ELEMENTS OF THE KATO LANGUAGE

BY

PLINY EARLE GODDARD
UNIVERSITY OF CALIFORNIA PUBLICATIONS
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PLINY EARLE GODDARD

CONTENTS

<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Phonology</td>
<td>4</td>
</tr>
<tr>
<td>Individual Sounds</td>
<td></td>
</tr>
<tr>
<td>Vowels</td>
<td>4</td>
</tr>
<tr>
<td>Semi-Vowels</td>
<td>5</td>
</tr>
<tr>
<td>Continuants</td>
<td>5</td>
</tr>
<tr>
<td>Liquids</td>
<td>5</td>
</tr>
<tr>
<td>Nasals</td>
<td>6</td>
</tr>
<tr>
<td>Spirants</td>
<td>7</td>
</tr>
<tr>
<td>Stops</td>
<td>9</td>
</tr>
<tr>
<td>Labial</td>
<td>9</td>
</tr>
<tr>
<td>Dentals</td>
<td>9</td>
</tr>
<tr>
<td>Palatals</td>
<td>11</td>
</tr>
<tr>
<td>Velar</td>
<td>12</td>
</tr>
<tr>
<td>Glottal</td>
<td>12</td>
</tr>
<tr>
<td>Affricatives</td>
<td>13</td>
</tr>
<tr>
<td>Table of Sounds</td>
<td>13</td>
</tr>
<tr>
<td>Comparison of Kato and Hupa Sounds</td>
<td>14</td>
</tr>
<tr>
<td>Assimilation of Sounds</td>
<td>17</td>
</tr>
<tr>
<td>Modification of Syllables</td>
<td>17</td>
</tr>
<tr>
<td>Morphology</td>
<td>19</td>
</tr>
<tr>
<td>Nouns</td>
<td></td>
</tr>
<tr>
<td>Simple, Monosyllabic</td>
<td>19</td>
</tr>
<tr>
<td>With Possessive Prefixes</td>
<td>21</td>
</tr>
<tr>
<td>Parts of the Body</td>
<td>21</td>
</tr>
<tr>
<td>Clothing</td>
<td>23</td>
</tr>
<tr>
<td>Relatives</td>
<td>23</td>
</tr>
<tr>
<td>Nouns with Suffixes</td>
<td>23</td>
</tr>
<tr>
<td>Plural and Class Suffixes</td>
<td>24</td>
</tr>
<tr>
<td>Locative Suffixes</td>
<td>24</td>
</tr>
<tr>
<td>Suffix with Instrumental Meaning</td>
<td>26</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Suffixes of Temporal-Modal Force</td>
<td>26</td>
</tr>
<tr>
<td>Suffixes of Size, Shape, and Color</td>
<td>26</td>
</tr>
<tr>
<td>Nouns compounded with Nouns</td>
<td>27</td>
</tr>
<tr>
<td>First Noun qualifies the Second</td>
<td>27</td>
</tr>
<tr>
<td>With Possessive Prefix for Second Component</td>
<td>27</td>
</tr>
<tr>
<td>With Second Component modifying the First</td>
<td>27</td>
</tr>
<tr>
<td>Nouns compounded with Adjectives</td>
<td>28</td>
</tr>
<tr>
<td>Nouns compounded with Verbs</td>
<td>29</td>
</tr>
<tr>
<td>Adjectives and Verbs used as Nouns</td>
<td>29</td>
</tr>
<tr>
<td>Verbs with Instrumental Prefix used as Nouns</td>
<td>31</td>
</tr>
<tr>
<td>Polysyllabic Nouns Unanalyzed</td>
<td>31</td>
</tr>
<tr>
<td>Pronouns</td>
<td>32</td>
</tr>
<tr>
<td>Personal</td>
<td>32</td>
</tr>
<tr>
<td>Personal Demonstratives</td>
<td>33</td>
</tr>
<tr>
<td>Demonstratives</td>
<td>34</td>
</tr>
<tr>
<td>Interrogative and Indefinite Pronouns</td>
<td>34</td>
</tr>
<tr>
<td>Adjectives</td>
<td>35</td>
</tr>
<tr>
<td>Pronominal Adjectives</td>
<td>35</td>
</tr>
<tr>
<td>Numerals</td>
<td>36</td>
</tr>
<tr>
<td>Cardinals</td>
<td>36</td>
</tr>
<tr>
<td>Multiplicatives</td>
<td>36</td>
</tr>
<tr>
<td>Distributives</td>
<td>36</td>
</tr>
<tr>
<td>Directional Words</td>
<td>37</td>
</tr>
<tr>
<td>Adverbs</td>
<td>38</td>
</tr>
<tr>
<td>Place</td>
<td>38</td>
</tr>
<tr>
<td>Time</td>
<td>38</td>
</tr>
<tr>
<td>Manner and Degree</td>
<td>39</td>
</tr>
<tr>
<td>Postpositions</td>
<td>39</td>
</tr>
<tr>
<td>Particles and Interjections</td>
<td>41</td>
</tr>
<tr>
<td>Verbs</td>
<td>42</td>
</tr>
<tr>
<td>Prefixes</td>
<td>42</td>
</tr>
<tr>
<td>First Position</td>
<td>42</td>
</tr>
<tr>
<td>Adverbial</td>
<td>43</td>
</tr>
<tr>
<td>Deleter</td>
<td>49</td>
</tr>
<tr>
<td>Objective</td>
<td>51</td>
</tr>
<tr>
<td>First Modal</td>
<td>52</td>
</tr>
<tr>
<td>Second Modal</td>
<td>53</td>
</tr>
<tr>
<td>Subjective</td>
<td>55</td>
</tr>
<tr>
<td>Third Modals</td>
<td>57</td>
</tr>
<tr>
<td>Stems</td>
<td>59</td>
</tr>
<tr>
<td>Suffixes</td>
<td>80</td>
</tr>
<tr>
<td>Source of Information</td>
<td>80</td>
</tr>
<tr>
<td>Modal</td>
<td>81</td>
</tr>
<tr>
<td>Temporal</td>
<td>83</td>
</tr>
<tr>
<td>Tenses and Modes</td>
<td>84</td>
</tr>
<tr>
<td>Table of Analyzed Verbs</td>
<td>85</td>
</tr>
<tr>
<td>Interpretation of Tracings</td>
<td>86</td>
</tr>
<tr>
<td>Explanation of Plates</td>
<td>88</td>
</tr>
</tbody>
</table>
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. As has been said in another place, 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, to the pages and lines of which the numerals after the examples refer. The tracings 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. Anthrop., n.s. vii, 613-619; and v, 1-4, of this series.
PHONOLOGY

INDIVIDUAL SOUNDS

VOWELS

The vowels occurring in Kato are a, ä, e, ë, i, ì, ù, and ü. Of these, ä, ë, 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.

ä 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., -kwäñ, -kwaññ. The converse, however, is not true that a becomes ä in closed syllables. The stem of verbs often has ä in the present and a in the past: te'n nöł t'as, “cut them”; te'n ne sít 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 ë 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’ìn, “he said.” That it was as uniformly uttered is not certain.

ö 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 ù as a possessive prefix, when its duration is only about .1 second.

ù 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 Lit, Hupa lit, "smoke."

\( \ddot{u} \), close in quality as in *rule*, occurs as a possessive prefix where one might suspect its origin to be connected with \( \ddot{y}o \) and \( \ddot{y}i \), the demonstrative. That it is not a vowel originally independent of \( \ddot{o} \) seems probable. The closeness of quality may be due to neighboring semi-vowels. Even in this prefix it is often heard as \( \ddot{o} \). 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.

The duration of l 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 ñ, b becomes m and usually the preceding nasal becomes m (pl. 6, figs. 6, 8). The postposition bì when it follows a nasal becomes mì (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.

\( n \).—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 \( n \) 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).6

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.7 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

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.

\( \alpha \).—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.

\( t \).—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 ts 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 ō or ŭ 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 ŋ.²⁸

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

²⁸ 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 ě or ě̄ 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, -eai, 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 (c) position (pl. 10, figs. 2, 5).

A surd with glottal accompaniment (tc') 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 tc'. 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.

TABLE OF SOUNDS

<table>
<thead>
<tr>
<th>Stops</th>
<th>Continuants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate or Sonant</td>
<td></td>
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<tr>
<td>Bilabial</td>
<td></td>
</tr>
<tr>
<td>Apical-dental</td>
<td>d t t' s ts ts',s' n</td>
</tr>
<tr>
<td>Median-prepalatal</td>
<td>c dj tc tc'</td>
</tr>
<tr>
<td>Lateral-prepalatal</td>
<td>L L</td>
</tr>
<tr>
<td>Post-palatal</td>
<td>g k k' g</td>
</tr>
<tr>
<td>Velar</td>
<td>q e</td>
</tr>
<tr>
<td>Glottal</td>
<td>q e h, r</td>
</tr>
</tbody>
</table>

Semivowels: y, w.
**Vowels.**

<table>
<thead>
<tr>
<th>a</th>
<th>ə</th>
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<tbody>
<tr>
<td>e</td>
<td>ɛ</td>
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<tr>
<td>i</td>
<td>ɪ</td>
</tr>
<tr>
<td>u</td>
<td>ʊ</td>
</tr>
</tbody>
</table>

**COMPARISON OF KATO AND HUPA SOUNDS**

Kato a and ə correspond to Hupa a and ə (written ʊ).
- Kato a', cloud; Hupa a, cloud.
- Kato ya gün gal, he threw up; Hupa ya wil waL, he threw through the air.

Kato e; Hupa e.
- Kato t'ec, coal; Hupa, teúw, coal.
- Kato tes del⁸; Hupa teít tes del⁸, they went.

Kato i; Hupa e.
- Kato ci, I; Hupa, hwe, I.
- Kato dō gis iĩ, one could not see; Hupa dō xō dũ wesen, it could not be seen.

Kato ō; Hupa ə.
- Kato Lō', grass; Hupa Lō, grass.
- Kato nō te'ũn tō⁸, water reached; Hupa nō it tō, the water comes.

Kato ū; Hupa i.
- Kato l̄t, smoke; Hupa l̄t, smoke.
- Kato nas ūts, he ran about; Hupa nas its ei, he ran about.
- Kato gûl l̄t, it burns; Hupa wîl l̄t, it burns.

Kato y; Hupa y.
- Kato ya⁴, louse; Hupa ya, louse.
- Kato ye nat ya, he went in; Hupa ye na wit yai, he went in.

Kato l; Hupa l.
- Kato l̄t, seaweed; Hupa la, seaweed.
- Kato te'ũs li⁹, he caught in a noose; Hupa tais loi, he tied in bundles.
- Kato te't te l̄s, he led; Hupa na te l̄s, she dragged back.

Kato l; Hupa l.
- Kato l̄n, squirrel; Hupa l̄n, mouse.
- Kato lel yits, he tied together; Hupa le il loi, he tied together.
- Kato te'ên nan la, he jumped out; Hupa tce il tat, he jumped out.
Kato L; Hupa L.
   Kato ti Lōl, its straps; Hupa Lōl, strap.
   Kato te' Lei ū ū gī, she is making a basket; Hupa ke it Lō, she used
to make baskets.

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

Kato n; Hupa n.
   Kato ne', land; Hupa nin, ground.
   Kato na nūn yai, she started across; Hupa na niń yai, he crossed.

Kato ni; Hupa ni or n. 8
   Kato ò tc'ūn, toward it; Hupa xo teľ, toward her.
   Kato de t gūn*ař, he put it in the fire; Hupa de dū wūn an, he put
   in incense.

Kato s; Hupa s.
   Kato ū sūts, its skin; Hupa sīts, skin, bark.
   Kato dō ku ne sūń, I was insensible; Hupa ai ne sen, I thought.

Kato c; Hupa hw.
   Kato ca, moon; Hupa hwa, moon.
   Kato n ec in té le, let me look; Hupa nūw iń, let me look.
   Kato n eńi, black; Hupa Lū hwin, black.

Kato b; Hupa m.
   Kato bōń k'ūt, lake; Hupa mūık, lake.
   Kato bee ya hūt, he climbed up when; Hupa me is Lā deĩ, he ran up.
   Kato na'be, swim (plu. imp.); Hupa nauw me, let me swim.

Kato d; Hupa d. 9
   Kato ū da', his mouth; Hupa xōt da, his mouth.
   Kato da nō la, she put it up; Hupa da nā wil lai, she put it.
   Kato bē dūl, let us climb; Hupa wei dūl, we will go.

Kato dj; Hupa dj.
   Kato dje', pitch; Hupa dje, pitch.
   Kato dje gū, teẹt, he split open; Hupa dje wū kil, he tore open.

Kato t, Hupa t.
   Kato tō, water; Hupa tō, ocean.
   Kato te' te' gūn tāl', he stepped in water; Hupa te nō dū win tai, he
   stepped in water.

8 It is not certain that this is a phonetic change. The occurrence of
n and ū 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 gūn *an (Hupa de dū wūn an), he put on the fire; but
otherwise it is d also in Kato, as in de dūn *ge, put on the fire.
Kato t' ; Hupa t'.\(^{10}\)
Kato t'e', blanket; Hupa te, blanket.
Kato ta güt t'ats, he butchere; Hupa kit te tats, he cut them.

Kato te ; Hupa te.
Kato L teč, dust; Hupa Lit tečč, sand.
Kato wa nün tei bōn, it will blow through; Hupa qa yū wes tee, the wind blew.

Kato te ; Hupa tew.
Kato c teč, my grandmother; Hupa m tečč, if grandmother.
Kato ú. tei, make it; Hupa ú. tewe, make it.
Kato te'ün gūn tee če, he cried; Hupa te' win tewč, he cried.

Kato te' ; Hupa k (prepalatal).
Kato teč, tree; Hupa kin, tree.
Kato n tečč, your brother; Hupa mik kil, her brother.
Kato gūl tečč, he caught; Hump tečč win tewč, he caught him.

Kato te' ; Hupa k, ky.'\(^{11}\)
Kato te' nes tič, he lay down; Hupa tečč nes ten, he lay down.
Kato te' gūn yanč, he ate of it; qa yū win yan, he ate it.

Kato g ; Hupa w.
Kato gūl gelč, it was evening; Hupa wil weč, dark, night.
Kato sel gin, he killed; Hupa tee sel. wcn, he killed.

Kato k ; Hupa x.
Kato kai hič, winter time; Hupa xai, winter.
Kato k a cič, they dug; Hupa x a ke hue, she commenced to dig.
Kato wa tōn kan, she gave him; Hupa xō wa tečč xan, she gave her.

Kato kw ; Hupa x.
Kato kwōč, fire; Hupa xōč, fire.
Kato kw nač, his eyes; Hupa xon nač, his eyes.
Kato kwā'la, you did; Hupa xā ûle, do that.

Kato k' ; Hupa k. (The same sound.)
Kato k'at deč, soon; Hupa kūt deč, soon.
Kato k'a tečč t'ats, he cut; Hupa kit te tats, he cut them.
Kato nōn ûn dāk k'eč, get up (imp. sing.); Hupa in na is dāk ka, she got up.

Kato k'w ; Hupa k.
Kato k'wōč, on; Hupa kūt, on.

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

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\(^{10}\) Hupa č is but an earlier orthography for č 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:
kwōŋ' mī (for kwōŋ' bi), fire in. 119-13.12
kwōŋ' múŋ a (for kwōŋ' bō̊ŋ a), fire before. 119-16.
tūm mīc (for tūn bīc), swim. 118-16.

k final in verbal stems followed by b or k is assimilated:
kūk kwan (for ŋūk kwan), you shouted. 164-17.
na sōl lūk kwāŋ (for na sōl lūt kwāŋ), you have burned. 174-4.
ū na nūn tūb bō̊ŋ (for ŋ na nūn lūt bō̊ŋ), around you must burn. 104-10.
nōl kūb bō̊ŋ (for nōl kūt bō̊ŋ), will float ashore. 85-10.
t' of k'wūt', on, becomes ŋ before words beginning with n:
k'wūn na gai, on it he walked. 78-1.
k'wūn nōl tin, she put it on. 181-3.
g preceded by ŋ becomes ŋ or disappears:
na hūŋ āt (for na hūŋ gā), you untie. 123-7.
tē'eŋ a nī (for tē'eŋ ga nī), killed. 157-5.
tē'n nūŋ īŋ (for tē'n nūŋ gīŋ), 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:
- *tai becomes *ta, stem, to have, position.
- *yai becomes *ya, stem, to go.

The quality of the vowels changes in the following:
- *ta becomes *ta, prefix, relating to water.
- *ka becomes *ka, prefix, up.
- *ye becomes *ye, prefix, in.
- *del becomes *de, stem, go.
- *sil becomes *sil, stem, to strike.
- *kō becomes *kō, prefix, down.

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

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

Final stops disappear:
- *rat becomes *ra, stem, to jump.
- *yot becomes *yo, stem, to chase.
- *yeu becomes *ye, stem, to chase.
- *lao becomes *la, stem, to do.
- *k'a becomes *k'a, 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.

- aɪ, cloud. 74-6. (Pl. 12, fig. 1.)
- al', firewood. 137-16.
- yaɪ, sky. 77-13. (Pl. 12, fig. 2.)
- yaɪ, head louse. 152-5. (Pl. 12, fig. 3.)
- yas, snow. 74-3. (Pl. 12, fig. 4.)
- ye, house. 97-6. (Pl. 15, figs. 13, 14.)
- yoɪ, scoter. 122-6. (Pl. 5, fig. 9.)
- wōs, leg. 79-10. (Pl. 5, fig. 3; pl. 12, fig. 5.)
- łaɪ, seaweed. 84-12.
- lō (lōs), frost. 74-3.
- Lēs, clay. 80-1.
- Lōn, rodent, squirrel. 99-9. (Pl. 2, fig. 1; pl. 20, fig. 2.)
- Lōk', steel-head salmon. 84-5. (Pl. 12, fig. 6.)
- Lāt, smoke. 141-2. (Pl. 12, fig. 7.)
- Leɪ', night. 81-4.
- Lō, herb, grass. 71-3. (Pl. 2, fig. 8; pl. 12, fig. 8.)
- main, weasel. 74-2. (Pl. 6, fig. 5.)

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14 Ibid., III, 13.
neť, 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.
sifu, ground squirrel. 73-7. (Pl. 12, fig. 10.)
sk'ete, mush. 110-8.
ca, sun. 74-9. (Pl. 12, fig. 11.)
cek', spittle. 154-14. (Pl. 12, fig. 12.)
cec, ochre. 80-4. (Pl. 15, fig. 12.)
cleť, orioles. 72-15.
bañ, doe, female. 165-9, 182-2.
bet, rope. 101-7. (Pl. 12, fig. 13.)
büs, slide. 86-11. (Pl. 12, fig. 14.)
büt', stomach. 110-1.
dañ, pile. 133-10; 181-6.
det, whooping crane (†). 73-14.
djañ, mud. 155-6.
djiffin, day. 82-8.
tó, water. 71-1. (Pl. 7, fig. 4; pl. 12, fig. 15.)
tüta', cane. 174-7.
tsw'ät', basket cradle. 113-12.
tëťi', brush. 76-7.
tsw'űn', bone. 110-1.
tc'un, tree. 71-3.
tc'añ, food. 85-5.
të'f, boat. 127-10.
të'f', black-bird. 72-15.
te'űn', noise. 107-8.
t'ať, feather. 105-14. (Pl. 7, fig. 7.)
t'ef', blanket. 110-5.
t'ee (t'ee), coal. 143-7; 147-9.
ges, black salmon. 84-3. (Pl. 12, fig. 16.)
gč, yew.
ka', goose. 73-14.
kať, a feather headdress. 176-17.
kai, winter.
kōs, cough. (Pl. 12, fig. 17.)
kwōť, fire. 81-3. (Pl. 4, fig. 5.)
kwōt, stream, creek. 90-15.
kwōč, whitethorn (a shrub). 166-3.
k'ať, arrow. 110-10.
k'aiť, hazelnuts. 94-5.
k'inn', juneberry. 133-3. (Pl. 4, fig. 8; pl. 11, fig. 2.)
k'űnť, hazel. 133-10. (Pl. 12, fig. 20.)
k'űč, alder. (Pl. 12, fig. 18.)
k'wať, fat. 85-15. (Pl. 12, fig. 19.)
qō, 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 di’t, my heart. (Pl. 13, fig. 14.)

n-, second person singular.
   nat, your sister. 132-4. (Pl. 13, fig. 10.)

nö’-, first person plural.
   nö’si’e, our heads. 129-10. (Pl. 5, fig. 8.)

nö’t-, second person plural.
   nö’si’e, your heads. 172-15.
   nö’taG, your mother. 135-2.

n h-, second person plural.
   n hunte, 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 ne’e, its (feather’s) back. 127-5.

ū- or 5-, third person singular or plural of persons, animals, or objects (pl. 13, figs. 2-9).
   ū na’e, her eye. 152-10. (Pl. 13, fig. 5.)
   ū teae, her apron. 165-8. (Pl. 13, fig. 3.)

kw-, third person singular or plural of persons or things referred to indefinitely.
   kw da’e, his mouth. 123-2. (Pl. 14, fig. 7.)

kuc-, third person plural.
   kuc na tag ha’e, without their knowledge. 155-8.

tc‘-, third person of detached, unassociated members.
   tc‘si’e, head. 128-5.

Parts of the Body

-ûnte, nose. 80-7; 98-2.
-we ci, eggs. 111-9.

