to be in a compound word with a verbal stem or a nominal stem.

<i>a'pala'k</i>	he threw it (telic form of the vb. st.).
<i>iki'k</i>	this way (part. st.).
<i>iki'ga'pala'k</i>	<i>üci'ts</i> he threw off his own blanket.
<i>pa'ηa</i>	up (part. st.).
<i>ta'l</i>	the sun, the day (<i>ta'-</i> , nom. st.).
<i>pa'ηata'l</i>	the god (lit., "above the sun").
<i>tu'uga'l</i>	the night, the dark (<i>tu'ga-</i> , nom. st.).
<i>na'wi'dami'</i>	between, the middle (part. st.).
<i>tu'gana'wi'dami'</i>	in the middle of the night.

Just as numeral particles may designate the days of the week by suffixing $-(a)\eta$ (see 7, iv, above), so the nominal stem, $ta-$, DAY, may suffix $-(a)\eta$ when appearing in a compound with a numeral particle or the particle, $ii'wi$.

na'na'uda'δ'η after four days (lit., "it being four days").
ii'wida''aya''awa'η the afternoon (lit., "the day being well finished").

Very commonly particle stems appear in composition with other particle stems. There is doubtless a stylistic order in such composition, but other than the fact that the first stem in the compound needs to be an independent particle, no obligatory requirements have been observed. Independent particles are compounded with conjunctive particles into elaborate words consisting of two, three, or even more stems. That the succession of particles is a compound word is inferred because alternation of stress binds together such groups of stems just as it binds together verbal themes and nominal themes (see §4, 2). Examples are:

waha'i-gu-me'eda'k i'mi' from there I in the morning went. ("I went from there in the morning.")

wδ'δ-pa'i ta'twa'l ηηgi'm two-three men came. ("Two or three men came.")

taη-ki'ma'a-di'η ku'yü'a't if-somebody-you wants. ("If somebody wants you.")

pi'c-ki-wa'l ta'twala' a'dawi'k then-I-that man saw. ("Then I saw that man.")

ku-ha'c-ku-ni'-wandzi'l ma'aga't and-not-I-?-that am knowing. ("And I did not know that.")

TEXT WITH ANALYSIS

THE POWER OF JIMSONWEED

Text and Interlinear Translation

<i>pt'ck'i</i> ¹¹	<i>tum'u'uga</i> ¹²	<i>wa'l</i> ¹³	<i>a'dzowa'la'</i> ¹⁴	<i>i'bül'i'ila'</i> ¹⁵	
then I	dreamed	that (obj.)	shaman (obj.).	She arrived (mov.)	
<i>wa'h.</i> ¹⁶	<i>pt'cun</i> ¹⁷	<i>al'a'win'a't.</i> ¹⁸	<i>macp'i'</i> ¹⁹	<i>hal'it</i> ²⁰	<i>i'h'igü't.</i> ²¹
there.	Then me	she is talking.	“Why you	are sitting	here?” she says.
<i>maci'n</i> ²²		<i>pundzi'</i> ²⁴		<i>wi'ts'i'a'c</i> ²⁵	
her thing covered (subj.)		her own eyes (suus obj.)		with	

¹¹ Ind. part., *ptc*, followed by conj. pron. 1 sing. subj. (§23). The voiceless medial plosive is geminated. Gemination is indicated by a superior dot (*k'*) in the very narrow transcription of this text alone. In the grammar, however (§§1-40), in the footnotes which follow, and in the accompanying texts, gemination is not specifically indicated in the transcription because the rules for geminating consonants are few and simple (see §1, 7). The diacritic specifically indicating gemination in this single text (*k'*, *t'*, etc.) is somewhat misleading, because geminated consonants have no mora value (see §4, 2, v), while long vowels, indicated by the same diacritic (*a'*, *ö'*, etc.), have the value of two morae.

¹² Telic form of tr. vb. TO DREAM (§11, 2). For want of convenient asp. expressions in English, the past tense transl. is given to this and other telic verbs, but only asp. is expressed, not tense (§18). The long vowel is rearticulated in this and in other words (*u'u*) because it precedes a stressed vowel; such rearticulation is not organic, and has the same mora value as a long vowel not rearticulated (*u'*).

