NOTES ON CHASTA COSTA
PHONOLOGY AND MORPHOLOGY

BY

EDWARD SAPIR

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NOTES ON CHASTA COSTA PHONOLOGY AND MORPHOLOGY.

INTRODUCTION.

In a large part of southwestern Oregon and contiguous territory in northwestern California were spoken a number of apparently quite distinct Athabascan dialects. The territory covered by tribes or groups of villages speaking these dialects embraced not only a considerable strip of Pacific coast\(^1\) but also much of the interior to the east (Upper Umpqua and Upper Coquille rivers, lower Rogue river, Chetco creek and Smith river); some of the tribes (such as Tolowa and Chetco) were strictly coast people, others (such as Galice Creek and Umpqua or Akwa\(^2\)) were confined to the interior. While some of the Athabascan dialects spoken south of the Klamath in California, particularly Hupa and Kato, have been made well known to students of American linguistics, practically nothing of linguistic interest has as yet been published on any of the dialects of the Oregon-California branch of Pacific Athabascan. It is hoped that the following imperfect and fragmentary notes on one of these dialects may prove of at least some value in a preliminary way.\(^3\)

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\(^1\) Outside of a few points in southern and southeastern Alaska (Cook Inlet, mouth of Copper river, Portland Canal) this is the only region in which Athabascan tribes have found their way to the Pacific.

\(^2\) My ' denotes nasalization.

\(^3\) The material for these notes was secured in a very incidental manner. While the writer was at work on Takelma in the latter part of the summer of 1906, he was living with Mr. Wolverton Orton, a full-blood Chasta Costa Indian. At odd moments Mr. Orton and the writer whiled away the time with Chasta Costa.
The Chasta Costa (or Cis/ta q'wâts/ta) Indians, now gathered in Siletz Reservation in western Oregon, formerly occupied part of lower Rogue river; between them and the coast were other Athabascan tribes or villages of practically identical speech, above them to the east were the unrelated Takelma. Among these tribes of nearly or quite identical speech were the Yâa/gwî or Euchre Creek people, the Tcê'/mê dâ/ne or "Joshuas" of the mouth of Rogue river, the Dû/tâ dâ/nî, the Mî/klu/nâ dâ/nî, and the Gwa/sâ. All these formed a linguistic unit as contrasted with the coast people (â/γôs/ta "lower tribes") or, as they are now commonly called by the Indians of Siletz, "Sol Chuck" Indians, a Chinook Jargon term meaning "salt water, coast" people; the dialect of these coast tribes was probably identical to all intents and purposes with Chetco. While Chasta Costa and Coast Athabascan are thus more or less distinct, they seem to have been mutually intelligible without very much difficulty, the coast dialect sounding merely somewhat "strange" and "drawn out" to a speaker of Chasta Costa. At least three other Athabascan dialects of this region, however, seem to have differed so much from Chasta Costa as to be but partly understood, if at all, by speakers of the latter; these are Upper Umpqua, Upper Coquille, and Galice Creek.

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It has already been pointed out (American Anthropologist, N. S., 9, p. 253, note 2) that there is reason to believe that J. O. Dorsey was incorrect in assigning the Chasta Costa villages above those of the Takelma (see his map in Journal of American Folk-Lore, III, p. 228). On p. 234 Dorsey gives a list of Chasta Costa villages.
PHONOLOGY.

VOWELS.

The vowels of Chasta Costa are $a$, $ä$, $e$ (open as in English met), $ë$ (long and open), $o$ (close as in German Sohn), $ö$, $u$ (apparently variant of $o$), $ü$, $i$ (generally open), $i$, and $A$ (like $u$ of English but); $ö$ (short and open as in German voll) sometimes occurs after velars as variant of $o$ (sxâ/lâ “five,” cf. Hupa $tcwô/la$), $ä$ (as in English hat) occurs after velars as variant of $e$ (tsxâ/xe “child,” cf. Carrier $øzkhékkhe “children”$).

Vocalic quantity is of considerable importance in Chasta Costa, not so much etymologically as phonetically. On the whole, long and short vowels interchange on regular mechanical principles; open syllables (that is, syllables ending in a vowel) with long vowel regularly shorten this vowel when the suffixing of one or more consonants to the vowel makes the syllable closed. Examples of $a$ thus varying with $ä$ are:

$$dô/yâc/îlâ “I won’t fly;” dô/yât/îla “we won’t fly” (cf. dô/yû/îlâ “he won’t fly”)$$
$$dô/ô/da “he is sitting down” (cf. dô/û/ô/da “I am sitting down”)$$
$$tclâsl/îse “he cries;” tclâcô/îl/îse “I shall cry” (cf. tclâ/û/îl/îse “you cry”)$$
$$tclâ/û/îl/îse “they cry” (cf. tclâ/û/îl/îl/îse “we cry”)$$
$$nac/tlô “I swim” (cf. nà/tlû/îl/îl/î “you bathe”)

$^6$ Carrier examples are taken from Rev. A. G. Morice, “The Déné Languages,” Transactions of the Canadian Institute, 1, pp. 170–212.
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An example of è shortened to e is:

\[ nés/tsxśl/į \] “I am seen” (cf. \[ nō/tsxśl/į \] “he is seen”)

Original long vowels may lose their quantity even in an open syllable, provided they are immediately followed or preceded by a syllable with relatively strong accent. Such are \[ tcśa/-, na-, and ne- \] in:

\[ tcśa/γā/θil/se \] “we cry;” \[ tcśa/γāśl/se \] “they cry”  
\[ ne/nō/tsxśl/į \] “we are seen”  
\[ lá na/dit/ślō “don’t bathe;” \] (\[ na/dit/ślō \] is phonetically enclitic to strongly accented \[ lá \]; contrast \[ nā/dit/ślō/čē \] “you will bathe”)

In general, however, stress accent cannot be said to be particularly well marked in Chasta Costa. Each syllable is a fairly well-defined phonetic unit tending to hold its own against others, so that an approximately level accentual flow with but few peaks results. Such writings as \[ nā/dit/ślō \] and \[ tcśa/θil/se \], with apparent accent preceded by long vowels, are doubtless but imperfect renderings of forms with level stress on first and second syllables (they might perhaps better be written \[ nā/dit/ślō \] and \[ tcśa/θil/se \] with secondary accent on second syllable). It does not seem that every vowel in an open syllable is organically long; thus \[ e \] in future \(-tē\) and in \(-de\) of \(tōwē/đe\) “everything” is regularly short. Many such cases are, however, probably only apparent, the short vowel being followed by a glottal stop; thus plural \[ ya- \] of \[ ya/dāl/nā \] “they make a sound” should doubtless be \[ ya’\].

Short \(a\) of closed syllables is regularly reduced from long \(ā\); original short \(a\) becomes \(a\) in a closed syllable. Examples of \(a\) thus dulled from original \(a\) are:

\[ tōAc/yAC/tē “I shall go” \] (cf. \(tē/θic/yA “I go;” \) \(-yAC = \) Hupa -\(yauw\))

1 Weak stress accent seems characteristic of Athabascan generally. Father Morice goes so far as to say, “there is no accent in Déne” (op. cit., p. 173).
nā/xān/dō “eight, two less” (nā/xā- = Kato\(^8\) nqk/ka- “two”)
dō/na/γāc/xwī “I do not vomit” (cf. na/γā/θ.θi/xwī “I vomit”)
t'āl/dāc “he runs” (-dāc = Hupa -dauw)
γān/na/’āc “he will bring” (-’āc = Hupa -auw)
t’e/ān/γāt/lat “we are sinking” (cf. t’e/ni/lat “we drown;”
Hupa -lat, -la “to float”)

Not to be etymologically confused with this \(\ddot{a}\) is inorganic \(\ddot{a}\). Whenever a consonant is not followed by a definitely determined vowel and yet, for some reason or other, is not phonetically appended to the preceding syllable, it must begin its own syllable and takes an inorganic, in other words etymologically meaningless, \(\ddot{a}\)-vowel after it. This syllable may either be completed by a consonant of etymological value (such as first person singular e, verb class signs i, t, l) never followed by a definite vowel or, if it is immediately followed by a syllable beginning with a consonant, this consonant is borrowed to complete the inorganic syllable (-\(i\) closes inorganic syllables preceding \(d\)-, \(t\!\)-, \(dj\!\)-, \(tc\!\)-, \(ts\!\!\)-, \(tθ\!\)-, \(tc\!\!\)-, \(L\!\)-), so that a doubled consonant results of which the first half is of no etymologic significance. In some cases, however, as before γ-, and in rapid speech generally, this inorganic consonant is not always distinctly heard; yet in syllabifying words Mr. Orton completed such inorganic syllables with a consonant with mechanical regularity. These syllables with inorganic vowel and consonant are characteristic not only of Chasta Costa but also of Hupa and Kato and doubtless other Athabascan dialects as well. The general phonetic tendency to speak in definite syllables and the further tendency to limit short vowels to closed syllables explain these characteristic Athabascan


\(^9\) -\(i\) may be secondarily lengthened from -\(a\).
developments. The quality of the inorganic vowel varies for different Athabascan dialects; it is $\ddot{a}$ (â) in Kato as well as in Chasta Costa, $i$ ($u$ before voiced or voiceless $w$, $\dot{u}$ or $e$ before post-palatal $k$-sounds) in Hupa, apparently $e$ in Galice Creek, $w$ (probably identical with our $a$) in Carrier. Chasta Costa $\text{xAt}/t'\text{At}/lal$ "they sleep" is etymologically equivalent to $x/t'/lal$; $x$-, third person plural prefix, cannot stand alone and is therefore followed by $a$ and $t$ borrowed from $-t'$-, while $-t'$- (verb prefix $t'$- reduced from $t'e$-, therefore not capable of combining with $x$- into $xAt'$-) in turn needs a syllabifying $a$ followed by $l$ borrowed from $-lal$. Other examples of inorganic $a$, with and without following inorganic consonant, are:

- $t'\text{Ac} / y\text{Ac} / t'e$ "I shall go" ($t'\text{A-} = t'$- reduced from $t'e$-)
- $d\dot{o} / y\dot{a} / x\text{At} / l\text{Aa}$ "they won't fly" ($x\text{At-} = x$-)
- $n\check{a} / x\text{Al} / d\text{Aa} / n\text{iic}$ "they work" ($x\text{At}/d\text{A-} = x/d-, d-$ reduced from $de$-)
- $d\ddot{a} / x\text{An} / n\dot{a} / t'\text{Ac}$ "they go to bed" ($x\text{An}/n\dot{a}t- = x/n-$)
- $t'\dot{e} / x\text{An} / \gamma\text{Al} / l\text{Aa}$ "he is sinking" ($\gamma\text{Al-} = \gamma$-)

Many syllables with final consonant and $a$- vowel must be considered as radical or at least unanalyzable elements. In not all such cases is $a$ a reduced form of $a$; where $a$ seems a primary vowel, as shown by comparison with other Athabascan dialects, it seems best to consider it an organic element in the syllable, though it remains plausible that at last analysis it is but a reduced form of some fuller vowel. Thus, while $-y\text{Ac}$ has been shown to represent an original $-y\text{ac}$ (Hupa $-yau\ddot{w}$), $-t'\text{Ac}$ contains a primary $a$, as shown by comparison with Hupa $-\ddot{u}g\ddot{w}$ "to lie down" (ultimately $-t'\text{Ac}$ is doubtless $-t'$, reduced from $-t'e$, and suffix $-c$).