15 in, 14-16.
-wö', tooth. 181-8. (Pl. 4, fig. 2; pl. 14, fig. 4.)
-wöö', leg. 151-18. (Pl. 5, fig. 3.)
-la', hand. 154-1; 164-1.
-la', penis. 80-8.
-La, butt. 93-10.
-na', eye. 180-7. (Pl. 13, fig. 5.)
-ne', back, back-bone. 133-3.
-ne', lower leg. (Pl. 13, fig. 12.)
-sa ye, its shell. 131-9.
-sa ke', spleen. 133-4.
-sö', head. 76-1. (Pl. 5, fig. 8.)
-sö da', crown of head. 79-4. (Pl. 14, fig. 12.)
-sö', tongue. 110-3. (Pl. 13, fig. 4.)
-sö se', sting. 156-1.
-süts, skin. 110-4. (Pl. 13, fig. 7.)
-büt', stomach. 148-6. (Pl. 11, fig. 5.)
-da', mouth. 122-13. (Pl. 14, fig. 7.)
-da', voices. 106-14.
-da' ga', beard.
-de', horn. 74-10. (Pl. 13, fig. 9.)
-des ke', lungs. 180-12.
-di ce', shoulder. 75-1.
-djë', heart. 125-17. (Pl. 13, fig. 14.)
-djë k'ë', intestines. 113-3.
-te le', liver. 180-12.
-t'a, tail. 86-4.
-t'ai, neck. 153-11.
-te'e k'e, navel. 132-10.
-te'in ne, leg. 107-12.
-te'6', milk. (Pl. 13, fig. 6.)
-te'6 ni, faeces. 142-7.
-te'6', tail. 163-1. (Pl. 14, fig. 5.)
-te'6, mind. 101-14.
-te'6, heart. 101-5. (Pl. 5, fig. 4.)
-djë, cie te', lungs. 80-2.
-te'6, kidney. 80-2. (Pl. 14, fig. 11.)
-te'6, testicles. 80-9.
-te'6 ge', ear. 110-2.
-ga', hair. 143-8.
-ge', marrow. 110-2.
-ki', butt.
-kwa ne, shoulder, arm. 102-15; 160-7.
-kwañ ke, ribs. 133-9.
-kwe', foot. 96-14. (Pl. 14, fig. 8.)
-göt', knee. (Pl. 13, fig. 13.)
Clothing

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

Relatives

-at', sister. 132-4. (Pl. 13, fig. 10.)
-ite, daughter. 128-7.
-únt, -un ñi, cousin. 139-4; 145-2; 146-3. (Pl. 14, figs. 1, 2.)
-yacts, young. 80-14; 182-4.
-ya teete, daughter. 176-10.
-ye* dùñ, husband. 132-14.
-ló, dog. 101-6.
-ñan, mother. 105-7.
-ta*, father. 105-7.
-t'è ci*, sister. 144-4.
-teel*, younger brother. 141-12.
-teai, grandchild. 97-16; 148-11. (Pl. 14, fig. 13.)
-te's, grandmother. 97-16. (Pl. 13, fig. 15.)
-teañ ka mái, uncle. 172-3.
-te'gi, grandfather. 153-10. (Pl. 13, fig. 11.)
-gúñ 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

-kí, -k, forming the plural of terms of relationship and classes of people.
  te'yan, woman. te'yan kí, women. 110-15.
  ski, boy. 116-16. skik, boys, children. 132-8. (Pl. 14, figs. 9, 10.)
-tcúñ, a suffix indicating one of a class, "that kind of a person."
  te'yan tcúñ, old woman. 152-3.
  s te'o tcúñ, my grandmother. 147-5.
-ta, the plural of the last.
-k'úcts, of uncertain meaning.
  te'yan k'úcts, old women. 105-1.
-kí ya húñ, a class suffix used particularly with place names.
It is the usual termination of the people of a village as distinguished from the locality.
  tó kí ya húñ, water people. 175-1.
-gúñ, of uncertain meaning.
  tsò gúñ, foxes, "the ones that are blue" (†). 73-3. (Pl. 8, fig. 3.)

Locative Suffixes

-dúñ, at.
  ye dúñ, house place. 113-15.
  yi tcó dúñ, dance house place. 145-6.
  se ta'dúñ, rock creek. 107-16.
  tó n còn dúñ, water good place. 173-7.
-ta', among.
  ye bifu ta', houses among. 171-17.
  ne' k'wút ta', countries. 157-6.
  n còn ta', good places. 173-6.
  ca'na'ta', creeks, creeks in. 82-14; 93-11.
  tcúñ ta', trees among. 171-9. (Pl. 15, fig. 6.)
  ó ye ta', under places. 180-1.
-tc'úñ, toward.
  tó tc'úñ, water toward. 176-6.
  cân te'tc'úñ, my mother toward. 120-11.
-bí, in.
  ye bifu, house in. 97-11.
  ó da' bifu, its mouth in. 128-15; 182-5.

15a See also the postpositions used with pronouns, p. 39.
wa te'a mǐ⁶, hole in, 156-12. (Pl. 4, fig. 9.)
sak tō⁶ bi⁶, spring in. 115-10.
cīe bi⁶, red mountain, 102-15. (Pl. 15, fig. 12.)
ts'gl bi⁶, basket in. 115-10.
kwō⁶ mǐ⁶, fire in. 110-4.

-bi⁶k⁶, inside.
yā'bi⁶k⁶, sky in. 101-15. (Pl. 15, fig. 15.)
ye bi⁶k⁶, house inside. 99-5. (Pl. 15, fig. 14.)
tō bi⁶k⁶, water inside. 155-4.
ō la⁶ bi⁶k⁶, its hands in. 114-8.

-bi⁶ ūŋ⁶, toward, in.
yā'bi⁶ ūŋ⁶, sky in. 81-2; 99-10.
ye'bi⁶ ūŋ⁶, house in. 110-15. (Pl. 15, fig. 13.)

-k'wūt⁷, on.
ō tei⁶ k'wūt⁷, its tail on. 162-14. (Pl. 9, fig. 9; pl. 20, fig. 1.)
ū sī⁶ da k'wūt⁷, crown of its head on. 76-5.
ū de⁶ k'wūt⁷, its horn on. 76-3.
ne⁶ k'wūt⁷, land on. 92-2.
tō k'wūt⁷, water on. 82-1.

-ū ye, -wī-ye, under.
ca ū ye huň⁴, sun under. 75-4.
tēn wī ye, tree under. 97-3.

-tūk gūt⁶, between.
ō na⁶ tūk gūt⁶, its eyes between. 76-2.
ye tūk gūt⁶, house middle. 142-13. (Pl. 16, fig. 1.)

-lūt, middle (time or place).
ne⁶ lūt⁶, earth middle. 75-3; 104-11. (Pl. 16, fig. 4.)
cin lūt⁶, summer middle. 121-14.
ta lūt⁶, ocean middle. 126-8. (Pl. 16, fig. 7.)
kai lūt⁶, winter middle. 113-14.

-būň a⁶, before, alongside of.
kwō⁶ mūň a, fire before. 119-16.

-ne⁶ ūŋ⁶, other side of, “its back towards.”
tō ne⁶ ūŋ⁶, water other side. 126-6. (Pl. 11, fig. 9.)

-ū nō⁶, behind.
ne⁶ ū nō⁶⁶, hill behind. 164-16. (Pl. 4, fig. 7.)
tēn nō⁶, tree behind. 103-5.

-laįt, on top, “summit, point.”
ne⁶ laįt, earth top. 161-14.
ū laįt⁶, their tops. 132-15.
kw teįt laįt'k⁶, his tail end. 177-12.
Suffix with Instrumental Meaning

-bûn, with, by means of.
na gî bûn, quiver with. 176-16.
tsa'î bûn, basket with. 148-2.
tca'î bûn, dress with. 166-6.
k'a'î bûn, arrows with. 166-7.
k'um mûn, withes with. 167-1.

Suffixes of Temporal-Modal Force

-bûn, for, will be (usually expresses purpose but sometimes predictions of the future only).
a'hûn, cloud will be. 79-2.
a'hûn, for clouds. 78-8.
ö te li'î bûn, its liver for. 109-6.
sak tô'î bûn, "spring will be." 89-4.

-wûn, for.
te'a wûn, food for. 123-3.
tô wûn, water for. 118-4, 123-3.

-hit', -hût, at time of.
cîn hit', summer time. 121-5.
cîn hût, summer time. 155-1. (Pl. 16, fig. 6.)
dji'n hût, day time. 105-7.
kai hit', winter-time. 121-11.

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

-ye, it is (simple affirmation).
ne'î ye, country is. 120-14.
e nga'î ye, my mother is. 120-11.
dô û sâfi'î yî, it is not meat. 134-14.
dô L gîc ye, it is not rattlesnake. 177-4.

-ûn gî, it is (affirmation with element of surprise).
câ ûn gî, sun it is. 100-7.

-tê le, will be.
k'ai t bûn. tê le, burden baskets will be. 140-12.

Suffixes of Size, Shape, and Color

-tcô, large, an augmentative suffix.
Lô'tcô, bunch grass. 94-7.
dûc tcô, grouse. 72-5.
gac tcô, redwood (gac, yew). 86-8. (Pl. 14, fig. 14.)
ges tcô, 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 te'unts, close by, from -tc'ūn⁴, by or near.
   dūtc, quail. 72-5. (Pl. 14, fig. 16.)
   ytc, wolf. 71-6. (Pl. 15, fig. 1.)
   e tcaite, my grandchild. 97-16. (Pl. 14, fig. 13.)
   e lōts, my dog. 89-14.

-yac, young, small.
   s kits yac, baby small. 113-12.

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

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

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

NOUNS COMPOUNDED WITH NOUNS¹⁶

The First Noun qualifies the Second

in tce' baň, deer female. 144-2.
   dūs t'e kō ne, madrone berries. 134-17.
   tō a' bun, "water cloud," for dew. 79-4.
   tō si' dun, water-head-place. 87-6.
   tō büt teō, water panther. 177-13. (Pl. 20, fig. 8.)
   te'ūn si' ts, "tree head small," pine cones. 115-13, 117-12.
   te'ūn sūts, "tree skin," bark. 137-14.
   ges na', salmon eye. 121-12.
   k'a' s'un tiǎ'̄, arrow-bow. 144-9.

   With Possessive Prefix for Second Component

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

   With the Second Component modifying the First.

   lōn te' ge' nes, "rodent-ears-long," a mouse. 73-10. (Pl. 2, fig. 1.)
   tō nai wō' nes, "fish-teeth-long." 86-1.

¹⁶ III, 19.
NOUNS COMPOUNDED WITH ADJECTIVES

-n tca, large.
   ne tca, country large. 97-16.
   tô nai n tca, fish big. 85-11.
   wô n tca, teeth large. 86-5. (Pl. 4, fig. 2.)

-n cô, good.
   tô n cô nit, water is good because. 87-10.

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

-nes, long.
   la' nes, 'hand long,' raccoon. 112-5. (Pl. 1, fig. 1.)
   Lô' nes, grass long. 80-3.
   tea nes, wasp. 150-14.
   tse k'el nes, '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 teo, 'mouths are flat large,' geese. 158-14.

-n Lûts, stout, rough.
   tô n Lûts, water rough. 86-6.

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

-L teik, red.
   yô' L teik, beads red. 176-14.
   tô nai L teik, fish red. 124-15.

-L taö, blue.
   Lô' L taö, grass blue. 76-6. (Pl. 2, fig. 8.)
   tô nai L taö, fish blue. 124-15. (Pl. 20, fig. 12.)

-L cûn, black.
   tô L cûn kwot, black water creek. 98-14.
   ges L cûn, salmon black. 86-2. (Pl. 15, fig. 10.)

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

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

-dûl k'ûs, brown (†).
   Lô' dûl k'ûs, grass dry. 121-13.
-t tük (?)
  tünk l tük, leaves die(†). 121-13.
-t biń, sharp, pointed.
  sę̀ t biń, "heads sharp," a bulb. 149-4.
-te'its, rough.
  se te'its, sandstones. 77-9. (Pl. 16, fig. 3.)
-lañ, many.
  wò lañ, "teeth many." 149-1.

The two following probably have descriptive adjectives.
  ta dül gai teö, hornet. 151-2.
  ta dül k'üts, milksnake. 178-9.

Nouns compounded with verbs

yö've tël 'iñ, "head(†)"(†), abalones. 84-12. (Pl. 20, fig. 6.)
Lö't n'ëi, "grass lies," grass game. 146-11. (Pl. 20, fig. 4.)
ne' te li', earthquake. (Pl. 20, fig. 9.)
nun kwös tiñ, wild cherries. 131-12.
sai 'an dünü, "sand lies place," sandy beach. 125-4.
sę̀ bis 'an, "head(†)"; head net. 113-8; 147-1.
suł bün nüü t'ai, "skin with it flies," flying squirrel. 122-12.
snę' bün gül li', "my leg with is tied," my garter. 176-16.
tso' kwi t'iñ, "milk it has," a plant. 149-2.
teüüm met yits, "stick tied with," net stick. 169-5.
teüüm ta' nae t bät, "tree among(†)". The name of a monster. 181-10.
tëun kw t'iñ, "tree (trunk) (†) it has," a kelp. 84-15.
t'än t gül yös, devil-fish. Contains stem -yös, to pull. 85-13; 124-16.
t'a kwil li', "feathers they have," birds. 88-8.
gac tśö kwit k'üya gits, "redwood on it runs," red squirrels. 73-7.
k'ai t but, "hazel(†)"; burden-basket. 135-6.

Adjectives and verbs used as nouns

yił kai, morning, days. 82-10; 105-14.
yis tö't, fog. 126-2. (Pl. 18, fig. 15.)
Cf. yis gän tö't, 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 dōnš, salt. Stem -don, to be bitter. 85-3.
L tac, black oaks. 89-17. (Pl. 16, fig. 12.)
L teño, dust. 165-1.
nal teñl, white thorn. 91-14. (Pl. 16, fig. 10.)
nat. cōt, grass-snakes. 124-11. (Pl. 10, fig. 8.)
nat. tōnšts, kangaroo-rats. Stem -tōn, to jump. 73-10.
na nin ‘aš i k’wūl, ‘it has horizontal position on,’ dam on. 168-9.
na dīlš, ‘they hang,’ sugar-pines. 86-17. (Pl. 1, fig. 8; pl. 19, fig. 1.)
na gai, ‘it travels,’ moon. 81-4.
na gi, ‘it is carried,’ or ‘it carries,’ quiver. 147-1.
na kūl, grass-snakes. 124-11. (Pl. 10, fig. 8.)
na kūlš, kangi-rats. Stem -tūn, to jump. 73-10.
na nin ‘aš i k’wūl, ‘it has horizontal position on,’ dam on. 168-9.
na dīlš, ‘they hang,’ sugar-pines. 86-17. (Pl. 1, fig. 8; pl. 19, fig. 1.)
na gai, ‘it travels,’ moon. 81-4.
na gi, ‘it is carried,’ or ‘it carries,’ quiver. 147-1.
na kūl, grass-snakes. 124-11. (Pl. 10, fig. 8.)
na kūlš, kangi-rats. Stem -tūn, to jump. 73-10.
VERBS WITH INSTRUMENTAL PREFIX USED AS NOUNS.

būl sūl teį, seed-beater. 113-11.
būl te qōt, net rope. 117-14.
būl gūl gūs, fire-sticks. 110-11. (Pl. 19, fig. 2.)

POLYSYLLABIC NOUNS UNANALYZED

a dīts, grasshoppers. 94-8.
in teę', deer. 71-4.
i dāqī, (a kind of rope). 114-1.
i dākw, Wailaki. 172-8. (Pl. 17, fig. 1.)
ō 'est', pestle. 113-9.
ūn tečān, peppernut. 94-7.
yai in tāf', mole. 96-6. (Pl. 20, fig. 3.)
wa teqāqā, hole through. 78-9. (Pl. 16, fig. 8.)
la ceę', buckeyes. 94-6. (Pl. 1, fig. 2.)
nāqī, dog. 91-9. (Pl. 2, fig. 3; pl. 16, fig. 11.)
nā neč, people. 71-7. (Pl. 16, fig. 13.)
nā' cī k'a, robin. 72-9. (Pl. 17, fig. 2.)
na tečūl, orphan. 102-6. (Pl. 10, fig. 5.)
na tečāte, swallows. 73-1.
na kōoč, clover. 152-5.
nōq k tečū, tar-weeds. 94-4. (Pl. 16, fig. 15.)
nūn teq'āt, strings. 117-13.
nūn kā dūn, men. 165-13.
sa tečū, tan-oaks. 88-9.
sūl sūnte, chipmunks. 73-8.
sūn tants, a star or constellation. 99-8.
sūl gits, lizard. 97-4.
ca' na', creek. 79-3. (Pl. 4, fig. 6; pl. 17, fig. 4.)
ban yō, turtle-doves. 92-16.
ban sīts, sandpipers. 73-2.
ban tō', ocean. 86-10. (Pl. 17, fig. 5.)
ban tečō, mussels. 84-13. (Pl. 17, fig. 8.)
be liňi, eels. 90-15. (Pl. 17, fig. 7.)
bel get, spear head. 133-8. (Pl. 17, fig. 10.)
bel kats, fish-spear. 128-12. (Pl. 17, fig. 11.)
be nič, prongs. 170-5.
būs bānte, barking-owls. 92-8. (Pl. 17, fig. 9.)
būnte lō, owls. 72-2. (Pl. 17, fig. 12.)
būnte k'am', seagulls. 72-12. (Pl. 15, fig. 16.)
das tečū, gopher. 122-6.
da tais, grey squirrels. 73-6.
da tečū, ravens. 72-2.
da tečā, storage bin. 138-2.
dō lō, bears. 71-6.

18 III, 16.
dûl lants, salamanders. 84-4.
dûn dai, arrowheads. 111-4.
ta ka tsee, crawfish. 91-2.
tel’t, sack. 113-7. (Pl. 18, fig. 1.)
tûn nî, roads. 78-4. (Pl. 17, fig. 13.)
tûn nûc, manzanita berries. 94-5.
tûs na, yellow-jackets. 91-7.
tcân nî, varied robins(f). 72-4.
tcî lî, screech-owl. 92-8.
tcî lè k’e, slime. 161-12.
tcîn nûf’t, stuffed deer heads. 177-10.
tcî tea’n, white oak. 131-11.
tcî bâq, poison. 163-7. (Pl. 18, fig. 6.)
tcûn nûc, tcûnte, Lewis’s woodpecker. 72-8. (Pl. 19, fig. 13.)
tcûn tc’t baq, woodpeckers. 72-11. (Pl. 18, 4.)
tcûn tc’t gi tcî, pileated woodpecker. 72-8.
tc’a la, sunflower seed. 138-6. (Pl. 18, fig. 2.)
tc’a tâl, frog. 112-11. (Pl. 18, fig. 3.)
tcî be tcût, fir. 86-8.
tc’d la ki, meadow-larks. 72-10.
tcûn t yac, condors. 72-7.
tcûn t’aﬁ, acorns. 88-15.
tcûs saî’t, chicken-hawks. 72-3.
tcûs tâs, mill-basked. 113-9.
tc’û be, firs. 90-1.
tc’la ki, sapsuckers. 73-11.
tc’lè lînte, humming-bird. 102-12.
tc’na r dûf, adolescent girl. 175-10. (Pl. 19, fig. 7.)
tc’sî tcûn, coyote. 72-1. (Pl. 18, fig. 9.)
tc’kak’t, net. 84-8. (Pl. 18, fig. 5.)
tc’e ki, girls. 111-2. (Pl. 17, fig. 15.)
gû ya ni’t, stars. 74-7. (Pl. 18, fig. 7.)
kâc kîts, old man. 108-2. (Pl. 18, fig. 8.)
ke bûl, knife. 78-11.
kî tsa’t, basket-pot. 113-8.
kwi yînt, pigeon. 73-12. (Pl. 18, fig. 10.)
k’il lek, boy. 119-7.
k’un ta gîts, jack-rabbits. 73-6. (Pl. 18, fig. 11.)

PRONOUNS

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

ci, I. 78-14. (Pl. 39, fig. 9; pl. 42, fig. 1.)
ci ye⁷, mine. 141-6. (Pl. 22, fig. 2.)
ca, for me. 103-9. (Pl. 22, fig. 1.)
cult, with me. 137-2.

First Person Plural

ne hiñe, we. (Pl. 5, fig. 8.)
n hi ye⁷, ours.
n hût, with us. 125-2.

Second Person Singular

niñe, you. 79-7.
ni ye⁷, yours. 117-1.
na, for you. 152-6.
nût, with you. 131-6.

Second Person Plural

nô hiñe, you. 114-11. (Pl. 28, fig. 13; pl. 31, fig. 11.)
nô hi ye⁷, yours.

Third Person

bi ye⁷, their, hers. 85-4; 88-5.
ba, for it. 113-12; 149-12.
bût, with it. 85-5.
kîn, himself. 88-7.
kîn yi, himself. 149-13.
kîn hâe, him (only). 130-3.
kî ye⁷, his. 91-9.
kwa⁷, for him. 110-9.
kwût, with him. 91-9.

PERSONAL DEMONSTRATIVES¹⁹

hûn, he, him.¹⁹¹ 174-1; 123-16.
hûn, with him. 94-13.
yôô, that fellow. 167-9.