¹³ Ind. part. obj. form. The subj. form would be *wa'* (§40).

¹⁴ *a'dzowa-*, n. st., -*l*, abs. suff., -*a*, obj. suff. (§27). The n. is obj. of the tr. vb. preceding (footnote 12).

¹⁵ *i'bül*, telic form of intr. vb. TO ARRIVE (§11, 1), -(*a*)*la*, suff. of mov. (§17, 1); the vb. st. exerts a prog. qualitative (§2, 1) and quantitative (§3, 1) influence on the *a* incr. associated with the suff. (§13, 1), changing -(*a*)*la* to -(*i'*)*la*.

¹⁶ Ind. part.

¹⁷ Ind. part. followed by conj. pron. 1 sing. obj. The pleonastic form is used here (§24), obj. of the tr. vb. (footnote 18).

¹⁸ *ala'w-*, atelic form of intr. vb. TO TALK (§11, 1), -(*i*)*n*, caus. suff., tr. the vb. st. (§14, 2, iii), -(*a*)*t*, pres. suff. (§18, 1).

¹⁹ Inter. part. followed by conj. pron. 2 sing. subj. (§23) with plosive unvoiced because juxtaposed to a voiceless consonant (§5, 3, 4).

²⁰ *hal'-s*, atelic form of intr. vb. TO SIT (§11, 1), -(*a*)*t*, pres. suff. (§18, 1); the vb. st. exerts a prog. qualitative influence on the *a* incr., changing -(*a*)*t* to -(*i'*)*t* (§2, 1), but the suff. resists lengthening (§2, 1, iii).

²¹ Ind. part., *ih*, followed by conj. part. The vowel preceding the conj. part. is intrusive (§4, 3, iii). -*g-* is a conj. part. related to the vb. st., *ptng-* TO SAY, with the same meaning, but the conj. part. -*g-* never occurs ind. Both the vb. st. and the conj. part. exert a prog. qualitative influence on the following *a* incr., changing the *a* to *i'* (§2, 1). The conj. part. -*g-* is always followed by the pres. suff., either as in this circumstance or with the -*t* of the suff. fused with the initial plosive of a subj. pron. or qt. part. (§18, 1), as happens below.

²² *maca'-s*, atelic form of tr. vb. TO COVER (§11, 1), *maci'*, n. base in -*i'* (§38, 1, i), -*n*, conj. poss. pron. 3 sing. (§24). The resulting n. is rel. subj. in nominal sentence (§28, 1, ii). N. which are nominalized may still take a direct obj., and the obj. of this n. is *pundzi-* (cf. footnote 24).

²³ Ind. part. related to *wa'l* (see footnote 13).

²⁴ *pundzi-*, n. st. belongs to class A2 (§26), suus obj. zero suff. (§27); the n. is morph. obj. of nominalized vb. (cf. footnote 22) and since the obj. of a directly nominalized tr. vb. becomes the denominating substantive (§38, 1, i), the n., *pundzi-*, is the notionally denominating substantive, as well as the morph. obj. of *maci'n*.

²⁵ Ind. part. of a prepositional nature, followed by a n. in the obj. case (§28, 2, iii).

TEXT AND INTERLINEAR TRANSLATION—(Continued)