Inorganic $a$ sometimes becomes palatalized to $i$, though there is not enough material available to make it certain just when this change takes place. Examples of this secondary $i$ have been found before $c$ (but not before its developments $s$ and $\theta$) and $s$ derived from $tc$ (but not before original $s$ or its
development) when itself preceded by m, n, or θ (preceding γ, however, tends to preserve λ). Examples are:

mis/ki\(^10\) “gull” (cf. Kato bûc/k’ai’)
nic/ya “I come” (nic- = cessative n- and first person singular c)
nic/dac “I dance”
t’e/nic/lat “I drown”
t’e/θic/ya “I go” (θic- = durative θ- and pronominal c; cf. t’eθ/ya “he goes” without vowel after θ)
tcIγ/γe/θic/ya “I eat”
γe/θic/i “I saw him” (cf. c/γeθ/i “he saw me”)
θicl/si “I let him”

With -θic- contrast -θλθ- (both from original *-sAc-) in dâθ/θλθ/dâ “I am sitting;” with -θicl- contrast -sasl- (from original *sACL- and *sACL- respectively) in tcIλ/sasl/se “I am crying.” -γic- was heard in yâ/γic/la “I fly,” but as this is an isolated example (contrast -γAC- in nâ/da/γAC/tlô “I bathe” and -γAC- in γAC/λ “I sneezed”), it seems possible that this form was misheard for yâ/γAC/la. Besides -nic- also -nAC- is met with: dâ/nAC/t’AC “I go to bed” and nâ/nAC/πu “I stop him;” it is probable that in these forms -nA- is a reduced form of ne- (cf. Hupa tcin/ne/tiwh “she goes to bed”) and thus not directly comparable with -nic-. Unaccented λ, itself reduced from a, has in one case (-yAC “to go”) been found further palatalized to i: dö/t’AC/yic “I’ll not go,” lá/ti/yic “don’t go!” (cf. t’AC/yAC/t’e “I shall go”); this -yic contracts with directly preceding t’A- into -t’AC: dö/t’AC “he won’t go.”\(^11\)

Original Athabascan ai has in Chasta Costa become monophthongized to i. Examples are:

I/gi “white” (cf. Kato L/gai)

\(^10\) Should probably be miski’.
mis/k'/i'^{12} “gull” (cf. Kato bátc/k’ai’)
hit'^{13} demonstrative “that” (cf. Hupa hai)

au as organic diphthong seems to occur but rarely in Athabascan. If dô “no!” (cf. Hupa dau) may be regarded as distinct from adverbial dô “not” (cf. Hupa dô), we would have an example of the parallel development of au to ô in Chasta Costa. Certain contractions that take place between i of first person plural -it- and second person plural -ô- with preceding vowels will be spoken of in discussing the pronominal prefixes.

One of the most striking phonological characteristics of Chasta Costa is the disappearance of an original η'' or of its representative, nasalization of preceding vowel. Its former presence can always be proved by comparison with other Athabascan dialects that, like Hupa, still preserve it. In the case of all vowels but inorganic a nasalization has left no trace whatever, original q (from åη), ê (from êη), and ê (from îη) being reduced to å, ê, and î; originally short vowels, on losing their nasalization and thus coming to stand in an open syllable, become lengthened, while originally long vowels in a closed syllable not only lose their nasalization but are shortened. Thus, a syllable sî may represent an original sî (or sîη) or sî (or sîη), while sîl may go back as well to sîl as to sîl. Examples of the absolute disappearance of an original η are:

nâ/xe “you paddle” (nâ- = *nq-, cf. Hupa nûn/ya “you are about”)
dô/yâ/t’â “you won’t fly” (yâ- = *yq-, cf. Hupa yûn/mas assimilated from *yûn/mas “you are rolling over”)
tclâl/se/t’e “you will cry” (tclâl- = *tclq-l-; cf. tclâcl/se/t’e “I shall cry” with -c- “I” morphologically parallel to -c- “you”)

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‘'“ is here shortened to i because of following glottal stop.

‘f’ denotes long i with weakly rearticulated parasitic i. Such “pseudo-diphthongs” sporadically occur in Chasta Costa in lieu of ordinary long vowels.

14. i.e., ng of English sing.
lā/na/ŋət/xwī “don’t vomit!” (ŋət- = *ŋət-, cf. ɣə- from *ŋq- in na/ŋət/θıt/xwī “you are vomiting”)
nēl/ɪ “you are looking at him” (nēl- = *nēl-; ɪ = -ɪ, cf. Kato -ɪn “to see”)
ɪ “dog” (original Athabascan *ɪ, *lɪ; cf. Hupa liŋ, Montagnais l’ɪn, Hare il’ɪn, Loucheux l’én, Carrier ɪ, old form ɪə*n)

Nasalized inorganic ɣ seems to have acquired a palatal coloring i; this i then regularly developed to ɪ in open, ɪ in closed syllables. It thus often seems as though Chasta Costa ɪ, ɪ is the morphologic equivalent, for instance in second person singular forms, of Athabascan ɬ, an equivalence, as has just been shown, due to secondary phonetic developments. Examples of ɪ < ɪ < ɣ are:

t’e/θɪ/ya “you go” (θɪ- = *sɬ; cf. Hupa na/siŋ/ya “you are going about”)
nɪ/dac “you dance” (nɪ- = *nɬ; cf. Hupa niŋ/yaww “go!”)
ɣu/ŋis dɪ/ŋi “you whistle” (dɪ- = *dɬ; cf. Hupa da/dɪŋ/la “run!” assimilated from *da/dɪŋ/la
nà/te/lɪ/tlō “you swim” (te/lɪ- = *kɬ; cf. Hupa na/kɪŋ/- yuŋ “come eat!”)
ɣa/γɪ/lɪ “you fly” (ɣɪ- = *ɣɬ; cf. Hupa ye/wiŋ/ya “you are going in”)
ɣa/γɪ/lɪ “it flies” (ɣɪ- = *ɣɬ; cf. Hupa na/win/tau “it will settle down” assimilated from *na/wiŋ/tau)
t’ɪ/lal “you are sleeping” (t’ɪ- = *tɬ; cf. Hupa tɪŋ/xaww/ne “you take along”)
verb stem -sɪ “to make” (cf. Hupa -lcwɪn)

15 Morice, op. cit., p. 210. Carrier has evidently undergone a development parallel to that of Chasta Costa. All northern Athabascan forms except Carrier (and Chipewyan) are taken from R. P. E. Petitot, “Dictionnaire de la langue Dene-Dindjé.”

16 kɬ is “fortis” palatal k, Hupa k, Morice’s q.
Examples, in closed syllables, of $i < t < A$ are:

- $t\text{cl}ä/\text{th}il/se$ “you cry” ($\text{th}il- = *s_A-\text{l}-; \text{cf. Hupa } na/dä/we/-sil/en/\text{i}$)
- $nä/dä/tlō/t'e$ “you will bathe” ($dit- = *d_A-t-; \text{cf. third person } nä/dät/lō/l'e$)
- $t'ä/\gamma il/nä$ “you drink” ($\gamma il- = *\gamma_A-\text{l}-; \text{cf. third person } t'ä/\gamma A/nä$)
- $yä/\gamma il/gA\theta$ “you climb” ($\gamma il- = *\gamma_A-\text{l}-; \text{cf. third person } yä/\gamma A/gA\theta$)
- $t'il/xwA\theta$ “you cough” ($t'il- = *t'_A-l-; \text{cf. third person } t'A/l/xwA\theta$)
- $ne/cil/i$ “look at me!” ($cil- = *c_A-l-$)

Hupa $\eta$ (that is, our $\eta$) seems at times to correspond to Chasta Costa $-n$, but comparison with northern Athabascan dialects indicates that in such cases we are dealing with original $-n$. Thus, $n\text{An}$ “you,” despite Hupa $niñ$, is shown to have original $-n$ by Montagnais $nen$ and Loucheux $nan$; $dån/tc\ell i$ “four,” Hupa $diñk$ ($=dïnk'$!), does not go back to original $*d_A/k\ell i$ but to $*d_A/n/k\ell i$ or $*d_A/\eta/k\ell i$ ($\eta$ assimilated from $n$), as evidenced by Loucheux $tan$; $la/\ell\text{An}$ “black” corresponds to Loucheux $del-\text{zen}$; similarly, $dån$ “in, at” must have original $-n$ despite Hupa $diñ$ and Kato $dùñ$ (original $*d_A$ would have given Chasta Costa $*dï$).

**Consonants.**

The consonantal system of Chasta Costa, like that of most Athabascan dialects, is characterized by a lack of labial stops, though $m$ is common; $b$ has been found in $bō/\text{thî}$ “cat,” a loanword from English $\text{pussy}$, but seems not to occur in native words (yet cf. $tc\ell /\text{på}/\text{yu}$ “flower”). The consonants of Chasta Costa are: the labial nasal $m$; the dental stops $t', d, tl$, and dental nasal $n$; the back stops $g$, $q'$ (or $q\ell$), $q\ell$, voiceless spirant

\[\text{In Hupa } s (\text{or nasalization}) \text{ disappears in closed syllables. In such forms Chasta Costa is etymologically more transparent than Hupa insofar as } t' \text{ is a reflex of original } \cdot A-, \text{ whereas Hupa } -t' \text{ is the normal inorganic vowel.}\]
x (as in German Bach), and voiced spirant γ (as in North German Wagen); the labialized back stops k'w, gw, q'w, and spirant xw (sometimes weakened to hw); the sibilants s, c (as in English ship), θ (as in English thin), and ϵ (voiceless lenis, intermediate between s and English z, heard in -az “to sneeze”); the affricative palatal consonants tc', dj, and tc'; the affricative alveolar consonants ts, ts!, and affricative dental consonant th'; the laterals l, l (voiceless spirantal l, with l, dorsal t followed by l, as variant), and L!; the glottal stop (''); the aspirate h (‘ at the close of a syllable); and the semivowels y and w.

Of these t', q', k'w, and tc' (English ch) are aspirated surds (k' is not found, k'w has been found but once and may be considered of doubtful occurrence); (b), d, g, gw, and dj are voiceless but lenis, intermediate acoustically between surds and sonants18 (dj is intermediate between English ch and j); t!, q!, tc!, ts!, th!, and L! are so-called “fortis” consonants, in other words, they are pronounced with simultaneous closure of glottis but are released before the release of the glottal chords. q', q!, gw, and q'w (g has not been found, but very likely exists) are velar consonants; k' has not been found,19 its place being taken by q!20 Of secondary origin are syllabically final t and k, which may be considered as voiceless stops differing from t' and k' in their lack of aspiration; they are etymologically equivalent to d and g. It is highly probable that also w, which does not frequently occur, is but a secondary development or acoustic variant of γ after o-vowels;21 after o-vowels γ becomes labialized to γw, in which both γ and w elements are so weak that one is constantly in doubt as to whether he hears

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18 It is possible that these “intermediate” stops are sonant at their moment of release.
19 Unless, as seems possible, k of mis/bi “gull” was misheard for k!.
20 q' corresponds to Hupa k, g is Hupa k. q' is by no means as forcible a sound as is, e.g., Chinookan q!. There is something decidedly illusive about it; the velar stop element seems to be reduced to a minimum, the glottal catch element is very strongly marked, and a weak x seems at times to precede the velar stop (e.g., sxlA “arrow”). Despite my familiarity with Chinookan q!, I did not often succeed in pronouncing Chasta Costa q! so as to satisfy Mr. Orton’s ear. It may well be that q! is really “fortis” or glottalized x (af); cf. Tlingit sf.
21 In Hupa γ has become w in every case.
\( \gamma \) or \( w \) (thus \( d\theta^\gamma e^\gamma - \) becomes \( d\theta^\gamma w^\gamma e^\gamma , \ d\theta^\gamma ?w^\gamma e^\gamma ; \) similarly, what was heard as \( d\theta/wa^w - \) may really be \( d\theta/wa^\gamma \). However, \( w \) occurs also in \( s\bar{a}^\gamma /w\bar{s}^\gamma /t\bar{s}^\gamma \) "sandhill crane;" \( w\bar{s}^\gamma/x\bar{e}^\gamma \) "good."

