ELEMENTS OF THE KATO LANGUAGE

BY
PLINY EARLE GODDARD

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# ELEMENTS OF THE KATO LANGUAGE

**By**

PLINY EARLE GODDARD

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INTRODUCTION

In general structure all the Athapascan languages have great uniformity. The nouns, when not monosyllabic, are built upon monosyllables by suffixes, or are sentence verbs used as substantives. The verbs have adverbial prefixes expressing spatial relations, subjective and objective prefixes expressing syntactical relations, stems which often indicate the character and number of the subject or object, and suffixes with temporal, modal, and conjunctional force.

This general structure has been rather fully discussed in the treatment of the Hupa dialect.\(^1\) As has been said in another place,\(^2\) the Kato dialect differs from Hupa sufficiently to make them mutually unintelligible. While this is due chiefly to phonetic changes, in a lesser degree it is due to differences in vocabulary, particularly nouns of descriptive meaning. The suffixes of the verbs also differ considerably. The elements which compose the words of each dialect are nearly all identical except for the phonetic changes which exist.

It has been thought sufficient, considering the treatment already given the Hupa language, to provide descriptions of the individual sounds occurring in Kato, illustrated as fully as possible with tracings; and to list the morphological elements, accompanying each with a few examples. This has been done with the expectation that the chief use made of the work would be comparative.

The material employed is chiefly that contained in Kato Texts,\(^3\) to the pages and lines of which the numerals after the examples refer. The tracings\(^4\) used were selected from about one thousand made in the spring and fall of 1908 by Bill Ray, from whom the texts also were obtained.

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4 For a description of the apparatus and methods consult Amer. Anthropol., n.s. vii, 613-619; and v, 1-4, of this series.
PHONOLOGY

INDIVIDUAL SOUNDS

VOWELS

The vowels occurring in Kato are a, æ, e, ë, i, ê, ū, and ū. Of these, æ, e, are evident modifications of a and e; and i is not at all common.

a in quality is the wide-mid-back in English father. It has a very uniform length of .17 seconds.

æ is narrow-mid-back much like the vowel in English what. It occurs only in closed syllables, the same morphological element when rendered open having unmodified a, e.g., -kwæn, -kwa næn. The converse, however, is not true that a becomes æ in closed syllables. The stem of verbs often has æ in the present and a in the past: tc'n nól t'æs, “cut them”; tc'n ne sìl t'ats, “I cut it up.” It is probable that the stem is more strongly stressed in the latter case. The duration is usually less than that of a, being about .11 seconds.

e is open in quality as in English net. It is of frequent occurrence and stable in its character. In a few cases only does it become narrowed to e as in English err. Its duration is very uniform, being about .17 seconds. In less stressed syllables it is morphologically equivalent to Hupa e of the same quality.

i always has the closed, continental sound as in English pique. When stressed it is the morphological equivalent of Hupa e.

i, the open sound in English in, is but rarely heard. It is extremely short in duration and is detected with some difficulty. It has been uniformly written in te'in, “he said.” That it was as uniformly uttered is not certain.

o with the close quality in English note is of frequent occurrence, and is fairly constant in its character, with a duration of .17 seconds. It has frequently been written in place of ū as a possessive prefix, when its duration is only about .1 second.

ū has the sound of u in English but. It is always short in duration, about .067 seconds. It corresponds in its use in
morphological elements with i in Hupa; Kato lât, Hupa lît, "smoke."

û, close in quality as in rule, occurs as a possessive prefix where one might suspect its origin to be connected with yó and yî, the demonstrative. That it is not a vowel originally independent of ō seems probable. The closeness of quality may be due to neighboring semi-vowels. Even in this prefix it is often heard as ō. Its duration is usually short, about .1 second.

SEMI-VOWELS

y initially seems to begin as a surd and to pass very quickly into a sonant glide. It adds very little if any duration to syllables. When final it is written i and seems in some cases to have belonged to a separate syllable.

w seems to have developed in most instances from completely sonant g under the influence of back vowels. In a few morphological elements w does appear without such influences, but in certain Athapascan dialects g appears even in these. When the w-like glide after k is not followed by a vowel it is surd and written w.

CONTINUANTS

Liquids

The only sonant liquid is the lateral one, l. Initially in the word and after a surd spirant the first half of the l is surd and the latter half sonant. The first portion of the tracings (pl. 1, figs. 1, 2) shows the effect of a single flap of the tongue followed by a distinct rise of the tracing point, probably due to a greater opening of the passage. In form, the tracing resembles that for the surd spirant L (pl. 1, fig. 9) but is much smaller.

Between vowels (pl. 1, fig. 4; pl. 3, fig. 3; pl. 7, fig. 9) and final in the syllable (pl. 1, figs. 3, 5; pl. 9, figs. 1, 7) the sonancy is uninterrupted. When l is followed by a glottal stop the sonancy and apparently the duration of the sound itself are much shortened. The sound under this condition makes but little impression upon the English ear, and it is often heard as a surd. The tracings in plate 1, figures 7-9, do show a degree of
sonancy. These interrupted sonants seem to be the representatives of Hupa final L.\(^6\)

The duration of 1 is about .18 seconds.

**Nasals**

m.—The bilabial nasal seems to occur only where b has been assimilated to a dental or palatal nasal. Examples of such assimilation are plainly seen in cases where the initial sound of a verb-stem is b. Whenever it is preceded by n or n, b becomes m and usually the preceding nasal becomes m (pl. 6, figs. 6, 8). The postposition bi\(^6\) when it follows a nasal becomes mi\(^6\) (pl. 4, fig. 9). There is one word with an initial m which is unexplained, main, “weasel” (pl. 6, fig. 5). The duration of this sound is about .1 second.

In common with several Athapascan dialects, Kato has b, apparently preserved, where Hupa and other dialects have m. Perhaps the change toward m began with these words where assimilation took place and afterwards was carried through the language by analogy.

Syllabic n.—In many words in Kato n stands by itself in a syllable (pl. 4, figs. 2, 3), particularly when it is the first modal prefix of verbs and adjectives, and the second personal possessive prefix before a consonant. Under these circumstances Hupa has a vowel i preceding the n. Such a vowel was imagined to exist in Kato and was at first written. This n, unlike the consonant, has no sound accompanying the release. Its duration is about .12 second.

n.—The dental consonantal n when initial usually has the sonancy beginning about .05 seconds before the release of the tongue (pl. 1, fig. 8; pl. 2, fig. 3; pl. 3, figs. 5, 6). In some instances the sonancy seems to follow the release in about .01 second (pl. 4, fig. 7), in this respect agreeing with g and d when initial.

When n occurs within a word it is sonant throughout (pl. 4, figs. 6, 7). Its duration is about .1 second.

The final nasal seems usually to be palatal rather than dental,
but it becomes dental when another syllable beginning with a vowel is suffixed. In that case the n is often heard doubled as the final and initial sounds of the adjoining syllables. This is revealed in the tracings of plate 3, figure 1 of which shows a more complete closure of the mouth passage for the second n. Figure 6 of the same plate shows a decided increase in the amplitude of the vibrations of the nasal tracing, apparently due to the lower pitch of the final syllable, which happens to be favored by the tambour in use.

\( \text{n.} \) — The palatal nasal seems to be characterized by an incomplete closure of the mouth passage, or by its closure sometime after the lowering of the velum. This results in a nasalized sonant, palatal spirant, or a nasalized vowel, according to the degree of elevation of the back of the tongue, but since the earlier part of the vowel and the latter part of nasal are pure, the mixed character is not particularly noticeable to the ear. Final g also has a similar incompleteness of contact.

Often the palatal \( \text{n} \) is followed by a glottal stop (pl. 3, figs. 3-5). The sound is somewhat obscured in that case and at first the glottal stop was supposed to precede the nasal. None of the tracings reveal such an order. The glottis seems to open and the velum to fall at the same instant, causing a simultaneous raising of both tracing points. Kato seems to differ from Hupa as to the order of the glottal stop and nasal, as appears from plate 5 of volume 5 in this series.

**Spirants**

The spirants of Kato are four in number, s, c, l, and h, all of them normally voiceless. In a few instances the initial portion is voiced at a low pitch, probably due to the gradual separation of the vocal chords. This low-pitched voicing of the initial portion impressed the hearer, in some cases, rather than the middle and last surd portion, and the sound was accordingly recorded as a sonant. In a number of cases intervocalic h appears with low pitch vibrations of great amplitude continuing throughout its duration. If it be true that the glottal spirant is caused by the friction of the air current as it passes the true
vocal chords, there may well be degrees of their retraction and relaxation.

s.—When initial, the tracing of s is usually a regular parabolic curve (pl. 5, fig. 1; pl. 6, fig. 7), showing a duration for the sound of about .22 second. In an intervocalic position (pl. 1, fig. 7) it may appear as a straight line or as an upward curve according to the elevation of the adjoining vowel tracing. Final in the syllable, which is a frequent position because of its occurrence as a suffix, it usually appears as a regular descending parabolic curve (pl. 3, figs. 5, 6; pl. 5, fig. 2; pl. 8, figs. 2, 8; pl. 10, figs. 1, 4, 7) of from .16 to .25 of a second in length. When final in the word, s is sometimes quite prolonged (.33 second) and shows a depression followed by a regular elevation. The form of the curve is due to variation in breath pressure controlled in the last analysis by the size of the opening between the tongue and the palate, and possibly, though not probably, to increase in the lung pressure.

c.—When initial before a consonant c (sh) seems to be syllabic (pl. 5, fig. 4; pl. 11, fig. 5). It is distinguished from s with difficulty by ear and its tracings closely resemble those of that sound. In other situations in the syllable and word the remarks above concerning s apply to c. In Hupa the corresponding sound is hw (-w).

l.—The position for this sound seems identical with that for l. The tracings of it (pl. 2, figs. 1, 2, 4; pl. 11, fig. 3) usually show evidence of a single flap or movement of the tongue and sometimes (pl. 42, fig. 12) the slighter movements which may represent the spirant character. In a few cases (pl. 10, fig. 2; pl. 8, fig. 1) the sonancy of the preceding vowel continues into the l, but in all other respects it is surd. The sound is of the same character as that found in Hupa. The average length is a little less than .2 of a second.

h, '.—Tracings of this sound in the initial, medial, and final (' ) positions are to be seen in plate 5, figures 7-9. In duration

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6 Work cited, v, 10.
7 Ibid., pl. 6, figs. 2, 4, 5, 6.
it is comparable to s and c. As has been remarked above, when medial it often has low-pitched vocal chord vibrations.

a.—A sonant spirant in the postpalatal position occurs between vowels and finally. It has probably resulted from a stop, the closure being incomplete.

**STOPS**

Six positions and three kinds of stops may be distinguished in Kato. The positions are bilabial, dental, prepalatal, postpalatal, velar, and glottal. The dental and palatal ones occur as sonants or intermediates, aspirated surds, and surds accompanied by glottal action.

**Labial**

b.—In the bilabial position only one kind is found, which from its resemblance to the corresponding members of other series may be called a sonant. The sonancy, however, does not occur until after the separation of the lips (pl. 5, fig. 3); the impulse for their separation and for the approximation of the vocal chords seeming to be synchronous. In regard to the tracings it should be observed that the lips, being tightly confined within the speaking funnel, often compress the air and elevate the recording point during the closure, obscuring the effect of the release, a result quite different from that produced by the other stops.

When b is preceded by a nasal it is assimilated to m. It does not occur in the final position of the syllable.

Its duration averages about .18 seconds.

**Dentals**

d.—The sonancy of d occurs about .04 seconds after the withdrawal of the tip of the tongue from the sockets of the teeth. Perhaps that interval is required for the adjustment of the chords after the nervous impulse is received (pl. 7, fig. 1). It will be observed that laryngeal adjustment of some sort is synchronous with the initial adjustment of the tongue marked by the first vertical lines in figures 1, 2, 3 of plate 7. Since only the latter third of the sound is sonant, and since its strength of enunciation does not differ from the surd so much as is usual in European
languages, it is heard by many as a surd. The sound is not found in the final position of the syllable, nor could it be expected since in that situation the sonant portion, the end glide, is wanting.

In the sound represented by t, the final glide is surd. Breath resulting in an aspiration perhaps a little stronger than in accented English syllables (pl. 7, figs. 4-6). In several cases t by itself composes a syllable (pl. 6, fig. 3; pl. 7, fig. 2). In similar situations Hupa has d if the sound be initial, and t if it be final, with a weak vowel if necessary. Where t and d occur in the same word t appears as a higher tracing, indicating its somewhat stronger character. In duration the closure is about .1 second and the glide about as long.

t'.—The third member of the dental series is one of those peculiar American sounds often called fortes or exploded. The upper larynx line (pl. 7, figs. 7-9) shows a rather marked depression beginning as the tongue reaches the position of closure, culminating an instant after its release, and gradually returning during the glide, the latter portion of which is sonant. In figure 9 both t' and t occur, with a definite depression for t' but none for t, although it is nearly twice as high in the lower breath tracing. The initial sound also has the depression for tc', of the same character as the sound under discussion.

It will be noticed that the recording point does not ascend so high as for d even, and immediately returns to the line marked by the preceding closure or even below it. It seems probable that the larynx tracing records a bodily movement of that organ which normally occurs when the glottis is closed by the depression of the epiglottis. The glottal stop (pl. 7, fig. 7) has a similar depression.

It seems that while the tongue is against the teeth closing the passage through the mouth the velum is raised, closing the nasal passages, and the glottis is closed by the epiglottis. The mouth and throat form at that time a closed chamber filled with compressed air which escapes as the tongue is withdrawn, causing the moderate elevation of the tracing point. Immediately after the release of the tongue, while the glottis is at least partly closed, some movement, perhaps the lowering again of the larynx, causes
a degree of suction. These sounds have a characteristic harsh effect on the ear. Examples of this sound in the final position may perhaps be seen in plate 11, figures 5 and 6. In the lower, breath, line of the latter the tongue release may be seen about 4 mm. after the last vertical line and a second one, probably the glottal release, 10 mm. after the first one. That the laryngeal movement is synchronous with, not posterior to, the dental stop, appears from the depression in the larynx line of figure 5 of this plate.

**Palatals**

The palatal stops seem mostly to be in the postpalatal position, the prepalatal stops apparently having become affricatives. In many cases it is rather difficult to be sure whether tc is uttered or a prepalatal k with, perhaps, a glide. There are three sorts of the postpalatal stops of the same general character as those of the dental series, and in addition considerable variation in the sonant depending upon the position in the syllable.

**g.**—Initially the sonancy of g begins, as in d, about .02 seconds after the release of the tongue (pl. 8, fig. 1). Between vowels, and in some cases even between vowel and consonant, the sonancy is continuous, and the contact slight and of short duration (pl. 8, figs. 2, 3). If an ô or ü follows, it is often heard as w. In Hupa, in both the initial and medial positions, w occurs in all vowel settings. Finally in a word and before a surd spirant the contact is incomplete and a sonant continuant is heard (pl. 8, fig. 9) written g.\(^{18}\)

**k.**—The aspiration of the palatal surd is more noticeable than in the case of the corresponding dental. The duration of this aspiration, between the release of the tongue and the beginning of the vowel, averages .08 seconds (pl. 9, figs. 1-3). In numbers of cases this consonant is syllabic, representing the pronoun of the third person either as a possessive prefixed to a noun or the object prefixed to the verb. In this case and in some others the aspiration sounds as a surd w. A sound of this kw sort occurs finally and between a vowel and consonant (pl. 11, fig. 1). It is

\(^{18}\) It now seems certain that two g's have been confused: one, not very frequent, is intermediate; the other is fully sonant, corresponding to w in Hupa.
quite probable that the w-tinge is imparted by the remains of an ö or ü vowel. It appears that the ordinary aspirated k when final usually loses its third or aspirated portion and resembles an unaspirated k. Hupa has a surd palatal continuant (x) as the corresponding sound in all situations.

k'.—The third member of the series is of the same character as t'. Its tracings show the same depression in the larynx line and a similar reduction in the height attained by the breath tracing with the following retraction. It has a harsh, cracking sound, still more noticeable than that of t'. A k of this sort followed by w is also found (pl. 9, fig. 9). When final it is rather hard to be sure which k should be written, but it almost certainly occurs in plate 11, figure 8, and perhaps in many other words. It corresponds to the only k of Hupa, in which language the palatal sonants seem to have become w, and the aspirated surd palatal stops the surd palatal spirant x.

Velar

q.—A few words have a sound clearly different from the palatal sounds discussed above. This difference seems to be one of position. The sound appears to be a velar, unaspirated and intermediate as to sonancy (pl. 8, figs. 7, 8).

Glottal

That the glottal stop (e) occurs in the initial position in a word is not certain. It is initial in the verbal stems -ea, -ei, and -ean, but these stems of course are never the first syllable of words. When intervocalic (pl. 11, fig. 9) the stop is usually heard as a short pause between the two sounds, and is likely to be overlooked as insignificant or not even noticed until attention is called to it. When it is final (pl. 1, figs. 2, 6) it is much more prominent, for in that situation its release is plainly heard as an aspiration. Its duration in this situation is much longer. Its presence may also be detected by its effect upon the vowel or consonant which it follows (pl. 11, fig. 3). It has the result of reducing the duration of a preceding sonant (vowel, liquid, or nasal) to be about one-half of the usual length.
AFFRICATIVES

The classification of the affricatives (stops plus spirants) is rather difficult in Kato. A sonant dj occurs in a number of syllables (pl. 10, figs. 1, 4), but there is usually some question as to the sonancy and also the position; dj, g, tc, and ky at first having been written for the same sound. An unmistakable surd tc also occurs with aspiration which takes place through the sh (e) position (pl. 10, figs. 2, 5).

A surd with glottal accompaniment (te') is frequent (pl. 10, figs. 3, 4, 6, 9); a deictic prefix of this sort being present in a large number of verbs. It is often syllabic.

It is rather doubtful if ts occurs in any large number of cases. The diminutive suffix, of very frequent use in Kato, often sounds as much like ts as it does like tc. This is probably due to the fact that the second part of the sound is formed in a position or in a manner between s and sh as heard in English.

L.—In some cases a lateral surd consonant of an l character seems to be accompanied by the same sort of glottal or epiglottal action which affects the surd stops and the affricative te'. This is especially plain in the tracing plate 2, figure 7. The effect, as in the other sounds of this character, is to reduce the energy of the breath, as is uniformly shown by the height of the tracings, and at the same time to impart a harshness which is strikingly noticeable.

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Semivowels: y, w.
Vowels.

a
\( \ddot{a} \)
\( \ddot{e} \)
\( \ddot{i} \)
\( \ddot{u} \)
\( \ddot{a} \)

COMPARISON OF KATO AND HUPA SOUNDS

Kato a and a correspond to Hupa a and ą (written ū).
Kato a', cloud; Hupa a, cloud.
Kato ya gūn gal, he threw up; Hupa ya wil waL, he threw through the air.

Kato e; Hupa e.
Kato t'ec, coal; Hupa, teŭw, coal.
Kato tes del'; Hupa teĭ tes deL, they went.

Kato i; Hupa e.
Kato ci, I; Hupa, hwe, I.
Kato dō gis iĭ, one could not see; Hupa dō xo dū wes en, it could not be seen.

Kato ô; Hupa ô.
Kato Lō', grass; Hupa Lō, grass.
Kato nō te'un tō', water reached; Hupa nō it tō, the water comes.

Kato ŭ; Hupa i.
Kato lāt, smoke; Hupa lit, smoke.
Kato nas ĕts, he ran about; Hupa nas ĕts eĭ, he ran about.
Kato gūl lāt, it burns; Hupa wil lit, it burns.

Kato y; Hupa y.
Kato ya', louse; Hupa ya, louse.
Kato ye nat ya, he went in; Hupa ye na wīt yai, he went in.

Kato l; Hupa l.
Kato lāt, seaweed; Hupa la, seaweed.
Kato te'ūs li', he caught in a noose; Hupa tais loi, he tied in bundles.
Kato te' tē lōs, he led; Hupa na te lōs, she dragged back.

Kato l; Hupa l.
Kato lōn, squirrel; Hupa lōn, mouse.
Kato lel yits, he tied together; Hupa le il loi, he tied together.
Kato te'e nan la, he jumped out; Hupa te'il lat, he jumped out.
Kato L; Hupa L.
Kato u L6, its straps; Hupa L6, strap.
Kato tc'Loi u6 gi, she is making a basket; Hupa ke it L6, she used to make baskets.

Kato syllabic n; Hupa n and i or other vowel.
Kato n tc'eL, your younger brother; Hupa nit tai, your paternal uncle.
Kato n das si, it is heavy; Hupa nit das, it is heavy.

Kato n; Hupa n.
Kato ne'e, land; Hupa nin, ground.
Kato na nun yai, she started across; Hupa na ni6 yai, he crossed.

Kato n; Hupa n or n.8
Kato o tc'06, toward it; Hupa xo teiu, toward her.
Kato de t gun'a6, he put it in the fire; Hupa de d6 wia6 an, he put in incense.

Kato s; Hupa s.
Kato u suts, its skin; Hupa sits, skin, bark.
Kato d6 ku ne s6n, I was insensible; Hupa ai ne sen, I thought.

Kato c; Hupa hu.
Kato ca, moon; Hupa hwa, moon.
Kato nec in t6 le, let me look; Hupa n6w i6, let me look.
Kato n6 c6n6, black; Hupa L6 hwin, black.

Kato b; Hupa m.
Kato hui x'ut, lake; Hupa m66k, lake.
Kato bee ya hui, he climbed up when; Hupa me is L6 dei, he ran up.
Kato na'be, swim (plu. imp.); Hupa nauw me, let me swim.

Kato d; Hupa d.9
Kato u da'e, his mouth; Hupa x6t da, his mouth.
Kato da n6 la, she put it up; Hupa da n6 wil lai, she put it.
Kato b6 d6, let us climb; Hupa wei d6, we will go.

Kato dj; Hupa dj.
Kato dj'e, pitch; Hupa dje, pitch.
Kato dje6 gun teet, he split open; Hupa dje wia6 kil, he tore open.

Kato t, Hupa t.
Kato t6, water; Hupa t6, ocean.
Kato te' te' gun tal'e, he stepped in water; Hupa te n6 d6 win tai, he stepped in water.

8 It is not certain that this is a phonetic change. The occurrence of n and 6 in Hupa stems regularly marking temporal-modal changes may have been extended by analogy.

9 When a prefix such as follows de-, in fire, stands alone, it becomes t in Kato, e.g., de t gun 'an (Hupa de d6 wia6 an), he put on the fire; but otherwise it is d also in Kato, as in de d6n 'ag, put on the fire.
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Kato t'; Hupa t.\^{10}
Kato t'c', blanket; Hupa te, blanket.
Kato t'a gu t'ats, he butchered; Hupa k'te tats, he cut them.

Kato tc; Hupa te.
Kato t'c', dust; Hupa lit te'un, sand.
Kato wa nun te bōn, it will blow through; Hupa da kyū wes te, the wind blew.

Kato tc; Hupa tew.
Kato t'c; Hupa te.
Kato t'c', Hupa tew, my grandmother;
Kato t'c', Hupa tew, its grandmother.

Kato tc; Hupa k (prepalatal).
Kato te'n, tree; Hupa kin, tree.
Kato n teel', your brother; Hupa mik kil, her brother.
Kato gūl teût, he caught them; tē xoūl, he caught him.

Kato tc'; Hupa te, ky.\^{11}
Kato te' nes tiā, he lay down; Hupa tein nes ten, he lay down.
Kato te' gūn yan'ū, he ate of it; kyū win yan, he ate it.

Kato g; Hupa w.
Kato gūl gel', it was evening; Hupa wil wēl, dark, night.
Kato sel'gin, he killed; Hupa tē sel'wen, he killed.

Kato k; Hupa x.
Kato kai hit', winter time; Hupa xai, winter.
Kato ka ya ci', they dug; Hupa xa ke hue, she commenced to dig.
Kato wa'tūn kan, she gave him; Hupa xo wa teiun xan, she gave her.

Kato kw; Hupa x.
Kato kwōl', fire; Hupa xoūl, fire.
Kato kw na', his eyes; Hupa xo'n na, his eyes.
Kato kwāla, you did; Hupa xa ule, do that.

Kato k'; Hupa k. (The same sound.)
Kato k'at de', soon; Hupa kūt de, soon.
Kato k'a te'n t'ats, he cut; Hupa k'et te tats, he cut them.
Kato nūn fn dūk k'e', get up (imp. sing.); Hupa in na is dūk ka, she got up.

Kato kw'; Hupa k.
Kato kwāt', on; Hupa kūt, on.

Kato q; Hupa q.
Kato qō, worm; Hupa qō, worm.
Kato ūl' qōt, spear it; Hupa ya a qōt, they always stuck them.

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\^{10} Hupa t is but an earlier orthography for t' used in Kato.

\^{11} In Hupa te with glottal accompaniment was not differentiated from the few occurrences of simple te.
ASSIMILATION OF SOUNDS

The instances of assimilation noticed are the following:

b following n or ŋ becomes m:
  kwōn mē (for kwōn bī), fire in. 119-13.12
  kwōn mōn a (for kwōn bān a), fire before. 119-16.
  tūm mīc (for tūn bīc), swim. 118-16.

t final in verbal stems followed by b or k is assimilated:
  ūl tēčk kwan (for ūl tečk kwan), you shouted. 164-17.
  na sōl lūk kwān (for na sōl lūt kwān), you have burned. 174-4.
  ū na nūn tōb bān (for ū na nūn tōt bān), around you must burn. 104-10.
  nōl kūb bān (for nōl kūt bān), will float ashore. 85-10.

t' of k'wūt', on, becomes n before words beginning with n:
  k'wān na gai, on it he walked. 78-1.
  k'wān nōl tiī, she put it on. 181-3.

g preceded by ŋ becomes ŋ or disappears:
  na hūn șt (for na hūn șt), you untie. 123-7.
  tē'ēn a nī (for tē'ēt gā nī), killed. 157-5.
  tē'n nūn ỹī (for tē'n nūn ỹī), he brought. 135-11.

MODIFICATION OF SYLLABLES

It is well known that syllables of greater importance of meaning are rendered more emphatic by methods which are characteristic of the languages in which they occur. English, in common with other languages of Germanic origin, has a strong stress accent. Ancient Greek and certain modern Slavic languages have a variation in pitch. Variations of stress are undoubtedly due to changes in the pressure exerted by the lungs upon the air column and are brought about by an unusual incitation of muscles controlling breathing. The increase of pitch, in like manner, is due to an extra forcible incitation and contraction of certain muscles of the larynx.