<i>tsóm·δ·i</i> . ²⁶			<i>pi'c</i> ²⁷	<i>mi''ip·l'</i> ²⁸	<i>i''i·wîn·i''igim</i> . ²⁹	
her own head hair (suus obj.).			Then	close	she stood (mov.).	
<i>pi'c</i> ²⁷	<i>ha'y·i</i> ³⁰	<i>wðngð'n</i> ³¹	<i>wa'adi'η</i> ³²	<i>kð·imi'η</i> . ³³	<i>pi'ck·i</i> ¹¹	<i>wa'h</i> ²³
Then	no	her shoes	of that	of woman.	Then I	there
<i>hal·i''a't</i> . ³⁴	<i>pi'cni'n</i> ³⁵	<i>wi'ts·i'a'c</i> ²⁵	<i>ïngi'i</i> ³⁶	<i>i''igim</i> . ³⁷		
am sitting about.	Then me	with		her own foot	she swung up at.	
<i>pi'c</i> ²⁷	<i>i'h</i> ³⁸	<i>aha't·ap·a'agim</i> ³⁹	<i>pð·cïp·i'l</i> . ⁴⁰		<i>pi'c</i> ²⁷	
Then	here	stuck (mov.)	the white thing (subj.).		Then	
<i>waha·i</i> ⁴¹	<i>i'mi'</i> . ⁴²	<i>pi'ck·i</i> ⁴³	<i>i''il·i·k</i> . ⁴⁴	<i>tu'gan·a'wi'dam·i'</i> . ⁴⁵		
from there	she took leave.	Then I	woke up	in the middle of the night.		

²⁶ *tsómδ·i*, n. st. belongs to class A1 (§26), -i, suus obj. suff. (§27). The n. is obj. of *wi'ts·i'a'c* (footnote 25).

²⁷ Ind. part.

²⁸ Ind. part. Another form of this part., *mi''ipi'tc*, means "very close." (§40).

²⁹ *i''i·wîn*², telic form of intr. vb. TO STAND, -(a)*gim*, suff. of mov. (§17, 4); the vb. exerts a prog. qualitative (§2, 1) and quantitative (§3, 1) influence, and the medial vowel of the suff. has the value of one mora in alternation of length (§3, 2, iv) so that the suff. -(a)*gim* becomes -(i')*gim*.

³⁰ Neg. part. sometimes heard, *ha'yi*.

³¹ *wðngð·n*, n. st. belongs to class A2 (§26), -n, conj. part. 3 sing. poss. pron. (§24). The n. is rel. subj. used in nominal sentence (§28, 1, ii) and used in annexation with the following gen. n. (§28, 3).

³² Ind. part. gen. form. The subj. form is *wa'*, the obj. form, *wal*. These forms are used in apposition with the n. to which they refer (§40).

³³ *kð·im*, n. st. belongs to class C1 (§26), -η, gen. suff. (§27). The gen. n. is used in annexation with the preceding rel. n. (cf. footnote 31 and §28, 3).

³⁴ *hal*² (cf. footnote 20). The vowel incr. associated with the pres. suff. is redup. to express the iter. asp. (§15, 5). The qualitative and quantitative influence of the vb. st. extends only to the incr. juxtaposed to the vb. st. This incr. is delimited by the intrusive glottal stop (§4, 2, iv).

³⁵ Cf. footnote 17. In this form both the ind. part. and the conj. part. are stressed (§4, 3, iii). The pron. is obj. of tr. vb. (footnote 37).

³⁶ *ïngi·i*, n. st. belongs to class A2 (§26), -i, suus obj. suff. (§27). The n. is obj. of the preceding part.

³⁷ Telic form of tr. vb. TO SWING ONE'S FOOT UP (§11, 1).

³⁸ Cf. footnote 21.

³⁹ *ahatap*², telic form of impers. vb. TO STICK, -(a)*gim*, suff. of mov. (§17, 4); the vb. st. exerts a prog. quantitative effect (§3, 1), and the medial vowel of the suff. has the value of one mora in alternation of length (§3, 2, iv) so that the suff. -(a)*gim* becomes -(a')*gim*.

⁴⁰ *pð·cï·i*², atelic form of the impers. vb. IT IS WHITE (§11, 1), -(a)*pi·l*, agentive suff. (§36, 2); the vb. st. exerts a prog. qualitative influence (§2, 1), so that -(a)*pi·l* becomes -(i')*pi·l*.

⁴¹ Ind. part.

⁴² Telic form of the intr. vb. TO GO (§11, 1). It is a matter of polite usage to say, when making one's departure, *me'tki i'mi* already I take leave. In recounting one's own adventures, or the adventures of others, the telic form of the vb. *i'mi*, is always used when the character of the account moves from one place to another.

⁴³ Cf. footnote 11. In this occurrence both the ind. part. and the conj. part. are stressed.

⁴⁴ Telic form of the intr. vb. TO WAKE UP (§11, 2).