This consonant system is only in part a faithful representative of the original Athabascan system. Some consonants have become merged with others, while other consonants have kept distinct but have been changed in regard to place of articulation. Chasta Costa \( m, t^\gamma, d, t^\gamma, n, g, q! (k^\gamma), q!w, \gamma, l, l^\gamma, ^\gamma, h, \) and \( y \) seem in practically every case to correspond to these same Athabascan sounds.

Athabascan \( k^\gamma \), as also in Hupa, has become \( x \) in Chasta Costa:

\[
x\bar{a}^\gamma/lt\bar{c}^\gamma \text{"goose"}^{22} \quad (\text{cf. Hupa } x\bar{a}^{23}; \text{ Applegate Creek } k^\gamma q^\gamma/\not{t}c^\gamma; \text{ Kato } k^\gamma a^\gamma)
\]
\[
n\bar{a}/x\bar{i} \text{"two"} \quad (\text{cf. Hupa } nax; \text{ Montagnais } nak\bar{e}^{24})
\]
\[
ts\bar{l}^\gamma/x\bar{a}^\gamma \text{"woman"} \quad (\text{cf. Carrier } ts\bar{\varepsilon}k\bar{h}^\gamma)
\]
\[
tsx\bar{a}^\gamma/x\bar{e}^\gamma \text{"child"} \quad (\text{cf. Carrier } ezkh\bar{e}^\gamma)
\]

Analogously to this change of \( k^\gamma \) to \( x \), original Athabascan \( k^\gamma w \) has become \( xw \) (sometimes heard as \( hw \)) in Chasta Costa. This sound is preserved as such in Kato \( k^\gamma w \) and Chasta Costa \( xw \), but seems generally to have fallen together in other dialects with original \( k^\gamma \). Examples are:

\[
h\bar{w}^\gamma \text{"foot"} \quad (\text{cf. Kato } k\bar{w}^\gamma; \text{ Carrier } ne-k\bar{\varepsilon}^\gamma; \text{ Loucheux } \bar{e}k\bar{p}^\gamma)
\]
\[
na/\gamma\bar{a}/\theta\bar{\alpha}\bar{t}/x\bar{w}^\gamma \text{"I vomit"} \quad (\text{cf. Carrier } k\bar{h}u \text{"vomiting"})
\]

It seems, however, to persist as \( k^\gamma w \) in:

\[
k^\gamma w\bar{s}^\gamma/t\bar{\bar{d}}^\gamma/n\bar{e}^\gamma \text{"six"} \quad (\text{cf. Hupa } x\bar{a}s^\gamma/\not{t}a\bar{n})
\]

Etymologically but not phonetically distinct, both in Hupa and Chasta Costa, from these secondary \( x \) and \( xw \) are

---

22. \( t^\gamma u \) is augmentative.
24. Petiot's \( ' \) represents aspiration.
25. Father Morice represents "fortis" stops by means of points below characters.
original Athabascan x and xw. A good example of the latter is:

-xwAT "to cough" (cf. Carrier xwes "cough," as noun)

Athabascan sibilants and sibilant affricatives (ts and tc sounds) have undergone various modifications in Chasta Costa. Original s has regularly become θ:

θA/γA "grizzly bear" (cf. Carrier sas-e4et "brown bear")
t'e/θic/ya "I go" (cf. Hupa te se/ya/te "I am going away")
t'eθ/ya "he goes" (cf. Hupa tes/ya/te "it is about to come")
-gAT "to climb" (cf. Hupa -k's)
-xwAT "to cough" (cf. Carrier xwes)

Before l (or its variant L), however, s is regularly retained:

tslA/stSL/se26 "I cry;" tclάsL/se "he cries;" tclA/γάsL/se "they cry" (with these forms contrast tclA/θill/se "you cry")
nA/γέsL/si "he tells" (contrast nA/θill/si "you tell")
cαsL/si "he lets me" (contrast θill/si "I let him")
cAšL/t'ál "he kicks me" (contrast θill/t'ál "I kicked him")
q'lwAt/dasL/nA "it was lying on it"

Athabascan ts would, by analogy, have been expected to develop into θl (as in Chipewyan), but θ seems to be regularly found instead:

θl "head" (cf. Carrier n-tsi "your head;" Montagnais -thi;27 Hare -kfwi; Loucheux -tchi.28 Kato -sί "head" seems to indicate that in Kato also, at least initially, s and ts fell together.

θA/γA "hair of head" (cf. Montagnais ethi-pa29)

---

26 -sASL- is assimilated from *-SACL-, -s- being here prevented from becoming -θ- because of following -s- (before l) of same syllable.
27 i. e., -thi. Petitot's θ is θ. In Hare ts (or its reflex θ) developed into what Petitot writes kfw, perhaps to be understood as kφ, i. e., k plus bilabial f.
28 Petitot's tc is our ts.
29 Petitot's p is γ.
In some cases *s* seems to have become *s*:

\[ sè "stone" (cf. Kato *se*; Hupa *tse*; Montagnais *thè*; Hare *kfwè*; Loucheux *tchi*; Carrier *tsè*) \]

As might be expected, Athabascan *tsl* has regularly become *tl* in Chasta Costa:

\[ dā/de/āl/θ/l "we are sitting" (cf. Hupa *na/ya/deg/tse*, i. e., -ts/e, "they lived as before") \]
\[ θl/āl/dā "story" \]

Athabascan *c* is normally preserved as such (e. g., *cî* "I"). However, it is assimilated to *s* before *s* and *tsl*:

\[ s/tsl/l/āl "my sickness" (c- "my") \]
\[ nēs/tsl/āl/ī "I am seen (c- "I") \]
\[ As/sè/t'é "I shall cry" (from \(*_{AC}c\)*) \]
\[ s/tsl/ān/na/’Ac "he will bring it to me" (c- "me") \]

Assimilation of \(*_{SAC}\) to \(s_{AS}\) has taken place in:

\[ tcl/āl/š/š/s/ "I cry" (cf. tcl/āl/š/š/se/’t’é "I shall cry") \]

Original \(*_{SAC} > \_s/c\), however, regularly developed to *θic*:

\[ tcl/āl/γ/θic/ya "I eat" \]

Original \(*_{SAC}\), after being assimilated to \(*_{SAS}\), regularly shifted to *θθ*, unless, as we have seen, it was protected by immediately following *l*:

\[ dā/θ/θ/dā "I am sitting" (from *dā/s/AC/da) \]
\[ t’e/θ/θ/lal "I have been sleeping" (from *t’e/s/AC/lal) \]
\[ tcle/θ/θ/lö "I swim across" (probably misheard for tcle/θ/θ/lö) \]

Original *s*, when immediately following *c*, also causes it to assimilate; *ss*, which thus results, is then regularly shifted to *θθ*:

\[ γā/γ/θel "I threw" (from *γā/γAC/se) \]
Athabascan tc (sometimes tcw?) is not retained in Chasta Costa, but appears regularly as s:

- $l/s'ak$ "red" (cf. Kato $l/tcik$; Loucheux $ditssig$)
- $mis/k(!i(')$ "gull" (cf. Kato $btc/k'ait$)
- $sâ'/was/tslé$ "sandhill crane" (cf. Applegate Creek $tcâ'/wâc/tc(!e)$)
- $-sî$ "to make" (cf. Hupa -$tcwâñ$; Kato -$tcî$; Chipewyan -$tsî$)
- $-se$ "to cry" (cf. Chetco -$swe$; Hupa -$tcwen$; Kato -$tce'$; Carrier -$ssî$)

Chasta Costa $sx$ is found in:

- $sxo/lâ$ "five" (cf. Hupa $tcwâ/la$; Chipewyan $sa/sâ/la/yai'$)

Athabascan tc! remains, tc! often being shifted, however, to ts! (or $s^{32}$):

- $tcle$- verb prefix "across the water" (cf. Hupa $tce$-, i. e., $tcle$-, "down to the beach, out of the house;" Kato $tc'e$-; Chipewyan $ts'e$- "to a body of water")
- $tsl/ân$ "toward, to" (cf. Hupa $-tcîn$, i. e., -$tci$$â$; Kato -$tc'â'n$; Chipewyan -$ts'ân$)
- $tsl/de$ "sickness" (cf. Loucheux $tssik$, i. e., $tslik$)
- $s'at'$ "to be hurt" (cf. Hupa -$tcat$, i. e., -$tcâ$t, "to be sick, to become ill")

There is still another set of sibilants in Chasta Costa, which go back to original palatalized (anterior palatal) k-sounds ($g'$, $k'$, $k'.$). In Kato, Navaho, Apache, Chipewyan, and other Athabascan dialects, as in Chasta Costa, these have become affricative sibilants, without, however, falling together, as a rule, with the original Athabascan tc- consonants. In Chasta Costa, $k'$ has become tc', $k'!$ has become tc! (this tc!

---

30 Petitot's $tss$ is our tsl.
32 It is quite likely that tc! and tsl are here merely auditory variants of t$tl$ ($\delta$ is midway between $s$ and $c$). In Kato tc', ts' and s' also interchange.
does not vary, apparently, with ts!); for gy I have no examples. Chasta Costa and Chipewyan are largely parallel in their development of Athabascan ts, tc, and ky sounds:

<table>
<thead>
<tr>
<th>Athabascan</th>
<th>Hupa</th>
<th>Chasta Costa</th>
<th>Chipewyan</th>
</tr>
</thead>
<tbody>
<tr>
<td>dz</td>
<td>ts</td>
<td>θ</td>
<td>dθ, θ</td>
</tr>
<tr>
<td>ts</td>
<td>ts!</td>
<td>θ!</td>
<td>θ!</td>
</tr>
<tr>
<td>dj</td>
<td>dj</td>
<td>θ!</td>
<td>θ!</td>
</tr>
<tr>
<td>tc</td>
<td>tc(w)</td>
<td>s</td>
<td>ts</td>
</tr>
<tr>
<td>tc!</td>
<td>tc!</td>
<td>ts!, ts!</td>
<td>ts!</td>
</tr>
<tr>
<td>gy</td>
<td>gγ</td>
<td>tc</td>
<td>tc</td>
</tr>
<tr>
<td>ky</td>
<td>ky!</td>
<td>tc!</td>
<td>tc!</td>
</tr>
</tbody>
</table>

There are thus three distinct series of sibilant affricatives (and of sibilants) in Chasta Costa and Chipewyan, none of which is in direct accord with the original Athabascan sounds; Hupa, it is highly important to note, reflects the original sounds almost exactly. 33 Carrier, it would seem, has also preserved the kγ-series.