It seems that in Kato and other Athapascan dialects there are similar grades in the force exerted by the muscles in closing and adjusting the mouth passage. It was formerly held that these were secondary effects of stress accent, although such accent is

nearly absent at the present time. It seems more reasonable to look upon these differences of enunciation as coördinate with, if not independent of, stress and pitch.

Such differences in muscular tension of the walls of the mouth, and of the tongue should alter the resonance of the buccal cavity, and the quality of the vowels, render stops and affricatives simple spirants, and cause final consonants to disappear.

The following diphthongs lose their final component:
- *-ai becomes - *a, stem, to have, position.
- *-yai becomes - *ya, stem, to go.

The quality of the vowels changes in the following:
- ta- becomes tā-, prefix, relating to water.
- ka- becomes kāl-, prefix, up.
- ye- becomes yī-, prefix, in.
- -del- becomes -dūl, stem, go.
- -sil becomes -sūl, stem, to strike.
- kō- becomes kwāt-, prefix, down.

The sonant *l becomes a surd spirant *L:
- *-ul becomes -dūl, stem, of swimming fish.
- *-kal becomes -kāl, stem, to break.
- *-qal becomes -qāl, stem, to walk.

Affricatives become spirants:
- *-yats becomes -yas, stem, to snow.
- *-yite becomes -yīc, stem, to rest.
- *-gets becomes -gūc, stem, to look.
- *-k'ats becomes -k'as, stem, of long object.

Final stops disappear:
- *-lat becomes - *la, stem, to jump.
- *-yot becomes -yū, stem, to chase.
- *-yeu becomes -ye', stem, to chase.
- *-lao becomes -la', stem, to do.
- *-k'ao becomes -k'as', stem, to be fat.

Not only is the duration of the entire syllable lessened in these instances in which a diphthong becomes a simple vowel, an affricative a simple spirant, and a final stop disappears, but vowels in the weaker forms are shorter.

Stress and pitch seem to vary but slightly except that at the conclusion of a sentence or any part of it spoken separately the voice falls much as in English.
MORPHOLOGY

NOUNS

The nouns of Kato are of the same sort and fall into the same classes as Hupa nouns already fully discussed. In the first class, monosyllables without evidence of formative elements, there have been found sixty-eight. Of such Hupa nouns forty-eight have been listed. Of these Kato nouns sixteen are believed not to exist in Hupa either as simple words or elements of words, while seven of the Hupa monosyllables are not known in Kato. The Hupa have descriptive names in the place of these Kato nouns, the apparently original ones. In several instances the change appears to be recent. The ordinary Hupa word for water is ta'nan, what one drinks, but tō is still employed in compounds. Nouns similar to these Kato words are generally in use throughout the territory intervening between Hupa and Kato territory and are to be considered Athapascan nouns that have disappeared in Hupa.

SIMPLE, MONOSYLLABIC

The following nouns seem to have no formative elements.

a', cloud. 74-6. (Pl. 12, fig. 1.)
ał, firewood. 137-16.
yə', sky. 77-13. (Pl. 12, fig. 2.)
yə's, head louse. 152-5. (Pl. 12, fig. 3.)
yas, snow. 74-3. (Pl. 12, fig. 4.)
yə, house. 97-6. (Pl. 15, figs. 13, 14.)
yō', scoter. 122-6. (Pl. 5, fig. 9.)
yō's, bead. 145-7.
wō's, leg. 79-10. (Pl. 5, fig. 3; pl. 12, fig. 5.)
lāt, seaweed. 84-12.
lō (lō's), frost. 74-3.
Łets, clay. 80-1.
Łōn, rodent, squirrel. 96-9. (Pl. 2, fig. 1; pl. 20, fig. 2.)
Łōk', steel-head salmon. 84-5. (Pl. 12, fig. 6.)
Łōt, smoke. 141-2. (Pl. 12, fig. 7.)
Łe', night. 81-4.
Łō', herb, grass. 71-3. (Pl. 2, fig. 8; pl. 12, fig. 8.)
main, weasel. 74-2. (Pl. 6, fig. 5.)

14 Ibid., III, 13.
net, land, earth. 71-1; 74-9. (Pl. 20, fig. 9.)
sai, sand. 85-9.
se, stone. 71-3. (Pl. 5, fig. 1.)
sis, otter. 73-4.
slus, ground squirrel. 73-7. (Pl. 12, fig. 10.)
ske't, mush. 110-8.
ca, sun. 74-9. (Pl. 12, fig. 11.)
scek, spittle. 154-14. (Pl. 12, fig. 12.)
sic, ochre. 80-4. (Pl. 15, fig. 12.)
skie't, orioles. 72-15.
bafi, doe, female. 165-9, 182-2.
bet, rope. 101-7. (Pl. 12, fig. 13.)
bus, slide. 86-11. (Pl. 12, fig. 14.)
bu't, stomach. 110-1.
dañ, pile. 133-10; 181-6.
det, whooping crane (♀). 73-14.
djañ, mud. 155-6.
dje't, pitch. 137-13.
djeñ, day. 82-8.
tó, water. 71-1. (Pl. 7, fig. 4; pl. 12, fig. 15.)
tútas, cane. 174-7.
tw'al, basket cradle. 113-12.
të't, brush. 76-7.
tw'tun, bone. 110-1.
tc'un, tree. 71-3.
tc'añ, food. 85-5.
tc'õ, boat. 127-10.
tc'o't, black-bird. 72-15.
tc'tun, noise. 107-8.
t'añ, feather. 105-14. (Pl. 7, fig. 7.)
t'eñ, blanket. 110-5.
t'ee (t'ee), coal. 142-7; 147-9.
ges, black salmon. 84-3. (Pl. 12, fig. 16.)
gác, yew.
ka'õ, goose. 73-14.
ka'ñ, a feather headdress. 176-17.
ka'i, winter.
kôs, cough. (Pl. 12, fig. 17.)
kwe't, track. 108-13.
kwof, fire. 81-3. (Pl. 4, fig. 5.)
kwôt, stream, creek. 90-15.
kwóc, whitethorn (a shrub). 166-3.
k'añ, arrow. 110-10.
k'ai, hazelnuts. 94-5.
k'mñ, Juneberry. 133-3. (Pl. 4, fig. 8; pl. 11, fig. 2.)
k'un, hazel. 133-10. (Pl. 12, fig. 20.)
k'õe, alder. (Pl. 12, fig. 18.)
k'wao, fat. 88-15. (Pl. 12, fig. 19.)
qó, worms. (Pl. 8, fig. 7.)
WITH POSSESSIVE PREFIXES

Nouns capable of intimate possession, such as parts of the body, and terms of relationship, seldom or never occur without a possessive prefix. These prefixes are:

- **a-**, reflexive.
  - a t’a, her own blanket fold. 181-9. (Pl. 7, fig. 8; pl. 13, fig. 1.)
- **c-** or **s-**, first person singular.
  - c dji⁷, my heart. (Pl. 13, fig. 14.)
- **n-**, second person singular.
  - nat, your sister. 132-4. (Pl. 13, fig. 10.)
- **n⁰-**, first person plural.
  - n⁰‘sif, our heads. 129-10. (Pl. 5, fig. 8.)
- **n⁰’-**, second person plural.
  - n⁰‘sif, your heads. 172-15.
- **n⁶-**, your mother. 135-2.
- **n⁶⁰n⁴**, second person plural.
  - n⁶ⁿᵗᵉ, your (pl.) noses. 97-9.
- **b-** or **bi-**, third person of singular or plural definitely mentioned or understood persons or things (pl. 14, fig. 3).
  - bunte, his nose. 80-7.
  - bi ne⁶, its (feather’s) back. 127-5.
- **uí-** or **û-**, third person singular or plural of persons, animals, or objects (pl. 13, figs. 2-9).
  - û na⁵, her eye. 152-10. (Pl. 13, fig. 5.)
  - û teₐ⁴, her apron. 165-8. (Pl. 13, fig. 3.)
- **kw-**, third person singular or plural of persons or things referred to indefinitely.
  - kw da⁹, his mouth. 123-2. (Pl. 14, fig. 7.)
  - kuc-, third person plural.
    - kuc na tao h₄, without their knowledge. 155-8.
  - te’-, third person of detached, unassociated members.
    - te’si⁴, head. 128-5.

*Parts of the Body*²⁵

- ânte, nose. 80-7; 98-2.
- we ci⁴, eggs. 111-9.

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²⁵ In, 14-16.
-wō's, tooth. 181-8. (Pl. 4, fig. 2; pl. 14, fig. 4.)
-wō's, leg. 151-18. (Pl. 5, fig. 3.)
-la's, hand. 154-1; 164-1.
-la't, penis. 80-8.
-La, butt. 93-10.
-na's, eye. 180-7. (Pl. 13, fig. 5.)
-ne's, back, back-bone. 133-3.
-ne's, lower leg. (Pl. 13, fig. 12.)
-sa ye, its shell. 151-9.
-sa ke's, spleen. 133-4.
-sf, head. 76-1. (Pl. 5, fig. 8.)
-sf da's, crown of head. 79-4. (Pl. 14, fig. 12.)
-so'c, tongue. 110-3. (Pl. 13, fig. 4.)
-so se', sting. 156-1.
-sū's, meat. 134-14.
-sūn ta's, forehead. 132-15.
-sūts, skin. 110-4. (Pl. 13, fig. 7.)
-sle's, anus. 143-13.
-bū's, stomach. 148-6. (Pl. 11, fig. 5.)
-da's, mouth. 122-13. (Pl. 14, fig. 7.)
-da's, voices. 106-14.
-da'g, beard.
-de's, horn. 74-10. (Pl. 13, fig. 9.)
-des ke's, lungs. 180-12.
-di ce's, shoulder. 75-1.
-dji's, heart. 125-17. (Pl. 13, fig. 14.)
-dji k'e's, intestines. 113-3.
-te le's, liver. 180-12.
-t'a, tail. 86-4.
-t'ai, neck. 153-11.
-ts'e k'e, navel. 132-10.
-ts'in ne, leg. 107-12.
-ts'o's, milk. (Pl. 13, fig. 6.)
-tc'a ni, faeces. 142-7.
-tc'i's, tail. 163-1. (Pl. 14, fig. 5.)
-tc'i's, mind. 101-14.
-tc'i's, heart. 101-5. (Pl. 5, fig. 4.)
-dji ci te's, lungs. 80-2.
-teō djit's, kidney. 80-2. (Pl. 14, fig. 11.)
-teōk, testicles. 80-9.
-te'ge's, ear. 110-2.
-ga's, hair. 143-8.
-ge's, marrow. 110-2.
-ki's, butt.
-kwa ne, shoulder, arm. 102-15; 160-7.
-kwañ ke, ribs. 133-9.
-kwe's, foot. 96-14. (Pl. 14, fig. 8.)
-qō't, knee. (Pl. 13, fig. 13.)
Clothing

-Łol, strap. 97-7.
-t'a, pocket, blanket fold. 181-9. (Pl. 13, fig. 1.)
-t'a ni, skirt. 165-6. (Pl. 13, fig. 2.)
-tea", apron. 165-8. (Pl. 13, fig. 3.)

Relatives

-at', sister. 132-4. (Pl. 13, fig. 10.)
-it'e, daughter. 128-7.
-ąnt, -ńń di, cousin. 139-4; 145-2; 146-3. (Pl. 14, figs. 1, 2.)
-yacts, young. 80-14; 182-4.
-ya teete, daughter. 176-10.
-ye* důn, husband. 132-14.
-lő, dog. 101-6.
-nan, mother. 105-7.
-ta*, father. 105-7.
-t'ė ci*, sister. 144-4.
-teel*, younger brother. 141-12.
-teai, grandchild. 97-16; 148-11. (Pl. 14, fig. 13.)
-teg, grandmother. 97-16. (Pl. 13, fig. 15.)
-teńa ki nai, uncle. 172-3.
-te'gi, grandfather. 153-10. (Pl. 13, fig. 11.)
-gän dan, son-in-law. 128-7.
-ki, boy. 102-6. (Pl. 14, fig. 9.)
-kik, children. 105-2.

Nouns with Suffixes

Nouns as such never seem to be used with prefixes other than the possessive ones. They take, however, a large number and variety of suffixes. With the exception of those first listed, these suffixes have very definite meanings and most of them are traceable to other parts of speech. Those indicating size, shape, and color differ from adjectives only in the absence of the usual prefixes before the stem. The postpositions used with nouns are not different from those forming phrases with pronouns, but in a few cases the noun does not seem to exist without the suffix. These postpositions might easily become inflectional cases should they suffer obscuring phonetic changes or their use except as nominal suffixes cease.
Plural and Class Suffixes

-ki, -k, forming the plural of terms of relationship and classes of people.

té'yán, woman. té'yán ki, women. 110-15.
ski, boy. 116-16. skik, boys, children. 132-8. (Pl. 14, figs. 9, 10.)

-te'ũň, a suffix indicating one of a class, "that kind of a person."

té'yán te'ũň, old woman. 152-3.
s té'ó te'ũň, my grandmother. 147-5.

-ta, the plural of the last.


-k'ûčts, of uncertain meaning.

té'yán k'ûčts, old women. 105-1.

-kí ya hûň, a class suffix used particularly with place names.

It is the usual termination of the people of a village as distinguished from the locality.

tô kí ya hûň, water people. 175-1.

-gûň, of uncertain meaning.

l tsó gûň, foxes, "the ones that are blue" (†). 73-3. (Pl. 8, fig. 3.)

Locative Suffixes

-dûň, at.

ye dûň, house place. 113-15.
yi té'ó dûň, dance house place. 145-6.
se ta'dûň, rock creek. 107-16.
tô n côn dûň, water good place. 173-7.

-ta', among.

ye bî' ta', houses among. 171-17.
ne' k'wûtn ta', countries. 157-6.
n côn ta', good places. 173-6.
cà'na'ta', creeks, creeks in. 82-14; 93-11.
tûn ta', trees among. 171-9. (Pl. 15, fig. 6.)
ô ye ta', under places. 180-1.

-te'ũň', toward.

tô te'ũň', water toward. 176-6.
ô nàn te'ũň', my mother toward. 120-11.

-bî', in.

ye bî', house in. 97-11.
ô dâ' bî', its mouth in. 128-15; 182-5.

15a See also the postpositions used with pronouns, p. 39.
wa te'a mi', hole in. 156-12. (Pl. 4, fig. 9.)
sak tö' bi', spring in. 115-10.
eie bi', red mountain, 102-15. (Pl. 15, fig. 12.)
to'g' bi', basket in. 115-10.
kwo' mi', fire in. 110-4.

-bi'k', inside.
y'a' bi'k', sky in. 101-15. (Pl. 15, fig. 15.)
ye bi'k', house inside. 99-5. (Pl. 15, fig. 14.)
tö bi'k', water inside. 155-4.
ö la' bi'k', its hands in. 114-8.

-bi' ün', toward, in.
y'a' bi' ün', sky in. 81-2; 99-10.
ye' bi' ün', house in. 110-15. (Pl. 15, fig. 13.)

-k'wút', on.
ö tei' k'wút', its tail on. 162-14. (Pl. 9, fig. 9; pl. 20, fig. 1.)
ü si' da k'wút', crown of its head on. 76-5.
ü de' k'wút', its horn on. 76-3.
ne' k'wút', land on. 92-2.
tö k'wút', water on. 82-1.

-ü ye, -wi-ye, under.
ca ü ye hûn, sun under. 75-4.
tu'un wi ye, tree under. 97-3.

-tûk güt, between.
ö na' tûk güt, its eyes between. 76-2.
ye tûk güt, house middle. 142-13. (Pl. 16, fig. 1.)

-l'út, middle (time or place).
ne' l'út, earth middle. 75-3; 104-11. (Pl. 16, fig. 4.)
cin l'út, summer middle. 121-14.
ta l'út, ocean middle. 126-8. (Pl. 16, fig. 7.)
kai l'út, winter middle. 113-14.

-bûn a, before, alongside of.
kwo' òhûn a, fire before. 119-16.

-ne' ün', other side of, "its back towards.''
tö ne' ün', water other side. 126-6. (Pl. 11, fig. 9.)

-û nö', behind.
ne' û nö', hill behind. 164-16. (Pl. 4, fig. 7.)
tu'n nö', tree behind. 103-5.

-lai', on top, "'summit, point."
ne' lai', earth top. 161-14.
û lai', their tops. 132-15.
kw te' lai'k', his tail end. 177-12.
Suffix with Instrumental Meaning

-būl, with, by means of.
na gī būl, quiver with. 176-16.
ts'āl būl, basket with. 148-2.
tca' būl, dress with. 166-6.
k'a' būl, arrows with. 166-7.
k'ūm mūn, withes with. 167-1.

Suffixes of Temporal-Modal Force

-būn, for, will be (usually expresses purpose but sometimes predictions of the future only).
a' būn, cloud will be. 79-2.
a' būn, for clouds. 78-8.
ō te lī būn, its liver for. 109-6.
sak tō būn, ‘spring will be.’ 88-4.

-wūn, for.
tē'a wūn, food for. 123-3.
tō wūn, water for. 118-4, 123-3.

-hit', -hūt, at time of.
cīn hit', summer time. 121-5.
cīn hūt, summer time. 155-1. (Pl. 16, fig. 6.)
dījī būt, day time. 105-7.
kāi hit', winter-time. 121-11.

-ūt, at (perhaps a form of the last).
Le'ūt, night in. 136-1.

-ye, it is (simple affirmation).
ne' ye, country is. 120-14.
cnā' ye, my mother is. 120-11.
dō ū sbā' yī, it is not meat. 134-14.
dō lō gū' ye, it is not rattlesnake. 177-4.

-ūn gī, it is (affirmation with element of surprise).
cā ūn gī, sun it is. 100-7.

-tē le, will be.
k'ai t būn, tē le, burden baskets will be. 140-12.

Suffixes of Size, Shape, and Color

-tcō, large, an augmentative suffix.
Lō'tcō, bunch grass. 94-7.
dūc tcō, grouse. 72-5.
gac tcō, redwood (gac, yew). 86-8. (Pl. 14, fig. 14.)
ges tcō, elk (ges, deer in other dialects). 71-5. (Pl. 14, fig. 15.)
-tc, -ts, small, a diminutive suffix also used to form terms of endearment. Cf. ū tu'unts, close by, from -tc'ūnē, by or near.

dūtcē, quail. 72-5. (Pl. 14, fig. 16.)
yētcē, wolf. 71-6. (Pl. 15, fig. 1.)
ē tcaite, my grandchild. 97-16. (Pl. 14, fig. 13.)
elōts, my dog. 89-14.

-yac, young, small.
skīts yac, baby small. 113-12.

With both diminutives.
nō ni yacēts, grizzly small. 92-5.
ca'na'1 yacēts, creek little. 115-13.
Cf. c yacēts, my little one. 182-4.
Cf. se ū yacēts, stones small. 76-10. (With possessive prefix ū.)

-sōs, slender.
de' sōtcē, spike back. 108-8.

-tel, -ter, wide, flat.
lō' tel, flat fish (†)
Lō' tel, bear grass. 176-17.
tē'ūn tel, "bone-wide" turtles. 90-14. (Pl. 15, fig. 5.)
Cf. se n te'tēts, stone flat small. 133-3. (With adjective prefix.)

NOUNS COMPOUNDED WITH NOUNS

The First Noun qualifies the Second

in tē' bañ, deer female. 144-2.
dūs t'e kō ne, madrone berries. 134-17.
tō a' būn, "water cloud,"1 for dew. 79-4.
tō sī' dūn, water-head-place. 87-6.
tō būt tēō, water panther. 177-13. (Pl. 20, fig. 8.)
tē'ūn wō'1, "tree teeth,"1 hook. 158-7.
tē'ūn sī' ts, "tree head small,"1 pine cones. 115-13, 117-12.
tē'ūn sūts, "tree skin,"1 bark. 137-14.
ges na'1, salmon eye. 121-12.
k'a'1 s'un tiā'1, arrow-bow. 144-9.

With Possessive Prefix for Second Component

ne' ū tel' dūn, earth tail place. 86-9.
te' kak' bī ne'1, net's back-bone. 119-18.

With the Second Component modifying the First.
lōn te' ges nes, "rodent-ears-long,"1 a mouse. 73-10. (Pl. 2, fig. 1.)
tō nai wō' nes, "fish-teeth-long."1 86-1.
NOUNS COMPOUNDED WITH ADJECTIVES

-n tcag, large.
  n o' n tcag, country large.  97-16.
  wō' n tcag', teeth large.  86-5.  (Pl. 4, fig. 2.)

-n cōn, good.
  tō n cō n it, water is good because.  87-10.

-n ce', bad.
  ne n ce', land bad (mud springs).  106-2.

-nes, long.
  la e' nes, 'hand long,' raccoon.  112-5.  (Pl. 1, fig. 1.)
  Lō' nes, grass long.  80-3.
  tea nes, wasp.  150-14.
  te' k'e nects, 'navel long,' an eel.  91-2.  (Pl. 20, fig. 7.)

-n telts, broad.
  kwe' n telts, 'foot broad,' a heron.  (Pl. 20, fig. 11.)
  da' ya' n tel i teł', 'mouths are flat large,' geese.  158-14.

-n lūts, stout, rough.
  tō n lūts, water rough.  86-6.

-L gai, white.
  ya' L gai, louse white.  (Pl. 15, fig. 8.)
  Lōn L gai, woodrats.  73-9.  (Pl. 20, fig. 2.)
  nāl gi' L gai, white duck. 148-3.
  sel gai, white stones.  143-4.

-L tełk, red.
  yō' L tełk, beads red.  176-14.
  tō nai L tełk, fish red.  124-15.

-L tsō, blue.
  Lō' L tsō, grass blue. 76-6.  (Pl. 2, fig. 8.)
  tō nai L tsō, fish blue. 124-15.  (Pl. 20, fig. 12.)

-L cūn', black.
  tō L cūn' kwōt, black water creek.  98-14.
  ges L cūn', salmon black.  86-2.  (Pl. 15, fig. 10.)

-L cīk, shining.
  na e' L cīk, eye shining. 181-9.  (Pl. 15, fig. 11.)

-dūl bai, grey.
  ne e' dūl bai, (a pine).  86-13.  Pl. 20, fig. 5.
  Lēte bai, grey clay.  76-2.

-dūl k'ūs, brown (?).
  Lō' dūl k'ūs, grass dry.  121-13.
-t tük (?)
  tūn l tük, leaves die(?). 121-13.

-t biņ, sharp, pointed.
  sī’ t biņ, “heads sharp,” a bulb. 149-4.

-te’īts, rough.
  se te’īts, sandstones. 77-9. (Pl. 16, fig. 3.)

-lañ, many.
  wō’ lañ, “teeth many.” 149-1.

The two following probably have descriptive adjectives.
  ta dūl gai teo, hornet. 151-2.
  ta dūl k’ūts, milksnake. 178-9.

NOUNS COMPOUNDED WITH VERBS

  yō’ tei in, “head(?),” abalones. 84-12. (Pl. 20, fig. 6.)
  Lō’ n’éi, “grass lies,” grass game. 146-11. (Pl. 20, fig. 4.)
  ne’ te li’, earthquake. (Pl. 20, fig. 9.)
  nūn kwōs tiñ, wild cherries. 131-12.
  sai s’an dūl, “sand lies place,” sandy beach. 125-4.
  sī’ bis ‘ān, “head(?)”; head net. 113-8; 147-1.
  sūs būn nūl t’ai, “skin with it flies,” flying squirrel. 122-12.
  sne’ būn gūl li’, “my leg with is tied,” my garter. 176-16.
  tsō’ kwi t’ūn, “milk it has,” a plant. 149-2.
  tei̇m met yits, “stick tied with,” net stick. 169-5.
  tei’l ta’ nac t bats, “tree among(?)”. The name of a monster. 181-10.
  teun kw t’in, “tree (trunk) (?] it has,” a kelp. 84-15.
  t’an gūl yōs, devil-fish. Contains stem -yōs, to pull. 85-13; 124-16.
  t’a kwil li’, “feathers they have,” birds. 88-8.
  gac tsō’ kwi̇t k’ūl yōs gits, “redwood on it runs,” red squirrels. 73-7.
  k’ai’l t but, “hazel(?)”; burden-basket. 135-6.

ADJECTIVES AND VERBS USED AS NOUNS17

-yū’ kai, morning, days. 82-10; 105-14.
  yis t’ōt, fog. 126-2. (Pl. 18, fig. 15.)
  Cf. yī gūn t’ōt, it is foggy. 121-10.
  yis kan, day. (Pl. 18, fig. 14.)

17 III. 21. A number of the words here listed have the form of verbs, but their meaning is uncertain.
le dōn⁵, salt. Stem -don, to be bitter. 85-3.
L tag, black oaks. 89-17. (Pl. 16, fig. 12.)
L te'le, dust. 165-1.
nal te'l, white thorn. 91-14. (Pl. 16, fig. 10.)
nat. côt, grass-snakes. 124-11. (Pl. 10, fig. 8.)
nat. tōn⁴ts, kangaroo-rats. Stem -tōn, to jump. 73-10.
na nin 'aie k'wūt, 'it has horizontal position on,' dam on. 168-9.
na dīl¹, 'they hang,' sugar-pines. 85-17. (Pl. 1, fig. 8; pl. 19, fig. 1.)
na gai, 'it travels,' moon. 81-4.
na n ē k'wēt, "it has horizontal position on," dam on. 168-9.
na dīl¹, 'they hang,' sugar-pines. 85-17. (Pl. 1, fig. 8; pl. 19, fig. 1.)
del kūt, magnesite beads. 176-13.
sel. kūt dī, kingfishers. 92-17.
sel. kā, "it is carried," or "it carries," quiver. 114-1.
na lāt, grass-snakes. 124-11. (Pl. 10, fig. 8.)
na lāt, "they jump." 73-10.
na lāt, dust. 165-1.
sakWto, springs. Stem -to, water. 88-4.
sel. kā, "it is carried," or "it carries," quiver. 114-1.
na n ē k'wēt, "it has horizontal position on," dam on. 168-9.
na dīl¹, 'they hang,' sugar-pines. 85-17. (Pl. 1, fig. 8; pl. 19, fig. 1.)
na n ē k'wēt, "it has horizontal position on," dam on. 168-9.
na dīl¹, 'they hang,' sugar-pines. 85-17. (Pl. 1, fig. 8; pl. 19, fig. 1.)
na gai, 'it travels,' moon. 81-4.
na n ē k'wēt, "it has horizontal position on," dam on. 168-9.
VERBS WITH INSTRUMENTAL PREFIX USED AS NOUNS.

būr. sūl tī, seed-beater. 113-11.

būr. te qōt, net rope. 117-14.

būr. gūl gūs, fire-sticks. 110-11. (Pl. 19, fig. 2.)