¹⁹ 111, 31-33.
¹⁹¹ It appears that a suffix ë 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. 123-12.
hai yi, those, that one. 171-19. (Pl. 21, fig. 15; pl. 45, fig. 1.)
Cf. the personal demonstratives hûn and hûl 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 ő or ŭ with the same initial.
yû ñ, over there. 100-4.
yû ñ, yonder. 100-7.
yô ye, there it is. 182-3.
yô ôñ, over there. 127-14. (Pl. 21, fig. 7.)
yô ôñ ha', yonder. 75-3.
yô yi de', far north. 77-1. (Pl. 21, fig. 5.)
Cf. yôñ, that fellow. 167-9.

INTERROGATIVE AND INDEFINITE PRONOUNS20

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: -díji (-gî), the simple interrogative, asking which one of several; -ca, -cañ (-ca- plus ŋ) with an implication of wonder in the question; and cû, used in affirmations concerning anything unusual or mysterious.

da t ya tañ, 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 cû kwû, something is wrong. 114-13.
dan cû kwû, stranger. 119-8.
ta cû kwû, somewhere I guess. 119-1.
tac cû, sometime. 135-13.

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

da t' in cô, very bad. 122-12.
da t' in câ nôn, what will be. 85-6.
dac t' ya cô de*, if anything is wrong. 166-10.
dac t' in dôj, why does it do that? 130-14.
dan t' te cô*, something. 167-3.
dan t' te cô mûn, how will it be? 78-13.
dan t' te cô kwôc cût, something wrong I guess because. 115-4.
dan t' te gi, how. 139-11.
da ya* t' in ge, what did they do? 166-4.
da ya* n dôj, what they say. 153-14.
dan t' in gi, how many. 166-12.
dan ca ûn, who is it? 170-12.
da nî cañ, who is he? 97-4.
da hîn teñ, what you say. 176-10.
dî kwôn dî, what kind. 80-4.
dô n kë hit*, nothing too bad. 128-1.
dô dan cô*, nobody. 99-4.
t'a din cô* kwôc, for some reason. 136-8.

ADJECTIVES\textsuperscript{21}

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 la*, another, certain similar ones which are not conjugated are included.

ō wûn, some. 122-14.
wân t'a*, some. 91-10.
wôn, some. 95-6.
la*, another, other. 76-3; 79-5.
la mûn, will be many. 78-6.
la ne, much. 120-15.
lân hit, much. 137-7.
lân dün, many. 138-8.
lân tê le, will be many. 173-7.
lê ne* ha*, people. 83-4. (Pl. 21, fig. 10; pl. 37, fig. 13.)
lê ta, every way. 129-4.
lê ta'kî, kind. 83-1. (Pl. 21, fig. 11.)

\textsuperscript{21} III, 33.
NUMERALS

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 Athapasean dialects nearby.

CARDINALS

<table>
<thead>
<tr>
<th>numeral</th>
<th>value</th>
</tr>
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<tbody>
<tr>
<td>la ha*</td>
<td>one</td>
</tr>
<tr>
<td>nak ka*</td>
<td>two</td>
</tr>
<tr>
<td>tak'</td>
<td>three</td>
</tr>
<tr>
<td>yil ban la ha*</td>
<td>six only</td>
</tr>
<tr>
<td>yil ban nak ka*</td>
<td>seven</td>
</tr>
<tr>
<td>yil ban tak'</td>
<td>eight</td>
</tr>
<tr>
<td>la* ba* un</td>
<td>ten</td>
</tr>
<tr>
<td>la* ba* un bu la ha*</td>
<td>ten with one</td>
</tr>
<tr>
<td>na dun la* la ba* un</td>
<td>twenty</td>
</tr>
<tr>
<td>ta dun</td>
<td>thirty</td>
</tr>
</tbody>
</table>

MULTIPlicativeS

tak' duni, three times. 165-11.

DISTRIBUTIVEs

<table>
<thead>
<tr>
<th>numeral</th>
<th>value</th>
</tr>
</thead>
<tbody>
<tr>
<td>la ha* ta</td>
<td>one at a time</td>
</tr>
<tr>
<td>nak ka* ta ha</td>
<td>two in a place</td>
</tr>
<tr>
<td>tak' ta</td>
<td>three at a time</td>
</tr>
</tbody>
</table>

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.

-nük', to the south, perhaps "up-stream" was its original meaning.
  yō yē nük', way south. 75-9. (Pl. 20, fig. 14.)
  hi nük', south. 139-13.
  hai nük', here south. 150-14.
  hai nük'k'a', way south, south along. 86-15; 107-16.
  dī nük', south. 75-6. (Pl. 20, fig. 15.)

-na ūn, from the south.
  yī na ūn, from the south. 107-9.
  hai na ūn, from south. 148-9.

-se', to the west, down hill.
  yō yē se', far west. 126-6.
  hai se', down hill. 106-3.
  dī se', west, down here. 77-11; 142-8.

-siũ ūn, from the west.
  hai siũ ūn, from the west. 78-10.
  dī siũ ūn, in the west. 80-11.

-de', to the north, perhaps originally "down-stream."
  yō yē de', far north. 77-1.
  hi de', north. 77-1.
  hai de' te' ūn', north toward. 115-7.
  dī de', north. 76-12.

-daũ ūn, from the north.
  yī da' ūn, from the north. 75-3.
  hai da' ūn, from the north. 78-8.
  dī da' ūn, from the north. 74-10.

-dûk, to the east, uphill.
  yī dûk', up hill. 180-3.
  yōk wē t'ûkw, far above. 77-3.
  hai dûk', up. 99-2.
  dī dûk', east. 75-4.

---

23 nii, 328-330.
-da úñ, from the east, down hill.
  hai da úñ, down hill. 180-5.
  di da úñ, from the east. 101-9.

-bañ, the opposite side, particularly of streams.
  yì 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 úñ, both sides. 144-10. (Pl. 21, fig. 9.)

ADVERBS

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

PLACE

i niñ, in a corner. 132-12.
yök wi t'úkw, far above. 77-3.
yök k'úñ, way off. 107-5.
nes k'a, the long way. 140-17.
nes se, is far. 167-2.
nes dûñ, far. 75-6.
nes dûn s, it is far. 140-17.
nes dûñ ha', far away. 86-14.
nûn kwì ye, underground. 75-8. (Pl. 21, fig. 12.)
hakw, right here. 160-1.
ha kwün, up there. 182-9.
dë k'a, here. 79-2.
dì ûñ, up there. 109-10.
djañ ha', here. 97-9.
t ga ma, along shore. 77-1.
t ga mats, by the shore. 155-1.
kën dûn ne, close. 104-13.
kën dûnte, nearby. 79-6. (Pl. 22, fig. 12.)
kwën nûn ûñ, up this way. 85-8.

TIME

han dût, next time. 136-4.
ha ñi, long time. 134-3.
ha ñe ñûñ, long time. 106-17.
ha ñe kwëc, long time probably. 139-1.
haku ñûñ', then. 71-2. (Pl. 5, fig. 7.)
hö ta, then. 84-10.

24 III, 328-338.
dañ*, already, long ago. 78-14; 121-13.
dañ, soon. 136-5. (Pl. 22, fig. 6.)
dō k'ūñ, already, not recently. 136-7; 175-1.
dō k'ūñ ha*, long ago. 155-15.
t'un dōñ ha*, all the time. 113-1.
gún t'o, now. 81-2.
kañ b'i*, tomorrow. 104-9. (Pl. 22, fig. 10.)
k'ut n'ūañ, next time. 166-9.
k'ūñ, just now. 103-8.
k'un n'ūañ, before. 97-14.
k'un dōñ, before. 137-5. (Pl. 22, fig. 11.)
k'un dōñ, yesterday. 128-7. (Pl. 22, fig. 13.)
k'an caññ, this time. 167-8.
k'ūñ dēñ, soon. 96-4. (Pl. 22, fig. 14.)

MANNER AND DEGREE

La kwa, just, only. 155-9; 164-11.
La kit, for nothing. 166-9.
La kwit, anyway. 133-14.
nikte (ni ikte), slowly. 100-13; 140-16. (Pl. 21, fig. 13.)
sa'dōñ, alone. 120-16.
sa'dōñ ha*, alone. 87-7.
sa'dōñ k'wa, alone. 172-3.
sūt', little way. 161-5.
st'ōñ, nearly. 123-8.
caññ, only. 78-6.
ca ni, only. 71-2.
cō, too much. 82-10.
cō*, in vain. 130-9.
cō n caññ, very well. 109-4.
cōñ kq, well. 166-5.
cōñk', well. 71-1. (Pl. 22, fig. 3.)
cōñ kwa, well. 181-13.
cōñt, in vain. 159-12.
kakw, fast. 93-12.

POSTPOSITIONS25

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

-ye, under.
ō ye*, under. 101-6. (Pl. 21, fig. 2.)
ō 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'wakw, about yourselves. 173-2.
  nō wakw, away from us. 173-5.

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

-I, with.
  būr, with it. 85-5.
  kūr, with him. 91-9.

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

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

-nite, midway of.
  ū nite, half-way. 122-15.
  ū nite, its middle. 162-14.

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

-nē duñ, base of.
  kūn nē duñ, its base. 182-10.

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

-dai*, outside of.
  ū dai*, outside. 98-4. (Pl. 21, fig. 4.)

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

-ta', among.
  bi ta', among. 107-14.
  dī ta', this place. 157-5.

-tūs, over, beyond.
  ū tūs, beyond it. 77-12.
  kw tūs, over him. 156-14.

-tūk gūt, between
  ū tūk gūt, between. 160-9.
-te'ūŋ*, to, toward.
  a te'ūŋ*, to himself. 87-7.
  ō te'ūŋ*, to him. 79-9. (Pl. 3, fig. 4.)
  ū te'ūŋts*, close by. 156-10.
  nó te'ūŋ*, to you. 97-7.
 L te'ūŋ*, together, toward each other. 104-1.
  kw ts'ūŋ*, 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 guń*, around, behind.26
  a te guń*, around yourselves. 169-4.

-kwa*, for.
  kw kwa*, for him. 119-1.
  nó kwa, for us. 181-7.

-ke*, behind.
  ske*, after me. 97-10.
  ske' ha*, behind me. 141-8.

-k'e, back, in the opposite direction.
  at k'e, back of himself. 86-17.

-k'wút', on (perhaps combined with a demonstrative).
  k'wút', on it. 75-6.

PARTICLES AND INTERJECTIONS27

ah te, come on, well. 98-6; 125-7.
  a bi, stop. 100-1.
  e 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.
  nií, say. 164-9.
  nií se, say. 100-3.
  nó dō*, nó' dō, go ahead, come. 103-7; 115-7.
  he ū*, 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.
  te+a*, listen. 182-15.
  ka*, well. 76-12.

26 Cf. prefix t gun in t gun 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 adverbial 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.

<p>| | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>a ya ci laq, took me up. 158-14.</td>
<td>a ne, she said. 152-8.</td>
<td>a nō' t'e, you are. 139-1.</td>
</tr>
<tr>
<td>a dōc yi, I boast. 128-1.</td>
<td>a kwče la ẹ, I fixed him. 182-14.</td>
<td>act'ye, I am. (Pl. 40, fig. 7.)</td>
</tr>
</tbody>
</table>

28 III, 90.
Adverbial

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

\begin{itemize}
  \item ya `ac, he put up. 99-10.
  \item yaL dac bôf\textsuperscript{2}, you must jump up. 82-16.
  \item ya\textsuperscript{2} `ai\textsuperscript{2}, it stood. 156-15.
  \item ya kwôz\textsuperscript{2} t\textsuperscript{a}, make him fly. 182-16.
  \item ya\textsuperscript{2} gûn gal, he threw up. 142-3. (Pl. 23, fig. 1.)
  \item nô gûn gaL, he threw down. 92-5.
\end{itemize}

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

\begin{itemize}
  \item ye\textsuperscript{2} nát ya, he went in. 177-13.
  \item ye\textsuperscript{2} hen yac, come in. 141-9.
  \item ye\textsuperscript{2} te\textsuperscript{2} gun yai, she went in. 132-13. (Pl. 10, fig. 9; pl. 23, fig. 2.)
  \item yi he dû\textsuperscript{a}, you go in. 97-10; 153-2.
  \item ye\textsuperscript{2} gi nái\textsuperscript{2}, they went in. 107-17.
\end{itemize}

te\textsuperscript{2} ní nai, came out. 164-9.

\textit{wai- or wa}. Used of position over, at one side of, or near.\textsuperscript{30}

\textbf{Duration .12.}

\begin{itemize}
  \item wa in yai, he went around. 97-3.
  \item wai\textsuperscript{2} te\textsuperscript{2} gun get, he struck over. 164-2.
  \item wa\textsuperscript{2} ūf kân\textsuperscript{a}, he placed before him. 129-4. (Pl. 23, fig. 3.)
\end{itemize}

\textit{wa-}. Used of motion through an opening or small space.\textsuperscript{31}

The duration of the syllable is about .27 seconds.

\begin{itemize}
  \item wa ūf sû\textsuperscript{2}, she carried through. 180-2.
  \item wa nûn te\textsuperscript{2} bân, shall be wind. 80-14. (Pl. 23, fig. 4.)
\end{itemize}

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

\begin{itemize}
  \item Lel yîts, he tied together. 174-15. (Pl. 43, fig. 11.)
  \item Le ges `a`, encircled. 82-15. (Pl. 23, fig. 5.)
  \item Lëf `a`, (water) met. 83-6.
\end{itemize}
Lun-. Used with verbs meaning to assemble. It is perhaps related to the last.38 Lun tes ya hut, 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", I will go about. 133-6. (Pl. 23, fig. 7; pl. 35, fig. 10.)
na ga kwaf, he had walked. 154-12. (Pl. 42, fig. 6.)
na' be, swim (dual imp.) 111-2. (Pl. 36, fig. 9.)
na' ke", swim (plural imp.). 172-14. (Pl. 45, fig. 2.)
na wo' nie, you played about. 134-17. (Pl. 8, fig. 5.)
nas e'uts, he ran about. 134-3. (Pl. 29, fig. 1.)
nas rüt, 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 bōg, it will be across, it will have waves. 85-8. (Pl. 23, fig. 8.)
nai gie", I will carry you across. 141-4.
na nūf 'ai, fish-weir, "it is across." 133-9. (Pl. 28, fig. 3.)
nai nūn lat, jump across. (Pl. 34, fig. 3.)
nai nūn 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 gūl 'a", he stood up a stick. 116-6.
na dōl 'a" bōg, let it stand on end. 108-3.
na t gūl 'a", he stood it up. 76-6. (Pl. 28, fig. 2.)
nat gūl 'a, he stood them up along. 88-13. (Pl. 26, fig. 8.)
na t'a" bōn dja", 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. t, 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 il dûl, 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 gûn 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'ac, put it (imp. plu.). 110-11. (Pl. 28, fig. 7.)
nô na na kats, I fell back. 182-16. (Pl. 44, fig. 11.)
nô nun yîñ, they lived. 160-12. (Pl. 29, fig. 12.)
nô cûl gal, throw me. 133-4. (Pl. 25, fig. 1.)
nô ga'ac, he put down. 86-11. (Pl. 23, fig. 11.)
nô te'nun tô', water reached (a certain point). 75-1. (Pl. 7, fig. 6.)
nôc ge', 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.
nôf fi 'an, he placed. 76-3.

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

nûn iegal, let me chop. (Pl. 42, fig. 7.)
nûn în dük k'ês, get up. 100-3. (Pl. 44, fig. 8.)
nûn yiñ t'o'güt, she stung when. 156-15. (Pl. 26, fig. 3.)
nûn yiñ tsûn, (ocean) beats against it. 86-12. (Pl. 41, fig. 2.)
nûn nei 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'îs dük k'ês, he got up. 98-5. (Pl. 23, fig. 10.)
nûn s'îs 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 III, 53.
39 Compare me- III, 46.
bes ya hût, he climbed up when. 143-9.
bes giñ, he carried it up. 98-16.
be nö'loš, lead me up (imp. plu.). 147-6. (Pl. 6, fig. 1.)
bë dûr, let us climb. (Pl. 23, fig. 13.
da bes ya*, he climbed up. 180-6. (Pl. 6, fig. 4.)
ben t'a tš 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.
bël ke*, it is finished. 172-12.
be nît ke*e, I have finished. 78-14.
be dûl *aï*, let us try it. 109-6.
be gün t'ee, 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 òn dic ge*, I take you up. 141-4. (Pl. 7, fig. 3.)
da nó la, she put it up. 181-5.
da bes ya*, he climbed on. 180-6. (Pl. 6, fig. 4; pl. 23, fig. 14.)
da nó la, she put it up. 181-5.
nó 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 die tążi, I will put in fire. 110-3. (Pl. 39, fig. 2.)
de dûn *aç button, you may put in fire. 127-12. (Pl. 23, fig. 15.)
de t gün *aã, she put in fire. 157-13. (Pl. 7, fig. 2.)
ye te' gün *aï kwàn, he had put in. 115-14.

djes-. Used of the splitting or separating a mass into two,
perhaps more parts.42 The duration is .12.
djes güñ taï*, he kicked open. 81-15.
djes güñ teel, he split open. 129-3. (Pl. 24, fig. 5.)
djes gün 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 some-
times takes a final n or t and shortens its vowel.

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40 III, 58.
41 III, 61.
42 III, 61.
43 III, 61.
taieacbûn, it (water) will settle back. 85-8.
tainân, drink. 88-6.

taya8, let them drink. 123-6. (Pl. 33, fig. 5.)
tanastya, he came out of the creek. 175-3.

Cf. tañnasâajûl, rolled out of fire. 147-9. (Pl. 41, fig. 3.)
tate'ot'bûn, prepare (soup). 123-13. (Pl. 24, fig. 1; pl. 37, fig. 6.)
tatûlûs, we dragged out. (Pl. 35, fig. 6.)
tagûn, gal, he threw in water. 90-14.
yagûn, gal, he threw up. 142-3.

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

tais t'ats, he cut up. 144-3.
tagût t'ats, they cut up. 175-4. (Pl. 24, fig. 2.)
tjeâgûnt'ats, he divided. 80-83.

te'e-. Relating to water, but usually to motion into or position under water.45 The vowel including marked aspiration has a duration of .16.
te'nôdûggeâ, we will put in water. 139-9. (Pl. 7, fig. 5; pl. 24, fig. 3.)
te'nôl'ûts, it ran in water. 174-10.
te'te'gûntaïâ, he stepped in water. (Pl. 38, fig. 10.)
te'na teg'ûldes, she washed them. (Pl. 38, fig. 3.)
te'nônígîne, I put in water. 140-1.
nônígîne, I put it down. 137-2.

tgûn-. Meaning around, back, behind.
tgûnnaisâqun, they turned around. 106-2.
tgûnnastgets, he looked back. 132-2.
nast gets, he looked around. 99-5.

ts'ûn-. Meaning away from, in verbs of fleeing.46
ts'ûnteð'delta, they ran off. 165-10; 178-10.

tce'e-. Meaning out of, correlative of ye-, into.47 The vowel has a duration of about .12. It unites in first person with e and in third person with modals n, l, and L.
tce'ennâl, he jumped out. 142-6. (Pl. 34, fig. 4.)
tce'enalâc, she takes out. 180-11.
tce'nûnyae, come out. (Pl. 24, fig. 4.)
tce'nânân, he took out. 170-14.

44III, 62.
45III, 63.
46Compare Hupa tsin-, III, 63.
47III, 63.
te' n giũ, he carried out. 98-5.
te' kũ wul tin, he was pulled out. 160-6.
te' el gal, he was thrown out. 102-7.
te'et txe buũ, you must carry out. 104-1.
te' en yai, he went out. 102-9.

ka-. Used of motion up out of the ground or water and also up a hill or the sky.48 The average duration is .17, but when the vowel is closed it is about .1.

tca' ẽ ciũ, they dug (bulbs). 148-12.
tcāf t'ai buũ, it will grow up. (Pl. 26, fig. 9.)
tcā na gül le, he came up (out of water). 175-3.
tcā na mil ki, they carried it up (the river bank). 175-4.
tcā nac, sun came up. 81-2. (Pl. 1, fig. 7.)
tcā sic, we came up. 141-2. (Pl. 1, fig. 7.)
tcā gül t'kuũ, they had sprung up along. 87-6. (Pl. 27, fig. 7.)
tcā nac bũn djaũ, shall come up. 99-11.
tcā nac bũn djaũ, it shall go down. 99-12.

kai-, ka- (kwa-). Used with verbs of searching or looking for.49 The k is strongly aspirated. The duration of the vowel is normal, .18.

tkā n te buũ, (they) must look for. 173-9.
tkā yae ūn te, they looked for it. 179-6.
tknw nō' tē, look for it. 164-11. (Pl. 24, fig. 6.)
tkā kw nō' tē, look for him. 160-1. (Pl. 39, fig. 1.)

kō, kwũ-. Used of general conditions, as of the weather.50 There seem to be two forms: kwũ- is very short, .06, and kō-, .12.

tkō wān yan, it grew. 166-7.
tkō wān nūũ, it (ground) jarred. 177-14.
tkō wān sūũ, it was hot. (Pl. 1, fig. 5.)
tkō wān tēũ, level. 106-6.
tdōkō giũ ñu, one couldn't see. 81-1. (Pl. 24, fig. 13.)
tkwũ tēũ tē lit, it was becoming flat. 107-3. (Pl. 27, fig. 2.)
tkwũ sāũ, deep water. 74-10. (Pl. 34, fig. 11.)
tkwũ lāũ, it is finished. 77. (Pl. 22, fig. 15.)
tkō wān sūũ, it was hot. 81-2.
tgūn sūũ, it became warm. 96-4.

tkō-, kwūt-. Meaning down, or down hill.51
ktō tcō gūl tōũ, they ran down. 153-9.
tkwūt tcō gūn yai kwũ, he had come down to. 116-5. (Pl. 24, fig. 9.)