⁴⁵ *tu'ga-*, n. st. THE DARK, compounded with the part. *na·widami*; lit., "in the middle of the dark." The combination always has the meaning "in the middle of the night." (§40).

TEXT AND INTERLINEAR TRANSLATION—(Continued)

<i>pi'c²⁷</i>	<i>ĩ'ts'ixk'a'tnũ'ĩ'ŋ⁴⁶</i>	<i>tŋ'ŋ'ŋ⁴⁷</i>	<i>ũ'ĩ'ĩga'ŋni'⁴⁸</i>	<i>pi'ck'ĩ¹¹</i>	
Then	is pricking my	knee (subj.)	waking up me.	Then I	
<i>ci'uba'⁴⁹</i>	<i>ĩ'ĩ'n'ihũ'ĩ.⁵⁰</i>	<i>pick'ĩ'⁵¹</i>	<i>ĩmbũ'⁵²</i>	<i>mŋ'ŋmŋ'ht'a'⁵³</i>	<i>ĩ'ĩ'ĩ.⁵⁴</i>
back again	got sick.	Then I	again	jimsonweed (obj.)	drank.
<i>pi'ck'ĩ¹¹</i>	<i>wa'l⁵⁵</i>	<i>pi'n'ĩ'ik⁵⁶</i>	<i>a'dzowa'la'⁵⁷</i>	<i>wuba'.'⁵⁸</i>	<i>wĩ'ts'ĩ'a'⁵⁵</i>
Then I	those (obj.)	all	shamans (obj.)	whipped	with
<i>wa'l¹³</i>	<i>a'ũ'tc'.⁵⁹</i>	<i>pi'ck'ĩ¹¹</i>	<i>wa'l¹³</i>	<i>tu'hat'a'⁶⁰</i>	<i>pi'n'ĩ'ik⁶¹</i>
that	my own bow.	Then I	those	water snakes (obj.)	all

⁴⁶ *ĩsĩxk-*, atelic form of the tr. vb. TO PRICK (§11, 2). Normally, a tr. vb. will have an animate subj., but the subj. of this vb. is "my knee" (cf. footnote 47). *-(a)t*, pres. suff. (§18, 1), *-ni'ĩŋ*, conj. part. 1 sing. poss. pron. (§24) used disjunctively. This pron. does not form a meaningful unit with the vb. to which it is attached, but refers formally to the following n.

⁴⁷ *tŋŋŋ-*, n. st. KNEE, belongs to class A1 (§26), *-n*, conj. part. 3 sing. poss. pron., here used in a neutral sense as a concordance device to show that this is the n. which is poss. by the person of the poss. pron. disjunctively attached to the preceding vb. (footnote 46; §24). The resulting meaning, "my knee," is subj. of the tr. vb. *ĩsĩxkat*, which is the main vb. of the sentence.

⁴⁸ *ũĩg-*, atelic form of the vb. st. TO WAKE UP (§11, 2), *-(a)ŋ*, nonidentical actor sub. suff. (§19, 4, i). This means that the resulting sub. vb., *ũĩgaŋ*, must have a different subj. than the subj. of the main vb. of the sentence (cf. footnote 47), and that the notional subj. of the sub. vb. must be a morph. obj. n. or pron. *-ni*, morph. conj. part. 1 obj. pron. (§24); notionally the obj. of the main vb. ("my knee is pricking me") and at the same time the subj. of the sub. vb. ("when I am waking up").

⁴⁹ Ind. part.

⁵⁰ *ĩ'ĩnĩhyĩ⁻²*, telic form of the intr. vb. TO BE SICK (§11, 1). The syllable, *-hyĩ-*, is possible only in medial position. The vb. is given in the text without suffixes attached, so that, because of its final position, *-hyĩ-> *hĩy-* by metathesis (§7), and the final *-y* opens to *-i* (§1, 5).

⁵¹ Cf. footnote 11. In this the conj. pron. is stressed.

⁵² Ind. part. Cf. footnote 49, in which the meaning is that a very recent action or condition is repeated; *ĩmbũ'*, however, merely means that something is done "again" irrespective of whether it had been done a long time ago or recently.