POLYSYLLABIC NOUNS UNANALYZED

a dīts, grasshoppers. 94-8.

in tec'ē, deer. 71-4.

ī da kā, (a kind of rope). 114-1.

ī dāk wē, Wallaki. 172-8. (Pl. 17, fig. 1.)

ō 'est', pestle. 113-9.

ūn tečān, peppernuts. 94-7.

yai in taś', mole. 96-6. (Pl. 20, fig. 3.)

wa tē'ākā, hole through. 78-9. (Pl. 16, fig. 8.)

īn ec'ē, buckeyes. 94-6. (Pl. 1, fig. 2.)

na' gūl, dog. 91-9. (Pl. 2, fig. 3; pl. 16, fig. 11.)

na' nēc, people. 71-7. (Pl. 16, fig. 13.)

na' ce k'a, robin. 72-9. (Pl. 17, fig. 2.)

na tēl, orphan. 102-6. (Pl. 10, fig. 5.)

na tēlāte, swallows. 73-1.

na kōkā, clover. 152-5.

nō k tečā, tar-weeds. 94-4. (Pl. 16, fig. 15.)


nūn kā dūn, men. 165-13.

sa tečā, tan-oaks. 88-9.

ūn sūnte, chipmunks. 73-8.

sūn tants, a star or constellation. 99-8.

sūl gits, lizard. 97-4.

cā' na'ē, creek. 79-3. (Pl. 4, fig. 6; pl. 17, fig. 4.)

ban yō, turtle-doves. 92-16.

ban sīts, sandpipers. 73-2.

ban tōs, ocean. 86-10. (Pl. 17, fig. 5.)

ban tō, mussels. 84-13. (Pl. 17, fig. 8.)

be līi, eels. 90-15. (Pl. 17, fig. 7.)

be līt, spear head. 133-8. (Pl. 17, fig. 10.)

be kats, fish-spear. 128-12. (Pl. 17, fig. 11.)

be nīc, prongas. 170-5.

būs būnte, barking-owls. 92-8. (Pl. 17, fig. 9.)

būste lō, owls. 72-2. (Pl. 17, fig. 12.)

būste k'āi'ī, seagulls. 72-12. (Pl. 15, fig. 16.)

das tečā, gopher. 122-6.

da taits, grey squirrels. 73-6.

da tēsā, ravens. 72-2.

da tec'ē, storage bin. 138-2.

dō'ī, bears. 71-6.

18 III, 16.
dül lants, salamanders. 84-4.
dûn dai, arrowheads. 111-4.
ta ka tœe, crawfish. 91-2.
te'le', sack. 113-7. (Pl. 18, fig. 1.)
tûn nî, roads.18a 78-4. (Pl. 17, fig. 13.)
tûn nûc, manzanita berries. 94-5.
tsûs na, yellow-jackets. 91-7.
tca:nî, varied robins(f). 72-4.
tei lîl, screech-owl. 92-8.
teil lë k'e, slime. 161-12.
tein nûn¹, stuffed deer heads. 177-10.
tei tean, white oak. 131-11.
tœô bâq, poison. 163-7. (Pl. 18, fig. 6.)
tœûn nûc teûnte, Lewis's woodpecker. 72-8. (Pl. 19, fig. 13.)
tœûn te' bâq, woodpeckers. 72-11. (Pl. 18, 4.)
tœûn te' gi tœô, pileated woodpecker. 72-8.
tœ'a la, sunflower seed. 138-6. (Pl. 18, fig. 2.)
tœ'a hâl, frog. 112-11. (Pl. 18, fig. 3.)
tei' be teîlû, fir. 86-8.
tœô la ki, meadow-larks. 72-10.
tœûn t'ya, condors. 72-7.
tœûn t'âlû, acorns. 88-15.
tœûs sai¹, chicken-hawks. 72-3.
tœ'ûsâ, mill-basket. 113-9.
tœû be, fîrs. 90-1.
tœ' la ki, sapsuckers. 73-11.
tœ' lë linte, humming-bird. 102-12.
tœ' na' dûn, adolescent girl. 175-10. (Pl. 19, fig. 7.)
tœ' ai teûn, coyote. 72-1. (Pl. 18, fig. 9.)
tœ' kak¹, net. 84-8. (Pl. 18, fig. 5.)
t'ë ki, girls. 111-2. (Pl. 17, fig. 15.)
gû ya nî², stars. 74-7. (Pl. 18, fig. 7.)
kæ' kits, old man. 108-2. (Pl. 18, fig. 8.)
ke bûl, knife. 78-11.
ki tsa¹, basket-pot. 113-8.
kwi yint, pigeon. 73-12. (Pl. 18, fig. 10.)
k'il lek, boy. 119-7.
k'un ta gits, jack-rabbits. 73-6. (Pl. 18, fig. 11.)

PRONOUNS18b

PERSONAL

The personal pronouns seem originally to have been confined to the first and second persons, although it is not easy to explain

18b III, 29.
all the third persons as demonstratives. There is a simple form, nominative or accusative; and an emphatic possessive, a dative, and an ablative of accompaniment, apparently formed by suffixes.

First Person Singular

cī, I. 78-14. (Pl. 39, fig. 9; pl. 42, fig. 1.)
cī ye⁶, mine. 141-6. (Pl. 22, fig. 2.)
eā, for me. 103-9. (Pl. 22, fig. 1.)
eń, with me. 137-2.

First Person Plural

ne hiń, we. (Pl. 5, fig. 8.)
n hi ye⁶, ours.
nń, with us. 125-2.

Second Person Singular

niń, you. 79-7.
ni ye⁶, yours. 117-1.
na, for you. 152-6.
ń, with you. 131-6.

Second Person Plural

nō hiń, you. 114-11. (Pl. 28, fig. 13; pl. 31, fig. 11.)
nō hi ye⁶, yours.

Third Person

bī ye⁶, their, hers. 85-4; 88-5.
ba, for it. 113-12; 149-12.
bń, with it. 85-5.
kīn, himself. 88-7.
kīn yi, himself. 149-13.
kīn hai⁶, him (only). 130-3.
kī ye⁶, his. 91-9.
kwa⁶, for him. 110-9.
kń, with him. 91-9.

PERSONAL DEMONSTRATIVES¹⁹

hūn, he, him.¹⁹a 174-1; 123-16.
hń, with him. 94-13.
yōō, that fellow. 167-9.

¹⁹ It appears that a suffix ń renders a demonstrative personal in its application. This also appears in Hupa adjective pronouns and numerals.
DEMONSTRATIVES

hi, the (practically an article). 99-6.
hai ye, that. 128-12.
ha yi, those, that one. 171-19. (Pl. 21, fig. 15; pl. 45, fig. 1.)
Cf. the personal demonstratives hūn and hūl above.
di, this. 74-9. (Pl. 24, fig. 15.)
yi, right here. (Pl. 21, fig. 6.)
yi bañ, the other side. 133-4. (Pl. 21, fig. 8.)

The more remote has the vowel ō or ŭ with the same initial.
yū l, over there. 100-4.
yū i, yonder. 100-7.
yō ye, there it is. 182-3.
yō ōn, over there. 127-14. (Pl. 21, fig. 7.)
yō ōn ha', yonder. 75-3.
yō yi de', far north. 77-1. (Pl. 21, fig. 5.)
yōk', way. 104-9.
Cf. yōn, that fellow. 167-9.

INTERROGATIVE AND INDEFINITE PRONOUNS

These words are usually interrelated in form. There are four initial syllables: da-, relating to conditions; dan-, used of persons; di-, employed with things and non-human persons; ta-, which is used of both time and place. With each of these there are found three suffixes: -dji (-g! ), the simple interrogative, asking which one of several; -ca, -cañ (-ca- plus ŭ) with an implication of wonder in the question; and cō', used in affirmations concerning anything unusual or mysterious.

da t ya ter, why. 129-10.
dan dji, who. 120-15.
di dji, what. 97-14.
ta dji, when, 102-12.
ta dji, where. 182-3. (Pl. 10, fig. 7; pl. 22, fig. 7.)
10, fig. 7; pl. 22, fig. 7.)
da t ya cañ, what is the matter. 114-7.
dan cañ ha', who. 144-4.
di can, what. 79-2.
ta can, where. 78-7.
da t ya cō kwue, something is wrong. 114-13.
dan cō kwue, stranger. 119-8.
ta cō kwue, somewhere I guess. 119-1.

20 III, 32.
The following are also of interest:

da t' in cō, very bad. 122-12.
da t' i cā nūn, what will be. 85-6.
dac t' ya cō de, if anything is wrong. 166-10.
dac t' in dį, why does it do that? 130-14.
dān te cō, something. 167-3.
dān te ca mūn, how will it be? 78-13.
dān te cō kwūc cūt, something wrong I guess because. 115-4.
dān te gį, how. 139-11.
da ya t' in ge, what did they do? 166-4.
da ya t' n dį, what they say. 153-14.
dān lāf gi, how many. 166-12.
dān ca uūn, who is it? 170-12.
dā nī caį, who is he? 97-4.
da hīn tef, what you say. 176-10.
dī kwūn dį, what kind. 80-4.
dō n kē hit', nothing too bad. 128-1.
dō dan cō, nobody. 99-4.
t'a din cō kwūc, for some reason. 136-8.

ADJECTIVES

Qualifying adjectives are conjugated after the manner of verbs. The stems of such adjectives are listed with the verbal stems. Many adjectives are listed under nouns with which they form compounds.

PRONOMINAL ADJECTIVES

In addition to the strictly pronominal adjectives such as lāt, another, certain similar ones which are not conjugated are included.

ō wūn, some. 122-14.
wān t' a t, some. 91-10.
wūn, some. 95-6.
lāt, another, other. 76-3; 79-5.
lā mūn, will be many. 78-6.
lā ne, much. 120-15.
lān hit, much. 137-7.
lān dūn, many. 138-8.
lān tē le, will be many. 173-7.
lē ne t' ha t, people. 85-4. (Pl. 21, fig. 10; pl. 37, fig. 13.)
lā t, every way. 129-4.
lā t' kį, kind. 83-1. (Pl. 21, fig. 11.)

21 III, 33.
NUMERALS 22

The Athapaskan numerals are generally decimal in their arrangement. Kato follow a quinary system as far as ten. This undoubtedly is connected with the practice of counting the fingers, six being "one on the other side." The Yuki and Pomo neighbors of the Kato make use of octonary and quinary systems, respectively. Four nak ka nak ka, two-two, has displaced dni kút which prevails in the other Athapaskan dialects nearby.

CARDINALS

la ha⁴, one. 82-5.

nak ka⁴, two. 178-4.

nak ka⁴ nak ka⁴, four. 108-3.

la⁴ sa ni, five. 165-17.

yi ban la⁴ ha⁴, six only. 140-9.

yi ban nak ka⁴, seven. 166-1. (Pl. 20, fig. 13.)

yi ban tak', eight. 103-9.

yi ban nak ka nak ka, nine.

la⁴ L ba⁴ un, ten. 102-14.

la⁴ L ba⁴ un bû L ha⁴, ten with one.

na dön la⁴ L ba⁴ dön, twenty. 178-8.

ta dön, thirty.

MULTIPLICATIVES

tak' dön, three times. 165-11.

DISTRIBUTIVES

la ha⁴ ta, one at a time. 165-15.

nak ka⁴ ta ha, two in a place. 108-2.

tak' ta, three at a time. 165-16.

22 III, 32.
DIRECTIONAL WORDS

These directional words are closely connected with nouns in their meaning, the second syllable usually being a monosyllabic name of some direction or cardinal point. They differ from nouns in requiring a demonstrative prefix and in their use, which is usually adverbial.

-nûk', to the south, perhaps “up-stream” was its original meaning:
- yô yî nûk', way south. 75-9. (Pl. 20, fig. 14.)
- hi nûk', south. 139-13.
- hai nûk', here south. 150-14.
- hai nûk' k'a*, way south, south along. 86-15; 107-16.
- dî nûk', south. 75-6. (Pl. 20, fig. 15.)

-na ûn, from the south.
- yî na ûn, from the south. 107-9.
- hai na ûn, from south. 148-9.

-se*, to the west, down hill.
- yô yî se*, far west. 126-6.
- hai se*, down hill. 106-3.
- dî se*, west, down here. 77-11; 142-8.

-sin ûn, from the west.
- hai sin ûn, from the west. 78-10.
- dî sin ûn, in the west. 80-11.

-de*, to the north, perhaps originally “down-stream.”
- yô yî de*, far north. 77-1.
- hî de*, north. 77-1.
- hai de* te'ûn*, north toward. 115-7.
- dî de*, north. 76-12.

-da* ûn, from the north.
- yî da* ûn, from the north. 75-3.
- hai da* ûn, from the north. 78-8.
- dî da* ûn, from the north. 74-10.

-dûk, to the east, uphill.
- yî dûk', up hill. 180-3.
- yôk wî t'ûkw, far above. 77-3.
- hai dûk', up. 99-2.
- dî dûk', east. 75-4.

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32 ni, 328-330.
-da ûñ, from the east, down hill.
  hai da ûñ, down hill. 180-5.
  di da ûñ, from the east. 101-9.
-bañ, the opposite side, particularly of streams.
  yi bañ, other side. 133-4. (Pl. 21, fig. 8.)
  hai bañ, after that. 111-4.
  di bañ, to other side. 105-1.
Cf. L bañ ûñ, both sides. 144-10. (Pl. 21, fig. 9.)

ADVERBS24

Adverbs are mostly either monosyllables having adverbial meaning, like k'ûñ, recently, or such elements with demonstrative and negative prefixes.

PLACE

I niñ, in a corner. 132-12.
yôk wi t'ûkw, far above. 77-3.
yô k'ûñ, way off. 107-5.
ne se k'a, the long way. 140-17.
nes se, is far. 167-2.
nes dûñ, far. 75-6.
nes dûn ê, it is far. 140-17.
nes dûñ ha ê, far away. 86-14.
nûn kwî ye, underground. 75-8. (Pl. 21, fig. 12.)
hakw, right here. 160-1.
ha kwân, up there. 182-9.
da ê, up. 99-15.
de k'a, here. 79-2.
di ûn, up there. 109-10.
djañ ha ê, here. 97-9.
t ga ma, along shore. 77-1.
t ga mats, by the shore. 155-1.
kûn dûn ke, close. 104-13.
kûn dûntc, nearby. 79-6. (Pl. 22, fig. 12.)
kwûn nûn ûñ, up this way. 85-8.

TIME

han dût, next time. 136-4.
ha ci, long time. 134-3.
ha oeê dûñê, long time. 106-17.
ha oe kwêc, long time probably. 139-1.
hakw dûñê, then. 71-2. (Pl. 5, fig. 7.)
hô ta, then. 84-10.

24 In, 328-338.
dañ', already, long ago. 78-14; 121-13.
dañ', soon. 136-5. (Pl. 22, fig. 6.)
dó k'úñ, already, not recently. 136-7; 175-1.
dó k'úñ ha*, long ago. 155-15.
t'ún dūñ ha*, all the time. 113-1.
gún t'ó, now. 81-2.
kac bi*, tomorrow. 104-9. (Pl. 22, fig. 10.)
kw't nūñ, next time. 166-9.
k'ūñ, just now. 103-8.
k'ūn nūñ, before. 97-14.
k'ūn dit', before. 137-5. (Pl. 22, fig. 11.)
k'ūn dūñ, yesterday. 128-7. (Pl. 22, fig. 13.)
k'an cañ, this time. 167-8.
k'at de*, soon. 96-4. (Pl. 22, fig. 14.)

MANNER AND DEGREE

la kwa, just, only. 155-9; 164-11.
lakwit, for nothing. 166-9.
lakwit, anyway. 133-14.
nikts (ni ikts), slowly. 100-13; 140-16. (Pl. 21, fig. 13.)
saadúñ, alone. 120-16.
saadúñ ha*, alone. 87-7.
saadúñ k'wa, alone. 172-3.
súñ, little way. 161-5.
st'te, nearly. 123-8.
cañ, only. 78-6.
ca ní, only. 71-2.
có, too much. 82-10.
có*, in vain. 130-9.
có n cóñ, very well. 109-4.
cóñ kó, well. 166-5.
cóñk', well. 71-1. (Pl. 22, fig. 3.)
cóñ kwa, well. 181-13.
cóót', in vain. 159-12.
kakw, fast. 93-12.

POSTPOSITIONS25

The following elements when suffixed to nouns or pronouns
make prepositional phrases.25a

-ye, under.

ó ye*, under. 101-6. (Pl. 21, fig. 2.)
ó ye ta', under places. 180-1.

25 III, 339-343.
25a Cf. also the Locative Suffixes of Nouns, p. 24.
-wakw, to one side of.
    wakw, to one side. 97-4.  (Pl. 11, fig. 1.)
    nō'wa ka, about yourselves. 173-2.
    nō wakw, away from us. 173-5.

-laï̂, top, end, on top of.
    ū laï̂, its top. 108-13.  (Pl. 21, fig. 3.)

-L, with.
    bûr, with it. 85-5.
    kûr, with him. 91-9.

-na, around, encircling.
    ō na, around it. 77-2.

-na tâg ha'̂, without the knowledge of.
    kw na tâg ha'̂, without his knowledge. (Pl. 8, fig. 9.)
    ū na tâg ha'̂, not knowing. 156-9.
    nō na tâg ha'̂, without our knowledge. 129-15.
    kûe na tâg ha'̂, without their knowledge. 155-8.

-nîte, midway of.
    ō nîte, half-way. 122-15.
    ō ni te'̂t, its middle. 162-14.

-nō'̂, behind.
    ū nō'̂, behind it. 103-2.

-nê du'n, base of.
    kîn nê du'n, its base. 182-10.

-bîr, in. (The element may be -r, b being the pronoun.)
    bîr, in it. 97-13.  (Pl. 6, fig. 7.)
    di bîr, this in. 90-16.

-dâi'̂, outside of.
    ō dâi'̂, outside. 98-4.  (Pl. 21, fig. 4.)

-dûk', up, on top.
    kw dûk', top. 127-9.

-ta', among.
    bî ta', among. 107-14.
    di ta', this place. 157-5.

-tûs, over, beyond.
    ō tûs, beyond it. 77-12.
    kw tûs, over him. 156-14.

-tûk güt, between
    ō tûk güt, between. 160-9.
-te'ūnə, to, toward.
  a te'ūnə, to himself.  87-7.
  ō te'ūnə, to him.  79-9. (Pl. 3, fig. 4.)
  ū te'ūnəts, close by. 156-10.
  nō te'ūnə, to you. 97-7.
 L te'ūnə, together, toward each other. 104-1.
 kw ts'ūnə, to him. 174-2.
-te'ūn a, before, in front of.
  ū te'ūn a, before it. 153-3; 77-7.
-t'ūkw, above, beyond.
  ō t'ūkw, above, way back. 77-3; 104-11.
-t gūn, around, behind. 26
  a te gūn, around yourselves. 169-4.
-kwaə, for.
  kw kwaə, for him. 119-1.
  nō kwa, for us. 181-7.
-keə, behind.
  skeə, after me. 97-10.
  ske haunt, behind me. 141-8.
-k'e, back, in the opposite direction.
  at k'e, back of himself. 86-17.
-k'wuť', on (perhaps combined with a demonstrative).
  k'wuť', on it.  75-6.

PARTICLES AND INTERJECTIONS 27

at te, come on, well. 98-6; 125-7.
 a bi, stop. 100-1.
 ē he, that is so. 173-14. (Pl. 21, fig. 1.)
 ū wē, O yes. 100-10.
 ūn, it was. 182-9.
 L'ūn, so it is. 100-3.
 niə, say. 164-9.
 ni je, say. 100-3.
 nō dōə, nōt do, go ahead, come. 103-7; 115-7.
 he ūə, yes. 82-2. (Pl. 21, fig. 14; pl. 33, fig. 9.)
 dō, no, not. 79-4; 100-10. (Pl. 7, fig. 1; pl. 22, fig. 8.)
 te he he i, (laughing). 147-5.
 teə, listen. 182-15.
 kaə, well. 76-12.

26 Cf. prefix t gūn in t gūn nas t gets, he looked back. 132-2.
27 III, 343.
VERBS

In Kato, as in other Athapascan dialects, the verbs are usually complete in their meaning and are really sentences. The adverbal concepts of place and direction are expressed by prefixes standing first in order. The object and subject pronouns precede the verbal stem in the order named. The relation of time in regard to inception, duration, repetition, completion, etc., is also expressed by prefixes, all of which precede the subject. Standing between the subject and the stem are modal prefixes which control to some extent the voices of the verb.

The stems themselves often vary in the quality of the vowel and in the final consonants in a manner analogous to accent. These varying forms occur in different tenses. Many of the stems indicate the character and shape as well as the number of the object or subject. Some stems are identical with monosyllabic nouns. The act itself in these instances seems not to be named, but is understood or inheres in the entire verb without an especial element for its expression.

The suffixes for the most part are subordinating, expressing the time relations, conditions, and the source of information. Not only is the material (prefixes, stems, and suffixes) from which the verbs are made identical, except for regular phonetic changes, with that employed in Hupa, but many of the complete verbs are similar.

PREFIXES

First Position

a-. Certain verbs of a sort usually requiring a double object have this prefix when the direct object does not immediately precede. These verbs express the doing, saying, and thinking of special things. This prefix forms an independent syllable except when followed by c, the first person singular.

a ya ci la, took me up. 158-14.
a ne, she said. 152-8.
a no' te, you are. 139-1.
a dce yi, I boast. 128-1.
a wu la ge, I fixed him. 182-14.
ac te ye, I am. (P1. 40, fig. 7.)

28 III, 90.
**Adverbial**

ya'. Used of motion or position upward or into the air.\(^{28a}\) The duration is .12 seconds. There is syllabic union with the third modal prefixes \(L\) and \(n\), perhaps also with \(c\), first person singular. A form yai- appears the probable result of accentuation.

- ya 'ac, he put up. 99-10.
- yaL dac bōn, you must jump up. 82-16.
- ya'i'ai, it stood. 156-15.
- ya kwōn t'a, make him fly. 182-16.
- ya' gur gal, he threw up. 142-3. (Pl. 23, fig. 1.)
- nō gur gal, he threw down. 92-5.

ye'-, yi'. Used of motion into a house or other partly enclosed space.\(^{29}\) The form yi'- appears to be the result of accent. Duration of ye' is .25, of yi' .18. Syllabic union with following sounds seems never to take place.

- ye nat ya, he went in. 177-13.
- ye hen yac, come in. 141-9.
- ye te' gun yai, she went in. 132-13. (Pl. 10, fig. 9; pl. 23, fig. 2.)
- yi he dū, you go in. 97-10; 153-2.
- ye gi nai', they went in. 107-17.
- te' ni nai, came out. 164-9.

wai- or wa. Used of position over, at one side of, or near.\(^{30}\)

**Duration .12.**

- wa in yai, he went around. 97-3.
- wai te' gun get, he struck over. 164-2.
- wa' ūn kaŋ, he placed before him. 129-4. (Pl. 23, fig. 3.)

wa-. Used of motion through an opening or small space.\(^{31}\) The duration of the syllable is about .27 seconds.

- wa ū ū, she carried through. 180-2.
- wa nūn tei bōn, shall be wind. 80-14. (Pl. 23, fig. 4.)

Le-. Used of the position near or movement toward each other of two or more objects.\(^{32}\) The duration of the vowel is about .15.

- LeL yits, he tied together. 174-15. (Pl. 43, fig. 11.)
- Le ges "a", encircled. 82-15. (Pl. 23, fig. 5.)

\(^{28a}\) III, 39.
\(^{29}\) III, 41.
\(^{30}\) Compare the Hupa second wa-, III, 44.
\(^{31}\) III, 44.
\(^{32}\) III, 44.
Lún-. Used with verbs meaning to assemble. It is perhaps related to the last.\(^{33}\n\)

Lún tsa ya hût, they came together when. 148-9. (Pl. 29, fig. 4.)

na-. Used of indefinite movements over the surface of land or water.\(^{34}\) The ordinary duration for the vowel is .13, but na ca and na ga have .19-.25. There seems to be contraction with o’, the second person plural prefix, and syllabic union with s, second modal.

na ca\(^{a}\), I will go about. 133-6. (Pl. 23, fig. 7; pl. 35, fig. 10.)

na ga kwâñ, he had walked. 154-12. (Pl. 42, fig. 6.)

na’ be, swim (dual imp.) 111-2. (Pl. 36, fig. 9.)

na’ ke\(^{e}\), swim (plural imp.). 172-14. (Pl. 45, fig. 2.)

na wô’ nic, you played about. 134-17. (Pl. 8, fig. 5.)

nas ûts, he ran about. 134-3. (Pl. 29, fig. 1.)

nas Lût, he burned around. 79-3.

nai-, na-. Used of horizontal position or motion as across a stream.\(^{35}\) The duration of nai- is .31, of na-. 16.

nai ‘ai bûs, it will be across, it will have waves. 85-8. (Pl. 23, fig. 8.)

na nie ge\(^{e}\), I will carry you across. 141-4.

na nûf ‘ai, fish-weir, “it is across.” 133-9. (Pl. 28, fig. 3.)

na nun lat, jump across. (Pl. 34, fig. 3.)

na nun yai, she started across. 154-2.

nai d-, nai t-, na d-, or na t-. Used of position or motion at right angles to a horizontal line or surface.\(^{36}\) The second syllable begins with d if a vowel follows, with t’ if the following vowel is preceded by a glottal stop, and consists of t if followed by a consonant. The duration of the vowel is about .17, varying from .16 to .19.

nai t gûl ‘a\(^{e}\), he stood up a stick. 116-6.

na dôl ‘a\(^{e}\) bûs, let it stand on end. 108-3.

na t gûl ‘a\(^{e}\), he stood it up. 76-6. (Pl. 28, fig. 2.)

na t gûl ‘al, he stood them up along. 88-13. (Pl. 26, fig. 8.)

na t’a\(^{e}\) bûn dja\(^{e}\), will stand up. 91-17.

na na-. Denoting a movement downward.\(^{37}\) The duration of the vowel in the first syllable is about normal (.16), that of the

\(^{33}\) Compare Hupa Linyate, they come together. 1, 295-1.