Examples of Chasta Costa tc' from original ky are:

\* \* \* \* \* \* \*

33 In his “Analysis of Cold Lake Dialect, Chipewyan,” Goddard treats Chipewyan ts and tc as though they were one sound corresponding to Jicarilla and Navaho tc (p. 86). Examination of the various illustrative forms scattered throughout the paper, however, soon convinces one that Chipewyan ts, dz, and ts! correspond respectively to Hupa, Jicarilla, and Navaho tc(w), dj, and tc!; whereas Chipewyan tc, dj, and tc! correspond respectively to Southern Athabascan ts, dz, and ts! and to Hupa kγ, gγ, and kγ!.

Thus, the Southern Athabascan ts-sounds represent both original ts-sounds and kγ-sounds; perhaps there is a phonetic difference that does not come out clearly in the orthography.

As for Kato, Goddard finds no difference between tc-sounds that go back to original tc-sounds and those that correspond to Hupa kγ-sounds ("Elements of the Kato Language," pp. 16, 51). However, deictic tc', corresponding to Hupa tc', varies with ts' and s', thus suggesting ts' as the true sound; on the other hand, tc'- (to indicate indefinite third personal object) corresponding to Hupa kγ' occurs consistently as tc' (contrast examples of tc', ts'-, s'- on p. 50 with those of tc'- on p. 51). It seems plausible, then, that in Chipewyan, Chasta Costa, and Kato original ky-sounds became true tc-sounds, while original tc sounds were shifted to ts-sounds (which are apt to be heard as either ts- or tc-sounds).
-tc'u augmentative suffix (e. g., hį/ tc’ù “horse,” literally “big dog”) (cf. Hupa -kų; Kato -tcō)

Examples of tc’ going back to Athabascan k! are:

dān/tc'i “four” (cf. Hupa diŋk, i. e., diŋk!)
stc!at/dé “seven” (cf. Hupa xō/kit, i. e., -kŋ!it)
tc!ášL/se “he cries” (cf. Hupa kya/tel/tcwū “it cried, i. e., kŋ!a-”)
tc!- verb prefix indicating indefinite object (cf. Hupa k-, k'y-, i. e., kŋ!; Kato tc’-)

Athabascan possessed sonant sibilants (z, j) and sibilant affricatives (dz, dj). Of these sounds z has been found in Chasta Costa -az “to sneeze;” dj is illustrated in several forms, but, as we shall see in a moment, does not in these go back to Athabascan dj. dz has not been found, though it may exist. j, as in Kato and Hupa, has become c:

la/cAn “black” (cf. Hupa Lū/hwín<*-cin; Kato L/cůn’; Jicarilla Lī/zī; Nav. Lī/jín; Chipewyan del/zůn; Loucheux del-zən)

Chasta Costa dj results from t (unaspirated) plus y:

q!wát/tc!at/dja “table” (<*q!wát/tc!at/ya “whereon one eats;” -ya “to eat”)
y/a/γıt/dja “we are ashamed” (<*ya/da/γıt/ya; cf. yAc in ya/dAc/ya “I am ashamed”)

Of the lateral consonants, only three (l, l, and L) have been found in Chasta Costa. Original dl may have been preserved also, but Athabascan dlō was heard rather as t (unaspirated) plus lō:

γAc/lō “I laugh” (cf. Chipewyan -dlō, -dlōk’ “to laugh”) -t- is very probably third modal -t- here; while -dlō really appears as -lō. After c and s, l becomes l:

nā/dAc/nic “I work” (cf. nā/dAl/nic “he works”)
nā/xwAc/ye “I play” (cf. nā/xwAl/ye “he plays”)
g!wát/dasL/nā “it was lying on it”
MORPHOLOGY.

PRONOUNS.

Independent personal pronouns:

- cí "I"
- nè "we" (probably contracted from *ne/he; cf. Hupa ne/he)
- nAn "you"
- nö/nè "you" (plur.)
- yū "he, that one"
- yû/nè, yûn/nè "they, those"
  (really demonstrative)  (really demonstrative)

Examples of possessive pronouns are:

- cic/la "my hand" (cic is independent cí combined with possessive prefix c-; literally, "I my-hand")
- nán/la "your hand" (that is, nán n-, "you your-hand")
- hí la "his hand" (hí is demonstrative)
- c/na/yâ "my eyes"
- s/tsî/dè "my sickness, I am sick"
- n/îsî/dè "you are sick"
- nö/îsî/dè "our sickness, we are sick"
- nö/îsî/dè/ha "your (pl.) sickness? are you (pl.) sick?"
  (-ha is interrogative)
- xö/îsî/dè "their sickness, they are sick"

Many nouns, when limited by preceding possessive pronouns, suffix -e, as regularly in Athabascan. Thus, from man "house:"

- cic/manè "my house"
- nân/mane "your house"

A noun followed by another with suffixed -e is to be understood as genitively related to it. Examples are:

- dâne' li/te'le "person's dog" (li/te'le from li "dog," with
voicing of l- to l-; cf. Hupa Liŋ “dog,” xo/liŋ/ke, i. e., xo/liŋ/kəle “his dog”)

īkār ‘llō/le “bowstring” (literally, “bow’s string;” cf. Chipewyan L’āl “rope,” possessed form L’u/le)
gā/yu is’t/de “baby’s sickness, baby is sick”

As reflexive possessive is used xā/dAt- (with -ā/dAt- cf. Hupa a/d-; Carrier edād-):

xā/dAt/ll/te/le “his own dog” (used reflexively)

Of demonstrative pronouns there have been found:

hū “that, he” (cf. Hupa hai, indefinite demonstrative and article);  hū/ll “that thing”
yū “that one” (cf. Hupa yō “that”) yū/ne, yūn/ne “those, they” m- “it” (cf. Hupa m-; Kato b-): mAt “with it”
de seems to be used as relative in:

dē uycl/t’e “what I want”

This element is perhaps demonstrative in force and related to Hupa de in deď “this,” hai/de “this.”

Totality is expressed by t’wī “all, everything” (cf. Hupa a/tiŋ “all”). Compounded with this element are:

t’wī/dē “everything” (-dē is very likely related to Hupa di- in di/hwō “something,” dī/hwe/e “nothing”)
dō/t’wī/dē “not everything”
t’wī/dan “everywhere” (literally, “all-at;” cf. Hupa a/tin/- diŋ “every place”)

Nouns.

Primitive non-descriptive nouns, as in all Athabascan dialects, are relatively frequent in Chasta Costa. Monosyllabic nouns are:

Body Parts.

la “hand” (cf. Hupa -la; Kato -la’)

24 Probably to be understood as ĭkār/gāče.
hwaí “foot” (cf. Kato -kwe; Chipewyan -ke)
θií “head” (cf. Kato -sií; Chipewyan -θií -θií)
-γa “hair” (in θαγά “head-hair;” cf. Kato -ga “hair;”
Chipewyan -ga, i.e., -γa)

ANIMALS.
tlát “bird”
lı̊ “dog” (cf. Hupa l̓i̊; Chipewyan l̓ı̊)

NATURAL OBJECTS.
sé “stone” (cf. Hupa tse; Kato se)
cā “sun” (cf. Hupa hya; Kato ca)
lát “smoke” (cf. Hupa lit; Kato l̓ūt)

CULTURE OBJECTS.
man “house” (cf. Hupa diminutive min-tc “hut”)
llel “matches” (originally doubtless “fire-drill;” cf. Chipewyanc
L’el “fire-drill”)
gōk “camass” (cf. Hupa kɔs “bulbs”)
l̓̓l̓̓l̓̓l̓̓l̓̓ “(its) string” (cf. Hupa L̓̓l̓̓l̓̓l̓̓ “strap;” Chipewyan
L’ūl “rope”)

Primitive, at any rate not easily analyzed, nouns of more
than one syllable are:

PERSONS.
dan/né, dané’ “person, man” (cf. Chipewyan de/ne, dán/ne;
Carrier tene)
tsɬ̓̓d xe “woman” (cf. Carrier tsk̓̓k̓̓xe; Kato tc’ek)
dis/né “male” (with -né cf. probably -n̓̓ of dané’)
sá/sas “white man”
tsx̓̓d xe “child” (cf. Carrier əsk̓̓k̓̓k̓̓xe; Kato sk̓̓-k “boys,
children”)
k̓̓l/’é “boy” (perhaps misheard for k̓̓l̓̓/’é; cf. Kato
k̓̓l̓̓/lek “boy”
g̓̓a/yu “baby”

BODY PART.
na/γa “eye” (cf. Hupa -na; Kato -na; Chipewyan -na/ɑa,
-na/æ)
ANIMALS.

θαγι“I “grizzly bear” (cf. Carrier sas-e4ak “brown or cross bear”)
mis/k(!)(!)(!)(i)(i) “gull” (cf. Kato būtc/k’ai)
dis/L!ac “fawn”
dα/mel’/kė “pelican”
nat/qi “duck” (cf. Kato nā/qi6)
mī/tcà/ts!Al/nē “deer”
t’e/glô/lēc/’e “mink”
sā/was/ts!é “sandhill crane” (cf. Applegate Creek tcâ’/-
wâc/te(?)e)
tc!âI/tc!âus/dje “ruffled grouse, ‘pheasant’”
θâ/gi “kingfisher”
das/nâI “red-shafted flicker”
tθ!âθ/nā/yâI/tθ!ô “hummingbird”
gîc/tc!ê “bluejay”
nâ/ts!ô/le “horned lark”
sô’s/ga/ga “robin”
ts!âI/ts!ûk “wren”
kasîs “barn swallow”
ga/lat’ê “crow”

Many of these animal names, as well as some of those that follow, are probably descriptive verb forms that have become stereotyped.

PLANTS.

tc!âI/pâ/yu “flower”
mi/tIâI/tθâθ “arrow-wood”
Lô’/dé “tar-weed” (probably compounded with Athabascan Lô “grass;” cf. Hupa Lô/da-itc “an herb”)
tc!âI/yat/ts!ê “sunflower(?)”

26 This word is humorously used to refer to Democrats, Democrat and dâ/mel’/kê exhibiting some similarity in sound.
27 This form was obtained independently.
28 This word is remarkable as containing p, a sound that is normally absent in Athabascan.
CULTURE OBJECTS.

- **xănθo** "canoe"
- **át/teca** "pipe"
- **tc/Aθ/gál** "sandstone arrow-shaft scraper"
- **ta/kâc** "bow" (probably **t’Ak/gâc**; cf. Kato **gâc** "yew")
- **q/âxəθ** "arrow"
- **detl/tlé** "arrow-point"

ABSTRACT.