48 Compare Hupa xa-, iii, 57.
49 Compare Hupa xa-, iii, 66.
50 Hupa xi-, iii, 94.
51 iii, 57.
kwün-. Used with a stem -yöt, the verb as a whole meaning to pursue. The vowel has a duration of .09.
kwün t gi yöt, they pursued him. 145-14.
kwün tin yöt, they ran after him. (Pl. 30, fig. 13.)
kwün ya yöl, 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 i mûn, you must do it. 136-2.
kwal i, he did. 129-4.
di kwa' si, he always do that. (Pl. 28, fig. 12.)
di kwa' si, he did this way. 79-12. (Pl. 24, fig. 15.)
co'k' kwa' la, he did well. Cf. 104-6. (Pl. 22, fig. 3.)

kwün 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.
kwün ye i dûl kwâc, underground we will go. 138-10.
kwün ye dûl tûc tel, we will bury it. 115-8.
kwün ye gûl la, it has sunk. 174-12. (Pl. 24, fig. 8.)
kwün ye hî dûl tê le, we will go (underground). 140-15.
ti dûl tê le, we will go. 136-5.

k'e-. Of severing as in biting and cutting.
k'e te' ús t'ats, he cut. 146-11.
k'e te' un yan kwân, bitten off. 161-7.
k'e tein 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.

Deictic

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.
adverbial 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.

te'üs qöt, he speared it. (Pl. 8, fig. 8.)
te'üs t'ök', he flaked. 156-7. (Pl. 11, fig. 8.)
te'n net yil'es, she eats up. 180-9. (Pl. 1, fig. 9.)
te' nes tiñ, he lay down. 175-11. (Pl. 5, fig. 2.)
te'n núñ yai, he came there. 142-14. (Pl. 25, fig. 6.)
te'n ne güñ 'iñ'es, he looked at it. 156-16. (Pl. 25, fig. 12.)
te'sín úñ gi, he is standing. (Pl. 26, fig. 2.)
te't téñ bañ, he walked lame. 133-6. (Pl. 24, fig. 14.)
te't téñ bún kwán, he had hung up. 176-3. (Pl. 27, fig. 8.)
te'qañ yañ ni, she was walking they say. 93-12. (Pl. 2, fig. 5.)
te'gün yie, he broke it. 79-12. (Pl. 10, fig. 3.)
Ye te' gün yai, he went in. 97-11. (Pl. 10, fig. 9.)

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

ts'úñ san, he saw him. 97-4.
ts'úñ liñ'es, he tied. 145-8.
ts'ásñ, stood. 75-10.

With no apparent distinction in meaning s'- was frequently
heard in place of te', and ts'.
s'ús yí'es, he made a house. 168-7. (Pl. 30, fig. 9.)
s'ús liñ'es, he became. 84-11. (Pl. 32, fig. 3.)
s'ús te'añ'es, he shot it. (Pl. 41, fig. 7.)
núñ s'ús dúk keñ'es, he got up. 98-5. (Pl. 23, fig. 10.)
núñ s'ús tiñ, 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 yí-. This often unites with the
third modals.
ye yí gün 'àn, came in. 130-16.
yíñ san, he found. 134-14.
yíñ súñ, (water) broke. 75-3.
yís t'áts, he cut it. 162-10.
núñ yíñ t'o güñ, when he stung. 156-15. (Pl. 26, fig. 3.)
yíñ nél liñ'es, one man looked. 165-11.
te'n ne'l in'es, he looked. 88-16.

The plural and the dual when not distinguished by the stem,
have yañ- in the position occupied by the other deictic prefixes.55
yañ yañ ni, they said they say. 82-11. (Pl. 4, fig. 4.)
be yañ t'aiñ'es, they tried it. 85-2. (Pl. 28, fig. 5.)
ta yañ t'oNASDAQ_3926, let them drink. 123-6. (Pl. 33, fig. 5.)
ka yañ ün te, they looked for it. 179-6.
ka ün t'e, she looked. 114-9.

55 iii, 99.
The deictic prefixes te', yi-, and ya- 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.58

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 nō-, or n h-, second person singular n-, second person plural nō- or n h-, third person singular kw-, third person plural ya'kw.

In the case of verbs of speaking with the stem -nī, -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.

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58 III, 84.
First Modal

δ. 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.

οὲ λαῦ, I will get. 137-2. (Pl. 24, fig. 11.)
δ᾿τ γεῦ, look at them (imp. plu.). 164-9. (Pl. 25, fig. 13.)
ν ἢ ἥ τ γεῦ, let me see you. 142-6. (Pl. 43, fig. 2.)
te᾿δ᾿ na γυτ γεῦ, he looked back. 87-13. (Pl. 43, fig. 4.)
te᾿δ᾿λ᾿τι kwaŋ hųt, he had named when. 117-12.

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

nas liu, he tied up. 145-7. (Pl. 32, fig. 6.)
nas dūl lin nō, we have got back. 95-12. (Pl. 3, fig. 6.)
nō na nī kats, I fell back. 182-16. (Pl. 44, fig. 11.)
te᾿n an tā, he jumped out. 149-6. (Pl. 34, fig. 4.)
te᾿n a γυt dac, he came out again. 149-13. (Pl. 37, fig. 10.)
ka na gūl lāc, she digs out. (Pl. 31, fig. 1.)
nas lin#, it became (again). 107-8.
si##, 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 ʊ, short and weak, is found, or the vowel is that required by a following prefix.

tī dūt, let us go. 141-6. (Pl. 38, fig. 2.)
tūc ge#, I will carry. 135-4. (Pl. 8, fig. 4.)
x tū la#, let him sleep. (Pl. 31, fig. 8.)
te᾿ tōt kʻas dja#, let him drop acorns. 129-8. (Pl. 10, fig. 4.)
tūt būl, it rains. 74-4. (Pl. 36, fig. 12.)
te sū. teōl#, I stole. Cf. 141-15. (Pl. 42, fig. 1.)
teʻte gūs te##, nearly daylight; the east was reddening. (Pl. 41, fig. 12; pl. 8, fig. 2.)
teʻte lē, he led. 175-2. (Pl. 32, fig. 10.)
dō haʻ teʻte teʻkūt, they did not go. 167-17. (Pl. 45, fig. 7.)
teʻte bā#, he walked lame. 133-6. (Pl. 24, fig. 14.)
x tes lāl ya# nī, he went to sleep they say. 83-4. (Pl. 31, fig. 10.)
teʻtes yal, he went. (Pl. 29, fig. 2.)
teʻte tes de lē, they went on. 108-12. (Pl. 38, fig. 1.)
teʻte ges fī#, he carried. 101-9. (Pl. 43, 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.

na del tea múf, they shall eat. 85-5.
na del gal kwâf, he had poured in. 125-13. (Pl. 42, fig. 12.)
na des bîl, he sprinkled. 123-2. (Pl. 23, fig. 9.)
na de gût tsan, they heard again. 107-6.
na die tea, let me eat. (Pl. 24, fig. 12.)
na de bâl, he sprinkled. 123-2. (Pl. 23, fig. 9.)
na de g'ut tsan, they heard again. 107-6.
na die tea, let me eat. (Pl. 24, fig. 12.)
de dûf 'ac, you put on the fire. 131-9. (Pl. 23, fig. 15.)

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

yi he 'ac, take them in. 113-4.
ye het a, come in. 143-1.
yi he dûf, you go in. 97-10.
ya' hes gîf, they carried it. 129-14.
nai hes 'âfî, they took it back. 107-10.
na hae gat, I will untie it. 79-1.
nai hes le 'ac, it swam along. 128-8.
nai he sîn t ya de', if you go back. 137-10.
nai he sîn 'ûts kwaî, I ran back. 182-6.
nai hûn das, you go back. 120-12.
hî tes gin, she carried them. 135-7.
ka hes di iî'í, we will look. 173-17.

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

Cf. Hupa w-, m, 95.
certain adverbial prefixes without much regard to their meaning.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.

gi dūt, we will go. 96-13.
gūc caL, I walk. 163-10.
ye' gū, gal, he threw up. 142-3. (Pl. 23, fig. 1.)
ye' te' gūn yai, he went in. 133-13. (Pl. 23, fig. 2.)
ta gū t'ats, he butchered. 175-4. (Pl. 24, fig. 2.)
dje' gū, teel, she split open. 129-3. (Pl. 24, fig. 5.)
kwūn ye' gūl lat, it sank. 174-12. (Pl. 24, fig. 8.)
kwūt te' gūn yai, he went down. 116-5. (Pl. 24, fig. 9.)
gū, teat, he shouted. 165-9. (Pl. 25, fig. 10.)
gūn nes, it became long. 87-1. (Pl. 25, fig. 8.)

s-. Verbs employing s- are usually of acts or states which continue for some time.
si da ye, I sit. 140-7.
si tī ne, I lie. 175-16.
s gūn, it was. 138-18.
staN, lay. 176-18.
staN, lay. 100-2.
sta, he sits. 123-7.
sūn da, you live. 79-7.
be nē sin, git de, I am becoming afraid. 130-15. (Pl. 6, fig. 2.)
bī' sta, he was sitting in. 132-3. (Pl. 6, fig. 7.)
te'ēs li', he caught in a noose. 108-4. (Pl. 1, fig. 6.)
te'ēs qōt, he speared it. 128-13. (Pl. 8, fig. 8.)
ka si del', we came up. 141-2. (Pl. 1, fig. 7.)

60 Examples of all three of the second modal prefixes may be seen on v, 138. In line 14, 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 dō ha' ge gūn, 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 gūn, it was, and here the meaning is clearly that of remaining in position with no reference to the beginning or end of the act.
n-. Seems to be exactly parallel in its use with g- above, having however the opposite meaning, completion.81

ni ya ye, I came there. 136-17. (Pl. 29, fig. 6.)
ni gi ne, I bring. 138-14. (Pl. 43, fig. 8.)
nö' c'ae, you (plu.) put it. 110-11. (Pl. 28, fig. 7.)
na nüü c'ai, a fish-weir (it is across). 133-9. (Pl. 28, fig. 3.)
nö' c'ae, you (plu.) put it. 110-11. (Pl. 28, fig. 9.)
be nü. ke' e, I have finished. 78:14. (Pl. 23, fig. 12.)
te'n nüü yöl, let it blow. 80-13. (Pl. 30, fig. 11.)
te'n nüü küt, they came. 154-12. (Pl. 45, fig. 6.)
te'nün yai, he came there. 142-14. (Pl. 25, fig. 6.)

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 e- is used. It is evidently connected with e', the independent pronoun.62

üe yit, I will make a house. (Pl. 30, fig. 8.)
üe te' e'e, I cried. 140-6. (Pl. 8, fig. 6.)
üe la|--, I will get. 137-2. (Pl. 24, fig. 11.)
nä e'a, I go about. 133-6. (Pl. 35, fig. 10.)
nüe 'i ne, I saw it. 137-1. (Pl. 28, fig. 10.)
be' e'ai', I will try it. 109-9. (Pl. 5, fig. 5.)
be' e na', I will roast. 168-16. (Pl. 33, fig. 2.)
da'n di' ge'e, I will pick you up. 141-4. (Pl. 7, fig. 3.)
tæ' e-go', I will carry. 135-4. (Pl. 8, fig. 4.)
te' te' e te' te', I will feather arrows. 156-5. (Pl. 7, fig. 9.)
kwa' 'i ne, I always do that. (Pl. 28, fig. 12.)
na huc da, I will go back. 132-8.
na hun dae, go back. 115-7.

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

ni ya ye, I came there. 136-17. (Pl. 29, fig. 6.)
ni gi ne, I bring. 138-14. (Pl. 43, fig. 8.)
nö na ni kats', I fell back. 182-16. (Pl. 44, fig. 11.)
si y'i ne, I stand. (Pl. 25, fig. 7.)
si ti' e ne, I lay. 175-16. (Pl. 39, fig. 9.)

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61 III, 95.
62 Compare Hupa -i'we, -déw, and -w, III, 97.
63 III, 100.
cō' ə ɡi ɡa ɡe, I fixed it good. 76-12. (Pl. 31, fig. 5.)
dō ɣi hə ɡe, I am tired. 98-1. (Pl. 36, fig. 6.)
be ɡe ɡe ɡe, I am getting afraid. 130-15. (Pl. 44, fig. 3.)
te ɡe teō', I stole. (Pl. 42, fig. 1.)
si ɡi ɡe, I lay. 175-16. (Pl. 39, fig. 9.)
stiff, 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 ū followed by the third modal prefix when it is present, surd 1 becoming sonant. In its absence the initial of the stem is taken over.64

nān dūl ə ɡa', we will make a dam. 163-11. (Pl. 28, fig. 1.)
na dūl yi, we will rest. 140-18. (Pl. 30, fig. 5.)
dō yī ɡe ɡe, we are tired. 116-17. (Pl. 36, fig. 8.)
dō dūl sū ɡe, we did not see. 116-18. (Pl. 26, fig. 7.)
te'nō dūɡ ɡa', we will put in water. 139-9. (Pl. 24, fig. 3.)
ka' dūt teō', 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 1-, 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 de', we came up. 141-2. (Pl. 1, fig. 7.)

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

uŋ qōt, spear it. 128-12. (Pl. 44, fig. 7.)
nā nūn dāc, come down (imp.). (Pl. 23, fig. 6.)
de dān ə ɡe, put on the fire (imp.). 127-12. (Pl. 23, fig. 15.)
tēn nūn yac, come out (imp.). (Pl. 24, fig. 4.)
ūl teɬ, 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'wun nūl ɡać, put it on. (Pl. 31, fig. 7.)
te'n ɡaɬ, you eat. 125-7. (Pl. 29, fig. 13.)
tē'o' ɡaɬ, 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.
-ō', in which the aspiration is quite marked. The third modal Ł completes the syllable when present. In certain cases the vowel seems to be contracted, resulting in aspirated a.

-ō' Lō, set snare. 108-2. (Pl. 25, fig. 5.)
 rotation correction
-ō' lāon, go to sleep. 110-16. (Pl. 31, fig. 11.)
-ō' lō, take me up. 147-6. (Pl. 6, fig. 1.)
-ō' buł, make soup. 123-13. (Pl. 24, fig. 1.)
-ō' yuŋ, you (plu.) eat. 148-6. (Pl. 29, fig. 10.)
-ō' k'aś, make a fire. 103-7. (Pl. 3, fig. 7.)
 na cōl, na buñ, you must doctor me. 166-10. (Pl. 33, fig. 4.)
 na sōl yān, you ate up. 136-16. (Pl. 24, fig. 11.)
 tc'n noł, cut them. 166-15. (Pl. 40, fig. 11.)
 ō't gūc, look at them. 164-9. (Pl. 25, fig. 13.)

tc'6 tāl, make soup. 123-13. (Pl. 24, fig. 1.)
 tc'n yuŋ, you eat. 148-6. (Pl. 29, fig. 10.)
 tc'6 lō, let him chew it. (Pl. 5, fig. 6.)
 tc'ō tōl k'aś djaś, let him drop it. 129-8. (Pl. 10, fig. 4.)
 tc'ō tāl djaś, let him make. 140-2. (Pl. 27, fig. 6.)
 n he ōł ka k'wic, we will spend the night probably. 105-3. (Pl. 27, fig. 10.)
 tc'n nōl yōl, let it blow. 80-13. (Pl. 30, fig. 11.)
 n tōl, let him sleep. (Pl. 31, fig. 8.)
 tc'6 yāl ōł, let them drink. 123-6. (Pl. 33, fig. 5.)
 ō't yāl, let it snow. 93-5.

Third Modals 68

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.

A number of prefixes occur between the subjective prefixes and the stems. In the case of only one of these, Ł, 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 Ł 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 -tāλ, -tāλś, referring to movement of the feet has

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

na ‡n gûl tal, he kicked out. 89-7.
nô dûn tal, you step. 82-1.
nô t gûl tal', 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.

sût tin, he sick lay down. 158-4.
nôt tiî, he laid him down. 80-6.
stiî, lay. 100-2.
nô’tic, 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.

nô wil k’as, fell. 152-1.
te’ tôl k’as djâ’, let him drop. 129-8. (Pl. 10, fig. 4.)
gûl k’ân, a fire was. 108-2. (Pl. 45, fig. 10.)
gûl san, it was found. 88-13.
But compare gûl teqâ, they shouted. 114-3.
gûl teqat, they (elk) shouted. 165-9.
gûl teîn, they made. 178-3.
gûl teîn, were made(1). 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 -tës, 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.

ô’t gêc, look at them. 164-9. (Pl. 25, fig. 13.)
nôhô t gêc, let me see you. 142-6. (Pl. 43, fig. 2.)
wûn gût t yac, some became old. 107-11. (Pl. 30, fig. 6.)
bûl te’ gût t yîn, he doctored. (Pl. 30, fig. 3.)
dô ha c ka nôn t yâsî, do not be ashamed. 131-8. (Pl. 30, fig. 2.)
t te’ bîl c, it rained. 81-1. (Pl. 36, fig. 13.)
te’ ön t gêc, he looked at them. (Pl. 43, fig. 5.)
Ye na gût ya, he went again. 99-4.
t’e na gût dac, he came up again. 149-13. (Pl. 10, fig. 6.)
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.

-ae, -ac, to have position.
  bec 'ae', I will try it. 109-9. (Pl. 5, fig. 5.)
  ka 'ae', it sprang up. 76-10. (Pl. 9, fig. 1.)
  Le ges 'ae', it was encircling. 82-15. (Pl. 23, fig. 5.)
  nai 'ai bã, it will be across. (Pl. 23, fig. 8.)
  di 'un es 'ae', up there in a row. 109-10. (Pl. 28, fig. 4.)

-¿qñ, -¿qč, to transport or give position to round objects.
  de t gun 'qñ, he put in the fire. (Pl. 7, fig. 2.)
  nọ ga 'qč, he put along. 86-11. (Pl. 23, fig. 11.)
  de düñ 'qč, put on the fire. 127-12. (Pl. 23, fig. 15.)
  nọ' 'qč, put it (plural). 110-11. (Pl. 28, fig. 7.)

69 These are discussed above, p. 18.
69a 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'añ and te'ač, to shoot; -tean and -teč, 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: -ge, -güc, -gel, -gin (Kato); -we, -wùw, -wel, -wif, -wen (Hupa).
70 III, 203.
71 III, 206. This is probably the stem above to which -ñ and -c are added.
-al', -ar', to chew.\(^{72}\)

te'guñ al' ya_ní, he chewed it they say. 109-7. (Pl. 26, fig. 4.)

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

-atc, -ac, to walk, to crawl.\(^{73}\)

\(t\)a te'út, ate ē kwa naññ, (turtles) have come out of water. 95-8.
tul ae bùñ, (turtles) must walk. 121-4.
t'e' tül ae bùñ, (crawfish) must walk. 121-4.

-əl, -ile, to sit (plural only).

nö'til, you stay. 168-1.

tö'núñ ə'il', they sat down. 170-8. (Pl. 28, fig. 9.)

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

-iñ', to look.\(^{74}\)

n dül 'iñ', let us look. 168-1. (Pl. 3, fig. 3; pl. 28, fig. 11.)

kw níñ iñ', he looked at him. 134-2. (Pl. 9, fig. 5.)
dō kō gis iñ', one couldn't see. 81-1. (Pl. 24, fig. 13.)
ya te' ku ne' iñ', they saw him. (Pl. 25, fig. 3.)
tön gùr iñ', he looked at it. 156-16. (Pl. 25, fig. 12.)
ne' iñ' tê le, I will look. (Pl. 27, fig. 3.)

nue iñ' le, I saw it. 137-1. (Pl. 28, fig. 10.)

-iñ', to do.\(^{75}\)

kwac 'iñ', I always do that. (Pl. 28, fig. 12.)

kwac iñ', you (plu.) do that. 113-4. (Pl. 28, fig. 13.)

-uts, to run, to move aimlessly.\(^{76}\)

na' uts, he ran about. 134-3. (Pl. 29, fig. 1.)

-uts, to shoot.\(^{77}\)

t'uts, he shot along. 144-9.

-yai, -ya, -yac, to go.\(^{78}\)

da beš ya', he climbed up. 180-6. (Pl. 6, fig. 4; pl. 23, fig. 14.)
ye' te' guñ yai, he went in. 97-11. (Pl. 10, fig. 9; pl. 23, fig. 2.)
tö'nuñ yac, come out. (Pl. 24, fig. 4.)
kwöt te'guñ yai, he went down. (Pl. 24, fig. 9.)
tö'nuñ yai, he came there. 142-14. (Pl. 25, fig. 6.)
tö'nuñ yai húñ, when he came. (Pl. 26, fig. 6; pl. 29, fig. 8.)
tö' tes yai, he went. 116-9. (Pl. 29, fig. 2.)

Lùn tés yai, they came together. (Pl. 29, fig. 4.)
ca k'ëñ yai, sun went down. (Pl. 29, fig. 5.)
ní ya ye, I came there. 136-17. (Pl. 29, fig. 6.)

\(^{72}\) III, 206.