\(^{34}\) III, 48.

\(^{35}\) III, 49.

\(^{36}\) III, 51.

\(^{37}\) III, 51.
second syllable shorter, about .12, and probably followed by a glottal catch.

na na dû, he moved it up and down. 150-1.
na na gûl liñ, it runs down. 121-14.
na na gûl dac, he jumped down. 146-3.
na na gûl giñ, he took them down. 145-17.
na na gût yai, he came down. 129-11.
na nun dac, come down. (Pl. 23, fig. 6.)

nô-. Used of being in or coming to a position of rest on the ground, and also of reaching other limits of motion. The average duration of the vowel is .16, varying from .14 to .19. When followed by c, first person singular, n, second modal in first person plural, or one of the third modals, it is joined with them in one syllable.

nô taec, put it (imp. plu.). 110-11. (Pl. 28, fig. 7.)
nô nañ qt, he untied half way. 122-15. (Pl. 44, fig. 6.)
nô na nî kats, I fell back. 182-16. (Pl. 44, fig. 11.)
nô nûn yîñ, they lived. 160-12. (Pl. 29, fig. 12.)
nô cût gal, throw me. 133-4. (Pl. 25, fig. 1.)
nô ga taec, he put down. 86-11. (Pl. 23, fig. 11.)
nô te’n tò, water reached (a certain point). 75-1. (Pl. 7, fig. 6.)
nôc ge’s, I carried. 182-1.
nôn da ‘añ, we put down. 172-2.
nôl k’as, they fell. 152-2.
nôl tiñ, he laid him down. 80-6.
nô fu’t’an, he placed. 76-3.

nûn-. Seems to be used of pressure or impact against a surface. The vowel is short as is usual in closed syllables; from .06 to .1.

nûn ic gal, let me chop. (Pl. 42, fig. 7.)
nûn ún dûk k’e’s, get up. 100-3. (Pl. 44, fig. 8.)
nûn yit t’o gût, she stung when. 156-15. (Pl. 26, fig. 3.)
nûn yit tsûn, (ocean) beats against it. 86-12. (Pl. 41, fig. 2.)
nûn nel’ k’ai, he made stick in. 156-14. (Pl. 45, fig. 9.)
nûn sûl gal, you beat. 129-10. (Pl. 42, fig. 8.)
nûn s’ûs dûk k’e’s, he got up. 98-5. (Pl. 23, fig. 10.)
nûn s’ûs tiñ, she took him up. 179-14. (Pl. 39, fig. 7.)

be-. Used of motion along a vertical or steep surface, as a tree or hillside. The duration of the vowel is .2. It unites with weak prefixes when they directly follow.

38 m, 53.
39 Compare me- m, 46.
bes ya hût, he climbed up when. 143-9.
bes gîn, he carried it up. 98-16.
be ō'los, lead me up (imp. plu.). 147-6. (Pl. 6, fig. 1.)
bê dûr, let us climb. (Pl. 23, fig. 13.)
da bes ya*, he climbed up. 180-6. (Pl. 6, fig. 4.)
ben t'a tê le, you will fly up. 182-11.
bee na*, I roast it (I lean it against[?]). 168-16.

This prefix seems to be used also in a figurative sense, at least in one less definite in its meaning.
beL ke*, it is finished. 172-12.
be nîL ke*e, I have finished. 78-14.
be dûl 'aîf*, let us try it. 109-6.
be gûn t'eG, he taught. 122-11.
bes ya hût, he climbed up when. 143-9.
tës ya hût, he went because. 118-3.

da-. Relating to a position higher than the ground.40 The vowel with considerable aspiration is about .18 in duration.
da ûn dîc ge*, I take you up. 141-4. (Pl. 7, fig. 3.)
da nô la, she put it up. 181-5.
da bes ya*, he climbed on. 180-6. (Pl. 6, fig. 4; pl. 23, fig. 14.)
da nô la, she put it up. 181-5.
nô la, he put it. 79-13.

de d-, (t-). Used of motion into or position in a fire.41 The duration of the vowel is about .2.
de dîc tâG, I will put in fire. 110-3. (Pl. 39, fig. 2.)
de dûl 'aG bûG, you may put in fire. 127-12. (Pl. 23, fig. 15.)
de t gûn 'aG, he put in fire. 157-13. (Pl. 7, fig. 2.)
ye te' gûn 'aG kwân, he had put in. 115-14.

dje=. Used of the splitting or separating a mass into two, perhaps more parts.42 The duration is .12.
dje gûL tâG, he kicked open. 81-15.
dje gûl teel, he split open. 129-3. (Pl. 24, fig. 5.)
dje gûn t'ats, he divided. 80-3.

tai-, ta-. Used relating to water or other fluids.43 The usual duration is from .15 to .18, but coming before n or d, it sometimes takes a final n or t and shortens its vowel.

40 III, 58.
41 III, 61.
42 III, 61.
43 III, 61.
tai 'ac būŋ, it (water) will settle back. 85-8.
tai nāŋ, drink. 88-6.
ta ya'ī dō nāŋ, let them drink. 123-6. (Pl. 33, fig. 5.)
ta nas t ya, he came out of the creek. 175-3.
Cf. tān nas döl', rolled out of fire. 147-9. (Pl. 41, fig. 3.)
ta te'ōt'ūn, prepare (soup). 123-13. (Pl. 24, fig. 1; pl. 37, fig. 6.)
tāt dūl sūs, we dragged out. (Pl. 35, fig. 6.)
ta gūn gal, he threw in water. 90-14.
ya gūn gal, he threw up. 142-3.


tai-, ta-. Uncertain, seems only to occur with stem -t'as -t'ats, meaning to butcher.44

\[\begin{align*}
\text{tais t'ats, he cut up.} & \quad 144-3. \\
\text{ta' t'as, butcher (imp. plu.).} & \quad 109-4. \\
ta gūt t'ats, they cut up. & \quad 175-4. (Pl. 24, fig. 2.) \\
dje'ī gūn t'ats, he divided. & \quad 80-83.
\end{align*}\]

te'-. Relating to water, but usually to motion into or position under water.45 The vowel including marked aspiration has a duration of .16.

\[\begin{align*}
te'nō dūg ge'ī, we will put in water. & \quad 139-9. (Pl. 7, fig. 5; pl. 24, fig. 3.) \\
te'nōl 'ūhs, it ran in water. & \quad 174-10. \\
te'he'ī gūn tai'ī, he stepped in water. & \quad (Pl. 38, fig. 10.) \\
te'na te'ūl dea, she washed them. & \quad (Pl. 38, fig. 3.) \\
te'nō nī gi ne, I put in water. & \quad 140-1. \\
nō nī gi ne, I put it down. & \quad 137-2.
\end{align*}\]

t gūn-. Meaning around, back, behind.

\[\begin{align*}
t gūn nais 'qn, they turned around. & \quad 106-2. \\
t gūn nas t gets, he looked back. & \quad 132-2. \\
na s t gets, he looked around. & \quad 99-5.
\end{align*}\]

ts'ūn-. Meaning away from, in verbs of fleeing.46

\[\begin{align*}
ts'ūn te'ī de'ī, they ran off. & \quad 165-10; 178-10.
\end{align*}\]

tc'e-. Meaning out of, correlative of ye-, into.47 The vowel has a duration of about .12. It unites in first person with c and in third person with modals n, l, and L.

\[\begin{align*}
tc'e' nan lā, he jumped out. & \quad 142-6. (Pl. 34, fig. 4.) \\
tc'e' nal 'ac, she takes out. & \quad 180-11. \\
tc'e' nūn yae, come out. & \quad (Pl. 24, fig. 4.) \\
tc'e' n tan, he took out. & \quad 170-14.
\end{align*}\]

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44 III, 62.
45 III, 63.
46 Compare Hupa tsin-, III, 63.
47 III, 63.
te'engu, he carried out. 98-5.
te'ēkūwūltin, he was pulled out. 160-6.
te'elgal, he was thrown out. 102-7.
te'ētēqēbūn, you must carry out. 104-1.
te'ēnyai, he went out. 102-9.

ka-. Used of motion up out of the ground or water and also up a hill or the sky. The average duration is .17, but when the vowel is closed it is about .1.

ka ya'ei', they dug (bulbs). 148-12.
kal 'ai būn, it will grow up. (Pl. 26, fig. 9.)
ka ngūlō, he came up (out of water). 175-3.
ka na milī', they carried it up (the river bank). 175-4.
ka nac, sun came up. 81-2. (Pl. 24, fig. 7.)
ka si delī', we came up. 141-2. (Pl. 1, fig. 7.)
ka gūlu'īl kwañ, they had sprung up along. 87-6. (Pl. 27, fig. 7.)
ka nac būn dja', shall come up. 99-11.
kō' nac būn dja', it shall go down. 99-12.

kai-, ka- (kwa-). Used with verbs of searching or looking for. The k is strongly aspirated. The duration of the vowel is normal, .18.

kai nte būn, (they) must look for. 173-9.
ka ya'an te, they looked for it. 179-6.
kwa nō' te, look for it. 164-11. (Pl. 24, fig. 6.)
ka kw nō' te, look for him. 160-1. (Pl. 39, fig. 1.)

kō, kwun-. Used of general conditions, as of the weather. There seem to be two forms: kwun- is very short, .06, and kō-, .12.

kō wūn y-an, it grew. 166-7.
kō wūn nūñ, it (ground) jarred. 177-14.
kō wūn sūl, it was hot. (Pl. 1, fig. 5.)
kō wūn teL, level. 106-6.
dō kō gūlīf, one couldn't see. 81-1. (Pl. 24, fig. 13.)
kwūn teL te lit, it was becoming flat. 107-3. (Pl. 27, fig. 2.)
kwūn sañ, deep water. 74-10. (Pl. 34, fig. 11.)
kwūn lañ, it is finished. 77. (Pl. 22, fig. 15.)
kō wūn sūł, it was hot. 81-2.
gūn sūł, it became warm. 96-4.

kō-, kwūt-. Meaning down, or down hill.

kō te'gūlu'īts, they ran down. 153-9.
kwūt te'gūn yai kwāñ, he had come down to. 116-5. (Pl. 24, fig. 9.)

48 Compare Hupa xa-, iii, 56.
49 Compare Hupa xa-, iii, 66.
50 Hupa xo-, iii, 94.
51 iii, 57.
kwûn-. Used with a stem -yôt, the verb as a whole meaning to pursue. The vowel has a duration of .09.
  kwûn t gî yôt, they pursued him. 145-14.
  kwûn tin yôt, they ran after him. (Pl. 30, fig. 13.)
  kwûn ya yôt, they followed. 179-8.

kwa-. Seems to be used with the meaning of "'manner like.'" The duration varies from .08 to .12. The glottal stop is usually present.
  kwa'la, you (plu.) did. 109-4.
  kwal.î muh, you must do it. 136-2.
  kwâl.î, he did. 129-4.
  kwâc tine, I always do that. (Pl. 28, fig. 12.)
  di kwa'lsin, he did this way. 79-12. (Pl. 24, fig. 15.)
  cÖñk' kwa's laq, he did well. Cf. 104-6. (Pl. 22, fig. 3.)

kwûn ye'-. Under the ground or water. The first vowel is short, .06; the second syllable ends in an aspiration which may be identical with ye' on p. 43 above.
  kwûn ye i dâl kwâc, underground we will go. 138-10.
  kwûn ye dâl tâc tel, we will bury it. 115-8.
  kwûn ye gûl laq, it has sunk. 174-12. (Pl. 24, fig. 8.)
  kwûn ye hî dâl tê le, we will go (underground). 140-15.
  ti dâl tê le, we will go. 136-5.

k'e-. Of severing as in biting and cutting.53
  k'e te' ûs t'ats, he cut. 146-11.
  k'e te'un yan kwân, bitten off. 161-7.
  k'e te'n nac bûn, you must bite off. 101-7.

k'e-. Apparently means down, used only of setting of heavenly bodies.
  k'e nac bûn dja', it (sun) shall go down. 99-12.
  k'e nin yac bûn, you must go down. 101-15.

Deictic54

The third person of the verb does not have a subjective prefix of the sort and in the position found in the first and second persons, but is marked by the absence of such a prefix. In many cases, however, a prefix with demonstrative force is found.

The singular subject when indefinite or not named in connection with the verb is referred to by te'. This follows the

52 Hupa xa-, III, 77.
53 III, 85.
54 III, 99.
adverbal but precedes the first modal prefixes. Usually it forms or begins a syllable which contains no vowels. A following consonant often seems to close the syllable.

\[ \text{te't's qot, he speared it. (Pl. 8, fig. 8.)} \]
\[ \text{te'us t'ok', he flaked. 156-7. (Pl. 11, fig. 8.)} \]
\[ \text{te'n net yil', she eats up. 180-9. (Pl. 1, fig. 9.)} \]
\[ \text{te' nes tia', he lay down. 175-11. (Pl. 5, fig. 2.)} \]
\[ \text{te'nun yai, he came there. 142-14. (Pl. 25, fig. 6.)} \]
\[ \text{te'n ne guñ 'iñ', he looked at it. 156-16. (Pl. 25, fig. 12.)} \]
\[ \text{ts'us san, he saw him. 97-4.} \]
\[ \text{ts'us li', he tied. 145-8.} \]
\[ \text{ts'añiñ, stood. 75-10.} \]

What seems to be this prefix was often recorded ts'-.

\[ \text{ts'ut san, he saw him.} \]
\[ \text{ts'us li', he tied. 145-8.} \]
\[ \text{s'ins yje, he made a house. 168-7. (Pl. 30, fig. 9.)} \]
\[ \text{s'us liñ', he became. 84-11. (Pl. 32, fig. 3.)} \]
\[ \text{s'us te'añ, he shot it. (Pl. 41, fig. 7.)} \]
\[ \text{nun s'us duk keñ', he got up. 98-5. (Pl. 23, fig. 10.)} \]
\[ \text{nun s'us tiañ, he picked him up. 179-14. (Pl. 39, fig. 7.)} \]

With no apparent distinction in meaning s' - was frequently heard in place of te', and ts'.

\[ \text{ts'us yiñ, he made a house. 168-7. (Pl. 30, fig. 9.)} \]
\[ \text{ts'us liñ', he became. 84-11. (Pl. 32, fig. 3.)} \]
\[ \text{s'us te'añ, he shot it. (Pl. 41, fig. 7.)} \]
\[ \text{nun s'us duk keñ', he got up. 98-5. (Pl. 23, fig. 10.)} \]
\[ \text{nun s'us tiañ, he picked him up. 179-14. (Pl. 39, fig. 7.)} \]

A subject which is named, or the last mentioned of two or more nouns, is referred to by yi-. This often unites with the third modals.

\[ \text{ye yì gün 'an, came in. 130-16.} \]
\[ \text{yiñ san, he found. 134-14.} \]
\[ \text{yiñ süt, (water) broke. 75-3.} \]
\[ \text{yiñ tıñ, he cut it. 162-10.} \]
\[ \text{nun yil tò güt, when he stung. 156-15. (Pl. 26, fig. 3.)} \]
\[ \text{yiñel tıñ', one man looked. 165-11.} \]
\[ \text{te'nol tıñ, he looked. 88-16.} \]

The plural and the dual when not distinguished by the stem, have ya- in the position occupied by the other deictic prefixes.\[\text{55} \]
\[ \text{ya'n ya' ni, they said they say. 82-11. (Pl. 4, fig. 4.)} \]
\[ \text{be ya'ñ aiñ, they tried it. 85-2. (Pl. 28, fig. 5.)} \]
\[ \text{ta ya'ñ o nañ, let them drink. 123-6. (Pl. 33, fig. 5.)} \]
\[ \text{ka yañ ñnte, they looked for it. 179-6.} \]
\[ \text{ka ñnte, she looked. 114-9.} \]

55 III, 99.
The deictic prefixes te'-, yi-, and yae- occur not only referring to the subject but to the object, in which case they are found in all persons of the verb. The Hupa prefix corresponding to te'- when used of the object is k- or ky, giving evidence of separate origins for forms now indistinguishable in Kato.56

te'et na', roast. 109-6.
te'et t'a t'ei le, I will make. 156-5. (Pl. 40, fig. 5.)
te'6' ya'6, you (plu.) eat. 148-6.
te'6' süt, pound. 110-5.
te'wö bür, carry it (plu.). 110-15. (Pl. 37, fig. 4.)
yi' te'a kwañ, who shot. 141-12.
yi' gün ya'6, (they) ate it. 113-16.
te'o' gi la nö, I went after. 136-10.
tö' ön gi la ne, water I brought. 137-1.

Objective

The object, except when of the third person and definitely named, is incorporated in the verb, occupying a position between the deictic prefixes and the first modals. These weaker forms of the pronoun are found also as possessive prefixes with nouns; first person singular c-, first person dual and plural nö-, or n h-, second person singular n-, second person plural nö- or n h-, third person singular kw-, third person plural ya'6 kw.

In the case of verbs of speaking with the stem -nì, -n, the pronoun is combined with L, "with," and precedes the deictic prefixes. The pronoun also precedes the prefix ga-, wa-, meaning "to," of which it is considered to be the object rather than that of the complete verb.

cul sùs e, (nobody) sees me. 176-1.
c nöli'fî, look at me. 103-9.
c gi' yal, I am sleepy. 164-4. (Pl. 29, fig. 7.)
nö' cul gal, throw me. 133-4. (Pl. 25, fig. 1.)
be cö' lös, lead me up. 147-6. (Pl. 6, fig. 1.)
te'o' nö' nöö a ne, he killed us. 117-6. (Pl. 25, fig. 4.)
n he 5ü ka kwic, we will pass the night. 105-3. (Pl. 27, fig. 10.)
n höö t ge', let me see you. 142-6. (Pl. 43, fig. 2.)
ne ö dün, you will die. 177-4.
dö' n die ge', I take you up. 141-4. (Pl. 7, fig. 3.)
kw nöh lif', she looked at him. 134-2. (Pl. 9, fig. 5.)
Cf. cul te'ni, he asked me. 182-3.

c gal t'ös, give me. 97-13.

56 III, 84.
First Modal

5.—There are a few verbal stems which seem to require this prefix, but it has not been possible to isolate it sufficiently to find its meaning. Its position is after the objective and before the following prefixes.

öc las'e, I will get. 137-2. (Pl. 24, fig. 11.)
öt gu'e, look at them (imp. plu.). 164-9. (Pl. 25, fig. 13.)
na hō' t ge', let me see you. 142-6. (Pl. 43, fig. 2.)
te'ō na gūt gu'e, he looked back. 87-13. (Pl. 43, fig. 4.)
tē'o l'y kwan hūt, he had named when. 117-12.

na-. With an iterative force indicating that the act is repeated or the direction is reversed.57

nas lī'e, he tied up. 145-7. (Pl. 32, fig. 6.)
nas dūl līn nō, we have got back. 95-12. (Pl. 3, fig. 6.)
nō na nī kats'e, I fell back. 182-16. (Pl. 44, fig. 11.)
te' nan lā, he jumped out. 142-6. (Pl. 34, fig. 4.)
te' na gūt dac, he came out again. 149-13. (Pl. 37, fig. 10.)
ka na gūl lāc, she digs out. (Pl. 31, fig. 1.)
nas iūi'e, it became (again). 107-8.
slī'i'e, it became (first time). 76-9.

t-, te-. With a distributive or progressive force as regards the act itself, its object or subject.58 The form te- is found in tenses expressing definite action. In other cases the vowel ŏ, short and weak, is found, or the vowel is that required by a following prefix.

tī dūl, let us go. 141-6. (Pl. 38, fig. 2.)
tāc ge', I will carry. 135-4. (Pl. 8, fig. 4.)
n tō lāt, let him sleep. (Pl. 31, fig. 8.)
tē' tōi k'as djas', let him drop acorns. 129-8. (Pl. 10, fig. 4.)
tūt bāl, it rains. 74-4. (Pl. 36, fig. 12.)
te sū tōi'i, I stole. Cf. 141-15. (Pl. 42, fig. 1.)
tē' te gūs tei'e, nearly daylight; the east was reddening. (Pl. 41, fig. 12; pl. 8, fig. 2.)
tē' te lōs, he led. 175-2. (Pl. 32, fig. 10.)
dō ha' te' te kūt, they did not go. 167-17. (Pl. 45, fig. 7.)
tē' te lē bañ, he walked lame. 133-6. (Pl. 24, fig. 14.)
na te sīy lāz ya' nī, he went to sleep they say. 83-4. (Pl. 31, fig. 10.)
tē' te yāl, he went. (Pl. 29, fig. 2.)
tē' te sē de lē, they went on. 108-12. (Pl. 38, fig. 1.)
tē' te gīi, he carried. 101-9. (Pl. 45, fig. 3.)

57 III, 67.
58 III, 78.
A prefix consisting of d-, the syllable completed by other elements, frequently occurs. No meaning has been discovered. It is, however, required by prefix de-, relating to fire, and na-, to be perpendicular.

- he, - h-. A prefix with he- or h- follows ye'- (yi), in, na-, back, and stands by itself. It has not been possible to assign any meaning for it.

Second Modal

There are a few verbs which have the second modal prefixes throughout, but in the greater number they do not occur in the indefinite present. It is in these few present tenses without other prefixes that the force of these second modals is most clearly seen. It is quite clear in these forms that n- indicates completion, s- progression, and g- inception of the act or state. In the great majority of verbs one of these three prefixes is required in the definite or past tense; in most cases, in fact, it is by the presence of one of these second modals that the definite tense is distinguished from the indefinite. They are regularly used with
certain adverbial prefixes without much regard to their meaning.\textsuperscript{60}

These second modals directly precede the subjective prefixes in the first and second persons and the third modals in the third person with which they form syllables. The progressive s-, however, may stand alone in the syllable, be joined to the stem, or close a syllable of which a first modal is the initial.

g-, in a few verbs seems clearly to have an inceptive force; in others it seems to occur regularly with certain adverbial prefixes with which its tie seems to be formal rather than logical.

\begin{itemize}
\item \textit{gǐ döt}, we will go. 96-13.
\item \textit{gǔ ē}, you carry. 137-13.
\item \textit{gǔ cał}, I walk. 163-10.
\item \textit{ya}’\textit{gǔ̍ gal}, he threw up. 142-3. (Pl. 23, fig. 1.)
\item \textit{ye}’\textit{te}’\textit{gǔn yai}, he went in. 132-13. (Pl. 23, fig. 2.)
\item \textit{ta gǔ̍ t’ats}, he butchered. 175-4. (Pl. 24, fig. 2.)
\item \textit{dje}’\textit{gǔ̍ tel}, she split open. 129-3. (Pl. 24, fig. 5.)
\item \textit{kwǔn ye}’\textit{gǔ̍ lat}, it sank. 174-12. (Pl. 24, fig. 8.)
\item \textit{kwǔt te}’\textit{gǔn yai}, he went down. 116-5. (Pl. 24, fig. 9.)
\item \textit{gǔ̍ n tel}, he shouted. 165-9. (Pl. 25, fig. 10.)
\item \textit{gǔ̍ n nes}, it became long. 87-1. (Pl. 25, fig. 8.)
\end{itemize}

\textbf{s-}. Verbs employing s- are usually of acts or states which continue for some time.

\begin{itemize}
\item \textit{sǐ da ye}, I sit. 140-7.
\item \textit{sǐ ti ne}, I lie. 175-16.
\item \textit{s gin}, it was. 138-18.
\item \textit{sān}, lay. 176-18.
\item \textit{stīn}, lay. 100-2.
\item \textit{sta}, he sits. 123-7.
\item \textit{sǔn da}, you live. 79-7.
\item \textit{be nē sǐn}̍ \textit{gīt de}, I am becoming afraid. 130-15. (Pl. 6, fig. 2.)
\item \textit{bi}’\textit{sta}, he was sitting in. 132-3. (Pl. 6, fig. 7.)
\item \textit{te}’\textit{ās} li’\textit{e}, he caught in a noose. 108-4. (Pl. 1, fig. 6.)
\item \textit{te}’\textit{ās} qót, he speared it. 128-13. (Pl. 8, fig. 8.)
\item \textit{ka sǐ del}’\textit{e}, we came up. 141-2. (Pl. 1, fig. 7.)
\end{itemize}

\textsuperscript{60} Examples of all three of the second modal prefixes may be seen on v, 138. In line 14, \textit{nī gi ne}, I bring, occurs without a prefix. In the next line it occurs in the same form with the prefix nō. In both of these the completion of the act is clear. In line 15 g occurs in dō̍ ha’\textit{ge gin}, she did not bring it in. The inceptive force is not particularly clear, but the statement may well mean that she did not begin the carrying. The following line has s and the stem without other prefixes, s gin, it was, and here the meaning is clearly that of remaining in position with no reference to the beginning or end of the act.
Subjective

The subjective prefixes are, with some exceptions, those used with nouns and postpositions. They stand between the second and third modal prefixes. In the third person the subject is referred to, if at all, by deictic elements.

The first person singular has two prefixes. In the indefinite tense c- is used. It is evidently connected with c, the independent pronoun.62

The definite tense has the vowel i, with no known connection with an independent pronoun form.63

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61 III, 95.
62 Compare Hupa -iùw, -úw, and -w, III, 97.
63 III, 100.
cō' gi la ce, I fixed it good. 76-12. (Pl. 31, fig. 5.)
dō yī he' e, I am tired. 98-1. (Pl. 36, fig. 6.)
be nē sū get de, I am getting afraid. 130-15. (Pl. 44, fig. 3.)
te sū teō', I stole. (Pl. 42, fig. 1.)
sī tī ne, I lay. 175-16. (Pl. 39, fig. 9.)
стих, she lay. 100-2.

The first person dual and plural has a syllable immediately before the stem beginning with d. The vowel is the weak short u followed by the third modal prefix when it is present, surd l becoming sonant. In its absence the initial of the stem is taken over.64

nañ dūl 'a', we will make a dam. 163-11. (Pl. 28, fig. 1.)
na dūl yic, let us rest. 140-18. (Pl. 30, fig. 5.)
dō yī de he' e, we are tired. 116-17. (Pl. 36, fig. 8.)
dō dūl sūs he, we did not see. 116-18. (Pl. 26, fig. 7.)
te'nō dāg ge', we will put in water. 139-9. (Pl. 24, fig. 3.)
ka'a dōt tea', well, let us cook. 149-7. (Pl. 25, fig. 11.)