⁵³ *mŋ'mŋ'h-*, n. st. JIMSONWEED (*Datura meteloides*), belongs to class B5 (§26). The same name is applied to the plant, and to the liquid decoction made from the roots of the plant, and to the supernatural being sometimes visited in dreams. *-t*, abs. suff., *-a*, obj. suff. (§27). The n. is obj. of the following tr. vb. (cf. footnote 54).

⁵⁴ Telic form of the tr. vb. TO DRINK (§11, 3).

⁵⁵ Cf. footnote 13. Here the part. is used in a pl. sense in apposition with "many shamans."

⁵⁶ Ind. part. obj. form. The subj. form would be *pi'nĩyũ'*.

⁵⁷ Cf. footnote 14. Here the n. is used in a pl. sense because it follows a quantifying word (§34). In addition, initial redup. to show that the pl. is collective (§34, 2) is optional.

⁵⁸ *wup²*, telic form of the tr. vb. TO WHIP, *-a*, redup. *a* incr. to express pl. obj. (§15, 5). Since the vb. is used nakedly, there is no suffix with which an *a* incr. can be associated, but the construction is based on the analogy of vb. st. plus vb. suff. formations. Analogical formations of this type are rare.

⁵⁹ *a'li-*, n. st. belongs to class B2 (§26), *-ts*, suus obj. suff. (§27). The suff. *-ts>-tc*, presumably under the assimilatory influence of the *-l-* in the st. The n. is an obj. of the preceding part.

⁶⁰ *tuha-*, n. st. belongs to class B2 (§26), *-t*, abs. suff., *-a*, obj. suff. (§27). The n. is used in a pl. sense because it is followed by a quantifying part. (§34); the n. is the obj. of the following tr. vb.

⁶¹ Cf. footnote 56. In this case the part. follows the noun. Word-order in general is stylistic rather than obligatory.

TEXT AND INTERLINEAR TRANSLATION—(Continued)

<i>iwi'k</i> ⁶²	<i>tu'hat'a</i> ⁶³	<i>yo'wi</i> ⁶⁴	<i>pi'ck-i</i> ¹¹	<i>waha'i</i> ⁶⁵	<i>at'a'twi</i> ⁶⁶
threw out	water snakes (obj.)	many.	Then I	from there	got sober.
<i>pi'ck-i</i> ¹¹	<i>waha'i</i> ⁴¹	<i>taha'mbul-i</i> ⁶⁷	<i>a'awi'n</i> ⁶⁸	<i>pi'n-i'ik</i> ⁵⁶	<i>wa'l</i> ⁶⁹
Then I	from there	old man (obj.)	told.	"All	those
<i>a'a'dzowa'la</i> ⁶⁷	<i>wuba'giki</i> ⁷⁰			<i>wi'ts'i'a'c</i> ²⁵	<i>wa'l</i> ¹³
shamans (obj.)	whipped," I am saying,			"with	that
<i>a'lu'tck-iki</i> ⁷¹	<i>ti</i> ⁷²	<i>wa'l</i> ¹³	<i>tu'hat'a'gi</i> ⁷³	<i>o'no'oba'n</i> ⁷⁴	
my own bow," I am saying,	"and	those	water snakes I	outside	
<i>iwi'kk-iki</i> ⁷⁵	<i>pi'c</i> ²⁷	<i>ti'w'igi't</i> ⁷⁶	<i>ta'hamb'l</i> ⁷⁷		
threw away," I am saying.	Then,	"Good," is saying	old man (subj.).		
<i>waha'igi</i> ⁷⁸	<i>ogó'n</i> ⁷⁹	<i>wi'n</i> ⁸⁰	<i>i'diwi</i> ⁸¹	<i>ha'ck-i</i> ⁸²	<i>imbi</i> ⁵² <i>ha'yica</i> ⁸³
From there I	am	better.	Not I	again	never

⁶² Telic form of tr. vb. (§11, 1).

⁶³ Pleonastic mention of the same n. as in footnote 60. The second mention of "water snakes" gives the opportunity to add the quantifying part. "many" (cf. footnote 64) to "all" (cf. footnote 61).