\(^{73}\) III, 209.

\(^{74}\) III, 209.

\(^{75}\) III, 211.

\(^{76}\) III, 212.

\(^{77}\) III, 211.

\(^{78}\) III, 212.
-yal, relating to sleepiness. Used with person affected as object.

c-gi yal, I am sleepy. 164-4. (Pl. 29, fig. 7.)
c-gi ya le, I am sleepy. 114-10.

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

nes ya ni kwa naâ, it had grown.

wán gút t yac, some became old. 107-11. (Pl. 30, fig. 6.)

kô wi yaL, they were growing. 88-15.

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

'ô ke dji yan, he didn’t like. 91-7.

ô s te kw yan ôn gi, I don’t like him. 142-16.

-yañ, to clear off.

niñ yañ kwañ ôn gi, it has cleared off. 168-1. (Pl. 26, fig. 1.)

niñ yan deâ, when it cleared off. 167-17. (Pl. 27, fig. 1.)

-yañ, to be ashamed.

ô haâ ka nôn t yañ, do not be ashamed. 141-8.

ka nôt t yan, she was ashamed. 180-8.

-yanâ, -yilâ, to eat. 80

e ne sôl yan, you ate upâ 136-16. (Pl. 24, fig. 10.)
tè' gàñ yamâ, he ate of it. 129-5. (Pl. 29, fig. 9.)
tè' o' yañ, you (plu.) eat. 148-6. (Pl. 29, fig. 10.)
tè'Èn yan, you (sing.) eat. 125-7. (Pl. 29, fig. 13.)
tè' neñ yilê, she eats up. 180-9. (Pl. 1, fig. 9.)

Cf. nes yì djaâ, let me eat. 181-12.

-yats, to snow. 81

ô t yats, let it snow. 93-5.

-yelâ, to stop crying (?).

tè' deñ yelâ, he stopped crying. 148-4. (Pl. 29, fig. 14.)

-yeg, -yeâ, to make a deer drive.

tè'n na dül yeg, we will drive. 110-9.

-yeâ, -yeâ, to make a deer drive.

tè'n na dül yeg, she always hunts. 181-7.

-yi, to name, to call by name.

tè'ôt yì kwàn hût, he had named when. 117-12.

ôl yì bôn djaâ, shall be called. 99-7.

-yiñ, to stand. 82

sì yì ne, I stand. (Pl. 25, fig. 7.)

Cf. te'ñiñ ôn gi, he is standing. (Pl. 26, fig. 2.)

79 III, 219.
80 III, 217.
81 Cf. yas, snow, III, 19.
82 III, 220.
-yín, to live at a place.83
nō nūn yín, they lived. 160-12. (Pl. 29, fig. 12.)

-yíc, yí, to speak. (First and second persons only).84
kūn nūc yíc, I will speak. 120-9.
a dōc yí, I boast. 128-1.
wī nūn yíc, you will talk. 174-3.
kō nō'íc, speak (plu.). 120-8.

-yíc, to break.85
tc'n yic, he broke it. 79-12. (Pl. 10, fig. 3.)

-yíc, to whistle.86
kw!n yíc, he whistled. (Pl. 30, fig. 7.)

-yít, yík, -yíc, to rest.87
na dāl yíc, let us rest. 140-18. (Pl. 30, fig. 5.)
na ges yíc, he rested. 161-4. (Pl. 30, fig. 4.)

-yít, yík, -yíc, to build a house.88
ńče yít, I will make a house. 168-6. (Pl. 30, fig. 8.)
s'ūs yí(k)6, he made a house. 168-7. (Pl. 30, fig. 9.)
gūl yíc, yán ní, he built a house they say. 83-11. (Pl. 30, fig. 10.)

-yōl, -yōl, yō, to blow.89
tc'n nōl yōl, let it blow. 80-13. (Pl. 30, fig. 11.)
Cf. ó wí yō, she fanned. 153-3.

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

-yot, -yō, -yōl, yōl, to chase.90
kwūn tin yot, they ran after him. (Pl. 30, fig. 13.)
būn ti gūl yō, they chased it. 174-10.
kwūn i yōl, they followed him. 98-11.
na būn yōl, they drove. 170-16.

-lai, -la, -lāc, to move several objects.
ka na gūl lāc, she digs out. (Pl. 31, fig. 1.)
ū na te'e na lai, her eye she took out. 152-9. (Pl. 31, fig. 2.)
k'wūn nūl lāc, put it on (sing. imp.). (Pl. 31, fig. 7.)
bel get k'wūn nūl lāc, spear points put on. 168-11. (Pl. 31, fig. 6.)

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83 III, 220.
84 III, 246. See -nī, -n below, p. 65.
85 Cf. Hupa -yeu̯, to rub, to knead. III, 220.
86 Cf. Hupa -yeu̯, to rest, to get one's breath. III, 220.
87 III, 220.
88 See ye, yik, house, p. 19.
89 III, 221.
90 III, 221.
-lal, -ləl, to sleep, to dream.\textsuperscript{91}
\begin{itemize}
\item n tə ləl, let him sleep. (Pl. 31, fig. 8.)
\item n tə ləl ya' ni, he went to sleep they say. \textsuperscript{83-4.} (Pl. 31, fig. 10.)
\item nə hə n tə lələ, you (plu.) go to sleep. 110-16. (Pl. 31, fig. 11.)
\item ñə nə ləl, he dreamed about. 145-2.
\end{itemize}

-lən, to laugh.
\begin{itemize}
\item ya'ə lən, they laughed. 155-2.
\item də sələn, he did not laugh. 103-15.
\end{itemize}

-lən\textsuperscript{e}, to get.
\begin{itemize}
\item ñə lən\textsuperscript{e}, I will get. 137-2. (Pl. 24, fig. 11.)
\item ñə lən, you get. 133-14. (Pl. 1, fig. 4.)
\end{itemize}

-lat, to float.\textsuperscript{92}
\begin{itemize}
\item kwən ya' gələt, it sank. 174-12. (Pl. 24, fig. 8.)
\item te'n nələt, it floated there. 148-1.
\end{itemize}

-lag, -la', -le', to do.\textsuperscript{93}
\begin{itemize}
\item kwəi la' ya' ni, he did it they say. (Pl. 31, fig. 3.)
\item də kwa'ə laə, he did this way. 154-6. (Pl. 31, fig. 4.)
\item əə gə la ə, I fixed it good. 76-12. (Pl. 31, fig. 5.)
\item nə əə ələe', dress yourself. 103-1.
\end{itemize}

-le\textsuperscript{e}, to sing.
\begin{itemize}
\item te'ə le\textsuperscript{e}, he sang. 149-11. (Pl. 32, fig. 1.)
\item te'ə gələ le\textsuperscript{e}, he commenced singing. 105-11. (Pl. 32, fig. 4.)
\end{itemize}

-leq, -le', to swim under water.\textsuperscript{94}
\begin{itemize}
\item na gələqə, fish were swimming down. 164-1. (Pl. 32, fig. 2.)
\item wən əni le ət, I swam to because. 175-5.
\end{itemize}

-li\textsuperscript{e}, to snare.\textsuperscript{95}
\begin{itemize}
\item te'əs li\textsuperscript{e}, he caught in a noose. 108-4. (Pl. 1, fig. 6; pl. 32, fig. 7.)
\item nas li\textsuperscript{e}, he tied up. 145-7. (Pl. 32, fig. 6.)
\end{itemize}

-li\textsuperscript{n}, to flow.
\begin{itemize}
\item na na gələ li ne, it runs down. 121-9.
\end{itemize}

-li\textsuperscript{n\textsuperscript{e}}, -le, to become.\textsuperscript{96}
\begin{itemize}
\item nas dələ lin ne, we have got back. 95-12. (Pl. 3, fig. 6.)
\item səs li\textsuperscript{n\textsuperscript{e}}, he became. 84-11. (Pl. 32, fig. 3.)
\end{itemize}

\textsuperscript{91} III, 232.
\textsuperscript{92} III, 232.
\textsuperscript{93} III, 230.
\textsuperscript{94} III, 237.
\textsuperscript{95} Cf. Hupa -loi, to tie, III, 236.
\textsuperscript{96} III, 233.
-lō, to hail.

ō lō, let it hail. 93-6.

-lō, to deceive.

t'e kwē lōē ńt, when he fooled him. 136-14. (Pl. 26, fig. 5.)
skō lōē kwāŋ, he was pretending. 134-6.

-lōs, to lead.97

be čō' lōs, take me up. 147-6. (Pl. 6, fig. 1.)
gūl lōs tē le, he will bring it. (Pl. 32, fig. 9.)
t'e tē lōs, he led. 159-9. (Pl. 32, fig. 10.)

-lūt, -Lūt, to burn (see Lūt, smoke).98

i gū lūt ńg ńg, 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.

bi' čō' lūts, in it urinate. 138-14.

-lūk, to tell, to relate.99

wān tē' kō lūk, he told about it. (Pl. 32, fig. 11.)
dō ha' wan kwēlūk bān āja', you must not tell him. 139-13.

-Lā, to shoot.

ō nō' lā bān, you must shoot. 173-4.
tē lā, he shot. 144-12.

-Lān, to be many.

gūn lān, became many. 83-14. (Pl. 33, fig. 10.)
gūn lā ne, have become many. 169-10. (Pl. 33, fig. 11.)

-Lat, -La (-Lag?), to jump.100

na nūn lāt, jump across (sing. imp.). (Pl. 34, fig. 3.)
tē' nūn lā, he jumped out. 142-6. (Pl. 34, fig. 4.)
nā nūn lā gūt, he jumped across when. 147-7.

-Lēg, Lē', relating substances of dough-like consistency.101

bi nō' lē', soak them. 110-6. (Pl. 34, fig. 1.)
bī nō' gūl lē, they soaked them. 179-1. (Pl. 34, fig. 2.)

-Lūts, to be rough, to be strong.

n lūts, it is stout. 78-12. (Pl. 34, fig. 5.)

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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 ūŋ gi, she is making a basket. (Pl. 2, fig. 7.)

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

ə' Lō, braid. 113-3.

da de' te'u's Lō kwān, he had girded himself. 103-3.

na t ġūt Lōn, he set snares. 108-4.

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

c gi na*, I am hungry. 141-14.

c gi na e, I am hungry. 168-15.

-nai*, -na*, to roast.\(^{103}\)

te'el naie*, it is roasted. 113-15.

beeg na*, I will roast. 168-16. (Pl. 33, fig. 2.)

te'goi na*, he roasted. (Pl. 33, fig. 1.)

-na (?)

nōi tin na*, were left. 158-10.

-nān, to drink.\(^{104}\)

ta ya* ō nān, let them drink. 123-6. (Pl. 33, fig. 5.)

tai 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 gi nai*, they went in. 107-17.

ye ni na, came in. 148-11.

-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, -nil, to speak.

he ū' te'n 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' ne kwān nās, you talk. 166-9.

ya* n ya* nī, they said they say. 82-11. (Pl. 4, fig. 4.)

kwāl ūn ya* 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 nil, it kept hooting. 179-7.

\(^{102}\) III, 239.

\(^{103}\) III, 242.

\(^{104}\) III, 243.

\(^{105}\) III, 242.
-nie, to play.106
na gös nie, you played with. 134-17.
na gös nie kwən, he had been playing. 115-10.

-nūk, to relate.
wən kw nūk de', you tell about when. 176-2.

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

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

-sat, -sqt, to sit.
nūn sat, sit down. 140-18. (Pl. 34, fig. 10.)
na nō sat, you (plu.) camp. 173-7.

-sʿt, relating to one's head and its position.
be t gūn sʿt, had her head close. 152-3.
t gūn na sʿt, turned heads. 165-12.

-sil, to steam (†).107
nē sil, I am sweating. (Pl. 35, fig. 1.)

-sil, -sul, -tsul, to strike (repeatedly).108
na nel sil, it struck. 162-11.
kwən ye teʿul sil, it pounded into the ground. 154-10.
ūl sūl, peck. 113-9.
nūn yil tsul, beats against it. 86-12.

-sō (†)
nō te gūl sō, she pushed in. 153-3.

-sūl, -sūl, to be warm.109
kō wūn sūl, it was becoming hot. 81-2. (Pl. 1, fig. 5.)
gūn sūl le, is hot. 149-7.
gūn sūl, it became warm. 96-4.

-sūn, to think. (First and second person.)
dō kw ne sūn, I was insensible. 182-17. (Pl. 35, fig. 5.)
nō nēc sūn ūt, I thought you. 171-6.

-sūn, to hide.
be nō sūn, you (plu.) hide it. 113-4. (Pl. 35, fig. 3.)
be nōn sūn kwaŋ ūŋ gi, you were hiding it. 101-10.
be nō gūs sūn, she hid. 135-11.

106 III, 247.
107 III, 253.
108 Cf. -sūl, to pound.
109 See -sil above. III, 253.
-sūn, -sūs, to hang, or to be hanging.
  te' tei sūn, he hung up. 176-13.  (Pl. 35, fig. 4.)
  na t sūs, hanging. 176-16.

-sūs, to see.109a
  cū1 sūs e, (nobody) sees me. 176-1.
  dō dūl sūs he, we did not see. 116-18.  (Pl. 26, fig. 7.)

-sūt, to fall.110
  nōl sūt, he fell. 147-8.
  te' tei sūt, he fell. 147-7.

-sūt, to pound.111
  ū 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.112
  teo' sūt, wake up. 100-9.
  te'o'n sūt', woke up. 134-13.

-ca', -cac, to go.  (First person only.)113
  na ca4, I will go about. 133-6.  (Pl. 23, fig. 7.)
  nan ca4, I will cross. 154-1.
  ta cac, I went. 182-17.

-ca', to catch with a hook.114
  gūs ca', they caught. 158-8.

-ce', to spit.115
  k'wūt te'ya ce', they spit on. 154-14.  (Pl. 35, fig. 12.)

-cūn', -cūn, to be black.
  et ci nē kwan nān, it had turned black. 94-7.  (Pl. 3, fig. 1.)
  nū cūn', black.  (Pl. 36, fig. 2.)

-ci', to dig.116
  ka te'gūc ci4, they dug. 148-11.  (Pl. 35, fig. 13.)
  ka te'gūn ci4, they were digging. 148-8.  (Pl. 35, fig. 14.)
  ka ya4 ci4, they dug. 148-12.

-cōn, to be good, to be good looking.117
  n cō ne, it is good. 79-4.
  n cōn ūn gi, it is beautiful. 100-5.

109a See Hupa -tsis. iii, 272.
110 Hupa -tsit. iii, 273.
111 Hupa -tsit, iii, 272.
112 iii, 253.
113 Hupa -hwa, -hwa, -hwauw, iii, 248.
114 Hupa -hwal, -hwa, iii, 248.
115 Cf. cek, spit.
116 Hupa -hwe, iii, 249.
117 Hupa, -hwōn, iii, 201.
-heč, to be tired (but only when used with a negative prefix).
  dó yí heč, I am tired. 98-1. (Pl. 36, fig. 6.)
  níñ dón heč 'án, are you (sing.) tired? 141-1. (Pl. 36, fig. 7.)
  dó yí de heč, we are tired. 116-7. (Pl. 36, fig. 8.)

-bač, to be thirsty.
  ta gu ba, I am thirsty. 141-10.
  t'gu ba e, I am thirsty. 118-4.

-bañ, to walk lame.
  te' ti. bañ, he walked lame. 133-6. (Pl. 24, fig. 14.)
  nac ba nč, I am lame. 133-8.
  na gúl t bañ, he limped along. 138-13.

-bat-, -bac (-buc), to embrace (?).
  be te'ma dút, he embraced it when. 131-2.
  da kit dól buc, he embraced it. 180-3.

-bet, to bet.
  te'uc beč, I bet. 146-12.

-beč, -bín, -bic, to swim.118
  nón bín na' be, swim (plu. imp.). 111-2. (Pl. 36, fig. 9.)
  ni bi ne, I swam. 118-17.
  na nón binc, swim across. 96-11.
  tům bic, swim. 118-16.

-bilč, -bül, -bůl, to fall, to rain (plural object).119
  te t bilč, it rained. 81-1. (Pl. 36, fig. 13.)
  ya' ga bilč, they threw over. 149-8.
  ku na s'is bilč, he sprinkled around him. 80-6.
  cóük tůt bůl, good it rains. (Pl. 36, fig. 12.)
  ce nant bůl, come to me again. 143-8.

-bůl, to handle flour (?).
  ta te'úm mů́ł, cook mush (sing. imp.). 163-14. (Pl. 6, fig. 8; pl. 37, fig. 5.)
  ta te'úł mů́ł, cook mush (plu. imp.). 123-13. (Pl. 24, fig. 1; pl. 37, fig. 6.)

-bulč, to hang up.
  te'te buč, he hung it up. 79-13. (Pl. 37, fig. 2.)
  tůt bůl, I will hang up. 115-6. (Pl. 37, fig. 3.)
  te'te buč kwą́, he had hung up. 176-3. (Pl. 27, fig. 8.)

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118 Hupa -me, -men, III, 240.
119 Hupa -mel, -mil, -mii, III, 240.
-būn, to be small(†).
  dō būn nē kwa nāṅ, were small. 95-6.
  ya‘ dō māṅ, they became small. 107-12.

-būn⁴, to be full.120
  dē mūn⁴ (din būn⁴), it was full. 129-12. (Pl. 37, fig. 1; pl. 6, fig. 6.)
  lē te mūn⁴, were full. 82-14.
  dō te būn ne, is not full. 149-6.
  tes dūl būn⁴, we filled. 182-2.

-dā, -dai, to sit, to remain.121
  sūn da, you stay (sing. imp.). 79-7. (Pl. 37, fig. 7.)
  bi⁴ sta, he was sitting in. 122-3. (Pl. 6, fig. 7.)
  sī dai, I sit. 140-7.
  tc‘n nes dai, he sat down. 161-10. (Pl. 37, fig. 8.)

-dai, to be exhausted(†).
  dō to‘i⁴ dai, he didn’t give out. 128-12.

-dac, to travel.122
  te’ na gōt dac, he came up again. 149-13. (Pl. 10, fig. 6; pl. 37, fig. 10.)
  yal dac būn⁴, you must jump up. 82-16.

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

-del⁴, -dūt, to go (dual only).123
  tc‘n nūn del⁴, they came up. 158-6. (Pl. 37, fig. 13.)
  ka sī del⁴, we came up. 141-2. (Pl. 1, fig. 7; pl. 37, fig. 12.)
  te’t tes dō le, they went on. 108-12. (Pl. 38, fig. 1.)
  bē dūt, let us climb. (Pl. 23, fig. 13.)
  ti dūt, let us go. 141-6. (Pl. 38, fig. 2.)

-del⁴, -der, -dūl, to handle objects (plural).
  de t gōl del⁴ kwaṅ, had put in the fire. 131-7.
  da nūl del kwaṅ, he had put on a frame. 135-4.
  ta ya it dūl, she put in water. 143-4.

-deg, -de’, to win.
  na‘ te’ūs deg, he won back. 147-1.
  na‘ te’ūs de’, he won back. 146-14.
  kō wān te’ gōl de’, from him he won. 146-8.

120 Hupa -men, -mīṅ, III, 241.
121 III, 254.
122 Cf. -dauw, III, 255.
123 III, 256.
-deg, -de', to wash.

te' na te'ús deg, he washed it. 129-2.
te' na te'gún de', she washed them. 153-5. (Pl. 38, fig. 3.)
te' na te'ús de, he washed it. 168-16.

-din', to shine.\textsuperscript{124}

a te' nuñ din bûñ, it will be light. 140-4.
cuñ di ne, the sun shines. 192-13. (Pl. 38, fig. 4.)

-dö', to be none.\textsuperscript{125}

n dö' bûñ, it will not be. 80-13. (Pl. 38, fig. 5.)
nuñ dö', all gone. 99-11.

-dûl, -dûr, relating to the movement of fish in numbers.
nuñ dûl, they came. 169-8.
tuñ dûl, come. 120-17.
tuñ dûl bûñ, must come. 120-18.

-dû, to move something up and down (†).

na nañ dû, he moved (a basket) up and down. 150-2.

-dûn, to die.

eñ o dûn, you will die. 177-4. (Pl. 25, fig. 2.)
ce dûn ne, I died. 128-4. (Pl. 38, fig. 7.)
ce e dûn te le, I will die. 177-5. (Pl. 38, fig. 9.)

-dûts, -dûs, to twist.

gût dûts, is twisted. 114-1.

-dûk, to crack (acorns).

te'le dûk e, I crack them. 140-4.
te'un tûk, crack them. 138-2.
te'ul tûk bûñ, you must crack. 136-1.

-djiñ, to be day.

o djiñ kwic, about day probably. 124-1.

-djöls, to roll.

ten nas djöls, it rolled out of the fire. 147-9. (Pl. 10, fig. 1; pl. 41, fig. 3.)

-tal, tâl, to step or move the foot.\textsuperscript{126}

te' te'gûn tal', he stepped in water. (Pl. 38, fig. 10.)
nû dûn tâl, you step. 82-1.
te' te'gût tâl, he dragged his foot along. 90-4.