When the stem of the dual and plural is different from that of the singular, instead of the prefix d- the first person in all tenses has r, not to be distinguished in sound from that found in the first person singular in the definite tense.

be dūl, let us climb. (Pl. 23, fig. 13.)
tī dūl, let us go. 141-6. (Pl. 38, fig. 2.)
ka sī del', we came up. 141-2. (Pl. 1, fig. 7.)

The second person singular has -n, undoubtedly connected with the independent pronoun niñ, completing the syllable which precedes the stem. It appears to be dropped before the third modals l, l, and d.65

ūn qōt, spear it. 128-12. (Pl. 44, fig. 7.)
nun dac, come down (imp.). (Pl. 23, fig. 6.)
de dūn 'qe, put on the fire (imp.). 127-12. (Pl. 23, fig. 15.)
tē' nun yac, come out (imp.). (Pl. 24, fig. 4.)
ūl tefl, make it. 79-8. (Pl. 41, fig. 8.)
nūn sūl gal, you hit. 129-10. (Pl. 42, fig. 8.)
tē'ul dūk, crack it. 138-2. (Pl. 38, fig. 8.)
k'wūn nūl lāc,66 put it on. (Pl. 31, fig. 7.)
tē'ūn yān, you eat. 125-7. (Pl. 29, fig. 13.)
tē'o' yān, you (plu.) eat. 148-6. (Pl. 29, fig. 10.)

The prefix appearing in the second person dual and plural is

64 III, 98.
65 III, 98.
66 n assimilated to the following l.
-o', in which the aspiration is quite marked. The third modal L completes the syllable when present. In certain cases the vowel seems to be contracted, resulting in aspirated a.

na te'ō' Lō, set snares. 108-2. (Pl. 25, fig. 5.)
n tō' lāt, go to sleep. 110-16. (Pl. 31, fig. 11.)
beō' tō' lō, take me up. 147-6. (Pl. 6, fig. 1.)
ta te'ō' but, make soup. 123-13. (Pl. 24, fig. 1.)
te'ō' yūn, you (plu.) eat. 148-6. (Pl. 29, fig. 10.)
ōt k'aś, make a fire. 103-7. (Pl. 3, fig. 7.)
na eō' na būn, you must doctor me. 166-10. (Pl. 33, fig. 4.)
ne sōt yān, you ate up. 136-16. (Pl. 24, fig. 10.)
tc'ō' gūc, cut them. 166-15. (Pl. 40, fig. 11.)
ōt gūc, look at them. 164-9. (Pl. 25, fig. 13.)
na' be, swim. 111-2. (Pl. 36, fig. 9.)

Third Modals

ō.—When it is desired to convey a command or permission to a third person ō is found directly preceding the prefixes discussed below. By its logical limitation it can only be used in the third person.

te'ō gūc, let him chew it. (Pl. 5, fig. 6.)
tc'ō' tō' k'as djaś, let him drop it. 129-8. (Pl. 10, fig. 4.)
te'ō tc' tō' djaś, let him make. 140-2. (Pl. 27, fig. 6.)
n he ōt ka kwic, we will spend the night probably. 105-3. (Pl. 27, fig. 10.)
tc'ō' nōl yōl, let it blow. 80-13. (Pl. 30, fig. 11.)
n tō' lāt, let him sleep. (Pl. 31, fig. 8.)
ta yāt ōt naś, let them drink. 123-6. (Pl. 33, fig. 5.)
ōt yats, let it snow. 93-5.

A number of prefixes occur between the subjective prefixes and the stems. In the case of only one of these, L, is it ever possible to discover any meaning or force imparted by it. Certain stems seem always to be preceded by t or d and others by one of the other third modals.

It would seem that L in a few cases has a transitive force, since the same stems when they occur without it have intransitive meaning. In many other cases it is impossible to observe the transitive meaning because the real force of the stem itself is not apparent.

The stem -tāL, -tāś, referring to movement of the feet has

67 ō is a prefix, see p. 52.
68 III, 34.
L when transitive and is without it when used of walking or standing.

na ūn gǔltāl, he kicked out. 89-7.

nō dūn tāl, you step. 82-1.

nō t gǔltāl, stood. 82-3.

The stem -tin, -tic, used of persons, animals, and things of animate origin, has L when transitive or when used of the dead or sick, but does not have L otherwise.

sīltin, he sick lay down. 158-4.

nōtțiņ, he laid him down. 80-6.

ściņ, lay. 100-2.

nōltić, lie down (plu.). 96-13.

It seems impossible to distinguish fully between the use of L and l. The latter is used always in the first person plural and the former in the second person plural. This difference is almost certainly due to phonetic causes. Occasionally l seems to be used of the passive but it may be that these passives belong to a set of forms with l, neutral in force, that seem to exist for many or all verbs with L.

nō wil k’as, fell. 152-1.

telōt k’as dziņ, let him drop. 129-8. (Pl. 10, fig. 4.)

gūlk’ān, a fire was. 108-2. (Pl. 45, fig. 10.)

gūlsān, it was found. 83-13.

But compare gūltiņ, they shouted. 114-3.

gūltiņ, they (elk) shouted. 165-9.

gūltiņ, they made. 178-3.

gūltiņ, were made(f). 162-3.

On the other hand, the many transitive verbs treating of the movement of objects classified by the stem as to shape and number, do not have L, except -tōs, relating to flat flexible objects.

A number of Kato verb stems are always preceded by t. The iterative prefix, na-, requires t in the same position. It is possible that t also has an iterative force in all cases.

ōt’ge, look at them. 164-9. (Pl. 25, fig. 13.)

nōhōt'ge, let me see you. 142-6. (Pl. 43, fig. 2.)

wūn gūt’ya, some became old. 107-11. (Pl. 30, fig. 6.)

būltiņ, he doctored. (Pl. 30, fig. 3.)

dō ha' ka nōn t’yaši, do not be ashamed. 141-8. (Pl. 30, fig. 2.)

telōt’letiņ, it rained. 81-1. (Pl. 36, fig. 13.)

telōnt’ge, he looked at them. (Pl. 43, fig. 5.)

ye na gūt’ya, he went again. 99-4.

telōnt’ge, he came up again. 149-13. (Pl. 10, fig. 6.)
When L and t (due to preceding na) both occur, the L precedes the t.

na het t küt, they went back. 163-6.
na gül t bah, he limped along. 138-13.

STEMS

The verbal stems of Kato in many cases have two forms differing phonetically. The present usually has the shorter and weaker form. In a number of cases the variation in the form of the stem is due to what appear to be reduced suffixes -n, -l and -c. It is possible that the glottal stop (ʔ) which seems in some cases to characterize the definite past is also a remnant of a suffix.

Some stems phonetically identical have no discoverable similarity in meaning. Since the complete verbs built upon these are usually quite different, no confusion arises. It is possible that a number of these could be shown connected in meaning if the history of the language were known.

-eai⁷⁰, -ane, to have position.

bec 'eai⁷⁰, I will try it. 109-9. (Pl. 5, fig. 5.)
ka₁'eai⁷⁰, it sprang up. 76-10. (Pl. 9, fig. 1.)
Legas 'eai⁷⁰, it was encircling. 82-15. (Pl. 23, fig. 5.)
naï 'eai bûn, it will be across. (Pl. 23, fig. 8.)
di tûn es 'eai⁷⁰, up there in a row. 109-10. (Pl. 28, fig. 4.)

-eqûn, -qec, to transport or give position to round objects.

deqûn 'eqûn, he put in the fire. (Pl. 7, fig. 2.)
nô ga 'qec, he put along. 86-11. (Pl. 23, fig. 11.)
de duñ 'qec, put on the fire. 127-12. (Pl. 23, fig. 15.)
nô⁷¹ 'qec, put it (plural). 110-11. (Pl. 28, fig. 7.)

⁶⁰ These are discussed above, p. 18.
⁶⁰a In many cases it is difficult or impossible to establish the exact form of the stem. There are several with endings -c and -n as -te'ân and te'æc, to shoot; -tc'an and -tciec, to leave. It seems probable that -c is a suffix. It may be that -n is also a suffix and that the stem ends in a vowel. If the -n belongs to the stem its disappearance before c would occasion no surprise. There are several stems, however, which have the simpler form occurring. In both Hupa and Kato the stem meaning to carry on the back has the forms: -gec, -güc, -gel, -gin (Kato); -we, -wûw, -wel, -wifî, -wen (Hupa).

⁷¹ III, 206. This is probably the stem above to which -n and -c are added.
-al\textsuperscript{7}, -al\textsubscript{2}, to chew\textsuperscript{72}

te'gün al\textsuperscript{7} yae ni, he chewed it they say. 109-7. (Pl. 28, fig. 4.)

na te'at, he was chewing. 143-3. (Pl. 41, fig. 5.)

-at\textsubscript{2}, -ac\textsuperscript{7}, to walk, to crawl\textsuperscript{73}

ta te'at, ate e kwa nañ, (turtles) have come out of water. 95-8.
tül ac bûñ, (turtles) must walk. 121-4.
te't tül ac bûñ, (crawfish) must walk. 121-4.

-čil\textsubscript{1}, -čil\textsubscript{2}, to sit (plural only).

nö'čil, you stay. 168-1.
tö'nüñ čil\textsuperscript{4}, they sat down. 170-8. (Pl. 28, fig. 9.)

nö'čil bûñ, you must stay. 105-2. (Pl. 28, fig. 8.)

-čin\textsubscript{1}, to look\textsuperscript{74}

n dul čin\textsuperscript{4}, let us look. 168-1. (Pl. 3, fig. 3; pl. 28, fig. 11.)
küñ in\textsuperscript{4}, he looked at him. 134-2. (Pl. 9, fig. 5.)
dö kō gis čin\textsuperscript{4}, one couldn't see. 81-1. (Pl. 24, fig. 13.)
ya te' kwen in\textsuperscript{4}, they saw him. (Pl. 25, fig. 3.)
tö'n gûn čin\textsuperscript{4}, he looked at it. 156-16. (Pl. 25, fig. 12.)
nee čin\textsuperscript{4} tê le, I will look. (Pl. 27, fig. 3.)
nüe čin e ne, I saw it. 137-1. (Pl. 28, fig. 10.)

-čin\textsubscript{2}, to do\textsuperscript{75}

kwac čine, I always do that. (Pl. 28, fig. 12.)
kwan in\textsuperscript{6}, you (plu.) do that. 118-4. (Pl. 28, fig. 13.)

-čuts\textsubscript{1}, to run, to move aimlessly\textsuperscript{76}

nas čuts, he ran about. 134-3. (Pl. 29, fig. 1.)

-čuts\textsubscript{2}, to shoot\textsuperscript{77}

tö'čuts, he shot along. 144-9.

-yai\textsuperscript{7}, -ya\textsubscript{1}, -yac\textsubscript{2}, to go\textsuperscript{78}

da bes ya\textsuperscript{1}, he climbed up. 180-6. (Pl. 6, fig. 4; pl. 23, fig. 14.)
ye' te'gün yai, he went in. 97-11. (Pl. 10, fig. 9; pl. 23, fig. 2.)
te'enüng yac, come out. (Pl. 24, fig. 4.)
kwüt te'gün yai, he went down. (Pl. 24, fig. 9.)
te'nüng yai, he came there. 142-14. (Pl. 25, fig. 6.)
te'nüng yai hüt, when he came. (Pl. 26, fig. 6; pl. 29, fig. 8.)
te' tes yai, he went. 116-9. (Pl. 29, fig. 2.)
Lûn tes yai, they came together. (Pl. 29, fig. 4.)
ca k'efi yai, sun went down. (Pl. 29, fig. 5.)
ni yai ye, I came there. 136-17. (Pl. 29, fig. 6.)

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\textsuperscript{72} III, 206.
\textsuperscript{73} III, 209.
\textsuperscript{74} III, 209.
\textsuperscript{75} III, 211.
\textsuperscript{76} III, 212.
\textsuperscript{77} III, 211.
\textsuperscript{78} III, 212.
-yal, relating to sleepiness. Used with person affected as object.

e gî yal, I am sleepy. 164-4. (Pl. 29, fig. 7.)
e gî ya lê, I am sleepy. 114-10.

-yan, -yac, -yâl, to grow, to become old.79

nes ya nî kwa nañ, it had grown.
wân gû t yac, some became old. 107-11. (Pl. 30, fig. 6.)
kô wî yâl, they were growing. 88-15.

-yan, to like (used with possessive prefix and -dje, heart).

'ôô ke dji yan, he didn’t like. 91-7.
dô s tei kw yan ôô gî, I don’t like him. 142-16.

-yañî, to clear off.

niñ yañ kwâñ ôô gî, it has cleared off. 168-1. (Pl. 26, fig. 1.)
niñ yan deô, when it cleared off. 167-17. (Pl. 27, fig. 1.)

-yañî, to be ashamed.

do hû ka nôn t yañî, do not be ashamed. 141-8.
ka nôt t yan, she was ashamed. 180-8.

-yanô, -yi, to eat.80

ne sô, yan, you ate up Ô 136-16. (Pl. 24, fig. 10.)
te' gûn yanô, he ate of it. 129-5. (Pl. 29, fig. 9.)
te' ô' yañô, you (plu.) eat. 148-6. (Pl. 29, fig. 10.)
te'ûn yanâ, you (sing.) eat. 125-7. (Pl. 29, fig. 13.)
te' ne, yî, she eats up. 180-9. (Pl. 1, fig. 9.)
Cf. nes yî djaô, let me eat. 181-12.

-yats, to snow.81

ôô t yats, let it snow. 93-5.

-yelô, to stop crying (?).

te'ôô deh yôô, he stopped crying. 148-4. (Pl. 29, fig. 14.)

-yêco, -ye', to make a deer drive.

te'n na dûl yêco, we will drive. 110-9.
te'n na dûl ye', she always hunts. 181-7.

-yî, to name, to call by name.

te'ôô, yi kwâñ hût, he had named when. 117-12.
yôô yî bûn djaô, shall be called. 99-7.

-yi, to stand.82

si yî ne, I stand. (Pl. 25, fig. 7.)
Cf. te'ôô ôô gî, he is standing. (Pl. 26, fig. 2.)

---

79 III, 219.
80 III, 217.
81 Cf. yas, snow, III, 19.
82 III, 220.
-yîn, to live at a place.\textsuperscript{83}
  nô nûn yîn, they lived. 160-12. (Pl. 29, fig. 12.)

-yîc, yî, to speak. (First and second persons only).\textsuperscript{84}
  kûn nûc yîc, I will speak. 120-9.
  a dôc yî, I boast. 128-1.
  kwî nûn yîc, you will talk. 174-3.
  kô nô'c yîc, speak (plu.). 120-8.

-yîc, to break.\textsuperscript{85}
  te'gûn yîc, he broke it. 79-12. (Pl. 10, fig. 3.)

-yîc, to whistle.\textsuperscript{86}
  kwôl yîc, he whistled. (Pl. 30, fig. 7.)

-yîc, -yîc, to rest.\textsuperscript{87}
  na dâl yîc, let us rest. 140-18. (Pl. 30, fig. 5.)
  na ges yîc, he rested. 161-4. (Pl. 30, fig. 4.)

-yîc, yîk, -yîc, to build a house.\textsuperscript{88}
  tû cû yîc, I will make a house. 168-6. (Pl. 30, fig. 8.)
  s'ûs yîk, he made a house. 168-7. (Pl. 30, fig. 9.)
  gûl yîk, nî, he built a house they say. 83-11. (Pl. 30, fig. 10.)

-yôl, -yôl, yôl, to blow.\textsuperscript{89}
  te'n nûl yôl, let it blow. 80-13. (Pl. 30, fig. 11.)
  Cf. ô wî yôl, she fanned. 153-3.

-yôs, to lead, to drag.
  ye' kwil yôs, they took her in. 158-15.

-yot, -yôl, -yôl, yôl, to chase.\textsuperscript{90}
  kwûn tin yôt, they ran after him. (Pl. 30, fig. 13.)
  bûn tî gi yôl, they chased it. 174-10.
  kwûn i yôl, they followed him. 98-11.
  na bûn yôl, they drove. 170-16.

-lai, -la, -ləc, to move several objects.
  ka na gûl ləc, she digs out. (Pl. 31, fig. 1.)
  bîg tî yûl, she took out. 162-9. (Pl. 31, fig. 2.)
  k'wûn nûl ləc, put it on (sing. imp.). (Pl. 31, fig. 7.)
  bel gi k'wûn nôl ləc, spear points put on. 168-11. (Pl. 31, fig. 6.)

\textsuperscript{83}iii, 220.
\textsuperscript{84}iii, 246. See -nî, -n below, p. 65.
\textsuperscript{85}Cf. Hupa -yeuâ, to rub, to knead. ii, 220.
\textsuperscript{86}Cf. Hupa -yeuâ, to rest, to get one's breath. iii, 220.
\textsuperscript{87}iii, 220.
\textsuperscript{88}See ye, yik, house, p. 19.
\textsuperscript{89}iii, 221.
\textsuperscript{90}iii, 221.
-lal, -ləl, to sleep, to dream.  
  n təl əl, let him sleep. (Pl. 31, fig. 8.)
  n təl əl, you (plu.) went to sleep. (Pl. 31, fig. 10.)
  nə hi n təl əl, you (plu.) go to sleep. 110-16. (Pl. 31, fig. 11.)
  ú ənəl, he dreamed about. 145-2.

-lən, to laugh.
  ya'əs lən, they laughed. 155-2.
  də sələn, he did not laugh. 103-15.

-ləni, to get.
  ðə ləni, I will get. 137-2. (Pl. 24, fig. 11.)
  ðə ləni, you get. 133-14. (Pl. 1, fig. 4.)

-lat, to float.
  kwən ye' gəl lat, it sank. 174-12. (Pl. 24, fig. 8.)
  ðə' nəl lat, it floated there. 148-1.

-lag, -la', -le', to do.
  kwai əl ya' ni, he did it they say. (Pl. 31, fig. 3.)
  də kwə' la', he did this way. 154-5. (Pl. 31, fig. 4.)
  có' gəl la' nə, I fixed it good. 76-12. (Pl. 31, fig. 5.)
  ðə' ənəl le'ə, dress yourself. 103-1.

-leq, to sing.
  te'ə leq', he sang. 149-11. (Pl. 32, fig. 1.)
  te'ə gəl leq', he commenced singing. 105-11. (Pl. 32, fig. 4.)

-leq, -le', to swim under water.
  na gəl leq, fish were swimming down. 164-1. (Pl. 32, fig. 2.)
  wən ni le get, I swam to because. 175-5.

-liq, to snare.
  te'us liq', he caught in a noose. 108-4. (Pl. 1, fig. 6; pl. 32, fig. 7.)
  nas liq', he tied up. 145-7. (Pl. 32, fig. 6.)

-liə, to flow.
  na na gəli ne, it runs down. 121-9.

-liə, -le, to become.
  nas dəl li ne, we have got back. 95-12. (Pl. 3, fig. 6.)
  səs liə', he became. 84-11. (Pl. 32, fig. 3.)

---

91 III, 232.
92 III, 232.
93 III, 230.
94 III, 237.
95 Cf. Hupa -loj, to tie, III, 236.
96 III, 233.
-lō, to hail.
ō lō, let it hail. 93-6.

-lō, to deceive.
te' kwā lō, when he fooled him. 136-14. (Pl. 26, fig. 5.)
skō lō ê kwā, he was pretending. 134-6.

-lōs, to lead.97
be cō' lōs, take me up. 147-6. (Pl. 6, fig. 1.)
gūl lōs tē le, he will bring it. (Pl. 32, fig. 9.)
tē' te lōs, he led. 159-9. (Pl. 32, fig. 10.)

-lūt, -Lūt, to burn (see Lūt, smoke).98
i gūl lūt ūn gi, we are burning. 104-13.
gūl lūt, it was burning. 173-16. (Pl. 32, fig. 8.)
nais lūt, is burning† 119-6.
na' Lūt, you burn. 119-1.
Cf. de lūg, burns. 100-6.

-Lūts, to urinate.
bīō lūts, in it urinate. 138-14.

-lūk, to tell, to relate.99
wān te' kō lūk, he told about it. (Pl. 32, fig. 11.)
dō ha' wan kwā lūk buē dja', you must not tell him. 139-13.

-La, to shoot.
ō nō' la buē, you must shoot. 173-4.
te la, he shot. 144-12.

-Laŋ, to be many.
gūn laŋ, became many. 83-14. (Pl. 33, fig. 10.)
gūn la ne, have become many. 169-10. (Pl. 33, fig. 11.)

-Lat, -La (-(La?) to jump.100
na nūn lāt, jump across (sing. imp.). (Pl. 34, fig. 3.)
te' ena lā, he jumped out. 142-6. (Pl. 34, fig. 4.)
na nūn lā gūt, he jumped across when. 147-7.

-Lēg, Lē', relating substances of dough-like consistency.101
bī nō' Lē', soak them. 110-6. (Pl. 34, fig. 1.)
bī' nō gūL Lēg, they soaked them. 179-1. (Pl. 34, fig. 2.)

-Lūts, to be rough, to be strong.
na lūts, it is stout. 78-12. (Pl. 34, fig. 5.)

97 III, 237.
98 III, 236, 239.
99 III, 236.
100 III, 238.
101 III, 239.
-Lōi, -Lō, -Lōn, to twine a basket, to braid.  

\[102\]

\[
te'Lōi ūnāŋ, she is making a basket. (Pl. 2, fig. 7.)
\]

\[
na te'u'Lō, set snares. 108-2. (Pl. 25, fig. 5.)
\]

\[
ō'Lō, braid. 113-3.
\]

\[
a de' te'us Lō kwān, he had girded himself. 103-3.
\]

\[
na t gūt Lōn, he set snares. 108-4.
\]

-na, relating to hunger. (It has the person affected as an object.)

\[
egīnae, I am hungry. 141-14.
\]

\[
egīna e, I am hungry. 168-15.
\]

-nai(e), -na(e), to roast.  

\[103\]

\[
te'el nai(e), it is roasted. 113-15.
\]

\[
be'e na(e), I will roast. 168-16. (Pl. 33, fig. 2.)
\]

\[
te'gūn na(e), he roasted. (Pl. 33, fig. 1.)
\]

-na(?)

\[
nō, tin na(e), were left. 158-10.
\]

-nān, to drink.  

\[104\]

\[
ta ya(e) o nān, let them drink. 123-6. (Pl. 33, fig. 5.)
\]

\[
ta nān, drink. 88-6.
\]

\[
ta nān, he drank. 79-2.
\]

-nac, -nai, -na, to go. (Third person only.)  

\[105\]

\[
ka nac, it came up. 81-2. (Pl. 24, fig. 7.)
\]

\[
ka gūn nac, he came up. 75-2. (Pl. 33, fig. 8.)
\]

\[
ye gūn nac, went in. 165-15.
\]

\[
ye gī nai(e), they went in. 107-17.
\]

\[
ye nī na, came in. 143-11.
\]

-nat', to lick with the tongue.

\[
te'ul nat', licked. 103-14.
\]

-nes, to be long.

\[
gūn nes, it became long. 87-1. (Pl. 25, fig. 8.)
\]

-nī, -ne, -n, -nec, -nīl, to speak.

\[
hē ū'C e'nī, yes he said. (Pl. 33, fig. 9.)
\]

\[
te' te gūn nī, it makes a noise, thundered. 77-10. (Pl. 33, figs. 6, 7.)
\]

\[
a dō' na kwān nān, you talk. 166-9.
\]

\[
yā'na ya(e) nī, they said they say. 82-11. (Pl. 4, fig. 4.)
\]

\[
kwa' an ya(e) nī, he told him they say. 151-9. (Pl. 3, fig. 2.)
\]

\[
te' kūn nec, he talked. 160-1. (Pl. 25, fig. 14.)
\]

\[
dō' kin nec, didn't speak. 141-16.
\]

\[
t gūn nīl, it kept hooting. 179-7.
\]

---

\[102\] III, 239.

\[103\] III, 242.

\[104\] III, 243.

\[105\] III, 242.
-nic, to play.106
  na gô’ nic, you played with. 134-17.
  na gûs nic kwâñ, he had been playing. 115-10.

-nûk, to relate.
  wûn kw nûk de’, you tell about when. 176-2.

-sas, to pull, to drag.
  ta nas sas, he pulled it out. 132-7.
  tat dûl sas, we dragged out. (Pl. 35, fig. 6.)

-sat, to be deep.
  kwûn sat, deep water. 74-10. (Pl. 34, fig. 11.)

-sat, -sât, to sit.
  nûn sat, sit down. 140-18. (Pl. 34, fig. 10.)
  na nô’ sat, you (plu.) camp. 173-7.

-sî’ê, relating to one’s head and its position.
  be t gûn sî’ê, had her head close. 152-3.
  t gûn na sî’ê, turned heads. 165-12.

-sîl, to steam (?).107
  nê sîl, I am sweating. (Pl. 35, fig. 1.)

-sîl, -sûl, -tsûl, to strike (repeatedly).108
  na nel sîl, it struck. 162-11.
  kwûn ye te’ûl sîl, it pounded into the ground. 154-10.
  ôl sûl, peck. 113-9.
  nûn yûl tsûl, beats against it. 86-12.

-sô ( ?)
  nô te gûl sô, she pushed in. 153-3.

-sûl, -sûl, to be warm.109
  kô wûn sûl, it was becoming hot. 81-2. (Pl. 1, fig. 5.)
  gûn sûl le, is hot. 149-7.
  gûn sûl, it became warm. 96-4.

-sûn, to think. (First and second person.)
  dô kw ne sûn, I was insensible. 182-17. (Pl. 35, fig. 5.)
  nô nûc sûn ôt, I thought you. 171-6.

-sûn, to hide.
  be nô’ sûn, you (plu.) hide it. 113-4. (Pl. 35, fig. 3.)
  be nôn sûn kwâñ ôû gi, you were hiding it. 101-10.
  be nô gûs sûn, she hid. 135-11.

106 III, 247.
107 III, 253.
108 Cf. -sût, to pound.
109 See -sîl above. III, 253.
-sūn, -sūs, to hang, or to be hanging.
  te' tei sūn, he hung up. 176-13. (Pl. 35, fig. 4.)
  na sūs, hanging. 176-16.

-sūs, to see.\footnote{See Hupa -tsis. III, 272.}
  cūt sūs e, (nobody) sees me. 176-1.
  dō dūl sūs he, we did not see. 116-18. (Pl. 26, fig. 7.)

-sūt, to fall.\footnote{Hupa -tsit. III, 273.}
  nōl sūt, he fell. 147-8.
  te' tei sūt, he fell. 147-7.