- **θ/Λθ/dà** "story"
- **yâ/wis** "whistling" (cf. Carrier **yuyus** "whistling," as noun)
- **ts’l/dé** "sickness" (used with possessive pronouns to indicate "to be sick")

Several animals are designated by words ending in **-tc’u**, an augmentative suffix, "big" (cf. Hupa and Kato animal and plant names in **-kyō** and **-tcō** respectively). Such are:

- **t’ět/mō/te’u** "pigeon"
- **cu/dâ’/te’u** "bald eagle"
- **θΛθ/dâ/lî/te’u** "owl"
- **lî/te’lê/te’u** "red-headed woodpecker"
- **ga/sà’/te’u** "raven"
Nouns ending in -t!i or -t!ini denote "one who has so and so." -ni is, likely enough, related to -ne of dAn/né "person;" -ne or -n is found in many Athabascan dialects as suffix denoting "person." Examples of -t!i(ni) are:

lt/tl/nì "dog-owner"

dò/at/tì/nì, dò/at/tì "bachelor" (literally, "not-wife-having-person." dò- "not;" at-, i.e., at! "wife," cf. Hupa ùt "wife," Kato at' "sister")

Examples of noun compounds consisting of two noun stems are:

θA/γá "head-hair" (shortened from θì "head" and γá "hair." Cf. Chipewyan θì/γá)

gà/lal gwd/γu "red-winged blackbird" (literally, "crow('s) brother-in-law." With this cf. Chipewyan da/tsa/-tcel/le "a small crow," literally, "crow younger-brother")

An example of a compound noun consisting of verb and noun is:

Al/Az dAn/ne "sneezer" (literally, "he-sneezes person")

An example of a compound noun consisting of noun and adjective is:

tc!ac t/θó/è "bluebird" (literally, "bird blue")

A characteristic type of noun in Athabascan is formed by verbs which, while remaining strictly verbal in form, are used to refer to objects, in other words, are logically nouns. As has been already noted, several nouns of more than one syllable listed above as unanalyzable are doubtless, strictly speaking, verb forms. Quite clearly verbal in form are:

ñã0/LLò "paper" (cf. nat/LLò "he writes")

g!wåt/då0t/gac "table-cloth" (literally, "it lies or is thrown

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38 Goddard, op. cit., p. 110.
down on top;" cf. Hupa -kas, i. e., -gas, "to throw," and wes/kas "it lay"

q̃w̃át/tc̃lát/djà "table" (literally, "thereon it is eaten")

mAl/té/tc̃lAt/tšAl/lec "smoking materials" (literally, "there-with it is smoked")

**Numerals.**

1. la, lâ/qa (cf. Hupa la; Kato la/ha)
2. nà/xi (cf. Hupa nax; Kato nák/ka); nà/xi la "two hands"
3. t'â/ði (cf. Hupa tak, i.e. t'ak'; Kato tak'; Chipewyan ta, ta/qe
4. dàn/tcl'i (cf. Hupa diñk, i. e. diñk?; Chipewyan dî/qâ)
5. sx̂/lå (cf. Hupa twó/la; Chipewyan sa/só/la/gai)
6. k'was/t'â/ndé (cf. Hupa xôs/tan)
7. stc̃/duct/â (cf. Hupa xô/kit, i. e. k'lit)
8. nà/xán/dâ (= "it lacks two, two less")
9. lán/dâ (= "it lacks one, one less")
10. hw̃/ðe

Of numeral adverbs there were recorded:

lát/dan "once" (cf. Hupa na/diñ "twice," min/lûń/diñ "ten times")

la/me/qe/ca "in one time"

**Adjectives.**

Of adjectives, or verb stems with adjectival significance, there have been found:

was/xé, was/xâ "good;" was/xé li "dog is good"

txas/xé/la "rich" (-la is verbal suffix)

dû/án/dë "bad" (evidently verbal in form. dû-, dô- is negative; -dë probably misheard for -tlë "to be, exist;"

*Goddard, op. cit., p. 281.*
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\(AL/tc\ddot{a}/\gamma\ddot{\imath}\) “big thing” (cf. Hupa -\(kya/\ddot{o}\) “large;” Kato -\(tc\dot{a}\c)

\(l/\ddot{g}\ddot{\imath}\) “white” (cf. Hupa -\(L/\ddot{ka}i\; ;\) Kato -\(L/gai\)

\(la/c\ddot{A}n\) “black” (cf. Kato -\(L/c\dot{u}\nu\); Chipewyan \(d\ddot{e}l/z\ddot{u}\nu\)

\(l/sak\) “red” (cf. Kato -\(L/t\ddot{c}\ddot{k}\)

\(l/\theta\ddot{o}\) “yellow, green” (cf. Hupa \(L/\ddot{t}s\ddot{o}\) “green;” Kato -\(L/\ddot{t}s\ddot{o}\) “blue”)

“White,” “black,” “red,” and “yellow, green” are characterized by prefixed \(l(a)-\), which is common as adjectival prefix also in other Athabaskan dialects.

Adverbs.

Adverbs of place are:

\(xun\) “there” (cf. Hupa third personal pronoun \(x\ddot{o}\nu\?\?):

\(xun\ t/e/\theta/\ddot{y}a\) “there you go”

\(h\ddot{\imath}^i\ xun\ t/e/\theta/\ddot{y}a\) “there he goes”

\(txun/la\) “where?”:

\(txun/la\ t/e/\theta/\ddot{y}a\) “where are you going?”

\(d\ddot{o}/d\ddot{a}t\) “nowhere” (cf. Hupa \(-dit-\) in \(hai/\ddot{d}ai/d\dot{a}t/di\ddot{n}\)

“where;” \(d\ddot{o}\) - is negative)

\(d\ddot{a}k/\ddot{g}\ddot{e}\) “up” (cf. Hare \(\ddot{t}e\\ddot{g}\ddot{e}\)):

\(d\ddot{a}k/\ddot{g}\ddot{e}\ \ddot{t}\ddot{c}\ddot{c}l/\ddot{t}\ddot{\ddot{a}}\ddot{l}\) “I kicked him up”

\(m\ddot{a}r/d\ddot{a}n\) “on edge” (-\(d\ddot{a}n\) is postposition “at;” \(m\ddot{a}r<-\*

*mq<-*

*man<-; cf. Hupa \(n\ddot{i}/\ddot{m}an\) “each side”)

Adverbs of time are:

\(xat\) “then” (cf. Hupa \(xat\) “yet, right”)

\(x\ddot{a}\) “quickly” (cf. Hupa \(x\ddot{a}\) “yet”)

\(xun/\ddot{d}\ddot{e}\) “tomorrow” (cf. Hupa \(yis/xun/\ddot{d}\ddot{e}\) “tomorrow”):

\(xun/\ddot{d}\ddot{e}\ \ddot{d}\ddot{o}/\ddot{w}a/\gamma\ddot{\lambda}\ddot{c}/\ddot{\ddot{a}}\) “I’ll see him tomorrow”

\(xun/\ddot{d}\ddot{e}\ \ddot{t}\ddot{\lambda}\ddot{\lambda}/\ddot{d}\ddot{a}\ n\ddot{a}l\ \ddot{\n\ddot{\ddot{a}}\ddot{c}/\ddot{s}\ddot{i}\) “tomorrow story to-

you I-shall-tell”

\(xun/\ddot{d}\ddot{e}\ \ddot{t}\ddot{\lambda}\ddot{\lambda}/\gamma\ddot{\lambda}\ddot{c}\) “tomorrow I’ll go”


"always" (literally, "all-at"):  
\[ t'w1/dan \]
\[ t'w1/dan t'al/dac \] "he always runs"
\[ t'w1/dan as/se \] "I always cry"

"this evening" (doubtless misheard for \[ xal/-; -dan \] is postposition "at."
Cf. Hupa \[ xu/Le \] "in the night"):  
\[ xal/ts1i/dan \]
\[ d0/wan/\gamma ac/i \] "I'll see you this evening"

Modal adverbs are:

\[ d0 \] negative (cf. Hupa \[ d0 \]):  
\[ d0/t'Ac \] "he won't go"
\[ d0/t'Ac/yic \] "I'll not go"
\[ d0/y'a/tla \] "he won't fly"
\[ d0/as/se \] "I'm not crying"
\[ d0/n'a/dac/nic \] "I'm not working"
\[ d0/\gamma Ac/i \] "I didn't see him"
\[ d0/nec/i \] "I'm not looking at him"
\[ d0/ucl/t'e \] "I do not want"
\[ d0/na/\gamma Ac/xw1 \] "I do not vomit"

\[ la \] prohibitive:
\[ la \] "don't!"
\[ la/t'i/yic \] "don't go!"
\[ la/\gamma i/i \] "don't see him!"
\[ la/n'a/xwil/ye \] "don't play!"
\[ la/na/dit/lo \] "don't bathe!"
\[ la/na/\gamma at/xw1 \] "don't vomit!"
\[ d0/d0x/qle \] "unable"
\[ d0/lan \] "not much" (cf. Hupa \[ lan \] "much," \[ d0/lan \] "little")
\[ d0/w1/la \] "of course" (cf. Hupa \[ d0n \] "it is," \[ he/d0n \] "at least")

\[ d0/\lambda \] emphatic negative (really verbal in form, "to cease;"
Cf. Hupa \[ -lan, -\lambda n \] with negative prefix \[ d0- \] "to quit. leave, desist"):  
\[ d0/\lambda c/\gamma i/i \] "you didn't see me"
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cô/di “all right” (cf. Hupa nô/hwó/ñ “properly”?)
câl/q’we “to be accustomed to”:
  câl/q’wé na/dâct/tlô “I’m used to bathing”
tlô/xun “to keep on:”
  tlô/xên ne/câl/i “he keeps looking at me”
θâk/gwe “in fragments”
hô future prefix (more properly intensive):
  hô/yâ’/yâ’/tlâ “I’ll fly”
  hô/tc/Âsl/se “he wants to cry”
  hô/îl/î yît/î “stop laughing!”
dô/wa future prefix (probably with dubitative coloring):
  dô/wa/c/yâ’/î/ï’e “you’ll see me”
  s/î/tâ/ô dô/wa/Âl/î “I’ll get sick” (literally, “my-sickness will-become”) 
  dô/wa/nô/yân/ñêl “he will upset them”
  dô/wa/ît/ât/ñêl “they will go to pieces”

POSTPOSITIONS.