\textsuperscript{124} III, 260.
\textsuperscript{125} Cf. dö, not, the negative prefix.
\textsuperscript{126} III, 261.
-tän, -tic, to handle a large object.  
'tän, he took out (spear-shaft).  170-14.
-tan, to eat (third person only).  
'te tan ñän gë, he is eating.  174-1.  (Pl. 38, fig. 11.)
-te, to look for anything.  
ka kw nó te, look for him.  160-1.  (Pl. 39, fig. 1.)
ka ñën te, she looked.  114-9.
ka ya n te, they looked.  114-8.
-tel, -tet, to be wide or flat.
ñ tel, flat.  180-14.
kwän tel, të lit, it was becoming flat.  107-3.  (Pl. 27, fig. 2.)
gün tel, was flat.  106-11.
të'ëc tel kwän, he had spread.  115-11.
-tec, to teach (?).  
be gün tec, he taught.  122-11.  (Pl. 39, fig. 3.)
ke gët'ëc, he taught them.  122-1.
-tin, -tùc, relating to movement or position of an animal alive or dead, with transitive or intransitive meaning.  
nës tin, it is lying.  182-3.  (Pl. 39, fig. 5; pl. 10, fig. 7.)
nun s'us tin, he picked him up.  179-14.  (Pl. 39, fig. 7.)
tän nas tin, she took out again.  129-2.  (Pl. 39, fig. 8.)
ci së ti ne, I lay.  175-16.  (Pl. 39, fig. 9.)
nö niš. ti ne, he put it.  (Pl. 39, fig. 10.)
të'ëc ne, I lay down.  175-11.  (Pl. 5, fig. 2.)
ul túc, give it.  179-2.
nu nun tuc, lie down again.  100-1.
dö gët tuc, you did not give it to me.  179-5.
-töc, relating to position or movement of water.  
nö te'ën tòc, water came so far.  75-1.  (Pl. 7, fig. 6.)
-tönc, to jump or to cause to jump.  
nu te'ën tönc, he snapped it.  (Pl. 39, fig. 11.)
-tùn, -te, to be cold.
us tùn, it was cold.  96-1.
us tûn e, it is cold.  (Pl. 40, fig. 3.)
kö wùn tûn, it is cold.  121-10.
ung te'ëc ñän, I might be cold(†).  133-8.

127 III, 262.
128 III, 263.
129 III, 264.
131 III, 264-6.
133 III, 267.
-tük, to burst.

gut. tük, it burst. 182-5. (Pl. 8, fig. 1; pl. 40, fig. 1.)

-tük, to kill.

s djó ôü tük, kill me (plu.) "my heart(?)" 151-8. (Pl. 40, fig. 4.)

-t'a, to use a sling.

na kwíč t'a kwíc, I am going to sling at him. 122-14. (Pl. 40, fig. 9.)

-t'an, relating to wax-like substances.

kwé y'a hé t'añ, they stuck on. 170-6.

-t'ats, -t'as, to cut.

yis t'ats, he cut it. 162-10.

ta güt t'ats, he butchered. 175-4. (Pl. 24, fig. 2.)

t'en ne sít t'ats, I cut it up. 138-15. (Pl. 40, fig. 12.)

t'en nóč t'as, cut them (plu. imp.). 166-15. (Pl. 40, fig. 11.)

-t'ag, -t'a', to fly.

nún t'ag, it flew. 182-11. (Pl. 40, fig. 6.)

téc t'a téc le, I will feather. 156-5. (Pl. 7, fig. 9; pl. 40, fig. 5.)

-t'e, to have an appearance or disposition.

ac t'é, I am. 159-10.

a nó t'é, you are. 139-1.

an dót t'é ye, we are. 132-5.

an t'é, it is. 100-10.

kún t'é, she is like. 181-11.

-t'e, to cook.

tóč t'é, you cook (plu. imp.). 167-16. (Pl. 40, fig. 10.)

úš t'é ye', it is cooked. 163-15. (Pl. 40, fig. 8.)

-t'ín, to do.

dó kwá t'ín, he never did that. 130-14. (Pl. 9, fig. 4.)

kwá t'íñ, I did that. 147-5.

-t'ót, to suck.

k'úl t'ót, he sucked it. 159-2. (Pl. 40, fig. 2.)

t'el t'ót, (make) it suck. 115-3.

-t'ôG, -t'ô', to sting.

na te'el t'ô, she stung. 156-14.

nún yin t'ô got, she stung them when. 156-15. (Pl. 26, fig. 3.)
t'ót dún t'ô kwác, something stung I guess. 114-14.

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124 Cf. -tük, to burst.
125 III, 268.
126 III, 268.
128a Cf. t'a', feathers, and Hupa -tau, III, 268.
127 III, 268.
128 III, 269.
-t'ök', to flake flint.
   te'ūs t'ök', he flaked. 156-7. (Pl. 11, fig. 8.)

-tsai, -sai, to be dry.\footnote{140}
   ol sai dia', let them dry. 136-3.
   gūl tsai, it was dry. 123-4. (Pl. 34, fig. 8.)
   te'ūs sai, she dried it. 181-4.

-tsān, -sū, to find, to see.\footnote{141}
   te'ūl tsān, he found. 97-4. (Pl. 34, fig. 6.)
   dō ha te'ūl tsa ne, he did not find. (Pl. 34, fig. 7.)
   ul sān, do you see? 141-2.
   dō gūl sān, it was never found. 179-6. (Pl. 34, fig. 9.)

-tsān, to hear.
   òc tsān, I heard. 182-8.
   ya te'ūl sūl sān, they listened. 178-1.

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

-tsūt, to know.
   dō 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'eg, -ts'ē', -s'ū, (-ts'ē), to hear.
   na ya di ts'eg, they heard again. 106-16.
   ka nāl ts'ē, they heard again. 106-14.

-tcāi, -tcā, to bury, to cook by burying.\footnote{142}
   te' gūn tcāi, he buried it. 129-2.
   ka te' gūn ca, well, let us cook. 149-7. (Pl. 25, fig. 11.)
   be te' gūn ca, she put in sand. 152-8.

-tcān, to eat in company.\footnote{143}
   na dūl tcān kwa, he had eaten. (Pl. 41, fig. 4.)
   na dīc tcān ne, I ate. 171-9. (Pl. 41, fig. 6.)
   na dīc tcā, let me eat a meal. (Pl. 24, fig. 12.)

-tcān, to defecate.\footnote{144}
   te' gūn tcān, he defecated. 142-7.

\footnote{140}{III, 270.}
\footnote{141}{III, 270.}
\footnote{142}{Hupa -tewai, -tewa, III, 275.}
\footnote{143}{Hupa, -tewan, -tewān, III, 275.}
\footnote{144}{Cf. Hupa -tewen, -tewī, III, 278.}
-tcän, -tcë, to leave one.
  ò tcë nö'tcë bâⁿ, you may leave it. 118-1.
  dö tcës tcë të le, I will not leave. 139-18.
  ò tcës gut tcëañ, they left them. 178-11.
  ò te'ñ ni tcë ne, I left him. 117-17. (Pl. 41, fig. 10.)

-tcat, -tcë, to be sick.145
  t gun tcë de, is sick. 140-5.
  dün tcë bâñ, will be sick. 79-5.

-tcat, -tcät, to shout.
  gût tcät, they shouted. 165-9. (Pl. 25, fig. 10.)
  ò teät, I will shout. 164-12.
  òl tcät, shout. 164-13.
  gûl tcät, they shouted. 114-3.

-tcaâ, -tcâ', to be large.146
  gûn tcë kwâñ, had become large. 116-4.
  ò tcâ', let be large. 93-7.
  wö' n tcâ', teeth large. 86-5. (Pl. 4, fig. 2.)

-tceë, -cë, to be bad.147
  n toë e, bad. 140-18.
  dö ha' n toë' mûn djaë, let it not be bad. 171-10.

-tceë( ?), -tcëul (-tcëJ), to split.148
  dzie' gûl tcëul, she split open. 129-3. (Pl. 24, fig. 5.)
  gûl tcëul, were opened. 125-6.
  dzie' kûl tcëul, split it. 80-9.
  dzie' gûl tcëul, he split open. 129-3.

-tceq, -tcë', (-ce'), to cry.149
  te' gun tee ge, he cried. 133-1. (Pl. 41, fig. 11.)
  òc teë ce, I cried. 140-6. (Pl. 8, fig. 6.)
  òm tee' bâñ, you may cry. 115-7.
  dö ha' kw ân ce', do not for it cry. 117-8.

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

-teï', to be red, to dawn.
  te' t e gûs teï', it was about dawn. (Pl. 8, fig. 2.)
  te' gûs teï', it was red. 148-5.

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146 MII, 274.
147 Cf. Hupa -kya ñ, -iya, MII, 201.
148 Cf. Hupa -kya -kya 6, -kya, MII, 201.
149 Cf. Hupa -te'ñ, -te'ñ, MII, 280.
150 Hupa -te'ñ, MII, 274.
-tein, -tei, -teil, to make.\textsuperscript{151}
\begin{itemize}
\item ūl tei, make it. 79-8. (Pl. 41, fig. 8.)
\item te'gul tell, it is growing. (Pl. 41, fig. 9.)
\item kw na* ūl tei, make him live. (Pl. 10, fig. 2.)
\item te'oi tei dja*, let him make. 140-2.
\item gul teiñ, they made. 178-3.
\item ya* het tein, they made. 170-4.
\item te'is tein, he made. 77-6.
\end{itemize}

gic teiñ, I place along. 88-1.

-teös, relating to flat, flexible objects, such as skins.\textsuperscript{152}
\begin{itemize}
\item nai teös, she put. 180-7.
\item c gar. teös, give me. 97-13.
\end{itemize}

-teöt, -teöl, to steal.
\begin{itemize}
\item k'teł teöt, he stole. 118-11. (Pl. 9, fig. 6.)
\item ci te sù. teoil*, I stole. (Pl. 42, fig. 1.)
\end{itemize}

-teök (-cük), to arrange in a row, to string.\textsuperscript{153}
\begin{itemize}
\item te'gün teök kwan, he had filled. 159-6.
\item te'gün cùk kwan, he had strung. 135-1.
\end{itemize}

-teul, -teùl, to be wet or damp.
\begin{itemize}
\item na gùn teùl ya* ni, he got wet they say. 126-16. (Pl. 42, fig. 3.)
\item nai teul ńt, it was wet because. 126-11.
\end{itemize}

-teùn, -teic, to smell.
\begin{itemize}
\item ye gùn teùn, he smelled it. 114-4.
\item gul. cùn ne, it smells. 109-6.
\item sùl. teic, you smell. 141-5.
\end{itemize}

-teût, -tei, to catch hold of.\textsuperscript{154}
\begin{itemize}
\item yi. teût, caught it. 114-4.
\item gul teût, he caught them. (Pl. 42, fig. 2.)
\item te'oi teîf ya* ni, he caught it they say. 142-5. (Pl. 42, fig. 5.)
\item nai tse bùñ, you must catch. 116-16.
\end{itemize}

-teût', to feed.\textsuperscript{155}
\begin{itemize}
\item kù wa gùt teût', they fed her. 151-15. (Pl. 36, fig. 4.)
\end{itemize}

-teût, to stretch.
\begin{itemize}
\item nù. teût, you stretch. 78-15.
\item te'o. teût, stretch it out. 77-13. (Pl. 42, fig. 4.)
\end{itemize}

\textsuperscript{151} Hupa -tewen, -tewiñ, -tewe, III, 276.
\textsuperscript{152} Hupa -kyos, III, 284.
\textsuperscript{153} Hupa -tewôk, III, 279.
\textsuperscript{154} Hupa, -kit, III, 283.
\textsuperscript{155} Hupa -kit, III, 283.
-tc’aṇ̌, -tc’ac, to shoot with a bow.
-štłač te’aṇ̣̌, he shot it. (Pl. 41, fig. 7.)
štłač tec’aṇ̌, he shot. 110-13. (Pl. 25, fig. 9.)
šu te’ac, you shoot. 178-1.

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

-gal', -gal, -gaḷ, to throw.\textsuperscript{157}
ṇ‘t gal’, she threw it. 181-4.
kal te’el gal’, he tipped it. 154-3.
ke’ gṛ gal’, she threw away. (Pl. 42, fig. 11.)
ṇ‘t det g̣ kwăn, he had poured. 125-13. (Pl. 42, fig. 12.)
ỵ‘ g̣ gal’, he threw up. 142-3. (Pl. 23, fig. 1.)
ṇ‘t g̣ gal, put across. 153-18.
no g̣ gal, throw me. 133-4. (Pl. 25, fig. 1.)

-gal', -gal, -gal, to drop, to beat.
na g̣ gal, he beat it. 177-6.
ṇ‘t g̣ gal, let me chop. (Pl. 42, fig. 7.)
ṇ‘t ṣt g̣al, you hit. 129-10. (Pl. 42, fig. 8.)
nat g̣al, hit again. 177-7.

-gale, to be mouldy.
tce gale’, it is mouldy. 167-16. (Pl. 42, fig. 9.)

-gan', -gale, -gale, to kill (with plural object).
ḍ‘ gale, I kill! 96-10.
5’ gale, kill. 113-6.
tce gale ne, he was killed. (Pl. 42, fig. 10.)
tce ṇ‘t na gale ne, he killed us. (Pl. 25, fig. 4.)
nai gi gale bûn, must kill. 173-2.

gẹc, to chew.
tce gẹc, let them chew it. (Pl. 5, fig. 6.)
ỵ‘gẹc, let him chew them. 110-7.

-gat, to sew.
tce nai gat de, he sewed up. 122-13. (Pl. 44, fig. 5.)
ṇ‘t na ṭat, he untied it. 122-15. (Pl. 44, fig. 6.)
ṇ‘ ṭat he gat, he loosened. 122-14.
na ḥ at bûn, you must untie it. 78-15.
na ḥ at ṭat, you untie. 123-7.

-gats, -gats, to scrape.\textsuperscript{158}
5’ gats, scrape. 113-7.
tce ge gats, she scraped them. 153-5.

\textsuperscript{158} Hupa -wa1, -wa2, III, 221.
\textsuperscript{157} Hupa -wa1, -wa2, -wa3, -wa4, III, 222.
\textsuperscript{158} Cf. Hupa -was, III, 224.
-ge⁵, to whip.
ōn ge⁶, whipped† 102-9.
-gel⁵, -gel, -gûl, relating to the passing of night.¹⁵⁹
gûl ge le, it was getting late. (Pl. 43, fig. 1.)
tea kwûn gel⁵, very dark. 127-3. (Pl. 2, fig. 4.)
ûl gûl, evening. 82-9.
-get, to thunder.
dô nai get, it didn't thunder. 74-4.
-get, -ge, to spear.¹⁶⁰
wai te' gün get, he struck over. 164-2.
yâ' te' oñ ge, they speared. 166-16.
-gets, -gûc, -ge⁶, to look, to see.
n hôc t ge⁵, let me see you. 142-6. (Pl. 43, fig. 2.)
te'ô na gût gûc, he looked back. 87-13. (Pl. 43, fig. 4.)
te'on t gets⁵, he looked at them. (Pl. 43, fig. 5.)
ô' t gûc, look at them. 100-9. (Pl. 25, fig. 13.)
ûn t gûc. look. 95-12.
-gîn, to kill.¹⁶¹
sel gîn ya⁶ nî, he killed they say. (Pl. 43, fig. 10.)
-gîn, -gûc, -ge⁶, -get, to carry on the back.¹⁶²
te' nô düg ge⁵, we will put in water. 139-9. (Pl. 7, fig. 5; pl. 24,
fig. 3; pl. 43, fig. 6.)
te'n nûg gûc, she brings in. 180-9. (Pl. 43, fig. 7.)
nî gi ne⁶, I bring. 138-14. (Pl. 43, fig. 8.)
te'n nûn fiâ', he brought it. 135-11. (Pl. 43, fig. 9.)
da n die ge⁵, I will pick you up. 141-4. (Pl. 7, fig. 3.)
tâc ge⁵, I will carry. 135-4. (Pl. 8, fig. 4.)
te't tes gîn, he carried. 101-9.
gûc get, I will carry. 141-1.
-git, -gûc, to be afraid.¹⁶³
be nê sû git de, I am getting afraid. 130-15. (Pl. 6, fig. 2; pl. 44,
fig. 3.)
wûn ye nel git, they were afraid of it. 154-6.
wûn tôt gûc ûn, might be frightened. 99-15.
-gîts, to tie.
le gîts⁵, he tied together.
tûm me'yîts, 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, -wi'n, -we, III, 225.
¹⁶² Hupa -wen, -wi'n, -wûw, -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.
  tűc kai, 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 ōl ka kwie, we will spend the night probably. 105-3. (Pl. 27, fig. 10.)
  dō yin kai, not day. 178-12.
  yī gūl kai, it was daylight. 105-5.
  yī gūt ka lit, it got light when. 114-5.

-kân, -kac, -ka, to move a vessel containing liquid.
  wa' dō kā ḥ, she gave him. 129-4. (Pl. 23, fig. 3.)
  kō wa kac, give him (a basket of food). (Pl. 45, fig. 1.)

Used of fishing with a net, probably the same stem.
  Cf. ő' kan, net it. 168-14.
  ts'gūn kan, he had caught. 120-1.
  dō ya' kac, they didn't net it. 168-14.
  kwa te'gūst ka, for him they dipped. 155-7.

-kân, -kūn, to be sweet.
  l kūn, is sweet. 166-11.
  tūl ka mūn dja', sweet will be. 91-5.

-ke', to finish.
  be nū ke', I have finished. 82-15. (Pl. 23, fig. 12.)
  bel ke', he finished. 172-12. (Pl. 45, fig. 3.)
  be lū ke get, he finished when. 149-15.
  be gec ke ge, I am finishing. 76-7.

-ke', to bathe (plural only).
  na' ke', bathe. 172-14. (Pl. 45, fig. 2.)

-ket, to trade.
  le te'gūt ket, they traded. 172-6.

-kūt, to ask, to question.
  dō ha' cō dōl kūt, do not ask me. 166-8. (Pl. 45, fig. 8.)
-kút, to travel (plural only).
  te'n mól kút, they came. 154-12. (Pl. 45, fig. 6.)
  dō ha te'te kút, they did not go. 167-17. (Pl. 45, fig. 7.)
-kút, to swallow.
  te'gul kút, he swallowed. 109-7. (Pl. 1, fig. 3; pl. 45, fig. 5.)
  nōk kút, may I swallow you. 181-14.
  kwal kút, his mouth he put in. 157-15.
-kút, to fall.
  wal kút, fell through. 158-1.
  na te'ūn kút, it fell. 83-4.
-kút, -kūs, to float.
  yal kút, floated. 143-7.
  tei kút, were washed away. 71-7.
  nō nūk kūs, it floated about. 127-8.
-k'ač, -k'ač, to be fat.170
  L k'ač būn djač, let it be fat. 85-14. (Pl. 26, fig. 10.)
  L k'ač, is fat. 83-15.
-k'ai, to hit (with an arrow).171
  nūn net k'ai, he hit. 156-14. (Pl. 45, fig. 9.)
-k'an, to build a fire.172
  ðō k'ań, make a fire. 103-7. (Pl. 3, fig. 7.)
  gūl k'än, there was a fire. 162-13. (Pl. 45, fig. 10.)
  ðū k'ań, 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'tōl k'as djač, let him drop. 129-8. (Pl. 10, fig. 4.)
  ya's gūr k'as, he threw up. 154-5.
  ḡāt gūl k'āc, she threw up. 144-7.
  nō wil k'as, fell. 152-1.
  nūn ya's l k'as, they pushed them in. 154-14.
  te'gūl k'at, it fell. 154-10.
  te'i k'ät, it struck. 154-11.
-k'et, to brace oneself in getting up from a sitting or lying position.173
  nūn s'ūs 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'ots, to be sour, to be bitter.
  dūn k'ots, sour. 139-11.
  dūn dūn k'ō teit, it is not salt because. 87-10.

171 111, 281.
172 Cf. Hupa, wil kan nei, a fire is burning. 1, 151, l. 4.
-k'ūc, to lighten.
    dō te't tān k'ūc, it did not lighten. 74-6. (Pl. 44, fig. 9.)
-k'ūn'e, to twist.\(^{174}\)
    ō'k'ūn'e, twist. 163-12.
    na te'k'ūn'e, it is writhing. 177-8.
-k'ūts, to push in.
    wāl k'ūts, put in. 105-14.
    nai nek'ūts kwān, had stuck in. 158-4.
    tāt ūs k'ūts, he pulled it out. 127-9.
-qal, -qal, to walk (third person only).\(^{175}\)
    te'qal ya'nī, he was walking they say. 93-12. (Pl. 2, fig. 5; pl. 44, fig. 1.)
-qūt, to penetrate with a point, to spear.\(^{176}\)
    te'ūs qūt, he speared. 128-13. (Pl. 8, fig. 8.)
    ūṇ qūt, spear it. 128-12. (Pl. 44, fig. 7.)
    ūc qūt, 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.

be ne sū, git dī, I am becoming afraid. 130-15. (Pl. 6, fig. 2.)
be niš keē'e, I have finished. 82-15. (Pl. 23, fig. 12.)
sē yi ne, I stand. (Pl. 25, fig. 7.)
ye a'ne na, house stands. (Pl. 28, fig. 6.)
ūc ga nā, I kill. 139-4.
na ūnā göt'sa'ē, he put across. 134-5.
naš dūl lin nā, we have got back. 95-12. (Pl. 3, fig. 6.)
te'ōnā gi la nā, I went after. 138-10.