-sūt, to pound.\footnote{Hupa -tsit, III, 272.}
  tū sūt, I will pound. 110-3. (Pl. 35, fig. 8.)
  k'gūn sūt, she pounded. 135-9. (Pl. 35, fig. 9.)

-sūt', to wake up.\footnote{Hupa -tsit, III, 253.}
  te'e sūt, wake up. 100-9.
  te'e'n sūt', woke up. 134-13.

-ca', -cac, to go. (First person only.)\footnote{Hupa -tsit, III, 272.}
  na ca', I will go about. 133-6. (Pl. 23, fig. 7.)
  nan ca', I will cross. 154-1.
  ta cac, I went. 182-17.

-ca', to catch with a hook.\footnote{Hupa -tsit, III, 253.}
  gūs ca', they caught. 158-8.

-ce', to spit.\footnote{Hupa -tsit, III, 253.}
  k'wūt te'ya ce', they spit on. 154-14. (Pl. 35, fig. 12.)

-ci'n, -cūn', to be black.
  et ci nē kwān nañ, it had turned black. 94-7. (Pl. 3, fig. 1.)
  na cūn', black. (Pl. 36, fig. 2.)

-ci'e, to dig.\footnote{Hupa -hwai, -hwaL, -hwa, -hwauw, III, 248.}
  ka te'gūc ci', they dug. 148-11. (Pl. 35, fig. 13.)
  ka te'gūn ci', they were digging. 148-8. (Pl. 35, fig. 14.)
  ka ya' ci', they dug. 148-12.

-co'n, to be good, to be good looking.\footnote{Hupa -hwai, -hwa, -hwauw, III, 248.}
  n cō ne, it is good. 79-4.
  n cōn ūn gi, it is beautiful. 100-5.

\footnote{Cf. cek, spit.}
\footnote{Hupa -hwe, III, 249.}
\footnote{Hupa, -hwōñ, III, 201.
-he⁵, to be tired (but only when used with a negative prefix).

dō yi he⁵e, I am tired. 98-1. (Pl. 36, fig. 6.)
nĩn dōn he⁵ ūn, are you (sing.) tired? 141-1. (Pl. 36, fig. 7.)
dō yi de he⁵, we are tired. 116-7. (Pl. 36, fig. 8.)

-ba⁵, to be thirsty.

ta gi ba, I am thirsty. 141-10.
t gi ba e, I am thirsty. 118-4.

-bañ, to walk lame.

te' te' bañ, he walked lame. 133-6. (Pl. 24, fig. 14.)
mac ba nã, I am lame. 133-8.
na gāł te bañ, he limped along. 138-13.

-bat, -bac (-büc), to embrace(†).

be te' ma doît, he embraced it when. 131-2.
da kit dūl büc, he embraced it. 180-3.

-be⁵, to bet.

te'üc be⁵, I bet. 146-12.

-be⁵, -bîl⁵, to pick.

ya⁵ te' bë, they were picking. (Pl. 36, fig. 10.)
yǝ⁵ k' te' bîl⁵, they went to gather. 152-5.
yǝ⁵ te' be dûñ, they were picking where. 120-6.
ke güm me, he gathered. 76-4.

-be⁵, -bîn⁵, -bîc, to swim.†

nô hìn na' be, swim (plu. imp.). 111-2. (Pl. 36, fig. 9.)
ni bî ne, I swam. 118-17.
na nô' bîc, swim across. 96-11.
tûm mîc, swim. 118-16.

-bîl⁵, -bûl, -bûl, to fall, to rain (plural object).†

t e t bîl⁵, it rained. 81-1. (Pl. 36, fig. 13.)
yǝ⁵ ga bîl⁵, they threw over. 149-8.
kva na s'is bîl⁵, he sprinkled around him. 80-6.
côk tût bûl, good it rains. (Pl. 36, fig. 12.)
t e nan t bûl, come to me again. 143-8.

-bûl⁵, to handle flour(†).

ta te'üm mûl, cook mush (sing. imp.). 163-14. (Pl. 6, fig. 8; pl.
37, fig. 5.)
ta te'ü mûl, cook mush (plu. imp.). 123-13. (Pl. 24, fig. 1; pl.
37, fig. 6.)

-bûl, to hang up.

t e t e te' bûl, he hung it up. 79-13. (Pl. 37, fig. 2.)
t òc bûl, I will hang up. 115-6. (Pl. 37, fig. 3.)
t e te' bûl kwâñ, he had hung up. 176-3. (Pl. 27, fig. 8.)

† Hupa -me, -men, III, 240.

† Hupa -meL, -mil, -mîL, III, 240.
-būn, to be small(†).
  do būn nē kwa nān, were small. 95-6.
  yač do mān, they became small. 107-12.

-būn, to be full.120
  dē mān (din būn), it was full. 129-12. (Pl. 37, fig. 1; pl. 6, fig. 6.)
  lē mān, were full. 82-14.
  do te būn ne, is not full. 149-6.
  tes dūl būn, we filled. 182-2.

-dā, -dāi, to sit, to remain.121
  sūn dā, you stay (sing. imp.). 79-7. (Pl. 37, fig. 7.)
  bič stā, he was sitting in. 132-3. (Pl. 6, fig. 7.)
  si dāi, I sit. 140-7.
  te'n nēs dāi, he sat down. 161-10. (Pl. 37, fig. 8.)

-dāi, to be exhausted(†).
  do tōc dāi, he didn’t give out. 128-12.

dac, to travel.122
  te'na gūt dac, he came up again. 149-13. (Pl. 10, fig. 6; pl. 37, fig. 10.)
  yal dac būn, you must jump up. 82-16.

-dac, to dance.
  nāc dac, I will dance. 103-9. (Pl. 37, fig. 9.)
  te'gūn dac kwañ, he had danced. (Pl. 37, fig. 11.)

-delč, -dul, to go (dual only).123
  te'n nūn delč, they came up. 158-6. (Pl. 37, fig. 13.)
  kā si delč, we came up. 141-2. (Pl. 1, fig. 7; pl. 37, fig. 12.)
  te'te dē le, they went on. 108-12. (Pl. 38, fig. 1.)
  bē dūl, let us climb. (Pl. 23, fig. 13.)
  tī dūl, let us go. 141-6. (Pl. 38, fig. 2.)

delč, -delč, -dul, to handle objects (plural).
  de t gūl delč kwañ, had put in the fire. 131-7.
  da nūl dēl kwañ, he had put on a frame. 135-4.
  ta ya it dūl, she put in water. 143-4.

-deč, -de', to win.
  nač te'ūs dec, he won back. 147-1.
  nač te'ūs de', he won back. 146-14.
  ko wān te' gūl de', from him he won. 146-8.

120 Hupa -men, -mič, III, 241.
121 III, 254.
122 Cf. -dauw, III, 255.
123 III, 256.
-de'g, -de', to wash.
  te' na te'gul de', he washed it. 129-2.
  te' na te'gul de', she washed them. 153-5. (Pl. 38, fig. 3.)
  te' na te'gul de, he washed it. 168-16.

-dűn, -dūn, to shine.124
  te'n us dűn*, shone. 85-9.
  na te'nun din būn, it will be light. 140-4.
  cūn dīne, the sun shines. 192-13. (Pl. 38, fig. 4.)

-dōn, to be none.125
  n dōn būn, it will not be. 80-13. (Pl. 38, fig. 5.)
  nūt dōn*, all gone. 99-11.
  n dōn ye, there is none. 109-1. (Pl. 38, fig. 6.)

-dūn, -dūn, relating to the movement of fish in numbers.
  nūn dūn, they came. 169-8.
  tūn dūn, come. 120-17.
  tūn dūn būn, must come. 120-18.

-dūn, to move something up and down (†).
  na nail dūn, he moved (a basket) up and down. 150-2.

-dūn, to die.
  ne* dūn, you will die. 177-4. (Pl. 25, fig. 2.)
  ce dūn ne, I died. 128-4. (Pl. 38, fig. 7.)
  ce e dūn tē le, I will die. 177-5. (Pl. 38, fig. 9.)

-dūts, -dūs, to twist.
  gūt dūts, is twisted. 114-1.

-dūk, to crack (acorns).
  te'ne dūk e, I crack them. 140-4.
  te'nu tūk, crack them. 138-2.
  te'nu tūk būn, you must crack. 136-1.

-dji, to be day.
  o dji kwic, about day probably. 124-1.

-djel, to roll.
  tān nas djel*, it rolled out of the fire. 147-9. (Pl. 10, fig. 1; pl.
  41, fig. 3.)

-tal*, tāl, to step or move the foot.126
  te' te'gūl tal*, he stepped in water. (Pl. 38, fig. 10.)
  nūl tāl, you step. 82-1.
  te'te' gūl tāl, he dragged his foot along. 90-4.

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124 III, 260.
125 Cf. dō, not, the negative prefix.
126 III, 261.
-tən, -təc, to handle a large object.\(^{127}\)

tecən tən, he took out (spear-shaft). 170-14.


-tən, to eat (third person only).\(^{128}\)

te't tan tən gi, he is eating. 174-1. (Pl. 38, fig. 11.)

-tə, to look for anything.\(^{129}\)

ka kw nə te, look for him. 160-1. (Pl. 39, fig. 1.)

ka ŋə nə te, they looked. 114-9.

-tn, to eat (third person only).\(^{125}\)

tc'ən tən fi, he is eating. 174-1. (P1. 38, fig. 11.)

-te, to look for anything.\(^{129}\)

ka kw nə te, look for him. 160-1. (Pl. 39, fig. 1.)

ka ŋə nə te, they looked. 114-8.

-tən, to be wide or flat.

nə tən, flat. 180-14.

kwən tən, tən lit, it was becoming flat. 107-3. (Pl. 27, fig. 2.)

gən tən, was flat. 106-11.

tc'əcən kwən, he had spread. 115-11.

-teə, to teach (†).\(^{130}\)

be gən teə, he taught. 122-11. (Pl. 39, fig. 3.)

ke gut teə, he taught them. 122-1.

-tən, -təc, relating to movement or position of an animal alive or dead, with transitive or intransitive meaning.\(^{131}\)

nes tən, it is lying. 182-3. (Pl. 39, fig. 5; pl. 10, fig. 7.)

nən sən sən tən, he picked him up. 179-14. (Pl. 39, fig. 7.)

tən nas tən, she took out again. 129-2. (Pl. 39, fig. 8.)

cə sə ti ne, I lay. 175-16. (Pl. 39, fig. 9.)

nə ni tən, he put it. (Pl. 39, fig. 10.)

tc'nəs tən, he lay down. 175-11. (Pl. 5, fig. 2.)

ul təc, give it. 179-2.

na nən təc, lie down again. 100-1.

də cə gəu təc, you did not give it to me. 179-5.

-təc, relating to position or movement of water.\(^{132}\)

nə tə'ən təc, water came so far. 75-1. (Pl. 7, fig. 6.)

-təc, to jump or to cause to jump.\(^{133}\)

na tc'əl təc, he snapped it. (Pl. 39, fig. 11.)

-tən, -te, to be cold.

us tən, it was cold. 96-1.

us tən e, it is cold. (Pl. 40, fig. 3.)

kə wən tən, it is cold. 121-10.

-te ti'ə nə, I might be cold(†). 133-8.

\(^{127}\) III, 262.

\(^{128}\) III, 263.

\(^{129}\) III, 264.

\(^{130}\) Cf. Hupa -tə, -te, -tel, to sing, in a ceremony. III, 267.

\(^{131}\) III, 264-6.


\(^{133}\) III, 267.
-tūk, to burst.
  gūt-tūk, it burst. 182-5. (Pl. 8, fig. 1; pl. 40, fig. 1.)
-tūk, to kill.124
  s̓d̓j̓ị̓tūk, kill me (plu.) "my heart(?)" 151-8. (Pl. 40, fig. 4.)
-t'a, to use a sling.
  na kw̓n̓ce t'a kw̓le, I am going to sling at him. 122-14. (Pl. 40, fig. 9.)
-t'an, relating to wax-like substances.135
  k'we ya' he t'aṇ̃̓, they stuck on. 170-6.
-t'ats, -t'as, to cut.126
  yis t'ats, he cut it. 162-10.
  ta gūt-t'ats, he butchered. 175-4. (Pl. 24, fig. 2.)
  te'n ne sil t'ats, I cut it up. 138-15. (Pl. 40, fig. 12.)
  te'n Nó̓ul t'as, cut them (plu. imp.). 166-15. (Pl. 40, fig. 11.)
-t'ag, -t'a', to fly.128a
  nūn t'as, it flew. 182-11. (Pl. 40, fig. 6.)
  te'ic t'a te le, I will feather. 156-5. (Pl. 7, fig. 9; pl. 40, fig. 5.)
-t'e, to have an appearance or disposition.137
  ac t'e, I am. 159-10.
  a nō' t'e, you are. 139-1.
  q̓n dō̓t t'e ye, we are. 132-5.
  qn t'e, it is. 100-10.
  kūn t'e, she is like. 181-11.
-t'e, to cook.
  tō̓t t'e, you cook (plu. imp.). 167-16. (Pl. 40, fig. 10.)
  ʔ̓s t'e ye', it is cooked. 163-15. (Pl. 40, fig. 8.)
-t'iñ, to do.138
  dō̓ kw̓a t'iñ̓, he never did that. 130-14. (Pl. 9, fig. 4.)
  kw̓ač t'iñ, I did that. 147-5.
-t'ōt, to suck.139
  k̓uł t'ōt, he sucked it. 159-2. (Pl. 40, fig. 2.)
  te'ił t'ōt, (make) it suck. 115-3.
-t'ōg, -t'ō', to sting.
  na te'et t'ō, she stung. 156-14.
  nūn yin t'ō gōt, she stung them. 156-15. (Pl. 26, fig. 3.)
  te'et dō̓t t'ō' kw̓c, something stung I guess. 114-14.

124 Cf. -tūk, to burst.
126 III, 268.
128a Cf. t'a', feathers, and Hupa -tau, III, 268.
137 III, 268.
139 III, 269.
139a Cf. Hupa -tōt, to drink, to suck. III, 267.
-t'ok', to flake flint.

*te'us t'ok', he flaked. 156-7. (Pl. 11, fig. 8.)*

-ts'ai, -s'ai, to be dry. 140

*ōl sai dja', let them dry. 136-3.*

*gūl. ts'ai, it was dry. 123-4. (Pl. 34, fig. 8.)*

*te'us sai, she dried it. 181-4.*

-ts'ān, -sqū, to find, to see. 141

*te'ūl ts'ān, he found. 97-4. (Pl. 34, fig. 6.)*

*dō ha' te'ūl ts'a ne, he did not find. (Pl. 34, fig. 7.)*

*ūl sañ, do you see? 141-2.*

*dō gūl sañ, it was never found. 179-6. (Pl. 34, fig. 9.)*

-ts'ān, to hear.

*ōc ts'añ, I heard. 182-8.*

*ya' te'o sūl sañ, they listened. 178-1.*

-tsō, to be blue.

*dūl tsō, blue. 113-13. (Pl. 35, fig. 2.)*

-tsūt, to know.

*dō ē dūl tsūt de, we didn't know him. 119-8.*

-ts'eg, -ts'ē', to eat soup.

*k gūl ts'eg, he ate soup. (Pl. 41, fig. 1.)*

-ts'ēg, -ts'ē', -s'ūl (-t'si*), to hear.

*na ya' dī ts'ēg, they heard again. 106-16.*

*ka na'l. ts'ē, they heard again. 106-14.*

-tc'ai, -tca, to bury, to cook by burying. 142

*te'gūl. tc'ai, he buried it. 129-2.*

*ka* dūt tc'ai, well, let us cook. 149-7. (Pl. 25, fig. 11.)*

*be te gūl. ca', she put in sand. 152-8.*

-tc'ān, to eat in company. 143

*na dūl tc'ān kwañ, he had eaten. (Pl. 41, fig. 4.)*

*na dic tc'ān ne, I ate. 171-9. (Pl. 41, fig. 6.)*

*na dic tc'ā, let me eat a meal. (Pl. 24, fig. 12.)*

-tc'ōn, to defecate. 144

*te'gūl tc'ān, he defecated. 142-7.*

140 III, 270.

141 III, 270.

142 Hupa -tewai, -tewa, III, 275.

143 Hupa, -tewan, -tewān, III, 275.

144 Cf. Hupa -tewen, -tewān, III, 278.
-tean, -teie, to leave one.
   ő teö nöteie bâñ, you may leave it. 118-1.
   dl teö teie te le, I will not leave. 139-18.
   ő teö gât teañ, they left them. 178-11.
   ő teö nî te ñe, I left him. 117-17. (Pl. 41, fig. 10.)

-tcat, -tcele, to be sick. 145
   t gën teâ de, is sick. 140-5.
   dön teâ bâñ, will be sick. 79-5.

-tcat, -tceat, to shout.
   gût tceat, they shouted. 165-9. (Pl. 25, fig. 10.)
   tcele, I will shout. 164-12.
   üt tceat, shout. 164-13.
   gût tceat, they shouted. 114-3.

-tcaël, -tceal', to be large. 146
   gën teâo kwâñ, had become large. 116-4.
   ő tceal', let be large. 93-7.
   wö n tceal', teeth large. 86-5. (Pl. 4, fig. 2.)

-tceal', -ceal, to be bad. 147
   n tceal e, bad. 140-18.
   dö ha n tceal mûn djaal, let it not be bad. 171-10.

-tceal (?), -tceal (-tceal), to split. 148
   djeal gût tcel, she split open. 129-3. (Pl. 24, fig. 5.)
   gût tcel, were opened. 125-6.
   djeal kûl tcel, split it. 80-9.
   djeal gût tcel, he split open. 129-3.

-tceal, -tceal', (-ceal'), to cry. 149
   te' gên teal ge, he cried. 133-1. (Pl. 41, fig. 11.)
   uc teal ce, I cried. 140-6. (Pl. 8, fig. 6.)
   ün tceal bâñ, you may cry. 115-7.
   dö ha kw ân ceal, do not for it cry. 117-8.

-teal, to blow, said of the wind. 150
   wa nûn teâl bâñ, it will blow through. 80-14. (Pl. 23, fig. 4.)

-teal', to be red, to dawn.
   teal' te gûs teal', it was about dawn. (Pl. 8, fig. 2.)
   teal' gûs teal', it was red. 148-5.

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146 III, 274.
147 Cf. Hupa -kya ă, -kya, III, 201.
149 Cf. Hupa -kya ă, -kya, III, 201.
-tein, -tei, -tei, to make.151
  ūl tei, make it. 79-8. (Pl. 41, fig. 8.)
  te'gul tei, it is growing. (Pl. 41, fig. 9.)
  kw na* ūl tei, make him live. (Pl. 10, fig. 2.)
  te'ot tei djæ*, let him make. 140-2.
  gül tei, they made. 178-3.
  ya* het tein, they made. 170-4.
  te'is tein, he made. 77-6.
  gic tei, I place along. 88-1.

-teös, relating to flat, flexible objects, such as skins.152
  naL teös, she put. 180-7.
  c gar teös, give me. 97-13.

-teöt, -teöl, to steal.
  k't teöl teöt, he stole. 118-11. (Pl. 9, fig. 6.)
  cI te sū. teöl*, I stole. (Pl. 42, fig. 1.)

-teök (-cûk), to arrange in a row, to string.153
  te'gûn teök kwân, he had filled. 159-6.
  te'gûn cûk kwân, hehad strung. 135-1.

-teûl, -teûl, to be wet or damp.
  na gûn teûl ya* ni, he got wet they say. 126-16. (Pl. 42, fig. 3.)
  nai teûl ût, it was wet because. 126-11.

-teûn, -teîc, to smell.
  ye gûn teûn, he smelt it. 114-4.
  gûl cûn ne, it smells. 109-6.
  sûl teic, you smell. 141-5.

-teût, -teï, to catch hold of.154
  yû teût, caught it. 114-4.
  gûl teût, he caught them. (Pl. 42, fig. 2.)
  te'ot teîf ya* ni, he caught it they say. 142-5. (Pl. 42, fig. 5.)
  naL tec bûn, you must catch. 116-16.

-teût', to feed.155
  kû wa gût teût', they fed her. 151-15. (Pl. 36, fig. 4.)

-teût, to stretch.
  nûL teût, you stretch. 78-15.
  te'ot teût, stretch it out. 77-13. (Pl. 42, fig. 4.)

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151 Hupa -tewen, -tewi, -tewe, III, 276.
152 Hupa -kyös, III, 284.
153 Hupa -tewök, III, 279.
154 Hupa, -kit, III, 283.
155 Hupa -kit, III, 283.
-te'añ, -te'ac, to shoot with a bow.
  s'ûs te'añ, he shot it. (Pl. 41, fig. 7.)
  gût te'añ', he shot. 110-13. (Pl. 25, fig. 9.)
  ûn te'ac, you shoot. 178-1.

-ga, -gai, to walk (third person only).\textsuperscript{158}
  na ga kwân, he had walked. 154-12. (Pl. 42, fig. 6.)

-gal\textsuperscript{t}, -gal, -gal\textsubscript{s}, to throw.\textsuperscript{157}
  nô te' gal\textsuperscript{t}, she threw it. 181-4.
  ka te'el gal\textsuperscript{t}, he tipped it. 154-3.
  k'ë gûl gal\textsuperscript{t}, she threw away. (Pl. 42, fig. 11.)
  nô' det gal kwân, he had poured. 125-13. (Pl. 42, fig. 12.)
  ya' gûl gal\textsuperscript{t}, he threw up. 142-3. (Pl. 23, fig. 1.)
  na nôl gal\textsuperscript{t}, put across. 153-18.
  nô' cûl gal\textsuperscript{t}, throw me. 133-4. (Pl. 25, fig. 1.)

-gal\textsuperscript{t}, -gal, -gal\textsubscript{s}, to drop, to beat.
  nañ gûl gal\textsuperscript{t}, he beat it. 177-6.
  nûn ic gal\textsuperscript{t}, let me chop. (Pl. 42, fig. 7.)
  nûn sût gal, you hit. 129-10. (Pl. 42, fig. 8.)
  nat gal\textsuperscript{t}, hit again. 177-7.

-gant\textsuperscript{t}, to be mouldy.
  te' tãnt\textsuperscript{t}, it is mouldy. 167-16. (Pl. 42, fig. 9.)

-gan, -gan\textsuperscript{t}, to kill (with plural object).
  ûc gañ, I kill\textsuperscript{f} 96-10.
  û ñañ, kill. 113-6.
  te'gûn ga ne, he was killed. (Pl. 42, fig. 10.)
  te'c nö'nûk a ne, he killed us. (Pl. 25, fig. 4.)
  nai gi gal bûñ, must kill. 173-2.

-gâc, to chew.
  te' o gâc, let them chew it. (Pl. 5, fig. 6.)
  yû gâc, let him chew them. 110-7.

-gat, to sew.
  te'c naiL gat de, he sewed up. 122-13. (Pl. 44, fig. 5.)
  nû na'f ât, he untied it. 122-15. (Pl. 44, fig. 6.)
  na he gat, he loosened. 122-14.
  na hûn a bûñ, you must untie it. 78-15.
  na hûn ât, you untie. 123-7.

-gats, -gâs, to scrape.\textsuperscript{158}
  û ñañ, scrape. 113-7.
  te' ge gats, she scaped them. 153-5.

\textsuperscript{158} Hupa -wai, -wa, III, 221.
\textsuperscript{157} Hupa -waL, -wâL, -wûL, III, 222.
\textsuperscript{158} Cf. Hupa -was, III, 224.
-geľ, to whip.
ōng geľ, whipped† 102-9.

-gelő, -gel, -gul, relating to the passing of night.159
gul geľ, it was getting late. (Pl. 43, fig. 1.)
ta kwōł, gelő, very dark. 127-3. (Pl. 2, fig. 4.)
ul gul, evening. 82-9.

-get, to thunder.
dō nai get, it didn’t thunder. 74-4.

-get, -ge, to spear.160
wai te’gün get, he struck over. 164-2.
yaľ te’ōng geľ, they speared. 166-16.

-gets, -gőc, -geľ, to look, to see.

n höc t geľ, let me see you. 142-6. (Pl. 43, fig. 2.)
te’ō na gůt gőc, he looked back. 87-13. (Pl. 43, fig. 4.)
te’on t getső, he looked at them. (Pl. 43, fig. 5.)
ō’ t gőc, look at them. 100-9. (Pl. 25, fig. 13.)
on t gőc. look. 95-12.

-giň, to kill.161
sel giň yaľ nį, he killed they say. (Pl. 43, fig. 10.)

-gin, -gőc, -geľ, -get, to carry on the back.162
te’ nō đąg geľ, we will put in water. 139-9. (Pl. 7, fig. 5; pl. 24,
fig. 3; pl. 43, fig. 6.)
te’n nųg gőc, she brings in. 180-9. (Pl. 43, fig. 7.)
nį gi neľ, I bring. 138-14. (Pl. 43, fig. 8.)
te’n nųń ſiňą, he brought it. 135-11. (Pl. 43, fig. 9.)
da nDIC geľ, I will pick you up. 141-4. (Pl. 7, fig. 3.)
tće geľ, I will carry. 135-4. (Pl. 8, fig. 4.)
te’t tes giň, he carried. 101-9.
gőc get, I will carry. 141-1.

-git, -gůc, to be afraid.163
be nį sůń git de, I am getting afraid. 130-15. (Pl. 6, fig. 2; pl. 44,
fig. 3.)
wůn ye nel git, they were afraid of it. 154-6.
wůn tó t gőc ſuň, might be frightened. 99-15.

-gits, to tie.

Le giťaľ, he tied together.
teľm met yiťa, a stick he tied. 169-5. (Pl. 30, fig. 12.)