Athabascan is characterized, among other features, by the use of a considerable number of postpositional elements of chiefly local force. They are appended to nouns or pronominal, numeral, or adverbial stems; less often to verb forms, in which case they have subordinating force. Chasta Costa examples are:

-dân “at” (cf. Hupa -di’n):
  xa’h!/ts/l/dân “this evening”
  t’wâ/l/dân “everywhere” (literally, “all-at”)
  lât/dân “once” (cf. lâ- “one”)
  mâ/l/dân “on edge”
  al/dâc/nt/dân “when I tell him” (literally, “I-tell-him at”)\(^\text{9}\)

\(^\text{9}\) Similarly in Hupa -mi’. “When,” as verb suffix, is doubtless simply pronominal -mi- plus postposition -t. “with.”
"with, to" (cf. Hupa -l; Kato -L):

\[ xhənəθ/\text{l} nəc/\text{x}e \] "I paddle canoe" (literally, "canoe-with I-paddle")

\[ tələθ/\text{d}ə nəl nəc/si \] "I tell you story" (literally, "story you-with I-make")

\[ tələθ/\text{d}ə cəl nəl yəs/si \] "he tells me story" (literally, "story me-with he-makes")

\[ məl/tələθ/\text{l}ələn/\text{lel} "where-with it is smoked, materials for smoking" (\textit{ma}-\textit{t} "therewith;" cf. Kato \textit{bəl} "with it;" Hupa \textit{mi} "with, in")

This same \textit{-l} is probably also found attached to verbal prefix \textit{a-} (used in verbs of saying):

\[ ał/\text{də}c/nəl/\text{dən} "when I tell him" (cf. Hupa \textit{a}l/-\textit{tc}it/dən/ne "he talked to")

\[ tsələn "toward" (cf. Hupa -\textit{tc}i\textit{n} "toward;" Kato -\textit{tc}u\textit{n} "to, toward")

\[ s/\text{tsələn}/nəl/\text{əc} "to-me he-will-bring-it"

\[ -\text{me} "in" (cf. Hupa -\textit{me} "in;" Kato -\textit{bi} "in")

\[ mən/\text{mə} "in house"

\[ -\text{me}/\text{qəl} "in, around in" (compounded of \textit{-me} and \textit{-qəl}; cf. Chipewyan -\textit{kə} "on")

\[ mən/\text{mə}/\text{qəl} "around in house"

\[ lə/mə/\text{qəl}/\text{ca} "all in one time" (cf. \textit{lə}, \textit{lə}/\text{ca} "one")

\textbf{VERBS.}

As in other Athabascan dialects, the typical Chasta Costa verb consists of one or more adverbial prefixes, which may be followed in order by a deictic or third personal element, a first modal prefix, a second modal element, a first or second person subjective element, and a third modal element or "class" sign; these, not all of which need of course be present, are then followed by the verb stem itself. The stem often ends the verb form, but may be followed by one or more enclitic elements of modal or syntactic force. The verb form is fre-
quently preceded by an adverb or postposition which, while best considered as a non-integral part of the verb, forms a rather close syntactic unit with it. A pronominal object, if present, comes after an adverbial prefix but before a first modal element. Thus, the verb form *t'ā/γā/θōt/nā/hā* “do you (plur.) drink?” consists of seven elements: *t'ā-* , an adverbial prefix referring to water; *γā-* , a second adverbial element; *θ-*, a second modal element of durative significance; *-ō-*, second person plural subjective pronominal element; *-t-* , a third modal element, probably intransitive in force; *-nā-* , verb stem “to drink;” and *-hā-* , an enclitic interrogative element. The various elements that go to make up verb forms will be taken up in the order indicated.

**Adverbial Prefixes.** *ā-*, *a-*, 'A- used with verbs of saying, doing, and being (cf. Hupa and Kato *a-*):

- *ā/djān* “he says”
- *a/dacl/nā/dān* “when I tell him” (for *-t-*, see under Postpositions)
- *dō/dāt 'ān/īle* “there is not anywhere”

This *a-* is probably equivalent to an indefinite object, “something,” indicating what is said or uttered without definitely referring to it. This comes out rather clearly on comparison with a form like *yā/wīs dacl/nā* “I whistle” (literally, “whistling I-utter”), where no indefinite object *a-* is required, what is uttered being specifically referred to by *yā/wīs* “whistling.” That *a-* is somewhat in a class by itself as compared with other adverbial prefixes is indicated by its being followed in forms with indirect object by postpositive *-t-*. *yā-*, *ya-* “up (in the air)” (cf. Hupa *ya-; Kato *ya-*):

- *yā/γācl/gāθ* “I climb”
- *yā/γāθ/θel* “I threw”
- *yā/γic/īlā* “I fly”

It is not clear what significance is to be attached to *ya-* in:

- *ya/dacl/γac* “I am ashamed”
- *ya/da/γīt/đja* “we are ashamed”
ye- “into enclosed space (including mouth)” (cf. Hupa ye-; Kato ye’, yi’-)
  ye/γατ/νε/λα “he bit it”
dā-, da- “sitting or lying on something above ground”
  (cf. Hupa and Kato da-):
  dā/θαθ/dā “I am sitting down”
  dā/de/θιλ/θιθ/θi “we are sitting down”
  dā/nαc/t’αc “I go to bed”
  q’wάt/dάθt/γάc “it lies thrown down on top,”
  i.e. “table-cloth”
  q’wάt/dας/νά “it was lying on it”
t’e- “in the water” (cf. Hupa te-; Kato te’-):
  t’e/αn/γαc/λα “I am sinking in the water”
  t’e/νίc/λα “I drown”
t’ā- referring to water (cf. Hupa and Kato ta-):
  t’ā/γαc/νά “I drink”
tce- “across a stream” (cf. Hupa tce- “out of;” Kato tce- “out of;” Chipewyan ts’e- “used of approach to a body of water”):
  tce/θιθ/θά “I swim across”
an- implies disappearance or undoing (cf. Chipewyan ‘a-, an- “away,” implies “desertion or abandonment”):
  t’e/αn/γαc/λα “I am sinking in the water”
  dō/wά/θα/νά/γάc/νά “he will upset them”
an- “back, hither” (cf. Chipewyan ‘a- ‘an-, ai- “back, toward home”):
  an/γαc/θά “come here!”
tclā-, tclus- of unknown significance (cf. Hupa kya-):
  tclā/sάκ/ςε “I cry” (cf. Hupa kya/teθ/teθe “she heard it cry”)
  tclus/ςε “he cries”
se’- used with verb of smiling:
  se’/γαt/θά “he smiles” (cf. γαθ/θά “he laughs”)

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41 Goddard lists forms in kya- i.e., k’ya-, under ky-; see op. cit., p. 90. It seems better however, to keep them apart.
tc!ô- of unknown significance (cf. Hupa kôô):  
   tc!ô/γô/τ/σ/ι/λ/α “he pointed with his finger”  
   ne/τc!ô/κ/ιε “I’ll bet you”  

u- of unknown significance (cf. Hupa verbs in ô-):  
   dô/τc/τ’e “I do not want”  
   dé/τc/τ’e “what I want”  

nâ-, na- indefinite movement on surface of ground or water; horizontality (cf. Hupa and Kato na-):  
   nân/nâô/γâ/la “he went around it”  
   s’ts’ân/na/’Ac “he’ll bring (it) to me”  
   γân/na/’Ac/τ’e “he will bring here”  
   nâ/nî/lan “stop him!”  
   nâ/γ’a “is going about, living”  
   t’t’i γân/na/’à “he brags” (literally, “high, important he-has”)  
   nà/xâcL/γè “I play”  
   nâ/dâcL/με “I work”  
   dô/wâ/nâ/γân/nâl “he will upset them”  
   nâc/Ld “I write”  
   xânâθ/i nâc/xe “I paddle canoe”  
   nac/tl “I swim, bathe”  
   na/τc!îù/dé “you wash”  
   nâ/dâcL/dé “I washed myself”  
   nâ/dâτ/tl/’e “he’ll bathe”  
   nâ/xât/dâl/el “they’ll bathe”  
   t’ô/â/θ/â/θ/τ/xh “story to-me you-told, caused”  

na- “back again” (cf. Hupa and Kato na-), followed by third modal -t-:  
   na/γô/θâ/θ/τ/xh “I vomit”  

γân- of uncertain significance (cf. Hupa wôn- “to pursue

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42 Goddard lists forms in kôô, i.e., kôôô, under kôô: see op. cit., p. 90. Perhaps kôôô is compounded of kôô and ôô.
43 This tcô- is probably better explained as deictic tcô followed by future imperative t-; see note 86.
44 Goddard, op. cit., p. 115.
or seek something; to attempt something by persistent effort”):

\( \gamma \text{An}/\text{na}/\Delta c/\text{t’e} \) “he will bring here"

\( \text{t’}/\text{t’} \gamma \text{An}/\text{na}/\dot{\text{a}} \) “he brags” (perhaps “important he-seeks-to-have”)

\( \text{ne-} \) of unknown significance:

\( \text{nècl}/\text{t} \) “I’m looking at him” (cf. \( \gamma \text{e}/\text{thi}/\text{i} \) “I saw him”)

\( \text{nès}/\text{tsl}’\text{t}/\text{i} \) “I am seen”

\( \text{xw(\text{a})-} \) of unknown significance:

\( \text{na}/\text{xwac}/\text{yè} \) “I play”

\( \text{xwac}/\text{i} \) “I believe (it)”

\( \text{xw\text{an}/nè/\text{tl}/\text{ya} \) “you win” (see under first modal \( \text{ne-} \))

\( \gamma\text{ä-} \gamma\text{a-} \), (\( \gamma \)) refers apparently to “mouth”:

\( \text{ye}/\gamma\text{â}/\text{ne}/\text{la} \) “he bit it” (\( \gamma\text{âl-} \) may, however, have been misheard for \( \gamma\text{âl-} \), with second modal \( \gamma- \); see note 92)

\( \text{na}/\gamma\text{â}/\text{thât}/\text{xwë} \) “I vomit”

\( \text{lå}/\text{na}/\gamma\text{â}/\text{xwë} \) “don’t vomit!”

\( \text{t’â}/\gamma\text{â}/\text{tît}/\text{nå} \) “we drink”

\( \text{t’â}/\gamma\text{ît}/\text{nå} \) “you drink” (or is \( \gamma- \) here second modal prefix?

Verbal prefixes of local force which are doubtless primarily postpositions and which are prefixed to adverbial prefixes proper are:

\( \text{nàn-} \) “around” (cf. Hupa -\( \text{nat} \); Kato -\( \text{na} \)):

\( \text{nàn}/\text{nåt}/\text{yå}/\text{la} \) “he went around it”

\( \text{q’wât-} \) “on, on top” (cf. Hupa -\( \text{kût} \) “on;” Kato -\( k’\text{wût} \) “on”):

\( \text{q’wât}/\text{tc’at}/\text{dja} \) “whereon one eats, table”

\( \text{q’wåt}/\text{dåt}/\text{gåc} \) “it lies thrown down on top, table-cloth”

\( \text{q’wåt}/\text{dasl}/\text{nå} \) “it was lying on it”
DEICTIC PREFIXES. Under this head are grouped a small number of quasi-pronominal elements of third personal reference which regularly come after adverbial prefixes, if any of these are present. They cannot be grouped with first or second personal subjective elements, as their position is quite distinct from these; first and second modal prefixes may come between. Of deictic elements there have been found:

- tc!- denotes lack or indefiniteness of object of transitive verb (cf. Hupa k-, ky-, i.e. k!i; Kato tc!-
  
  tc!Aγ/γe/θiC/ya “I eat” (i.e. without specific object being designated; cf. Hupa yik/kyā/-
  wiñ/yan “it ate”)
  
  q!wAt/tc!A/At/dja “whereon one eats, table”
  
  nā/tc!i/llō “you write” (cf. Hupa nā/kis/llōn, i.e. nā/kāiis/llōn “she made baskets”)
  
  nā/tc!i/lō “you swim, bathe”
  
  na/tc!i/de “you wash” (cf. Kato tē/na/tc’ās/dē “he washed it”)
  
  tc!A/t’ū/tlō “we wash ourselves” (cf. Hupa wa/-
  kin/nin/sei “it was heated through”)
  
  mō/tē/tc!A/Al/leC “wherewith it is smoked” (somewhat doubtful, as tc!- here follows first modal prefix t’e-; but see note 77)
  
  tc!Al/tlō “he sucks” (cf. Kato tc’il/t’ō “[make] it suck”)

It is possible that in this last example tc!- is third personal subjective (cf. Hupa tc-, i.e. tc!-; Kato tc’, ts’, s’), as suggested by Aclt!ot “I suck” with its lack of tc!- prefix. No other plausible case, however, of third personal subjective tc!- is available, so that its existence in Chasta Costa must be considered doubtful as yet.