⁶⁴ Ind. part. No occurrence has been found where more than one quantifying part. is used for a single n. When it is desired to describe quantity in more than one way, it is necessary to mention the n. twice, employing a different part. with each mention of the n.

⁶⁵ Cf. footnote 41. In this case the final diphthong seems to have the value of one mora. The value may have been incorrectly heard. It is difficult to determine the length of final vowels in open syllables.

⁶⁶ Telic form of the intr. vb. TO SOBER UP (§11, 1). This vb. st. is related to the n. st. *ta'twa-* MAN (§38, 4).

⁶⁷ *tahambil*, n. st. belongs to class C1 (§26), *-i* abs. obj. suff. (§27). This n. is always used for an old man who is a relative of the speaker; in this anecdote, he is the father of the speaker. Another related n. st., *ta'hamb'i'c*, also means "old man" but is less frequently applied to a relative.

⁶⁸ *a'aw-*², telic form of the intr. vb. TO TELL, TO GOSSIP (§11, 1), *-(i)n*, caus. suff. which tr. the vb. (§14, 2, iii); the *i* incr. associated with the suff. receives an additional mora of length through the influence of the st. (§3, 1).

⁶⁹ Cf. footnote 55. Here the ind. part. follows the quantifying part.

⁷⁰ *wuba-* (cf. footnote 58) followed by the conj. part., *-güt*, and the conj. part. 1 sing. subj. pron. (cf. footnote 21).

⁷¹ *a'litc-* (cf. footnote 59) followed by the same conj. part. as in footnote 70. The initial plosive of the part., *-güt*, is unvoiced because it is juxtaposed to a voiceless consonant.

⁷² Ind. part.

⁷³ *tuhata-* (cf. footnote 60), *-gi* 1 sing. subj. pron., which does not form a meaningful unit with *tuhata-* nor enter into the alternation of stress of this word (§8, 3), but is the subj. of the following tr. vb. (cf. footnote 75).

⁷⁴ *o'no'o-*, n. st. belongs to class A1 (§26). The same term is used for the body part, back, or the back part of an impers. substantive. *-ba-*, rel. loc. post., *-n*, conj. part. 3 sing. poss. pron. (§24). The n. is in the iness. rel. case, and means lit., "in its back," but, when not used in annexation with a gen. n. (§28, 3), the n. assumes the special meaning of "outside."

⁷⁵ *iwik* (cf. footnote 62) followed by the conj. part. as in footnote 71.

⁷⁶ *tiwi*, ind. part. followed by the conj. part., *-güt* (cf. footnote 21).

⁷⁷ Cf. footnote 67. The n. is here used as subj. of the sentence.

⁷⁸ *waha'i* (cf. footnote 41) followed by conj. part. 1 sing. subj. pron. (§23).

⁷⁹ Ind. part. "empty word" not transl. Probably expresses some vague modal feeling.

TEXT AND INTERLINEAR TRANSLATION—(Continued)

<i>ĩ'ĩ'n.ĩh'ĩ.</i> ⁵⁰	<i>mδ'δmδ'ht.</i> ⁸⁴	<i>ĩ'w.ĩwa'n</i> ⁸⁵	<i>tĩ'bo'h'ct.</i> ⁸⁶	<i>ha'e</i> ⁸⁷	<i>wa'l</i> ⁸⁸
get sick.	Jimsonweed	good	medicine.	Not	that (obj.)
<i>a'dzowa'l</i> ⁸⁹	<i>ĩ't.ĩct.ĩp.</i> ⁹⁰	<i>ĩ'w.ĩl.ĩ'iba'aki'tct.a'</i> ⁹¹		<i>δm.δ'k.</i> ⁹²	
shamans (subj.)	spoil.	To tamper it, want (qt.) they		in vain	
<i>kuha'ck.ĩtct.a'</i> ⁹³	<i>mun'u'gin.a't.</i> ⁹⁴	<i>mδ'δmδ'htk.ĩ'tc.</i> ⁹⁵	<i>δ'bδ'wika'η</i> ⁹⁶		
and not (qt.) they	are able to do it.	Jimsonweed (qt.)	has power		
<i>δ'yan.a'c</i> ⁹⁷	<i>a'dzowa'la'.</i> ⁹⁸	<i>pĩ'n.ĩ'ikk.ĩtct.a'</i> ⁹⁹	<i>ĩ'ndam.a'ĩ</i> ¹⁰⁰	<i>ĩ't.ĩct.ĩ'p.</i> ⁹⁰	
more than	the shamans.	All (qt.) they	sometimes	spoil	