159 Hupa -wel, -wil, -wil, III, 224.
160 Cf. bel get, spear head. 133-8.
161 Hupa -wen, -wiň, -we, III, 225.
162 Hupa -wen, -wiň, -wů, -we, III, 226.
163 III, 280.
-güts, to bite.
   be te güts, he bit it. 109-7.
-kai, to be alive.
   na kai, alive. 114-2.
-kal, -kai, to break.
   tas kal, break. 81-11.
   tük kal, I will break. 110-1.
-kan, -ka, -kai, relating to the passing of the night. n hes ka ni, we spent the night. 167-7. (Pl. 44, fig. 10.)
   n he öi ka kwie, we will spend the night probably. 105-3. (Pl. 27, fig. 10.)
   dö yin kai, not day. 178-12.
   yi gül kai, it was daylight. 105-5.
   yi gül ka lit, it got light when. 114-5.
-kän, -kaç, -ka, to move a vessel containing liquid.
   wa' öi kaž, she gave him. 129-4. (Pl. 23, fig. 3.)
   kō wa kaç, give him (a basket of food). (Pl. 45, fig. 1.)
Used of fishing with a net, probably the same stem.
   Cf. ö' kan, net it. 168-14.
   ts' gūn kan, he had caught. 120-1.
   dö ya' kaç, they didn't net it. 168-14.
   kwa te' güst ka, for him they dipped. 155-7.
-kän, -kūn, to be sweet.
   l. kūn, is sweet. 166-11.
   tūl ka mūn dja', sweet will be. 91-5.
-ke'e, to finish.
   be ni' ke'e, I have finished. 82-15. (Pl. 23, fig. 12.)
   bel ke'e, he finished. 172-12. (Pl. 45, fig. 3.)
   be lu ke get, he finished when. 149-15.
   be gec ke ge, I am finishing. 76-7.
-ke'e, to bathe (plural only).
   na' ke'e, bathe. 172-14. (Pl. 45, fig. 2.)
-ket, to trade.
   le te' gūn ket, they traded. 172-6.
-kūt, to ask, to question.
   dō ha' có dūl kūt, do not ask me. 166-8. (Pl. 45, fig. 8.)

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164 Hupa -xa, -xal, -xa1, -xūh, i1, 250.
165 Hupa -xan, -xāf, -xauw, i1, 250.
166 Hupa -xan, -xūn, i1, 250.
167 Hupa -xe, -xū, i1, 252.
168 Cf. Hupa -xāt, -xni, to buy, i1, 251.
169 Hupa -xūt, -xūl, i1, 252.
-kūt, to travel (plural only).

 tc'n nūl kūt, they came. 154-12. (Pl. 45, fig. 6.)
dō ha' tc'te' tc. kūt, they did not go. 167-17. (Pl. 45, fig. 7.)

-kūt, to swallow.

tc'gūl kūt, he swallowed. 109-7. (Pl. 1, fig. 3; pl. 45, fig. 5.)
nōc kūt, may I swallow you. 181-14.

-ke sal kūt, his mouth he put in. 157-15.

-kūt, to fall.

 wal kūt, fell through. 158-1.

 na te'ūn kūt, it fell. 83-4.

-kūt, -kūs, to float.

 yal kūt, floated. 143-7.

 tē. kūt, were washed away. 71-7.

 nō nūk kūs, it floated about. 127-8.

-k'a, -k'a', to be fat.170

 L k'a' būn dja'c, let it be fat. 85-14. (Pl. 26, fig. 10.)

 L k'a'a, is fat. 83-15.

-k'ai, to hit (with an arrow).171

 nūn nē. k'ai, he hit. 156-14. (Pl. 45, fig. 9.)

-k'an, to build a fire.172

 dō k'a'n, make a fire. 103-7. (Pl. 3, fig. 7.)

 gūl k'an, there was a fire. 162-13. (Pl. 45, fig. 10.)

 ūk k'a'n, make a fire. 127-11. (Pl. 45, fig. 11.)

-k'ats, -k'as, -k'at, relating to position and movement of long objects only.

 te' tōc k'as dja'c, let him drop. 129-8. (Pl. 10, fig. 4.)

 ya' gūl k'as, he threw up. 154-5.

 wān tōg k'ac, she threw up. 144-7.

 nō wīl k'as, fell. 152-1.

 nūn ya' l. k'as, they pushed them in. 154-14.

tc'gūl k'at, it fell. 154-10.

 te'ūn k'at, it struck. 154-11.

-k'et, to brace oneself in getting up from a sitting or lying position.173

 nūn sūs dūk k'et, he got up. 98-5. (Pl. 23, fig. 10.)

 nūn ūn dūk k'et, get up. 100-3. (Pl. 44, fig. 8.)

-k'ōts, to be sour, to be bitter.

dūn k'ōts, sour. 133-11.

dūn dūn kō teit, it is not salt because. 87-10.

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171 III, 281.
172 Cf. Hupa, wīl kan nei, a fire is burning. I, 151, l. 4.
-k'úc, to lighten.

do te't t'ul k'úc, it did not lighten. 74-6. (Pl. 44, fig. 9.)

-k'ún̄č, to twist.\(^{174}\)

ô'k'ún̄č, twist. 163-12.
na te'k'ún̄č, it is writhing. 177-8.

-k'úts, to push in.

wàl k'úts, put in. 105-14.
nai nei k'úts kwàn, had stuck in. 158-4.
tat ul k'úts, he pulled it out. 127-9.

-qal, -qal, to walk (third person only).\(^{175}\)

te'qal ya'ni, he was walking they say. 93-12. (Pl. 2, fig. 5; pl. 44, fig. 1.)

-qot, to penetrate with a point, to spear.\(^{176}\)

te'ús qot, he speared. 128-13. (Pl. 8, fig. 8.)
ûa qot, spear it. 128-12. (Pl. 44, fig. 7.)
ûe qot, I will spear it. 164-2.

**Suffixes**

The source of the information upon which the statement is based, the degree of probability, and the time and stage of completion are indicated by suffixes which stand after the stem of the verb. In some cases it is a matter of doubt whether these should be treated as separate words or as word parts merely. In most cases they do not seem to carry definite meaning when disjointed from the verb. Several of them are affixed to nouns and other parts of speech.

**Source of Information**

-e, -ē are used of facts directly observed or in which the speaker is concerned and has personal knowledge. The forms with -ē seem to be more emphatic.

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<td>be ne súi, git di</td>
<td>I am becoming afraid.</td>
<td>130-15. (Pl. 6, fig. 2.)</td>
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<tr>
<td>be nìi ke'ē</td>
<td>I have finished.</td>
<td>82-15. (Pl. 23, fig. 12.)</td>
</tr>
<tr>
<td>sì yi ne</td>
<td>I stand.</td>
<td>(Pl. 25, fig. 7.)</td>
</tr>
<tr>
<td>ye a'ne</td>
<td>house stands.</td>
<td>(Pl. 28, fig. 6.)</td>
</tr>
<tr>
<td>ûe ga nā</td>
<td>I kill.</td>
<td>138-4.</td>
</tr>
<tr>
<td>na'ûa gót'a'f ē</td>
<td>he put across.</td>
<td>134-5.</td>
</tr>
<tr>
<td>nas dûl lin nā</td>
<td>we have got back.</td>
<td>95-12. (Pl. 3, fig. 6.)</td>
</tr>
<tr>
<td>te'ôâa gi la nā</td>
<td>I went after.</td>
<td>136-10.</td>
</tr>
</tbody>
</table>

\(^{174}\) Cf. k'ún̄č, withes. 163-12.

\(^{175}\) III, 284.

\(^{176}\) III, 285.
-ũñ gi states the fact as undoubtedly true and directly observed but seems to indicate a degree of surprise.

te Loi ūñ gi, she is making a basket.  (Pl. 2, fig. 7.)
nû yañ kwâñ ūñ gi, it has cleared off.  168-1.  (Pl. 26, fig. 1.)
te sin ūñ gi, he is standing.  (Pl. 26, fig. 2.)
to tân ūñ gi, he is eating.  174-1.  (Pl. 38, fig. 11.)

ya^nî, to'in, are in form independent verbs. The former is the regular quotative used in myths and tales and is quite indefinite as to its subject.

to qal ya^nî, he was walking they say.  93-12.  (Pl. 2, fig. 5.)
to gûñ âl ya^nî, he chewed it they say.  109-7.  (Pl. 26, fig. 4.)
kwaict în' ya^nî, he did it they say.  (Pl. 31, fig. 3.)
na gûl teul ya^nî, he got wet they say.  126-16.  (Pl. 42, fig. 3.)
sel giñ ya^nî, he killed they say.  (Pl. 43, fig. 10.)

-kwañ refers to acts which while not directly observed, are inferred with certainty from the nature of the evidences observed.

ka gûl e'gâ kwâñ, they had sprung up along.  87-13.  (Pl. 27, fig. 7.)
to têl bun' kwâñ, he had hung up.  176-3.  (Pl. 27, fig. 8.)
to gûn dae kwâñ, he had danced.  (Pl. 37, fig. 11.)
na gâ kwâñ, he had walked.  154-12.  (Pl. 42, fig. 6.)
na^e del gâl kwâñ, he had poured.  125-13.  (Pl. 42, fig. 12.)

-kwa nâm seems to be used with suffix -e, -ê and indicates that the evidence but not the act is directly observed.

et ci nê kwa nâm, were black.  94-7.
et ga ye kwa nâm, were getting white.  94-5.
ta te'uî ate ê kwa nâm, turtles have come out of water.  95-8.
to te'o te'ot ye kwa nâm, someone had stolen.  135-15.

-kwûc, -kwie, is used with the first person only, and denotes conjecture as to past, present, or future happenings.

añ kwûc, it cries I guess.  115-4.
na hûc da kwûc, I will go back.  137-10.
na kwa nîc ta' kwie, I am going to sling at him.  122-14.  (Pl. 40, fig. 9.)
ne ôn ka kwie, we will spend the night probably.  105-3.  (Pl. 27, fig. 10.)
kwûc s'ûs nôl keê kwûc, might track us.  142-11.

-kwûl luc. This suffix seems to be related to the last in both form and meaning.

ûñ gi kwûl luc, is I think.  170-13.
tûs t'e kwûl luc ūñ, it is done I guess.  169-1.

Modal

-bûñ predicts the act or happening with more or less determination on the part of the speaker that it shall come to pass.
wa nun tei bûn, it will blow through. 80-14. (Pl. 23, fig. 4)
nai "ai bûn, it will be across. 85-8. (Pl. 23, fig. 8)
kal "ai bûn, it will grow up. 84-11. (Pl. 26, fig. 9)
nô "il bûn, you must stay. 105-2. (Pl. 28, fig. 8)
na cût na bûn, you must doctor me. 166-10. (Pl. 33, fig. 4)

-dja6 is used of future predictions in which determination or desire on the part of the speaker that the events shall come to pass is usually evident. For this reason it occurs more frequently in the first person.
te' tû. k'as dja6, let him drop. 129-8. (Pl. 10, fig. 4)
te'ô. tei dja6, let him make. 140-2. (Pl. 27, fig. 6)
ke na6 dja6, I want to live. 171-7. (Pl. 27, fig. 5)
lâ k'as bûn dja6, let it be fat. 85-14. (Pl. 26, fig. 10)
a dâl le dja6, we will do it. 83-2.

tc'ic, let him drop. 129-8. (Pl. 10, fig. 4)
tc'ic, let him make. 140-2. (Pl. 27, fig. 6)
kic na6 dja6, I want to live. 171-7. (Pl. 27, fig. 5)
kc'ic, I will try. 139-1.

-we, -têle. The simple future prediction without an implication of duty, necessity, or intention is expressed by te; tele is used when the information is on the speaker's authority.
te'ic tâ te le, I will feather arrows. 156-5. (Pl. 7, fig. 9)
nac tû te le, I will look. 165-4. (Pl. 27, fig. 3)
be na6 te le, I will try again. 139-1. (Pl. 27, fig. 4)
gül k'as te le, he will bring it. (Pl. 32, fig. 9)
ce dûn te le, I will die. 177-5. (Pl. 38, fig. 9)
nan dût te, are you going home? 120-13.
na hô tân nae te, will you move? 140-8.
nûl lin te, bûn, will flow. 89-5.
üt, te, you will make. 139-10.
na hûn dae te, will you go back? 137-9.
na hûc dae te, I will go back. 117-18.

-ût, -hût, when, because. This suffix subordinates the verb to which it is attached either as to time or cause as the context may require. It is confined in its use to the past. The suffix usually takes over as the initial of its syllable the final consonant of the stem. An h may be the final aspiration of the preceding stem.

ût, gûl lût, it was evening when. 105-6.
yai nût, ti nût, they brought it when. 128-16.
yas gûl k'as sit, he threw up when. 154-11.
yit tô gût, stuck him when. 156-1.
lôn tes ya hût, they came together when. 148-9.
na nûn la gût, he jumped across when. 147-7.
ô dji te'ôs tûk út, he killed because. 157-7.
wâm ni le get, I swam to because. 175-5.
na lôl út, it was wet because. 126-11.
nas li6 nût, he was tied because. 146-5.
te si ya hût, I went because. 118-5.
**Temporal**

-de⁹, when, if. This suffix is used of events in the future, whether certain to occur or not, fixing the time of another act or event.\(^{177}\)

-ő djii soô tâk de⁹, you kill it if. 177-5.
-wûn kw nûk de⁹, you tell about when. 176-2.
-na nûl gâl de⁹, you come back if. 117-18.
-na nûl gâl de⁹, when you put across. 153-11.
-na he sûn t yâ de⁹, if you go back. 137-10.
-tsûs qôt de⁹, if he spears it. 128-9.
-te'nûn yâ de⁹, if he comes. 142-11.
-gûl gel⁹ de⁹, night when. 97-10.
-gûn dô de⁹, is gone if. 140-2.
-kô wûn tûn de⁹, it is cold when. 172-15.
-kô te' gûl ûûs de⁹, when she runs down. 153-11.

-ûn expresses a contingency as less certain than -de⁹.

-ûc te li⁹ ûn, I might be cold(?). 133-8.
-wûn tôt gûc ûn, might be frightened. 99-15.
-na ôn te lô'ûn, may come. 133-9.
-tôt bûr ûn, it may rain. 168-6.
-Cf. na nó te'ûl ke'û le'n⁹; he might track us. 138-10.
-ta nan õ da õ le'n⁹, he might come again. 135-8.

-kwa⁹ denotes the continuance of the act until a stated time.\(^{178}\)
-na hûc ga kwa⁹, I am untying yet. 123-10.
-te'nûn dûc kwa⁹, he danced until. 130-15

-l, -L suffixed to the syllable of stem is used for acts or conditions that are continuous in time or place.

-t gûn nûn, it kept hooting. 179-7.
-tee' gûl laô,\(^{179}\) he cried along. 145-5.

-c is used of continuous or often repeated acts. It is also found in the imperative of many verbs without its meaning being clearly manifest.

-ta cac, I went. 182-17.
-tûn yac, you go. 78-13.
-tûm mie, swim. 118-16.

-bî, in. This suffix common with nouns occurs with verbs with the sense of when.

-tea kwûn gel⁹ bî, very dark in. 179-8.
-tea kwûn gel⁹ bî ûn⁹, very dark in. 179-7.

\(^{177}\) III, 321.

\(^{178}\) Cf. Hupa -ôx, -x, III, 304.

\(^{179}\) The stem is tee', therefore -gûl laô is an extended form or a compound suffix.
-ûn is used in asking a question to be answered by yes or no.

waŋ 'æ ūn, did you give? 137-8.
nan tya ūn kwăn, have you come back? 132-14.
te'ûn yan ūn kwăn, you have eaten? 138-3.

-kwan hût, two of the suffixes presented above, when combined make a relative temporal reference to the completion of the act.

nas liū ūt kwăn hût, it was again because. 107-6.
te'ts teîn kwăn hût, he had made when. 120-1.
te'ûs yî kwăn hût, he had named when. 117-12.
te'ûs t'a kwăn hût, he had feathered when. 116-12.
kë nôt get kwăn hût, because you were afraid. 123-12.

**TENSES AND MODES**

In addition to temporal and modal variations expressed by means of prefixes and suffixes discussed above there are two forms of the completed verb resulting in part from accent which have different temporal modal force associated with them. The present indefinite is usually the shorter of the two forms and is used mostly for the imperative, for intended or proposed action in the first person, and in negative statements. It might be distinguished as the non-indicative. The subject prefix of the first person singular is c, the second modals are usually absent, and the weaker form of the stem is usually found.

The definite tense is usually indicative in mode, referring to an act or state as existing at a definite time, usually past. It is distinguished by i as the subjective prefix in the first person singular, by the presence of one of the second modal prefixes, and by the stronger form of the stem. The glottal stop is so frequently found as the final element of the stem that it seems plausible that it is a morphological or phonetic characteristic of this form.

<table>
<thead>
<tr>
<th>Present Indefinite</th>
<th>Past Definite</th>
</tr>
</thead>
<tbody>
<tr>
<td>õe læs, I will get. 137-2. (Pl. 24, fig. 11.)</td>
<td>õn gi la ne, I brought. 137-1.</td>
</tr>
<tr>
<td>nae be, let me swim.</td>
<td>ni bi ne, I swam. 118-17.</td>
</tr>
<tr>
<td>cõã õe le, I will fix it. 77-3.</td>
<td>cõã gi la õe, I am fixing it. 76-12.</td>
</tr>
<tr>
<td>tše ca, I am going. 161-1.</td>
<td>te si yai, I went. 120-17.</td>
</tr>
<tr>
<td>ta te' ô'bûr, prepare mush (imp. plu.). 123-18. (Pl. 37, fig. 6.)</td>
<td>ta te sõ'bîl, have you cooked? 169-14.</td>
</tr>
<tr>
<td>tôt bûl, let it rain. 80-12.</td>
<td>tet bîl, it rained. 81-1. (Pl. 36, fig. 13.)</td>
</tr>
<tr>
<td>tô gûe bûn, let him carry. 140-1.</td>
<td>tes gin, he carried. 101-11.</td>
</tr>
<tr>
<td>Adverbial</td>
<td>Dialect</td>
</tr>
<tr>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>ya'</td>
<td>ya to'</td>
</tr>
<tr>
<td>ye'</td>
<td>tc'</td>
</tr>
<tr>
<td>wa'</td>
<td>tc'</td>
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<tr>
<td>Le</td>
<td>ge</td>
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<tr>
<td>na</td>
<td>de</td>
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<td>nō'</td>
<td>tc'</td>
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<td>nun'</td>
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<td>nun'</td>
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<td>na</td>
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<td>te' nō</td>
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<td>tc'</td>
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<tr>
<td>tc'</td>
<td>n</td>
</tr>
<tr>
<td>ką</td>
<td>l</td>
</tr>
</tbody>
</table>

**Note:** The verbs are analyzed from the table and their meanings are provided in the text. The numbers in parentheses correspond to the page and figure numbers cited in the text. The suffixes and stems are derived from the Kato language. The adverbials such as ya' and ye' indicate the use of the verb in different contexts. The table provides a comprehensive view of how these verbs can be used in various grammatical structures.
INTERPRETATION OF TRACINGS

Plates 3 and 4 have nasal tracings for the upper line. These are made as follows: a glass bulb open at each end is inserted in one nostril, from the outer end of which a rubber tube passes to a tambour having a rubber membrane rather tightly stretched. To this rubber membrane a straw lever ending in a horn tracing point is attached. As long as the posterior orifices of the nostrils are closed by the velum the line will be straight, but as soon as the velum falls the tracing point rises. The tracings show that the vibrations are recorded both in the nasal consonants and nasalized vowels, when the breath passes through the nose, and in the pure vowels, when the nasal passage is closed. In the latter case the vibrations must be transmitted through the soft and hard palate.

In plates 1, 2, and 5-11 the upper line is from the larynx. A metal tube ends in a cup-shaped termination over which a sheet of thin rubber is stretched. This is applied to one side or the front of the larynx. In these tracings the attachment was in most cases to the front near the notch of the Adam's apple. The subject's neck was soft and flabby, the larynx projecting but slightly. The connection and tambour were the same as those used for nasal tracings.

In both cases the points of the tracing levers were so adjusted that vertical lines drawn with the instrument cut the two tracings at synchronous points. The error due to irregularities of the drum does not exceed a millimeter (about .02 second).

The lower line in the above mentioned plates and the tracings in the remainder of the plates are made by the air column of the breath taken from the lips by a metal mouthpiece fitting closely and transmitted by a small rubber tube to a Marey tambour. All the tracings were, with one or two exceptions, made with the same tambour with no material change in its adjustment.

Vowels and semi-vowels result in more or less elevation of the tracing point which inscribes the vibrations; these are in most cases the fundamentals not the partials of the sounds. The liquid l has vibrations similar to those of the vowels, but usually shows one or more deep notches at its beginning. The nasals result in straight horizontal lines at the lowest level, since no breath issues
from the mouth during the articulation. The spirants are smooth upward curves showing only the varying strength of the air-column, which is controlled by the size of the opening of the mouth passage and the lung pressure. The instrument is not delicate enough to record the agitation of the air produced by the rubbing against the opening which gives the spirants their characteristic sounds.

The stops are shown by horizontal lines of the lowest level during the period of closure, and by nearly or quite vertical lines caused by the sudden release of air at the moment of explosion. If the stop be a sonant the point immediately falls and traces the vibrations. If an aspirated surd is spoken the point continues to rise or falls slowly without marking regular vibrations. If the stop is accompanied by glottal action the points fall sharply to or below the level marked by the tracer during the closure, the vibrations beginning as it recovers from this descent.

By observing the points where the vertical lines cut the horizontal ones in plates 1-11, the exact beginning and end of sonancy and nasalization can be ascertained as regards the movements within the mouth indicated by the breath tracing. The straight horizontal line is drawn mechanically while the paper is on the drum and constitutes a time line extremely accurate, with 50 mm. equal to one second. The duration of words, syllables, individual sounds, and often their component parts may be quickly determined.

Varying elevations of the tracings of the same sound in the same word indicate changing stress. It is probable that vowels being but slightly impeded in the passage through the mouth regardless of their quality show stress. The amplitude of the vibrations in the tracings varies with both stress and pitch, since the natural period of the membrane and lever favors a certain rate of vibration which its rendered more strongly. The pitch can often be determined, relatively at least, by counting the number of vibrations in a given length of base line.

Little can be determined as to the quality of the vowels by tracings such as these.

_transmitted march 1, 1911._
EXPLANATION OF PLATE 1

LATERAL SONANT AND SPIRANT

Upper line larynx, lower line breath.

Fig. 1.— la' nes, raccoon. 112-5.
Fig. 2.— 'a di', buckeyes. 94-6.
Fig. 3.— te'gli küt, he swallowed. 109-7.
Fig. 4.— 5 lañ, you get (imp.), 133-14.
Fig. 5.— kō wun sūl, it was becoming hot. 172-14.
Fig. 6.— te'uus H', he caught in a noose. 108-4.
Fig. 7.— -kasi döl', we came up. 141-2.
Fig. 8.— na dīl', sugar-pine. 89-17.
Fig. 9.— tc'nu net yhil', she eats up. 180-9.
EXPLANATION OF PLATE 2
LATERAL SPIRANT
Upper line larynx, lower line breath.

Fig. 1.—Lōn te ges, "rodent ears long," a mouse.
Fig. 2.—nal teōs, she put a blanket. 180-7.
Fig. 3.—nal gi, dog. 91-9.
Fig. 4.—te kwōr gel, very dark. 74-8.
Fig. 5.—te'qar ya ni, he was walking they say. 93-12.
Fig. 6.—L gi, rattlesnake. 91-17.
Fig. 7.—te' Lōi ū gi, she is making basket.
Fig. 8.—Lo' L tō, grass blue. 76-6.
EXPLANATION OF PLATE 3

NASALS

Upper line from bulb in nostril, lower line breath.

Fig. 1.— et ci nè kwăn n ngàn, it had turned black. 94-7.
Fig. 2.— kwut ön ya' nè, they told him they say. 125-9.
Fig. 3.— n dül 'iš', let us look. 168-1.
Fig. 4.— ő te'hef', to him. 79-9.
Fig. 5.— nas lif', he became. 107-8.
Fig. 6.— nas dül lin ne, we have got back. 95-12.
Fig. 7.— őt k'añ', make a fire (plu. imp.). 103-7.
EXPLANATION OF PLATE 4

NASALS

Upper line from bulb in nostril, lower line breath.
Fig. 1.—ya' bl' ûû', sky in. 81-3.
Fig. 2.—w6'n tca', teeth large. 86-5.
Fig. 3.—n gún dó', it became none. 76-12.
Fig. 4.—ya'n ya' nî, they said they say. 82-11.
Fig. 5.—kw6'û', fire. 81-3.
Fig. 6.—ca'na', creek. 79-3.
Fig. 7.—ne' û nô', behind the hill. 164-16.
Fig. 8.—k'îs', juneberry. 133-3.
Fig. 9.—wa tê'a mi', hole in. 156-12.
EXPLANATION OF PLATE 5
SPIRANTS
Upper line larynx, lower line breath.

Fig. 1.— se, stone. 71-3.
Fig. 2.— te'nes tiïñ, he lay down. 175-11.
Fig. 3.— wës, leg. 79-10.
Fig. 4.— c tci', my heart. 101-5.
Fig. 5.— bec 'ai', I will try it. 109-9.
Fig. 6.— te'gäc, let him chew it.
Fig. 7.— hake dëf', that time. 71-2.
Fig. 8.— nehin no'sit', our heads. 129-10.
Fig. 9.— y9', scoter(t), a bird. 122-6.
EXPLANATION OF PLATE 6
LABIAL STOP AND NASAL

Upper line of figs. 1-4, 7, larynx, of figs. 5, 6, 8, from bulb in nostril, lower line breath.

Fig. 1.— be co'k's, take me up (plu.), 147-6.
Fig. 2.— be ne sit git di, I am afraid of. 130-15.
Fig. 3.— t bôc, it is round. 80-1.
Fig. 4.— da bes ya't, he climbed up. 180-6.
Fig. 5.— main, weasel. 74-2.
Fig. 6.— dô môf', it is full. 129-13.
Fig. 7.— bi' sta, he was sitting in. 132-3.
Fig. 8.— ta te'um mâl, cook mush (imp. sing.). 163-14.
EXPLANATION OF PLATE 7

DENTAL STOPS

Upper line larynx, lower line breath.

Fig. 1.—dō, not. 137-2.
Fig. 2.—det gun tāh, be put in the fire. 168-17.
Fig. 3.—da' a die ge², I will pick you up. 141-4.
Fig. 4.—tō, water. 71-1.
Fig. 5.—te' nō dug ge², we will put in water. 139-9.
Fig. 6.—nō te'ün tō¹, water came so far. 75-1.
Fig. 7.—t'a³, feather. 105-14.
Fig. 8.—a t'a, her blanket fold. 181-9.
Fig. 9.—te'le t'a tē le, I will feather arrows. 156-5.
EXPLANATION OF PLATE 8
SONANT PALATAL STOPS
Upper line larynx, lower line breath.