Generally third person singular subjective forms are distinguished by the lack of any pronominal prefix, but in certain

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* Goddard, op. cit., p. 51.
cases deictic elements are found which are clearly third personal (subjective) in value. These are:

\textit{dj-} (cf. Hupa tc-, i.e. tc!-; Kato tc'-, ts'-, s'?):

\begin{itemize}
  \item \textit{d\textbar/djan} "he says" (verb-stem -n; cf. Hupa aL/-
tc\textbar/den/ne "he talked to them")
  \item \textit{dj\textbar/la} "he says" (cf. Hupa tc\textbar in "they say;"
Kato tc\textbar in)
\end{itemize}

It is quite likely, however, that \textit{dj\textbar} is to be explained as from
\textit{*dy\textbar} (dy, as we have seen, becomes \textit{dj}), in which \textit{d-}
is first modal prefix (cf. d\textbar/n\textbar "you make a sound") and \textit{*y\textbar} is reduced from \textit{*yen} (ye- as below; -n to say).

\textit{ye-}, \textit{ya-} (cf. Hupa y-, y\textbar- referring to other than adult Hupa;
Kato y\textbar-):

\begin{itemize}
  \item \textit{n\textbar l na/y\textbar l/s\textbar "to-you he-tells"} (contrast n\textbar cl/s\textbar "I tell")
  \item \textit{c\textbar l na/y\textbar sl/s\textbar "to-me he-tells"} (with second modal prefix s-, \textit{\theta-}; contrast n\textbar /\textbar \textbar /s\textbar "you tell")
  \item \textit{ya/q\textbar \theta/ya\textbar "he eats"} (contrast tc\textbar \textbar \gamma/ye/\textbar \textbar \textbar /ya
"I eat")
\end{itemize}

\textit{x-}:

\begin{itemize}
  \item \textit{tc\textbar \ell/xa\textbar /t\textbar \ell/\textbar "he swims across"} (contrast tc\textbar \ell/-
\textbar \theta/t\textbar \ell/\textbar "you swim across")
\end{itemize}

This \textit{x-} seems to have no parallel in Hupa or Kato (is it connected with third person objective \textit{x\textbar} of Hupa, \textit{kw-} of Kato?). Were it not that -\textbar \ell/\textbar "to swim, bathe" is used only of singular subjects, one might surmise that \textit{x-} is really plural \textit{xa-} (see below).

Among deictic elements are further to be reckoned certain prefixes that serve to indicate either plurality as such or more specifically third personal plurality. These are:

\textit{ya-} (cf. Hupa ya-; Kato ya\textbar-):

\begin{itemize}
  \item \textit{yu/w\textbar is ya/di\textbar /n\textbar "we whistle"} (contrast \textit{yu-/}
\textit{w\textbar is d\textbar cl/n\textbar "I whistle"})
\end{itemize}

\footnote{\textit{q\textbar \ell/} was very likely misheard for \textit{ye-}.}
yâ/wâs ya/dâl/nâ “they whistle” (contrast yâ/wâs dâl/nâ “he whistles”)

γâ-, γa-:

te’lâ/γâ/thâl/se “we cry” (contrast te’lâ/sâsl/se “I cry”)
te’lâ/γâsl/se “they are crying” (contrast te’lâsl/se “he cries”)
te’lâ/γâl/se/t’e “you (pl.) will cry” (contrast te’lâl/-se/t’e “you (sing.) will cry”)

xa- third person plural (apparently not found in either Hupa or Kato; but cf., without doubt, Chipewyan he- “used for dual or plural of verbs in third person”):

yâ/xâγ/γâ/la “they fly” (yâ/γâ/la “it flies”)
dâ/yâ/xât/la “they won’t fly” (dâ/yâ/la “he won’t fly”)
xâs/sè/t’e/ha “will they cry?” (as/sè/t’e/ha “will he cry?”)
dâ/xâs/se “they’re not crying” (dâ/as/se “he’s not crying”)
nâ/xâl/dâl/nic “they work” (nâ/dâl/nic “he works”)
c/xa/γêθ/î “they saw me” (c/γêθ/î “he saw me”)
nâ/xât/da/γâl/el “they are bathing”
t’e/an/xâγ/γâl/la “they sink in the water” (t’e/an/γâl/la “he sinks”)
xâl/t’âl/la “they are sleeping” (t’âl/la “he is sleeping”)
dâ/xân/nat/’âc “they went to bed” (dâ/nat/t’âc “he went to bed”)
xâl/t’âl/xwâθ “they cough” (t’âl/xwâθ “he coughs”)
xâl/âl/’âz “they sneeze” (âl/’âz “he sneezes”)

First Modal Prefixes. Under this term are comprised a small number of rather frequently occurring elements which regularly come after both adverbial prefixes and deictic elements, but precede another set of modal elements (second
modal prefixes) which are to be taken up shortly. Their meaning is rather colorless. Besides their position they have this peculiarity in common, that they lose their vowel in indefinite tense forms (such as have no second modal prefixes: θ-, γ-, or n-) and are thus reduced to single consonants. They are:

t'e- (definite tenses), t'- (indefinite tenses) seems to indicate durative activity (cf. Hupa te-; Kato te-, t-):

\[ t'e/θ\acute{c}/ya \quad \text{"I go;" indefinite: } d\acute{a}/t'\acute{c}/yic \quad \text{"I'll not go;" } t'i/y\acute{a}c/t'e \quad \text{"you must go"} \]
\[ t'\acute{a}cI/d\acute{a}c \quad \text{"I run" (indefinite)} \]
\[ t'\acute{a}cI/t'\acute{a}cI/θ\acute{a}l \quad \text{"you (pl.) wash yourselves" (indefinite)} \]
\[ t'/γi/i \quad \text{"he looks around" (indefinite; but see note 69)} \]
\[ t'e/θ\acute{a}θ/laI/la \quad \text{"I've been sleeping;" indefinite: } t'\acute{a}cI/laI \quad \text{"I'm sleeping"} \]
\[ t'\acute{a}cI/xw\acute{a}θ \quad \text{"I cough" (indefinite)} \]
\[ m\acute{a}t/t'e/tc\acute{a}cI/ts\acute{a}cI/tc\acute{a}c \quad \text{"wherewith it is smoked" (as following tcI- is deictic, it is more likely that } t'e- \text{ here is adverbial prefix, not first modal; see note 77).} \]

de- (definite tenses; da- before γ-), d- (indefinite tenses) meaning unknown (cf. Hupa d-, dû-; Kato de-, d-):

\[ aI/d\acute{a}cI/nI/dI\acute{n} \quad \text{"when I tell him" (indefinite)} \]
\[ y\acute{u}/\acute{w}Isa/d\acute{a}cI/nI \quad \text{"I whistle" (indefinite)} \]
\[ c/'n\acute{a}/γ\acute{a} d\acute{a}/s\acute{a}t' \quad \text{"my-eyes hurt" (definite; cf. Hupa dû/win/win/tc\acute{a}c \quad \text{"it got sick")} \]
\[ n\acute{a}/da/γ\acute{a}cI/tI\acute{a} \quad \text{"I bathe;" indefinite: } n\acute{a}/d\acute{a}cI/-
\[ t\acute{a}cI/t'e \quad \text{"I'll bathe"} \]
\[ n\acute{a}/da/γ\acute{a}I/\acute{e}I \quad \text{"we are bathing;" indefinite: } n\acute{a}/-
\[ d\acute{a}/eI/\acute{e}I \quad \text{"we'll bathe"} \]
\[ n\acute{a}/d\acute{a}cI/nIc \quad \text{"I work" (indefinite)} \]
\[ n\acute{a}/d\acute{a}cI/d\acute{e} \quad \text{"I washed myself" (indefinite)} \]
\[ y\acute{a}/d\acute{a}cI/y\acute{a}c \quad \text{"I am ashamed" (indefinite)} \]
\[ y\acute{a}/da/γ\acute{a}I/d\acute{a}j\acute{a} \quad \text{"we are ashamed" (definite)} \]
\[ d\acute{a}/de/θ\acute{il}/\acute{e}I \quad \text{"we are sitting down" (definite)} \]
γε- (definite tenses), γ- (indefinite tenses) meaning unknown:

| γε/θι/ι | "you saw him;" |
| γε/θι/ι | "you'll see him" |
| γεθι/λο | "he breaks into laughter;" |

This γε-, γ- should not be confused with second modal γ-, which will be taken up presently. Two first modal prefixes (t' and γ-) occur in t'/γι/ι "he looks around;" that γ- is not second modal here is indicated by parallel definite forms with γε- (see γε/θι/ι above), further by weak form t' of first prefix (definite tenses require t'e)

ne- (definite tenses), n- (indefinite tenses) meaning unknown

| ne/θι/ι | "you win" |
| nα/θι/ι | "I go to bed" |
| nα/θι/ι | "I stop him;" |

This ne-, n- is not to be confused with second modal n-, which occurs only in definite tenses.

SECOND MODAL PREFIXES. These comprise three consonantal elements (θ- or s-; γ-; and n-) which are used only in definite tenses and which have reference, as far as any definite
significance is ascertainable at all, to what may be termed range or span of activity, but not to tense as such. θ- (s- in certain forms) is durative or continuative in force (cf. first modal t’e-, which is regularly followed by θ-); n- is cessative, marking the end of an activity or marking an activity which is conceived as the end point of a previous activity (e. g., “to come” as contrasted with durative “to go”); γ- is the most uncertain, being apparently inceptive or momentaneous in some cases, but clearly not so in others. They are, it seems, mutually exclusive elements. In practice their use seems largely determined by the prefixes that precede. n- and γ- always begin their syllable, being completed either by -i- (<*-i7-) or by subjective pronominal or by third modal elements, which are joined to them by means of -i- or inorganic -A-; θ- (s-) is similarly joined to following subjective pronominal elements, if one is present, otherwise it forms part of the preceding syllable.

Examples illustrating θ- (s- before l, l) are:

\[ t'e/\theta i/c/ya \quad \text{“I go;”} \quad t'e/\theta i/y a \quad \text{“he goes” (cf. Hupa t'e/së/yai “I went away”)} \]
\[ nAn/náθ/yâ/la \quad \text{“he went around it”} \]
\[ tc!\Lambda/\gamma e/\theta i/c/ya \quad \text{“I eat;”} \quad ya/qlé/\theta i/y a \quad \text{“he eats”} \]
\[ \text{(contrast Hupa yik/\k yâ/\w i/n yan “it ate” with w-)} \]
\[ tc!e'/\theta i/t/l!ô \quad \text{“you swim across” (contrast na/da/-} \gamma i/t/lô \quad \text{“you bathe”)} \]
\[ dâô/dâ \quad \text{“he is sitting down” (cf. Hupa sit/\d ai “he lived”)} \]
\[ dâô/de/\theta i/l/\theta i \quad \text{“we are sitting down” (cf. Hupa de/\sô/\l/\t e/\te “you will stay”)} \]
\[ tc!l/\theta i/\se \quad \text{“you (sing.) cry” (contrast Hupa \w i/n/-} \text{tcwû “you have cried”)} \]

* Goddard somewhat doubtfully assigns inceptive force to its Hupa cognate w-; in Kato its cognate g- seems clearly inceptive only in certain verbs; while in Chipewyan Goddard ascribes continuative value to g-.