⁵⁰ Atelic form of intr. vb. TO BE. This vb. is the only exception to the rule that the atelic form of a vb. st. cannot stand in entire ind. (§12, 20).

⁸¹ Ind. part. comparative form of the ind. part., *ĩwĩ* (cf. footnote 76).

⁸² Neg. ind. part. followed by conj. part. 1 sing. subj. pron. (§23) with initial plosive unvoiced because in juxtaposition to a voiceless consonant.

⁸³ Ind. neg. part. related to the form given in footnote 82.

⁸⁴ Cf. footnote 53. The n. is here used as subj. in a nominal sentence (§28, 1, ii).

⁸⁵ *ĩwĩ* (cf. footnote 76) followed by the element, *-wa-* (§39), and by *-n*, conj. part. 3 sing. poss. pron. (§24) here used in a neutral sense. The form, *ĩwĩwan*, is generally used as an attributive word when the n. described accompanies it (cf. footnote 86); otherwise, the form, *ĩwĩ*, is more commonly employed.

⁸⁶ *tĩ'bo'huc*, n. belongs to class B5 (§26), *-t*, abs. suff. (§27). The n. is in subj. case and is used as a predicate in the n. sentence. The noun itself is nominalized from the atelic form of the vb. st., *tĩ'bo'h-ro* DOCTOR (tr.) (§11, 1), *-(i)c-*, inanimate instr. of action suff. (§35, 1). The resulting n. is lit., "the instrument for doctoring."

⁸⁷ Neg. ind. part. (cf. footnote 82).

⁸⁸ Cf. footnote 13. The part. is here used as the obj. of the following tr. vb. (cf. footnote 90).

⁸⁹ Cf. footnote 14. The n. is here used as the subj. of the following tr. vb. The context of the anecdote presumes a pl. sense.

⁹⁰ Telic form of the tr. vb. TO SPOIL (§11, 1).

⁹¹ *ĩwĩlĩ*², atelic form of the tr. vb. TO TAMPER WITH, TO FIX, TO PLANT (§11, 1). The vb. st. has a quantitative effect on the incr. juxtaposed (§3, 1), changing *-(i)ba'* to *-(i')ba'*, because the incr. is associated with the desiderative suff. (*-ba'*, §16, 7), *-(a)t*, pres. suff., with the *-t* fused with the initial plosive of the juxtaposed conj. part (§18, 1). *-gidža*, qt. conj. part. *-(a)t+gidža=akidža*, and the final vowel is elided before the conj. part. *-da*. When the vowel is elided, the affricate is placed in final position and therefore unvoiced. *-da*, conj. part. 3 pl. subj. pron. (§23). The initial plosive of the pron. is unvoiced because it is in juxtaposition to the unvoiced affricate (§5, 3, 4).

⁹² Ind. part. with vague modal feeling.

⁹³ A combination of two ind. part. followed by two conj. part. (§40). Perhaps the preceding part. (cf. footnote 92) should also be included in the group, which gives an appearance of unity because alternation of stress is operative (§4, 2). *ku-*, ind. part. with vague meaning of "and" or "but," *-hac-*, ind. neg. part. (cf. footnote 82), *-kitc-*, qt. conj. part., *-ta*, conj. part. 3 pl. subj. pron. (cf. footnote 91). The initial plosive of the qt. part. is unvoiced because it is juxtaposed to a voiceless consonant.

⁹⁴ *munu'g-*, atelic form of exceptional tr. vb. (§11, 1) which appears only in sentences with neg. part. (cf. footnote 93), *-(i)n*, caus. suff. (§14, 2), *-(a)t*, pres. suff. (§18, 1).