\(^{174}\) Cf. k'ūn'e, withes. 163-12.
\(^{175}\) III, 284.
\(^{176}\) III, 285.
-ûñ gi states the fact as undoubtedly true and directly observed but seems to indicate a degree of surprise.

te'Loi ūngi, she is making a basket. (Pl. 2, fig. 7.)
iî yâñ kwâñ ūngi, it has cleared off. 168-1. (Pl. 26, fig. 1.)
te'sin ūngi, he is standing. (Pl. 26, fig. 2.)
tet man ūngi, he is eating. 174-1. (Pl. 38, fig. 11.)

ya'ni, te'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.

te'qal ya'ni, he was walking they say. 93-12. (Pl. 2, fig. 5.)
te'gâû aî ya'ni, he chewed it they say. 109-7. (Pl. 26, fig. 4.)
kwaî la' ya'ni, he did it they say. (Pl. 31, fig. 3.)
na gâû te'u la' ya'ni, he got wet they say. 126-16. (Pl. 42, fig. 3.)

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

ka gâû t'âgâû kwâñ, they had sprung up along. 87-13. (Pl. 27, fig. 7.)
tet tel bût kwâñ, he had hung up. 176-3. (Pl. 27, fig. 8.)
tet gûn dâè kwâñ, he had danced. (Pl. 37, fig. 11.)
na gâ kwâñ, he had walked. 154-12. (Pl. 42, fig. 6.)
na' de'f gâl kwâñ, he had poured. 125-13. (Pl. 42, fig. 12.)

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

et ci'ò kwa nâñ, were black. 94-7.
et ga ye kwa nâñ, were getting white. 94-5.
ta'te'ûn ate'è kwa nâñ, turtles have come out of water. 95-8.
tet'ë ûn dët ye kwa nâñ, someone had stolen. 138-15.

-kwûc, -kwic, 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 kwic te'a kwic, I am going to sling at him. 122-14. (Pl. 40, fig. 9.)
ne ôn) ka kwic, we will spend the night probably. 105-3. (Pl. 27, fig. 10.)
kwûn s'ûs nôl ke'è kwûc, might track us. 142-11.

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

ûngi kwûl luc, is I think. 170-13.
të t'ê kwûl luc üñ, 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.
usually takes which may on in the quently

-\text{dja}^* 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.

-\text{tel}, -\text{tê le}. The simple future prediction without an implication of duty, necessity, or intention is expressed by \text{tel}; \text{tê le} is used when the information is on the speaker's authority.

-\text{út}, -\text{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.
Temporal

-de⁵, 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

-đi⁰ sör tāk de⁵, you kill it if. 177-5.
wūn kw nūk de⁵, you tell about when. 176-2.
na dūt de⁵, you come back if. 117-18.
nā nāl gal de⁵, when you put across. 153-11.
na he sūn t yā de⁵, if you go back. 137-10.
tā'ūs qōt de⁵, if he spears it. 128-9.
tē'nūn ya de⁵, if he comes. 142-11.
gūl gel⁵ de⁵, night when. 97-10.
gūn dō' de⁵, is gone if. 140-2.
kō wūn tān de⁵, it is cold when. 172-15.
kō te' gūl qūts de⁵, when she runs down. 153-11.

-ūn expresses a contingency as less certain than -de⁵.
ūc te li⁰ uān, I might be cold(?). 133-8.
wūn tōt gūc uān, might be frightened. 99-15.
na ēn te lē' uān, may come. 133-9.
tōt būr uān, it may rain. 168-6.
Cf. na nō te'ūt ke' u lē'f, he might track us. 138-10.
ta nān ē da u lēnf, he might come again. 135-8.

-kwa⁴ denotes the continuance of the act until a stated time.¹⁷⁸

na hūc ga kwa⁴, I am untying yet. 123-10.
tē'nūn dač kwa⁴, 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.
gūn yai⁴, walk. 104-13.
t gūn nūn, it kept hooting. 179-7.
tee⁴ gūl lāl⁴, 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 eac, I went. 182-17.
tūn yae⁴, you go. 78-13.
tūm mič⁴, swim. 118-16.

-bir⁴, in. This suffix common with nouns occurs with verbs with the sense of when.
tee kwūn gel⁴ bir⁴, very dark in. 179-8.
tee kwūn gel⁴ bir⁴ uān⁴, very dark in. 179-7.

¹⁷⁷ III, 321.
¹⁷⁸ Cf. Hupa -dx, -x, III, 304.
¹⁷⁹ The stem is tee⁴, therefore -gūl lāl⁴ is an extended form or a compound suffix.
-ūn is used in asking a question to be answered by yes or no.
wan ʷæi ʿun, did you give? 137-8.
nan t ya ʿun kwən, have you come back? 132-14.
teʿun yan ʿun kwən, you have eaten? 138-3.

-kwan hūt, two of the suffixes presented above, when combined make a relative temporal reference to the completion of the act.
nas liū ʿt kwən hūt, it was again because. 107-6.
teʿis teiū kwən hūt, he had made when. 120-1.
teʿūr, yī kwən hūt, he had named when. 117-12.
teʿūs tə kwən hūt, he had feathered when. 116-12.
kē nōt get kwən hūt, 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>
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<tbody>
<tr>
<td>öe laše, I will get. 137-2. (Pl. 24, fig. 11.)</td>
<td>ön gi la ne, I brought. 137-1.</td>
</tr>
<tr>
<td>nac be, let me swim.</td>
<td>nī bi ne, I swam. 118-17.</td>
</tr>
<tr>
<td>cōe ʷcē le, I will fix it. 77-3.</td>
<td>cōe ʷgi la se, I am fixing it. 76-12.</td>
</tr>
<tr>
<td>tēc ʷcē, I am going. 161-1.</td>
<td>te si yai, I went. 120-17.</td>
</tr>
<tr>
<td>ta tec ʷbūl, prepare mush (imp. plu.). 123-18. (Pl. 37, fig. 6.)</td>
<td>te tec ʷbīl, have you cooked? 169-14.</td>
</tr>
<tr>
<td>tōt būl, let it rain. 80-12.</td>
<td>tōt bīl, it rained. 81-1. (Pl. 36, fig. 13.)</td>
</tr>
<tr>
<td>tō gēc būn, let him carry. 140-1.</td>
<td>tes gin, he carried. 101-11.</td>
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<td>Adverbial</td>
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<td>kq</td>
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1912 [Godward: Elements of the Kato Language]
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's nea, raccoon. 112-5.
Fig. 2.— l'a di', buckeyes. 94-6.
Fig. 3.— te'gulikut, he swallowed. 109-7.
Fig. 4.— b la'ñ, you get (imp.). 133-14.
Fig. 5.— kō wūn stū, it was becoming hot. 172-14.
Fig. 6.— te'ul i's, he caught in a noose. 108-4.
Fig. 7.— ka sī de', we came up. 141-2.
Fig. 8.— na di', sugar-pine. 89-17.
Fig. 9.— te'n net, yā, she eats up. 180-9.
EXPLANATION OF PLATE 2

LATERAL SPIRANT

Upper line larynx, lower line breath.

Fig. 1.— Lôn tə ge nes, "rodent ears long," a mouse.
Fig. 2.— nał təɔs, she put a blanket. 180-7.
Fig. 3.— nał ɛ gi, dog. 91-9.
Fig. 4.— tea kwɔr ɡelɛ, very dark. 74-8.
Fig. 5.— tea'qat  yaɛ ni, he was walking they say. 93-12.
Fig. 6.— Lɛ gɛc, rattlesnake. 91-17.
Fig. 7.— te' Lɔi uñ gi, she is making basket.
Fig. 8.— Lɔ' L təo, grass blue. 76-6.
**EXPLANATION OF PLATE 3**

**NASALS**

Upper line from bulb in nostril, lower line breath.

Fig. 1.— et ci né kwăn nañ, it had turned black. 94-7.

Fig. 2.— kwáñ on ye' na, they told him they say. 125-3.

Fig. 3.— n dîl 'iš', let us look. 168-1.

Fig. 4.— tyo'ññ', to him. 79-9.

Fig. 5.— nas liñ', he became. 107-8.

Fig. 6.— nas dîl liñ na, we have got back. 95-12.

Fig. 7.— tzo'ñañ, make a fire (plu. imp.). 108-7.
EXPLANATION OF PLATE 4

NASALS

Upper line from bulb in nostril, lower line breath.

Fig. 1.—ya’ bi’ úfs’, sky in. 81-2.
Fig. 2.—wó’n tca’, teeth large. 86-5.
Fig. 3.—n gún dó’s, it became none. 76-12.
Fig. 4.—ya’n ya’s ni, they said they say. 82-11.
Fig. 5.—kwó’s, fire. 81-3.
Fig. 6.—ca’na’s, creek. 79-3.
Fig. 7.—ne’ ú nó’s, behind the hill. 164-16.
Fig. 8.—k’is’, juneberry. 133-3.
Fig. 9.—wa te’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.—tc'nes tiid, he lay down. 175-11.
Fig. 3.—wes, leg. 79-10.
Fig. 4.—c tc's, my heart. 101-5.
Fig. 5.—bec 'aist, I will try it. 109-9.
Fig. 6.—te'gagc, let him chew it.
Fig. 7.—hake duf't, that time. 71-2.
Fig. 8.—ne hin no's, our heads. 129-10.
Fig. 9.—y9', seoter(?), 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 cō'łəs, take me up (plu.), 147-6.
Fig. 2.— be ne sīt git dl, I am afraid of. 130-15.
Fig. 3.— t bōc, it is round. 80-1.
Fig. 4.— da bes ya', he climbed up. 180-6.
Fig. 5.— main, weasel. 74-2.
Fig. 6.— dō mṓ, it is full. 129-13.
Fig. 7.— bi' sta, he was sitting in. 132-3.
Fig. 8.— ta te'óm mú́, cook mush (imp. sing.). 163-14.
EXPLANATION OF PLATE 7

DENTAL STOPS

Upper line larynx, lower line breath.

Fig. 1.— dó, not. 137-2.
Fig. 2.— det gün 'təb, be put in the fire. 168-17.
Fig. 3.— da'a die ge've, I will pick you up. 141-4.
Fig. 4.— tô, water. 71-1.
Fig. 5.— te' nó dugg ge've, we will put in water. 139-9.
Fig. 6.— nó tc'un tô've, water came so far. 75-1.
Fig. 7.— t'a've, feather. 105-14.
Fig. 8.— a t'a, her blanket fold. 181-9.
Fig. 9.— te'le t'a tô le, I will feather arrows. 156-5.
EXPLANATION OF PLATE 8

SONANT PALATAL STOPS

Upper line larynx, lower line breath.

Fig. 1.—gǔtīk, it burst. 182-5.
Fig. 2.—tē'tē gǔstel', it was about to dawn.
Fig. 3.—l tāō gǔkā, fox. 73-3.
Fig. 4.—tēč gō', I will carry. 125-4.
Fig. 5.—nawō' nēc, you (plu.) played. 134-17.
Fig. 6.—ōc tēl oe, I cried. 140-6.
Fig. 7.—qō, worm.
Fig. 8.—tēč qō, he speared it. 128-13.
Fig. 9.—kwən tāo hā', without his knowledge.
EXPLANATION OF PLATE 9

SURD PALATAL STOPS

Upper line larynx, lower line breath.

Fig. 1.—ka'la'ta', it sprang up (of vegetation). 76-10.
Fig. 2.—nâk ka'ta', two. 178-4.
Fig. 3.—te'ge'ãã's, a boat went. 126-7.
Fig. 4.—dôkwa'thã, he never did that. 130-14.
Fig. 5.—kw'ni'ts'a', he looked at him. 134-2.
Fig. 6.—kt'te'kõtõ, he stole. 118-11.
Fig. 7.—gõl'ka's, there was a fire. 162-13.
Fig. 8.—t'k'an yi dôk, up the ridge. 99-3.
Fig. 9.—8 te'i k'wöt', 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 t'ut te, make him live.

Fig. 3.— te' gün ye, he broke off. 79-12.

Fig. 4.— te' to te'k'as djol, let him drop. 129-8.

Fig. 5.— na te'u, orphan. 102-6.

Fig. 6.— te' na güt dae, he came out again. 149-13.

Fig. 7.— na'dij Nes ti, where is he lying? 182-3.

Fig. 8.— na te' k'ol, grass-snake. 84-5.

Fig. 9.— ye'te' gün 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'lä', juneberry. 133-3.
Fig. 3.— wsit, k'qas', he put in. 105-14.
Fig. 4.— t'w', raw. 91-5.
Fig. 5.— c bdt', my stomach.
Fig. 6.— se qöt', a headdress. 176-17.
Fig. 7.— se tō mai, stone-fish (sword-fish?). 86-1.
Fig. 8.— te'us t'ök', he flaked. 156-7.
Fig. 9.— tō ne' ñus', 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. — tök', 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. — shōs, ground-squirrel. 73-7.
Fig. 11. — ca', sun. 74-9.
Fig. 12. — cek', sputum. 154-14.
Fig. 13. — bet., rope. 161-7.
Fig. 14. — bōs, slide of soil. 86-11.
Fig. 15. — tō, water. 71-1.
Fig. 16. — ges, salmon. 84-3.
Fig. 17. — kōs, cough.
Fig. 18. — k'hec, alder.
Fig. 19. — k'wa', fat. 83-15.
Fig. 20. — k'ūts', hazel. 133-10.
EXPLANATION OF PLATE 13
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 tæs', her apron. 165-8.
Fig. 4.— u sō', his tongue. 110-3.
Fig. 5.— a mā', his eye. 152-10.
Fig. 6.— u tsō', her milk.
Fig. 7.— u sōts, its hide. 110-4.
Fig. 8.— ð di eo', its shoulder. 75-1.
Fig. 9.— ð de', its horn. 74-10.
Fig. 10.— nat', your sister. 132-4.
Fig. 11.— e te ge, my grandfather. 153-10.
Fig. 12.— e ne', my leg.
Fig. 13.— e qōt, my knee.
Fig. 14.— e djil', my heart.
Fig. 15.— s teō, my grandmother. 97-16.
EXPLANATION OF PLATE 14

NOUNS WITH POSSESSIVE PREFIXES.

Fig. 1.—kwùnt, cousin. 145-2.
Fig. 2.—cúm dí, my cousin. 145-3.
Fig. 3.—ba ei, his nephew. 145-3.
Fig. 4.—kwó, his teeth. 181-8.
Fig. 5.—kù tcú, his tail.
Fig. 6.—káxte, knife. 110-10.
Fig. 7.—kù dám, his mouth. 123-2.
Fig. 8.—kù kwó, his foot. 82-5.
Fig. 9.—sité, boy. 102-6.
Fig. 10.—súk, children. 132-8.
Fig. 11.—c te díjí, my kidney. 133-3.
Fig. 12.—kwó dám, his crown. 79-4.
Fig. 13.—s teáx, my grandchild. 97-16.
Fig. 14.—gáx teó, redwood. 86-8.
Fig. 15.—gáx teó, elk. 71-5.
Fig. 16.—díté, quail. 72-5.
EXPLANATION OF PLATE 15
NOUNS WITH SUFFIXES

Fig. 1. — yiete, wolf. 71-6.
Fig. 2. — t köets, chestnut. 89-8.
Fig. 3. — t kae teó, pelican. 72-13.
Fig. 4. — y teó, dance house. 83-11.
Fig. 5. — tu'úu tet, turtle (bone broad). 90-14.
Fig. 6. — teun ta', among trees. 171-9.
Fig. 7. — de' t. gai, its horn white. 161-16.
Fig. 8. — ya' t. gai, house white.
Fig. 9. — teul gait, tail white. 138-12.
Fig. 10. — gee t. ckhé, salmon black. 86-2.
Fig. 11. — na l. clk, eye shining. 181-9.
Fig. 12. — clc bi', red earth in (a mountain). 102-15.
Fig. 13. — ye' bi' ak, house in. 110-15.
Fig. 14. — ye' bik, house inside. 99-5.
Fig. 15. — ya' bik, sky inside. 101-15.
Fig. 16. — bôts k'ait, 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'its, stone rough (sand-stone). 77-9.
Fig. 4.—ne'te'at, world middle. 75-3.
Fig. 5.—le'a te'o', rotten log. 124-15.
Fig. 6.—ci'si'h, summer time. 155-1.
Fig. 7.—ta'e'at, ocean middle. 126-8.
Fig. 8.—wa te'au, hole. 78-8.
Fig. 9.—nun ye'o' tao, ground under is found (bulbs). 148-8.
Fig. 10.—zal te'ul, white thorn. 91-14.
Fig. 11.—nat gi, dog. 91-9.
Fig. 12.—t hao, black oak. 89-17.
Fig. 13.—na nee, people. 71-7.
Fig. 14.—se k'at', grinding stone. 137-16.
Fig. 15.—nok te'u, pounded seeds. 94-4.
EXPLANATION OF PLATE 17
POLYSYLLABIC NOUNS

Fig. 1.— i da' kw, Wailaki or Yuk. 170-9.
Fig. 2.— na' cō k'a', robin. 72-9.
Fig. 3.— set te'o'i, heron. 72-4.
Fig. 4.— ca'na', stream 79-3.
Fig. 5.— ban tō', ocean. 86-10.
Fig. 6.— cae ditī, bear clover. 94-9.
Fig. 7.— be lift, ccl. 90-15.
Fig. 8.— ban to', mussel. 84-13.
Fig. 9.— bās būnte, an owl. 92-8.
Fig. 10.— bel get, fish spear. 133-8.
Fig. 11.— bel kats, pole of fish-spear. 128-12.
Fig. 12.— bēs te lō, owl. 72-2.
Fig. 13.— tōn ni, road. 78-4.
Fig. 14.— da teants, crow. 78-15.
Fig. 15.— t'o ki, girls. 111-2.
EXPLANATION OF PLATE 18
POLYSYLLABIC NOUNS

Fig. 1.—te te', sack. 113-7.
Fig. 2.—te'la, sun-flower. 138-6.
Fig. 3.—te'hal, frog. 112-11.
Fig. 4.—te'n te'bas, a bird. 72-11.
Fig. 5.—te'kak', net. 84-8.
Fig. 6.—te'bu, poison. 163-7.
Fig. 7.—go ya na', stars. 74-7.
Fig. 8.—k'c'kita, old man. 108-2.
Fig. 9.—te'si te'li, coyote. 72-1.
Fig. 10.—kwi yint, pigeon. 73-12.
Fig. 11.—k'ün ta'gits, jackrabbit. 73-6.
Fig. 12.—t te'gūsh, fox. 73-3.
Fig. 13.—s tait, cotton-tail rabbit. 155-12.
Fig. 14.—yis kan, day. 100-12.
Fig. 15.—yis t'h', fog. 126-2.
EXPLANATION OF PLATE 19

NOUNS OF VERBAL ORIGIN

Fig. 1.—na dele, a small pine. 88-11.
Fig. 2.—bât, gôl gôs, fire-sticks. 110-11.
Fig. 3.—ba na t'ai, post of dance-house. 130-17.
Fig. 4.—t bût, burden basket. 179-11.
Fig. 5.—dôl kôte, fawn. 108-9.
Fig. 6.—ta'as rôs, mountain. 71-2.
Fig. 7.—te'n nat. dôf, adolescent girl. 109-9.
Fig. 8.—te'ga te'ës, twine. 116-10.
Fig. 9.—te 기, mountain robin. 72-4.
Fig. 10.—te'ga', basket-pan. 113-10.
Fig. 11.—te'wëc teës, foam. 85-3.
Fig. 12.—kwôn teë, valley. 174-9.
Fig. 13.—te'n nît, te'kôte, Lewis' woodpecker. 72-8.
Fig. 14.—be'dài teëk teô, a woodpecker, "its head red large."
EXPLANATION OF PLATE 20

POLYSYLLABIC NOUNS

Fig. 1.—ő tel' k'wát', its tail on. 162-14.
Fig. 2.—Lōn Lai, wood-rat, "rodent white." 73-9.
Fig. 3.—yai in tašt', mole. 96-6.
Fig. 4.—Lō' n'ai, grass game. 146-11.
Fig. 5.—ne' döl bai, a pine. 86-13.
Fig. 6.—yō' tel' 'tās, abalone. 124-17.
Fig. 7.—ts'e k'ne nects, day eel, "navel long." 91-2.
Fig. 8.—tō bōt teō, water-panther. 177-13.
Fig. 9.—ne' tē li', earthquake.
Fig. 10.—tak', three. 101-4.
Fig. 11.—kwe' n telts, black-crowned night heron, "foot broad."
Fig. 12.—tō nai tēs, blue cat-fish (?), "fish blue." 124-15.
Fig. 13.—yi ban nāk ka', seven, "beyond two." 166-1.
Fig. 14.—yō yi nēk', way south. 75-6.
Fig. 15.—di nēk', south. 75-6.
Fig. 1.—a he', so it is. 172-14.
Fig. 2.—ó ye', under it. 101-6.
Fig. 3.—ó lai', its top, on it. 103-13.
Fig. 4.—ó dai', outside. 98-4.
Fig. 5.—yó yi de', way north. 77-1.
Fig. 6.—yi', right here.
Fig. 7.—yó oô, over there, further. 127-14.
Fig. 8.—yi bafi', other side. 133-4.
Fig. 9.—la' bn ha', both sides. 75-7.
Fig. 10.—le ne ha', all. 83-4.
Fig. 11.—ta' ki, different kinds. 83-1.
Fig. 12.—nun kwi ye, underground. 75-8.
Fig. 13.—nikta, slowly. 140-16.
Fig. 14.—he ô', yes. 82-2.
Fig. 15.—ha yi', those people. 171-19.
EXPLANATION OF PLATE 22
PRONOUNS, ADVERBS, ETC.