Fig. 1.—güiلاق, it burst. 182-5.
Fig. 2.—te’te güstel’, it was about to dawn.
Fig. 3.—la6 güš, fox. 73-3.
Fig. 4.—tš equ, I will carry. 135-4.
Fig. 5.—na wö’ nie, you (plu.) played. 134-17.
Fig. 6.—te tei ee, I cried. 140-6.
Fig. 7.—qo, worm.
Fig. 8.—te’du qo, he speared it. 128-13.
Fig. 9.—kw na teq ha*, without his knowledge.
EXPLANATION OF PLATE 9

SURD PALATAL STOPS
Upper line larynx, lower line breath.

Fig. 1.—ka'la'a', it sprang up (of vegetation). 76-10.
Fig. 2.—nâk ka'a', two. 178-4.
Fig. 3.—te'ge kâs', a boat went. 126-7.
Fig. 4.—dô kwa't'Î, he never did that. 130-14.
Fig. 5.—kw là'.iï'sî', he looked at him. 134-2.
Fig. 6.—k't toto, he stole. 118-11.
Fig. 7.—gôl k'âsî, there was a fire. 162-13.
Fig. 8.—t k'an yî dôk, up the ridge. 99-3.
Fig. 9.—ô teî k'wôt', on his tail. 162-14.
EXPLANATION OF PLATE 10
AFFRICATIVES
Upper line larynx, lower line breath.

Fig. 1.— tan nas djol’, it rolled out of the fire. 147-9.
Fig. 2.— kw na’ üt tei, make him live.
Fig. 3.— te’gum ye, he broke off. 79-12.
Fig. 4.— te’töl k’as djas’, let him drop. 129-8.
Fig. 5.— na tei, orphan. 102-6.
Fig. 6.— te’e na güt dac, he came out again. 149-13.
Fig. 7.— ta’dji nes tiñ, where is he lying? 182-3.
Fig. 8.— nat. eöte, grass-snake. 84-5.
Fig. 9.— ye’te’gum yai, he went in. 97-11; 132-13.
EXPLANATION OF PLATE 11

MISCELLANEOUS

Upper line larynx, lower line breath.

Fig. 1.—wakets, one side, away from.
Fig. 2.—k'il', juneberry. 122-3.
Fig. 3.—wak'k'ats', he put in. 105-14.
Fig. 4.—t'w', raw. 91-5.
Fig. 5.—c b'dt', my stomach.
Fig. 6.—se q'it', a headdress. 176-17.
Fig. 7.—se tō nai, stone-fish (sword-fish?). 86-1.
Fig. 8.—te'us t'ük', he flaked. 156-7.
Fig. 9.—tō nō' ūn', water behind. 126-6.
EXPLANATION OF PLATE 12

MONOSYLLABIC NOUNS

Fig. 1.— a', clouds. 74-6.
Fig. 2.— ya', sky. 77-13.
Fig. 3.— ya', louse. 152-5.
Fig. 4.— yas, snow. 74-3.
Fig. 5.— wös, leg. 79-10.
Fig. 6.— tōk', steel-head salmon. 84-5.
Fig. 7.— tōt, smoke. 141-2.
Fig. 8.— Lō', herb. 71-3.
Fig. 9.— se', stone. 71-3.
Fig. 10.— sha', ground-squirrel. 73-7.
Fig. 11.— ca', sun. 74-9.
Fig. 12.— cek', sputum. 154-14.
Fig. 13.— bet., rope. 101-7.
Fig. 14.— bōs, slide of soil. 86-11.
Fig. 15.— sō, water. 71-1.
Fig. 16.— ges, salmon. 84-3.
Fig. 17.— kōs, cough.
Fig. 18.— k'ue, alder.
Fig. 19.— k'wa', fat. 83-15.
Fig. 20.— k'ūñas, hazel. 133-10.
NOUNS WITH POSSESSIVE PREFIXES

Fig. 1. — a t'a, her blanket fold. 161-9.
Fig. 2. — a t'a ni, her dress. 165-6.
Fig. 3. — u te's, her apron. 165-3.
Fig. 4. — u so', his tongue. 110-3.
Fig. 5. — u na's, his eye. 152-10.
Fig. 6. — u te's', her milk.
Fig. 7. — u sats, its hide. 110-4.
Fig. 8. — d il co', its shoulder. 75-1.
Fig. 9. — u de's, its horn. 74-10.
Fig. 10. — nat', your sister. 132-4.
Fig. 11. — e te ge, my grandfather. 153-10.
Fig. 12. — e ne's, my leg.
Fig. 13. — e sni', my knee.
Fig. 14. — e djir', my heart.
Fig. 15. — s teb, my grandmother. 97-16.
EXPLANATION OF PLATE 14

NOUNS WITH POSSESSIVE PREFIXES.

Fig. 1. — kwuñt, cousin. 145-2.
Fig. 2. — eñn ñi, my cousin. 145-3.
Fig. 3. — ba ej, his nephew. 145-3.
Fig. 4. — kwñt', his teeth. 181-8.
Fig. 5. — kw teñ', his tail.
Fig. 6. — kæte, knife. 110-10.
Fig. 7. — kw dañ', his mouth. 123-2.
Fig. 8. — kw kweñ', his foot. 82-5.
Fig. 9. — ski, boy. 102-6.
Fig. 10. — skik, children. 132-8.
Fig. 11. — c teñ djiñ', my kidney. 133-3.
Fig. 12. — kwñt dañ', his crown. 79-4.
Fig. 13. — s teñte, my grandchild. 97-16.
Fig. 14. — gæ teñ, redwood. 86-8.
Fig. 15. — gæ teñ, elk. 71-5.
Fig. 16. — dæte, quail. 72-5.
EXPLANATION OF PLATE 15

NOUNS WITH SUFFIXES

Fig. 1.—yi'lte, wolf. 71-6.
Fig. 2.—t'kôts, chestnut. 89-8.
Fig. 3.—t'kac toô, pelican. 72-13.
Fig. 4.—yi' toô, dance house. 83-11.
Fig. 5.—ts'ûû tet, turtle (bone broad). 90-14.
Fig. 6.—toûn ta', among trees. 171-9.
Fig. 7.—7 dô' L gai, its horn white. 181-16.
Fig. 8.—ya' L gai, house white.
Fig. 9.—toi gaitê, tail white. 133-12.
Fig. 10.—geei L chîk, salmon black. 86-2.
Fig. 11.—na L chîk, eye shining. 181-9.
Fig. 12.—cle biê, red earth in (a mountain). 102-15.
Fig. 13.—ye' biê ñê, house in. 110-15.
Fig. 14.—ye' bik, house inside. 99-5.
Fig. 15.—ya' bik, sky inside. 101-15.
Fig. 16.—bôts k'aiê, seagull. 122-6.
EXPLANATION OF PLATE 16

NOUNS WITH SUFFIXES

Fig. 1.— yi'tuk gut, house middle. 142-13.
Fig. 2.— gat te'o', barnacle.
Fig. 3.— se te'o'ta, stone rough (sand-stone). 77-9.
Fig. 4.— na'e' t'o'tu, world middle. 75-3.
Fig. 5.— lëc te'o, rotten log. 134-15.
Fig. 6.— ci'ai, summer time. 155-1.
Fig. 7.— ta'te'tu, ocean middle. 126-8.
Fig. 8.— wa te'a'nu, hole. 78-8.
Fig. 9.— nùn ye' tao, ground under is found (bulbs). 148-8.
Fig. 10.— nàl te'o'li, white thorn. 91-14.
Fig. 11.— nàl gi, dog. 91-9.
Fig. 12.— t'ao, black oak. 89-17.
Fig. 13.— nà nee, people. 71-7.
Fig. 14.— se k'at', grinding stone. 137-16.
Fig. 15.— nùd k te'o, pounded seeds. 94-4.
EXPLANATION OF PLATE 17

POLYSYLLABIC NOUNS

Fig. 1.—i da' kw, Wailaki or Yuki. 170-9.
Fig. 2.—na' co' k'na', robin. 72-9.
Fig. 3.—set te'o i, heron. 72-4.
Fig. 4.—ca' na', stream 79-3.
Fig. 5.—ban to', ocean. 86-10.
Fig. 6.—caac dii, bear clover. 94-9.
Fig. 7.—be lit, cchl. 90-15.
Fig. 8.—ban tie, mussel. 84-13.
Fig. 9.—bhe bunte, an owl. 92-8.
Fig. 10.—bel get, fish spear. 133-8.
Fig. 11.—bel kats, pole of fish-spear. 128-12.
Fig. 12.—be ta lo, owl. 72-2.
Fig. 13.—tun ni, road. 78-4.
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POLYSYLLABIC NOUNS

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Fig. 3.—te'a hqi, frog. 112-11.
Fig. 4.—te'n te' basa, a bird. 72-11.
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Fig. 6.—te'o bou, poison. 168-7.
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Fig. 8.—k'eu kits, old man. 108-2.
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EXPLANATION OF PLATE 19

NOUNS OF VERBAL ORIGIN

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Fig. 3.— ba na t'ai, post of dance-house. 130-17.
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Fig. 8.— te'ga te'ë', twine. 116-10.
Fig. 9.— teat.ni, mountain robin. 72-4.
Fig. 10.— te'ga't, basket-pan. 113-10.
Fig. 11.— te'wûc te'ë', foam. 85-3.
Fig. 12.— kwûn tet. bi't, valley. 174-9.
Fig. 13.— tehn nût, tehnût, Lewis' woodpecker. 72-8.
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EXPLANATION OF PLATE 20

POLYSYLLABIC NOUNS

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Fig. 13.—yi ban nāk ka', seven, "beyond two." 166-1.
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EXPLANATION OF PLATE 21
ADVERBS, PARTICLES, ETC.

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Fig. 2.— o ye', under it. 101-6.
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Fig. 12.— nûn kwî ye, underground. 75-8.
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Fig. 14.— he å', yes. 82-2.
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EXPLANATION OF PLATE 22

PRONOUNS, ADVERBS, ETC.

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Fig. 3.—cŏd kwa' lao, he did well. 104-6; 154-5.
Fig. 4.—ta din djì, what for?
Fig. 5.—di, this. 74-9.
Fig. 6.—da sit, soon. 136-5.
Fig. 7.—ta' dji, where? 182-3.
Fig. 8.—dô, not. 79-4.
Fig. 9.—tô te'ñ ñ a, water in front of. 77-7.
Fig. 10.—kae bi', tomorrow. 104-9.
Fig. 11.—k'ñn dìt', some days ago. 137-5.
Fig. 12.—kùn dûnte, close by. 79-6.
Fig. 13.—k'ñn dëk, yesterday. 128-7.
Fig. 14.—k'at de', soon. 96-4.
Fig. 15.—kùn taññ, enough. 77-8.
EXPLANATION OF PLATE 23

PREFIXES OF VERBS

Fig. 1.—ya' gšř gal, he threw up. 142-3.
Fig. 2.—ye' te' gšř yai, he went in. 132-13.
Fig. 3.—wa' šš kšř, she gave him. 129-4.
Fig. 4.—na naš teš bšš, it will blow through. 80-14.
Fig. 5.—te gšš 'šš, it was encircling. 82-15.
Fig. 6.—na naš dac, come down.
Fig. 7.—na ca', I go about. 133-6.
Fig. 8.—naš 'šš bšš, it will be across.
Fig. 9.—na des bšš, he spilled. 123-2.
Fig. 10.—naš s'šš dšš k'šš, he got up. 98-5.
Fig. 11.—nšš ga' šš, he put along. 86-11.
Fig. 12.—bšš des, let us climb.
Fig. 13.—da' bes ya', he climbed up. 180-6.
Fig. 14.—de dšš 'šš, you put on the fire. 131-9.
EXPLANATION OF PLATE 24

PREFIXES OF VERBS

Fig. 1.— ta te'o bi't, make soup (plu.). 123-13.
Fig. 2.— ta güt t'ais, they butchered. 175-4.
Fig. 3.— te' nō dūg ge', we will put in water. 139-9.
Fig. 4.— te'o nūn yac, come out.
Fig. 5.— dje' güt te'el, she split open. 129-3.
Fig. 6.— kwa nō' te, look for it. 154-11.
Fig. 7.— ka nac, it came up. 81-3.
Fig. 8.— kwa'n yō' gūl lat, it sank. 174-12.
Fig. 9.— kwōt te' gūn yai, he went down. 116-5.
Fig. 10.— no sūt yās, you (plu.) ate up. 136-16.
Fig. 11.— to' lāt, I will get. 137-3.
Fig. 12.— na die tea, let me eat a meal.
Fig. 13.— dō kō gūs iī, one couldn't see. 81-1.
Fig. 14.— te't tet bañana, he walked lame. 133-6.
Fig. 15.— di kwa't siên, he did this way. 79-12.
EXPLANATION OF PLATE 25

VERBAL PREFIXES, SUBJECTIVES AND OBJECTIVES

Fig. 1.—nö'e eli Gaz, throw me. 133-4.
Fig. 2.—ne 'o dëfs, you will die. 177-4.
Fig. 3.—ya* te'kw net. iñ, they saw him.
Fig. 4.—te'o nö' nän a ne, he killed us. 117-6.
Fig. 5.—na te'u Lø, set snares (plu. imp.). 108-2.
Fig. 6.—te'nun yai, he came there. 142-14.
Fig. 7.—si yi ne, I stand.
Fig. 8.—gun nos, it became long. 87-1.
Fig. 9.—gut te'añ*e, he shot. 110-12.
Fig. 10.—gut teñ, he shouted. 165-9.
Fig. 11.—ka* düt teca', well, let us bury. 149-7.
Fig. 12.—te'nu gut. iñ, he looked at it. 106-16.
Fig. 13.—6t goc, look at them. 164-9.
Fig. 14.—tc'kun nec, he talked. 160-1.
EXPLANATION OF PLATE 26

VERBAL SUFFIXES

Fig. 1.—nin yû̄ kwā gi gi, it has cleared off. 168-1.
Fig. 2.—te'sēs gi gi, he is standing.
Fig. 3.—nûn yû̄ t'u gi, when he stung. 156-15.
Fig. 4.—te'gû̄ aî' ya' ni, he chewed it they say. 109-7.
Fig. 5.—te'kei lo 'û, when he fooled them. 136-14.
Fig. 6.—te'nûn ya hût, when he came.
Fig. 7.—dò dû́ a sûhe, we did not see. 116-18.
Fig. 8.—na te gû̄ 'ô, he stood them up along. 88-13.
Fig. 9.—kaî 'ai bûn, it will grow up. 84-11.
Fig. 10.—k'â' bûn dja', let it be fat. 85-14.
EXPLANATION OF PLATE 27

SUPFIXES OF VERBS

Fig. 1.—niŋ yan de', when it cleared off. 167-17.
Fig. 2.—kwăn te' te lič, it was becoming flat. 107-3.
Fig. 3.—nuc in' te le, I will look. 165-4.
Fig. 4.—be mac 'ai' te le, I will try it again. 139-1.
Fig. 5.—kǔc na' dja', I want to live. 171-7.
Fig. 6.—te'ōt te' dja', let him make. 140-2.
Fig. 7.—ka ꚙt' ꚙ. kwăn', they had sprung up along. 87-13.
Fig. 8.—te' te' buť kwăn', he had hung up. 176-3.
Fig. 9.—nees ya nē kwa ngi, they were ripe. 94-4.
Fig. 10.—n be ō. ka kwis, we will spend the night probably. 105-3.
EXPLANATION OF PLATE 28

VERBAL STEMS

Fig. 1.—nəŋ dūl ‘a’, let us make a dam. 163-11.
Fig. 2.—na tgu ‘a’, he stood it up. 76-6.
Fig. 3.—na nū ‘a’, a flab-weir. 133-9.
Fig. 4.—di ‘a’ nū ‘a’, up there in a row. 109-10.
Fig. 5.—be yai ‘a’, they tried it. 85-2.
Fig. 6.—ye‘ s’ta ne, house stands. 141-5.
Fig. 7.—nō’iac nō hi, put, you (plu.). 110-11.
Fig. 8.—nō’ il bi, you must stay (plu.). 105-2.
Fig. 9.—te’nū ‘il’, they sat down. 170-8.
Fig. 10.—nū ‘i ne, I saw it. 137-1.
Fig. 11.—n dūl ‘iš’, let us look. 168-1.
Fig. 12.—kwac ‘i ne, I always do that.
Fig. 13.—nō hi, kwa’iš ‘i’, you (plu.) do that. 113-4.
EXPLANATION OF PLATE 29

VERBAL STEMS

Fig. 1.—nas 'uts, he ran about. 134-3.
Fig. 2.—te'te'ya'i, he went. 116-9.
Fig. 3.—k'ge 'uts, he was shooting along. 144-10.
Fig. 4.—t'un te'ya'i, they came together.
Fig. 5.—ca k'efi ya'i, sun went down.
Fig. 6.—ni ya ye, I came there. 136-17.
Fig. 7.—e gi ya'i, I am sleepy. 164-4.
Fig. 8.—te'nu y'a ya ni, he came there they say. 101-10.
Fig. 9.—te'gun ya'ni, he ate of it. 129-5.
Fig. 10.—te'gyi ya'ni, you (plu.) eat. 148-6.
Fig. 11.—te'gun ya'n, walk (sing. imp.).
Fig. 12.—nun y'ge, they were living. 160-12.
Fig. 13.—te'na ya'n, you (sing. imp.) eat. 125-7.
Fig. 14.—te'de'fi ya'n, he stopped crying. 148-4.
EXPLANATION OF PLATE 30

VERBAL STEMS

Fig. 1.—dō s dji' kw ya nē, I do not like him. 136-13.
Fig. 2.—dō ha' ka nōn t ēyi, do not be ashamed. 141-8.
Fig. 3.—bū tē' gōt ēyi, he doctored.
Fig. 4.—na' giū yīte, he rested. 161-4.
Fig. 5.—na dūlyi, let us rest. 140-18.
Fig. 6.—wā fūt t ēyi, some become old. 107-11.
Fig. 7.—kwōt yīte, he whistled.
Fig. 8.—dē yīte, I will make a house. 168-6.
Fig. 9.—s'ēh yīte, he made a house. 168-7.
Fig. 10.—gūl yīte yas ni, he built a house they say. 83-11.
Fig. 11.—tē'n nōn yōe, let it blow. 80-12.
Fig. 12.—te'm met yīte, a stick he tied. 169-5.
Fig. 13.—kwōn tīn yōe, they ran after him.
EXPLANATION OF PLATE 31

VERBAL STEMS

Fig. 1.—ka na gül laço, she digs out.
Fig. 2.—(b) na te' na lai, her eye she took out. 152-9.
Fig. 3.—kwaî' le' ya' ni, he did it they say.
Fig. 4.—di kwaî' laço, he did this way. 154-5.
Fig. 5.—cô' gi la ce, I fixed it good. 76-12.
Fig. 6.—bel get k'wâ' nò' lâco, spear point put it on (pl. imp.). 133-8.
Fig. 7.—k'wâ' nûl lôc, put it on (sing. imp.).
Fig. 8.—n tô lâco, let him sleep.
Fig. 9.—cô' dê le', I will fix good. 77-3.
Fig. 10.—n te' la' ya' ni, he went to sleep they say. 83-4.
Fig. 11.—nô' hin n tô' lâco, you (plu.) go to sleep. 110-16.
EXPLANATION OF PLATE 32

VERBAL STEMS

Fig. 1.— te'el le', he sang. 149-11.
Fig. 2.— na gül le, fish were swimming down. 128-12.
Fig. 3.— s'as lié', he became. 84-11.
Fig. 4.— te'e gül le', he commenced singing. 105-11.
Fig. 5.— ka kô si le, I am sick.
Fig. 6.— nas lié', he tied up. 145-7.
Fig. 7.— te'as lié', he caught in a noose. 108-4.
Fig. 8.— gül ist, it was burning. 173-16.
Fig. 9.— gül lö te le, you will bring. 136-5.
Fig. 10.— te' te lö, pulled repeatedly. 175-2.
Fig. 11.— wânt te'kô liik, he told about it. 161-18.
Fig. 12.— taille liuk, soft. 179-12.
Fig. 13.— kwül liuc ââ gi, it looks like. 170-14.
EXPLANATION OF PLATE 33

VERBAL STEMS

Fig. 1.—te'get na', he roasted.
Fig. 2.—bec na', I will roast. 168-16.
Fig. 3.—kēe na', I want to live. 182-5.
Fig. 4.—na eōl na bō, you must examine me. 166-10.
Fig. 5.—ta ya'ōnāl, let them drink. 123-6.
Fig. 6.—te' tōg gun ni, it makes a noise.
Fig. 7.—te' tōg gun ni, it thundered. 77-10.
Fig. 8.—ka gun nāc, he came up. 75-2.
Fig. 9.—he -tē te'nī, yes he said. 82-2; 102-8.
Fig. 10.—gun 145, became many. 83-14.
Fig. 11.—gun la ne, have become many. 169-10.
EXPLANATION OF PLATE 34

VERBAL STEMS

Fig. 1.—bi nõ' te', soak them (imp. plu.). 110-6.
Fig. 2.—bi nõ' gül tek, they soaked them. 179-1.
Fig. 3.—na nën tät, jump across. (imp. sing.).
Fig. 4.—te'näntä, he ran out. 142-6.
Fig. 5.—nätä, it is stout. 78-12.
Fig. 6.—te'ütsän, he found. 97-4.
Fig. 7.—(dõ ha') te'ütsän ne, he did not find.
Fig. 8.—gül tsaï, it was dry. 123-4.
Fig. 9.—dõ gül san, it was never found. 179-6.
Fig. 10.—nën sät, sit down (sing. imp.). 140-18.
Fig. 11.—kwn sät, deep water. 74-10.
VERBAL STEMS

Fig. 1.—nēsil, I am sweaty.
Fig. 2.—dāl tāl, blue. 113-13.
Fig. 3.—be no' sūf, you hide (plu. imp.). 113-4.
Fig. 4.—te'tet sūf, he hung up. 176-13.
Fig. 5.—dō kw ne sūf, I was insensible. 183-17.
Fig. 6.—tōt dāl sā, we dragged out.
Fig. 7.—te'gūn sōt, he pounded up. 80-5.
Fig. 8.—čā sōt, I will pound. 110-3.
Fig. 9.—k'gūn sōt, she pounded. 135-9.
Fig. 10.—na čā', I go about. 133-6.
Fig. 11.—te'gūn cāi, she buried in ashes. 129-2.
Fig. 12.—k'wāt te'ya čē', they spit on. 154-14.
Fig. 13.—ka te'gūc čī', they dug. 148-11.
Fig. 14.—ka te'gūn čē', they were digging. 148-8.
EXPLANATION OF PLATE 36

VERBAL STEMS

Fig. 1.—n eën ne, it is good. 77-4.
Fig. 2.—n. eën', black. 86-2.
Fig. 3.—gül eën', it smells good.
Fig. 4.—kwa gül teët', they fed her. 151-15.
Fig. 5.—dô nuñ. ban ne, he was not lame. 134-5.
Fig. 6.—dô yi he' e, I am tired. 98-1.
Fig. 7.—niis dôô he' eô, are you tired (sing.). 141-1.
Fig. 8.—dô yi de he' e, we are tired. 116-17.
Fig. 9.—nô biis na' be, swim (pln. imp.). 111-2.
Fig. 10.—ya' to' be, they were picking.
Fig. 11.—t bôe, round. 80-1.
Fig. 12.—côôk tôt bûl, well it rains. 74-4.
Fig. 13.—te t bûl', it rained. 81-1.
EXPLANATION OF PLATE 37

VERBAL STEMS

Fig. 1.—de mōń' (din bōń'), it was full. 129-12.
Fig. 2.—te' tet bōl, he hung it up.
Fig. 3.—ta bōl, I will hang up. 115-6.
Fig. 4.—te' wō bōl, carry it (plu. imp.). 110-15.
Fig. 5.—ta te'um mūt, cook mush (sing. imp.). 168-14.
Fig. 6.—ta te'ō' bōl, cook mush (plu. imp.). 123-13.
Fig. 7.—sūn da, you stay (sing. imp.). 79-7.
Fig. 8.—te'n nes da, he sat down. 161-10.
Fig. 9.—nē dae, I will dance. 103-9.
Fig. 10.—te' na gūt dae, he came out again. 149-13.
Fig. 11.—te' gun dae kwā, he had danced.
Fig. 12.—ka sē del', we came up. 141-2.
Fig. 13.—le nē' ha' te'n nūn del', all came up.
EXPLANATION OF PLATE 38

VERBAL STEMS

Fig. 1.— te' t tes dë le, they went on. 108-12.
Fig. 2.— ti dën, let us go. 141-6.
Fig. 3.— te' na te' ul doo, she washed them.
Fig. 4.— cën dë ni, the sun shines. 182-13.
Fig. 5.— n dë bëñ, it will not be. 80-13.
Fig. 6.— n dë yë, there is none. 109-1.
Fig. 7.— ce dën ne, I died.
Fig. 8.— te' ul dëk, crack them (sing. imp.). 138-2.
Fig. 9.— ce e dën te' le, I will die. 177-5.
Fig. 10.— te' te' gë n ta', he stepped in water.
Fig. 11.— te' ta' 'ilë gi, he is eating. 174-1.
EXPLANATION OF PLATE 39

VERBAL STEMS

Fig. 1.—ka kw nō'te, look for him. 100-1.
Fig. 2.—de die tāfi, I put in the fire.
Fig. 3.—be gūn too, he taught. 123-11.
Fig. 4.—tei nō't nūn tie, hide yourself (sing.).
Fig. 5.—nes tiū, it is lying. 182-3.
Fig. 6.—nō'tic, put it (plu. imp.). 168-13.
Fig. 7.—nūn s'ā'ũ tiū, he picked him up. 179-14.
Fig. 8.—tānu nas tiū, she took out again. 129-2.
Fig. 9.—ci sī ti ne, I lay. 175-16.
Fig. 10.—nō nūn ti ne, he put it.
Fig. 11.—na tē'ōt tōs, he snapped it.
EXPLANATION OF PLATE 40

VERBAL STEMS

Fig. 1.—gŭū. tūk, it burst. 182-5.
Fig. 2.—k'ŭ. t'u't', he sucked it. 159-2.
Fig. 3.—sū tūnū, it is cold.
Fig. 4.—sū dū. tūk, kill me (plu. imp.). 151-8.
Fig. 5.—te'k la tē le, I will feather. 156-5.
Fig. 6.—mū nā tō, it flew. 182-11.
Fig. 7.—æ te'ye, I am.
Fig. 8.—ta tē ye', it is cooked. 163-15.
Fig. 9.—na kwē tē kwē, I am going to sling at him. 122-14.
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EXPLANATION OF PLATE 42

VERBAL STEMS

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VERBAL STEMS

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