⁹⁵ Cf. footnote 53. The n. is here used as subj. of the following verbalized n., *-kitc* conj. qt. part. (cf. footnote 91).

⁹⁶ *δ'bδwĩ*, n. st. belongs to class B2 (§26), *-kaη*, verbalizing part. (§21, 4).

⁹⁷ Ind. part. used in comparisons. The n. preceding the part. is in the subj. case, while the n. following the part. is in the obj. case. The part. itself may possibly be a formation of tr. vb. st., *δ'y-* TO PASS BY (§11, 3), *-(a)n*, benefactive suff. (§14, 3), identical-actor sub. suff., *-(a)c* (§19, 3, i), used in a special sense.

⁹⁸ Cf. footnote 14. Here used as obj. after the preceding comparative part. (cf. footnote 97).

TEXT AND INTERLINEAR TRANSLATION—(Concluded)

<i>ti'bo'hict'a</i> ¹⁰¹	<i>mδ'δmδ'ht'a</i> ¹⁰²	<i>ha''t'c.</i> ¹⁰³	<i>mδ'δmδ'ht.</i> ¹⁰⁴	<i>wi'n</i> ⁸⁰
medicines (obj.)	jimsonweed (obj.)	not.	Jimsonweed	is
<i>map't'l</i> ¹⁰⁵	<i>ti'w'üwa'n</i> ⁸⁵	<i>ti'bo'ht'ct.</i> ¹⁰⁶		
now	good	medicine.		

⁹⁹ Ind. part. (cf. footnote 56), followed by conj. qt. part. and conj. 3 sing. subj. pron. (cf. footnote 93).

¹⁰⁰ Ind. part.

¹⁰¹ Cf. footnote 86. -a, obj. suff. (§27). The n. is here used as the obj. of the preceding tr. vb., and in a pl. sense because a quantifying part. is included in the sentence (cf. footnote 99).

¹⁰² Cf. footnote 53. The n. is here used as an obj. of the preceding tr. vb. This vb. has two direct objects (cf. footnote 101), but the quantifying part. (footnote 99) applies only to the first direct obj., "all the medicines," while the neg. part. (footnote 103) applies only to the second direct obj., "not the jimsonweed."

¹⁰³ Neg. ind. part., related to other neg. part. The slight differences in form of the various neg. part. do not seem to correspond with any consistent differences in meaning. (§40.)

¹⁰⁴ Cf. footnote 84, in which the same n. was used as the subj. of a nominal sentence. This sentence differs from the former sentence merely in that the vb. TO BE is included.

¹⁰⁵ Ind. part.

¹⁰⁶ Cf. footnote 86.

Free Translation

Well, I had a dream about a doctor. She arrived and went over there. Then she is talking to me. "Why are you sitting here?" she says. The hair of her head hangs forward, concealing her eyes. Then she came in order to stand close to me. Well, that woman had no shoes on. So I am shifting about in my position there. Then she swung her foot up at me. And a white thing came and fastened itself on my knee. Then she took leave, after that.

Then I woke up in the middle of the night. And my knee is pricking me when I am waking up. And I became sick again. So I took another drink of the jimsonweed medicine. Then, while under the influence of jimsonweed, I whipped all those doctors with my bow. And I threw out all those water snakes—very many water snakes. Then, after that, I came out of the jimsonweed trance.

And later I told Old Man about it. "I whipped all those doctors," I am saying, "with my bow," I am saying, "and I threw those water snakes outside," I am saying. Then Old Man says, "Good."

I am better after that. I never got sick again. Jimsonweed is good medicine. Doctors do not spoil that medicine. They desire to tamper with it in vain, it is said, and they are, it is said, not able to do it. Jimsonweed, it is said, has more power than the doctors. Sometimes they spoil all the other medicines, it is said, but not jimsonweed. Jimsonweed remains today a good medicine.

BIBLIOGRAPHICAL ABBREVIATIONS USED

- AA American Anthropologist.
SI-MC Smithsonian Institution, Miscellaneous
Collections.
UC-PAAE University of California, Publications in
American Archaeology and Ethnology.