Fig. 1.—ca te'ôn ge lan, he got for me.
Fig. 2.—ci ye' ye', my house. 141-6.
Fig. 3.—côôk kwat lâo, he did well. 104-6; 154-5.
Fig. 4.—ta din dji, what for?
Fig. 5.—di, this. 74-9.
Fig. 6.—da siti, soon. 136-5.
Fig. 7.—ta dji, where? 182-3.
Fig. 8.—dô, not. 79-4.
Fig. 9.— tô ô teiň a, water in front of. 77-7.
Fig. 10.—kac bô', tomorrow. 104-9.
Fig. 11.—k'ôn dît', some days ago. 137-5.
Fig. 12.—kôn dûnte, close by. 79-6.
Fig. 13.—k'ôn dûk, yesterday. 128-7.
Fig. 14.—k'at dê, soon. 96-4.
Fig. 15.—kwün lâñ, enough. 77-8.
EXPLANATION OF PLATE 23

PREFIXES OF VERBS

Fig. 1.—ya' gä'r gal, he threw up. 142-3.
Fig. 2.—ye' te' gën yai, he went in. 132-13.
Fig. 3.—wá' åüs káš, she gave him. 129-4.
Fig. 4.—wá' nún te' bû, it will blow through. 80-14.
Fig. 5.—le gën 'a', it was encircling. 82-15.
Fig. 6.—nán dæ, come down.
Fig. 7.—nén ca', I go about. 133-6.
Fig. 8.—nén 'a' bi'n, it will be across.
Fig. 9.—ná des bïl', he spilled. 123-2.
Fig. 10.—nén s'ha dëk k'ë', he got up. 98-5.
Fig. 11.—nô gät 'a', he put along. 86-11.
Fig. 12.—be níl kët', I have finished. 82-15.
Fig. 13.—bë dët', let us climb.
Fig. 14.—da' bës ya', he climbed up. 180-6.
Fig. 15.—de dët 'a', you put on the fire. 131-9.
EXPLANATION OF PLATE 24

PREFIXES OF VERBS

Fig. 1.— ta te'o bit, make soup (plu.). 123-13.
Fig. 2.— ta güt t'ais, they butchered. 175-4.
Fig. 3.— te' nō dug ge', we will put in water. 139-9.
Fig. 4.— te'o nūn yac, come out.
Fig. 5.— dje' güt tec, she split open. 129-3.
Fig. 6.— kwa nō te, look for it. 164-11.
Fig. 7.— ka nae, it came up. 81-3.
Fig. 8.— kwa nō yōn lat, it sank. 174-12.
Fig. 9.— kwot te' glu yai, he went down. 116-5.
Fig. 10.— ne sōl yō, you (plu.) ate up. 136-16.
Fig. 11.— ec iqat', I will get. 137-2.
Fig. 12.— na die tea, let me eat a meal.
Fig. 13.— dō kō gis i, one couldn't see. 81-1.
Fig. 14.— te'tet bañ, he walked lame. 133-6.
Fig. 15.— di kwa'te'n, he did this way. 79-12.
EXPLANATION OF PLATE 25

VERBAL PREFIXES, SUBJECTIVES AND OBJECTIVES

Fig. 1. — nō' clz. gaz, throw me. 133-4.
Fig. 2. — ne 'ō dūs, you will die. 177-4.
Fig. 3. — ya' te' kw net. ilu', they saw him.
Fig. 4. — te'o nö' nāf a ne, he killed us. 117-6.
Fig. 5. — na te'u' Lō, set snares (pln. imp.). 108-2.
Fig. 6. — te'nūn yai, he came there. 142-14.
Fig. 7. — sī yi ne, I stand.
Fig. 8. — gūn nes, it became long. 87-1.
Fig. 9. — gūt te'a'al', he shot. 110-12.
Fig. 10. — gūt te'a, he shouted. 165-9.
Fig. 11.— ka' dūt te'a, well, let us bury. 149-7.
Fig. 12. — te'n ne gūt. 'īa, he looked at it. 156-16.
Fig. 13. — o't gūc, look at them. 164-9.
Fig. 14. — te' kūn nes, he talked. 160-1.
EXPLANATION OF PLATE 26

VERBAL SUFFIXES

Fig. 1. — nin yu₉ kwu₆ גשת, it has cleared off. 168-1.
Fig. 2. — te'si₆ .getOrElse, he is standing.
Fig. 3. — nun yu₆ t'olgut, when he stung. 156-15.
Fig. 4. — te'gut a₉ ya₉ ni, he chewed it they say. 109-7.
Fig. 5. — te'kevit lo'ut, when he fooled them. 136-14.
Fig. 6. — te'nun ya holt, when he came.
Fig. 7. — dɔ̄ dul sas he, we did not see. 116-18.
Fig. 8. — na te'gut 'at, he stood them up along. 88-13.
Fig. 9. — kǝl 'ai bu₅, it will grow up. 84-11.
Fig. 10. — t'ka' bǝn dja', let it be fat. 85-14.
EXPLANATION OF PLATE 27

SUFFIXES OF VERBS

Fig. 1. — ni:n yan de', when it cleared off. 167-17.
Fig. 2. — kwun tet, to lit, it was becoming flat. 107-3.
Fig. 3. — mëc 'ih le le, I will look. 165-4.
Fig. 4. — be mëc 'ai' le le, I will try it again. 139-1.
Fig. 5. — këc na' dja', I want to live. 171-7.
Fig. 6. — te'o't tet dja', let him make. 140-2.
Fig. 7. — ka gët, ët kwës, they had sprung up along. 87-12.
Fig. 8. — te' tet bët kwës, he had hung up. 176-3.
Fig. 9. — nes ya në kwa nàf, they were ripe. 94-4.
Fig. 10. — n he ën ka kwis, we will spend the night probably. 105-3.
VERBAL STEMS

Fig. 1.—�َا� đúl 'a', let us make a dam. 163-11.
Fig. 2.—nà t̪ɡ̪uś 'a', he stood it up. 76-6.
Fig. 3.—nà nǔ̞ ñ 'ai, a fish-weir. 133-9.
Fig. 4.—di 'uñ es 'a', up there in a row. 109-10.
Fig. 5.—be yai 'aśi', they tried it. 85-2.
Fig. 6.—ye' s'ä ne, house stands. 141-5.
Fig. 7.—nō'äc nō ūñū, put, you (plu.). 110-11.
Fig. 8.—nō' il bůñū, you must stay (plu.). 105-2.
Fig. 9.—te' nũñ̪ 'ili', they sat down. 170-8.
Fig. 10.—nũ̕e 'i ne, I saw it. 137-1.
Fig. 11.—n đůl 'iñū, let us look. 168-1.
Fig. 12.—kwāc 'i(ne), I always do that.
Fig. 13.—nō ūñū kwa'tiñū', you (plu.) do that. 113-4.
EXPLANATION OF PLATE 29

VERBAL STEMS

Fig. 1.—nas 'uts, he ran about. 134-3.
Fig. 2.—te'ta yai, he went. 116-9.
Fig. 3.—k'ge 'uts, he was shooting along. 144-10.
Fig. 4.—tun te yai, they came together.
Fig. 5.—ca k'et yai, sun went down.
Fig. 6.—nyi ya, I came there. 136-17.
Fig. 7.—gi yai, I am sleepy. 164-4.
Fig. 8.—te'mun ya ya' ni, he came there they say. 101-10.
Fig. 9.—te'gun yas', he ate of it. 129-3.
Fig. 10.—te'9' yas', you (plu.) eat. 148-6.
Fig. 11.—te'gun yas', walk (sing. imp.).
Fig. 12.—nun yiy, they were living. 160-12.
Fig. 13.—te'un yas', you eat (sing. imp.). 125-7.
Fig. 14.—te'defi, he stopped crying. 148-4.
EXPLANATION OF PLATE 30

VERBAL STEMS

Fig. 1.—đō s əj' kewa nē, I do not like him. 128-13.
Fig. 2.—đō ha' ka nōn t yañ, do not be ashamed. 141-8.
Fig. 3.—bān te'gōt yē, he doctored.
Fig. 4.—na' gīnu yīte, he rested. 161-4.
Fig. 5.—na dōlyō, let us rest. 140-18.
Fig. 6.—wāl gōt t yae, some become old. 107-11.
Fig. 7.—kwe' yīte, he whistled.
Fig. 8.—ō yīt, I will make a house. 166-6.
Fig. 9.—s'shī yī, he made a house. 168-7.
Fig. 10.—gūl yī' ya' ni, he built a house they say. 83-11.
Fig. 11.—te'n nōn yūn, let it blow. 80-13.
Fig. 12.—te'rm me' yīt, a stick he tied. 169-5.
Fig. 13.—kwān tīn yōt, they ran after him.

[UNIV. CALIF. PUBL. AM. ARCH. ETHN. VOL II]

[DODANO] PL 30
Fig. 1.—ka na qul laq, she digs out.
Fig. 2.—(3) na’t te’na lai, her eye she took out. 152-9.
Fig. 3.—kwai’l a’ ya’ ni, he did it they say.
Fig. 4.—di kwa’laq, he did this way. 154-5.
Fig. 5.—o’t gi la oet, I fixed it good. 76-12.
Fig. 6.—bel get k’wun nö’laq, spear point put it on (pl. imp.). 133-8.
Fig. 7.—k’wun nil hè, put it on (sing. imp.).
Fig. 8.—n töl laq, let him sleep.
Fig. 9.—o’t oce’le’, I will fix good. 77-3.
Fig. 10.—n te’lal ya’ ni, he went to sleep they say. 83-4.
Fig. 11.—nö hin n töl laq, 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 göl le, fish were swimming down. 128-12.
Fig. 3.—s'ālāli', he became. 84-11.
Fig. 4.—te'göl le', he commenced singing. 105-11.
Fig. 5.—ka kō si le, I am sick.
Fig. 6.—nael li', he tied up. 145-7.
Fig. 7.—te'ās li', he caught in a noose. 108-4.
Fig. 8.—göl lēt, it was burning. 173-16.
Fig. 9.—göl lēs tē le, you will bring. 136-5.
Fig. 10.—te'te lēs, pulled repeatedly. 175-2.
Fig. 11.—wan te'kō lāk, he told about it. 161-18.
Fig. 12.—tal lōns, soft. 179-12.
Fig. 13.—kwūl lōc āg gī, it looks like. 170-14.
EXPLANATION OF PLATE 33

VERBAL STEM

Fig. 1.—*te'get na'$, he roasted.
Fig. 2.—bec na'$, I will roast. 168-16.
Fig. 3.—kōe na'$, I want to live. 182-5.
Fig. 4.—na cōl na bōš, you must examine me. 166-10.
Fig. 5.—ta ya'$ ō nāt, let them drink. 122-6.
Fig. 6.—*te' tō gūn ni, it makes a noise.
Fig. 7.—*te' tō gūn ni, it thunders. 77-10.
Fig. 8.—ka gūn nāc, he came up. 75-2.
Fig. 9.—he ō' te'nā, yes he said. 82-2; 102-8.
Fig. 10.—gūn tāqā, become many. 83-14.
Fig. 11.—gūn tā ne, have become many. 169-10.
EXPLANATION OF PLATE 34

VERBAL STEMS

Fig. 1.—bi nō te', soak them (imp. plu.). 110-6.

Fig. 2.—bi nō gōt tek, they soaked them. 179-1.

Fig. 3.—na nūn sat, jump across. (imp. sing.).

Fig. 4.—te' e na nta, he ran out. 142-6.

Fig. 5.—nūd ti, it is stout. 78-12.

Fig. 6.—te' ūt tsan, he found. 97-4.

Fig. 7.—(dō ha*) te' ūt tsa no, he did not find.

Fig. 8.—gōt tsai, it was dry. 123-4.

Fig. 9.—dō gōl san, it was never found. 179-6.

Fig. 10.—nūn sat, sit down (sing. imp.). 140-18.

Fig. 11.—kwōn sat, deep water. 74-10.
EXPLANATION OF PLATE 35

VERBAL STEM

Fig. 1. — mēsil, I am sweaty.
Fig. 2. — dāl tē, blue. 113-13.
Fig. 3. — be nō’ sūf, you hide (plu. imp.). 113-4.
Fig. 4. — te’ tēt, sūf, he hung up. 176-13.
Fig. 5. — dō kwe ne sūf, I was insensible. 182-17.
Fig. 6. — tāt dāl sē, we dragged out.
Fig. 7. — te’ ān sēt, he pounded up. 80-5.
Fig. 8. — ās sēt, I will pound. 110-3.
Fig. 9. — k’ ān sēt, she pounded. 135-9.
Fig. 10. — na ca’, I go about. 133-6.
Fig. 11. — te’ ān cai, she buried in ashes. 129-2.
Fig. 12. — k’wēt te’ ya ce’, they spit on. 154-14.
Fig. 13. — ka te’ ān cē, they dug. 148-11.
Fig. 14. — ka te’ ān cē, they were digging. 148-8.
EXPLANATION OF PLATE 36

VERBAL STEMS

Fig. 1.—n eën ne, it is good. 77-4.
Fig. 2.—m.čeñ", black. 86-2.
Fig. 3.—gũ.čeñ", it smells good.
Fig. 4.—kwa güt teñt", they fed her. 151-15.
Fig. 5.—dö nañ. bax ne, he was not lame. 134-5.
Fig. 6.—döylhe", I am tired. 96-1.
Fig. 7.—ña döy baxe", are you tired (sing.). 141-1.
Fig. 8.—döy de bax e, we are tired. 116-17.
Fig. 9.—nö bën na’be, swim (pln. imp.). 111-2.
Fig. 10.—ya’ te’ be, they were picking.
Fig. 11.—t bën, round. 80-1.
Fig. 12.—cę̄k tət bën, well it rains. 74-4.
Fig. 13.—te t bën", it rained. 81-1.
VERBAL STEMS

Fig. 1.—de mōn' (din bōn'), it was full. 129-12.
Fig. 2.—te't tet bōl, he hung it up.
Fig. 3.—tēc bōl, I will hang up. 115-6.
Fig. 4.—te'wō bōn, carry it (plu. imp.). 110-15.
Fig. 5.—ta te'um mūt, cook mush (sing. imp.). 163-14.
Fig. 6.—ta te'wō bōn, cook mush (plu. imp.). 123-13.
Fig. 7.—sūn da, you stay (sing. imp.). 76-7.
Fig. 8.—te'n nēs dāi, he sat down. 161-10.
Fig. 9.—nē dāi, I will dance. 103-9.
Fig. 10.—tē e na gūt dāi, he came out again. 149-13.
Fig. 11.—tē gūn dāi kwañ, he had danced.
Fig. 12.—ka sī del', we came up. 141-2.
Fig. 13.—Le ne' ha' te'n nūn del', all came up.
EXPLANATION OF PLATE 38

VERBAL STEMS

Fig. 1.—te't te'a dê le, they went on. 108-12.
Fig. 2.—ti dâ, let us go. 141-6.
Fig. 3.—te't na te'a u n do, she washed them.
Fig. 4.—cùn dî ne, the sun shines. 182-13.
Fig. 5.—na dô' bô, it will not be. 80-13.
Fig. 6.—na dô' ye, there is none. 109-1.
Fig. 7.—ce dûn ne, I died.
Fig. 8.—te'a dôk, crack them (sing. imp.). 138-2.
Fig. 9.—ce e dûn te le, I will die. 177-5.
Fig. 10.—te' te' gùn tâl', he stepped in water.
Fig. 11.—te't tâl' 'dô gî, 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 gān too, he taught. 122-11.

Fig. 4.—te in nō' nūn tie, hide yourself (sing.).

Fig. 5.—nes tiī, it is lying. 182-3.

Fig. 6.—nō'tie, put it (plu. imp.). 168-13.

Fig. 7.—nūn a'ka tiī, he picked him up. 179-14.

Fig. 8.—tām nās tiī, she took out again. 129-2.

Fig. 9.—ci stī tiīe, I lay. 175-16.

Fig. 10.—nō nūn tiīe, he put it.

Fig. 11.—na te'or tōs', he snapped it.
EXPLANATION OF PLATE 40

VERBAL STEM

Fig. 1.—gùr tük, it burst. 182-5.
Fig. 2.—k'ũt t'ũt, he sucked it. 159-2.
Fig. 3.—sá tũn ē, it is cold.
Fig. 4.—sá djũt tük, kill me (plu. imp.). 151-8.
Fig. 5.—te'le t'a tē le, I will feather. 156-5.
Fig. 6.—mũn t'a, it flew. 182-11.
Fig. 7.—ac t'e ye, I am.
Fig. 8.—sa t'e ye', it is cooked. 163-15.
Fig. 9.—na kwic t'a kwic, I am going to sling at him. 122-14.
Fig. 10.—no hũ t'ũl t'e, you cook (plu. imp.). 167-16.
Fig. 11.—no hũ te'n nú t'ũs, you cut them (plu. imp.). 166-15.
Fig. 12.—te'n ne al t'ats, I cut it up. 138-15.
EXPLANATION OF PLATE 41

VERBAL STEMS

Fig. 1.—k'gül te'oo, he ate soup.
Fig. 2.—nūn yūl te'mī, it beat against. 86-12.
Fig. 3.—tān nas ḏīl', he rolled out of fire. 147-9.
Fig. 4.—na dūl te'mī kwaʔ, he had eaten.
Fig. 5.—na te'ul, he was chewing. 146-4.
Fig. 6.—na die te'an ne, I ate. 171-9.
Fig. 7.—s'ūs te'af, he shot it.
Fig. 8.—ūn te'i, make it. 79-8.
Fig. 9.—te'gūl te'il, he kept making. 144-48.
Fig. 10.—ō te'ño ti te'a ne, I left him. 117-17.
Fig. 11.—te'gun te'oo, he cried.
Fig. 12.—te' te gūl te'ī, nearly daylight.
Fig. 13.—te'af gun te'i, he was angry.
EXPLANATION OF PLATE 42

VERBAL STEMS

Fig. 1.— ci te'it. te'it, I stole.
Fig. 2.— gil te'it, he caught them.
Fig. 3.— na' gil. ya' ni, he got wet they say. 126-16.
Fig. 4.— te'et. te'it, stretch it out (sing. imp.). 77-13.
Fig. 5.— te'it. te'it ya' ni, he caught it they say. 142-5.
Fig. 6.— na ga kwasi, he had walked. 154-12.
Fig. 7.— nun le ga', let me chop.
Fig. 8.— nun sih. gal, you beat! 129-10.
Fig. 9.— te'et. ga'le', it is mouldy. 167-16.
Fig. 10.— te'gul. ga' ne, he killed.
Fig. 11.— ke gil. gal', she threw away.
Fig. 12.— na te'et. gal kwasi, he had poured. 125-13.
EXPLANATION OF PLATE 43

VERBAL STEMS

Fig. 1.— gé·gi·le, it was getting late.
Fig. 2.— n·höc·t·ge', let me see you. 142-6.
Fig. 3.— te't te's giń, he carried. 101-9.
Fig. 4.— te'ń na·gıt·gę̀, he looked back. 87-13.
Fig. 5.— te'ń t gets', he looked at them.
Fig. 6.— te'ń nō·t·gę̀, we will put in water. 139-9.
Fig. 7.— te'ń nüŋ·gę̀, she brings in. 180-9.
Fig. 8.— ni·gın·ne', I bring. 138-14.
Fig. 9.— te'ń nūs·si, he brought. 135-11.
Fig. 10.— sæ·gin·ya·nì, he killed they say. 141-13.
Fig. 11.— lel yis', he tied together. 174-15.
EXPLANATION OF PLATE 44

VERBAL STEMS

Fig. 1.—te'qun yu' nî, he walked they say. 93-12.
Fig. 2.—t gûn gûte', it was getting thick. 126-11.
Fig. 3.—be nê sîn gît de, I am getting afraid. 130-15.
Fig. 4.—te'ge qôt, they stretched. 114-1.
Fig. 5.—te' e main. gat de, he sewed up. 122-13.
Fig. 6.—nô nà'î fât, he untied it. 122-15.
Fig. 7.—ûzi qôt, spear it. 128-12.
Fig. 8.—nûn un duk ke', get up (sing. imp.). 100-3.
Fig. 9.—dên te't tû. ke', it did not lighten. 74-6.
Fig. 10.—n hes ka nî, we spent the night. 167-7.
Fig. 11.—nô na ni kate', I fell back. 182-16.
EXPLANATION OF PLATE 45

VERBAL STEMS

Fig. 1.—ha yi kô wa kae, that one give him (a basket of food).
Fig. 2.—na' ke', bathe (plu. imp.). 172-14.
Fig. 3.—bel ke', he finished.
Fig. 4.—nôc kêt, I want to swallow you. 181-14.
Fig. 5.—te' gôl kêt, he swallowed. 109-7.
Fig. 6.—te ne' ha' te'n nûl kêt, all they came. 154-12.
Fig. 7.—ôô ha' te't te'r. kêt, they did not go. 167-17.
Fig. 8.—dô ha' cô dôt. kêt, do not ask me. 166-8.
Fig. 9.—nûn ne't k'ai ya' nî, he hit they say. 156-14.
Fig. 10.—gûl k'ân, there was a fire. 162-12.
Fig. 11.—ôûk'ân, make a fire. 127-11.
Fig. 12.—t gûl k'ôte', it got sour.
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