It would be worth while making a somewhat extended comparative study of the second modal prefixes of Athabascan, which form one of the most difficult but at the same time important chapters of its grammar.
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\(\text{γe/θic/} \) “I saw him” (cf. Hupa \(\text{te/si}w/i\u011fi \) “I am going to look”)
\(\text{nā/θil/} \) “you told story” (cf. Hupa \(\text{na/}\text{si}l/\text{i}cw\text{en} \) “I made”)
\(\text{t'e/} \) “you’ve been sleeping” (cf. Hupa \(\text{ni}t/\text{sei}/\text{li}l/\text{le} \) “you would go to sleep”)
\(\text{θic}/\text{t'āl} \) “I kicked him” (contrast Hupa \(\text{ye/} \) “they landed” with \(\text{w} \)
\(\text{na/γā/θit/xwēl} \) “you vomit”
\(\text{γe/} \) “I break into laughter”
\(\text{tāθ}/\text{la} \) one was (= \(\text{tā} \) “one” plus \(\) “la”;
\(\) Chipewyan \(\) “was there”)
\(\text{g'wāt/daθt/gāc} \) “it lies thrown down on top, table-cloth” (cf. Hupa \(\text{wes/kas} \) “it lay”)
\(\text{g'wāt/da}l/\text{nā} \) “it was lying on it”
\(\text{xwān/} \) “you win” (cf. Kato \(\text{kūn/ne/-}\ \\
\) “I win”)

Examples illustrating \(\) - are:
\(\text{nic/ya} \) “I come” (cf. Hupa \(\text{nei/yai} \) “I came”)
\(\text{nic/dac} \) “I dance” (cf. Kato \(\text{nūc/dac} \) “I will dance”)
\(\text{t'e/nī/lat} \) “you drown” (cf. Kato \(\text{tc'ı/nūl/lat} \) “it floated there”)

Examples illustrating \(\gamma\) - are:
\(\text{γa/} \) “he dances” (cf. Kato \(\text{tc'}/\text{gūn/dac/kwān} \) “he had danced”)
\(\text{γā/} \) “I climb” (cf. Hupa \(\text{ya/wi}/\text{l/kas} \) “he threw up”)
\(\text{γā/} \) “it flies” (cf. Hupa \(\text{na/win/} \) “it will settle down”)
\(\text{nā/da/} \) “I bathe”
\(\text{na/da/} \) “we are bathing” (cf. Chipewyan \(\) “take through the water”)
"I’m sinking in the water" (cf. Hupa da/na/wil/lal “it was floating there")

γAcI/As “I’ve been sneezing”

te/γit/siL/la “he pointed with his finger”

ya/da/γit/dja “we are ashamed”

**SUBJECTIVE PRONOMINAL PREFIXES.** There are three persons and two numbers (singular and plural), making six persons in all. The third persons, as we have seen, are indicated either by the absence of a pronominal element or by deictic prefixes which come between the adverbial prefixes and the first modal elements. There thus remain four persons (first person singular and plural, second person singular and plural) for treatment here. In the definite tenses the pronominal elements are appended to the second modal elements, with which they form a syllable, an inorganic A or i, if necessary, serving to connect them. In the indefinite tenses the pronominal elements are appended to whatever element (adverbial prefix, deictic element, or first modal prefix in reduced form) happens to precede them. They never begin their syllable except in the comparatively small number of cases in which the verb form, indefinite in tense, has nothing preceding the pronominal element or, in the case of the third person, nothing preceding the third modal prefix or verb-stem. When this happens, the second person singular and plural and the first person plural stand at the very beginning of the verb; the first and third persons singular, however, begin with an inorganic vowel A-.

**First Person Singular -c-** (cf. Hupa -w-; Kato -c-; Chipewyan -s-):

- te/θic/ya “I go”
- θicI/t’äl “I kicked him”
- nic/ya “I come”
- dâ/νac/t’Ac “I go to bed”
- t’è/An/γAc/laI “I am sinking in the water”
- γAct/lô “I laugh”
In definite tenses with θ- or n- as prefix the inorganic vowel connecting these elements with -c- is regularly i; this is evidently due to the palatal quality of the -c-. In definite tenses with γ- as prefix, however, the normal inorganic vowel, ʌ, is found, due, no doubt, to the velar position of the prefix. In the indefinite tenses the connecting vowel, if required, is always ʌ. Where we have nʌc- we are dealing with first modal ne-, reduced to n-, plus -c-, not with second modal n- plus -c-; contrast definite nʌc/ya with indefinite dʌ/nʌc/ˈʌc.

Before s- sibilants -c- is assimilated to -s-:
\[dʌ/ˈʌc/se \text{ "I'm not crying" (}<^{*}Ac/se)\]

\[θic- \text{ goes back to original } ^{*}sic- \text{ or } ^{*}sAC-. \text{ When -c- came to stand before a dental consonant (d, t, l), it was assimilated to -s-, and the inorganic vowel preceding it assumed the form ʌ; this } ^{*}SAS- \text{ then regularly became } \theta\theta-:\]
\[dʌ/\theta\theta/dʌ \text{ "I am sitting"} \]
\[γe/\theta\thetal/lo \text{ "I break into laughter"} \]
\[na/γʌ/\theta\thetal/xʌlt \text{ "I vomit"} \]
\[t'e/\theta\thetal/la{l}/la \text{ "I've been sleeping"} \]

Before third modal -l-, θic- seems to be regularly retained (cf. θicl/tˈal above; θicl/si “I make”). Secondary sAS-, not shifted to θAθ-, is found, however, before l(l) when this element is secondarily changed from third modal -l-:
\[tclʌ/sASl/se \text{ "I cry"} \]

That sASl- here is equivalent to *sASl-<*SACL- is indicated by tclʌ/θil/se “you cry;” contrast əhil/tˈal “you kicked him,” θicl/tˈal “I kicked him.”
It is to be carefully noted that -c- (or its reflexes -s-, -θ-)
is in Chasta Costa found in both definite and indefinite tenses. There is no trace of an element corresponding to the Hupa -e- (-ě-), Kato -i-, Chipewyan -i-, which are found in forms of definite tenses. It is quite probable that the -c- of the indefinite forms was extended by analogy.

**Second Person Singular i-** (cf. Hupa -ní-, i. e. -η; Kato -n-; Chipewyan n-, ne-, or nasalization of vowel:

- t’il/dəc “you run”
- t’ai/γiũ/nă “you drink”
- nă/čiũ/llo “you write”
- na/da/γiũ/l’o “you bathe”
- nă/diũ/l’o/t’e “you’ll bathe”
- yă/γiũ/gəθ “you climb”
- ya/diũ/yac “you are ashamed”
- nă/θiũ/sĩ “you made, told”
- nă/xwili/ye “you play”
- xwili/i “you believe it”
- xwani/nê/θiũ/ya “you win”
- t’il/xwəθ “you cough”

In all these cases the -i- connects a following third modal element (-l-, -l-, or -l-) with a preceding prefix. Examples of -i- beginning its own syllable are:

- i/ũ “you sneeze”
- hə/iũ/i “stop!”

If there is no third modal element, the -i-, lengthened to close -i-. closes its syllable:

- dă/ni/t’Ac “go to bed!”
- t’i/la “you are sleeping”
- dă/θi/dă “you are sitting”
- yă/γi/t’a “you fly”
- də/i/se “you do not cry”
This i-, e-, is only secondarily the second person singular subjective element. The original element was doubtless -η (cf. Hupa), which was reduced to nasalization of preceding vowels; the inorganic vowel, when nasalized, took on i- timbre. Finally, when nasalization disappeared, the i- timbre alone remained as the reflex of original -η. Where, in many indefinite tense forms, the nasalized vowel was other than an inorganic one, there was nothing left of the -η:

\[
dō/yā/tā “you won’t fly”
\]
\[
nā/xē “you paddle”
\]
\[
nēl/i “look at him!” (cf. nēc/i “I’m looking at him”)\]

In such cases the second person singular fell together with the third, as in dō/yā/tā “he won’t fly.”

First Person Plural (i)t-49 (cf. Hupa it/d-, -d-; Kato d-; Chipewyan -t-, -d-50):

\[
t’īt/lā “we are sleeping”
\]
\[
tc/At/t’īt/θā “we wash ourselves”
\]
\[
t’e/nīt/lā “we drown”
\]
\[
dā/nīt/t’Ac “we went to bed”
\]
\[
γc/θīt/i “we saw him”
\]
\[
yā/γīt/lā “we fly”
\]
\[
t’e/An/γīt/lā “we are sinking in the water”
\]
\[
dō/it/se “we are not crying”
\]

In Hupa and Kato regularly, and in Chipewyan often, the first person plural subjective pronominal prefix begins its syllable; in Chasta Costa it regularly ends its syllable, unless it has to stand at the beginning of the verb form, when it constitutes a syllable by itself (cf. dō/it/se above; dō “not” is independent adverb rather than prefix).

49 t is here unaspirated, and is thus etymologically identical with d.
50 In Father Legoff’s Montagnais paradigms -id- or -it- often, in fact regularly, appears -i- seems, as in Chasta Costa, to be organic.
If the prefix preceding the pronominal element ends in a vowel, the -i- disappears:

\[dō/yāt/\text{i}l/\text{a} \text{ "we won't fly"}\]

This does not mean, however, that this -i- is to be considered an inorganic vowel, as is the case in Hupa \(it/d\). If -it- is followed by third modal -t-, both -t- elements combine into a single -t-, and all that is left of the pronominal prefix is the -i-:

\[t'ā/\gammaā/\text{θi}l/\text{nā} \text{ "we drink" (contrast \(t'ā/\gammaāθ\text{θ}/\text{nā}
\text{ "they drink")}\]

If the third modal element is -l- or -l-, -t- disappears and -l- is changed to -l-; thus the first person plural of -l- verbs and -l- verbs is always formed alike. In Hupa and Kato third modal -l- regularly becomes -l-, but \(d\)- is preserved; hence Hupa \(d\text{i}l\text{-}, \text{Kato }d\text{d}l\text{-}. \) In Chipewyan, however, as in Chasta Costa, -l- not only becomes -l-, but -t- disappears. For Chasta Costa this means that the second person singular and first person plural of -l- verbs is identical, provided, of course, that there is no deictic prefix of plurality in the latter and that the verb stem does not change for the plural. Examples of -l- verbs are:

\[dā/de/\text{θi}l/\text{θi}/\text{i} \text{ "we are sitting"} \text{ (cf. Chipewyan }de/\text{θi}l/\text{θi}/\text{i}
\text{ "we are sitting")}\]
\)[nā/di\l/nic “we work” (cf. \(nā/d\text{i}l/nic “you work"")]
\)[t’\l/xw\text{θ} “we cough” (cf. \(t’\text{\l}/xw\text{θ} “you cough”)]
\)[nā/xw\text{l}/ye “let us play” (cf. \(nā/xw\text{l}/ye “you play”)]
\)[\text{il}/\text{\az “we sneeze” (cf. }\text{il}/\text{\az “you sneeze”}]
\)[nā/\text{da}/\gamma\text{i}l/\text{e}l “we are bathing;” \(nā/d\text{i}l/\text{e}l “we’ll bathe”]
\)[t\text{cla}/\gamma\text{a}/\text{θi}l/se “we cry” (cf. }t\text{cla}/\text{θi}l/se “you cry”]

Examples of -l- verbs are:

\[yū/\text{wīs }\gamma a/d\text{i}l/nī “we whistle” (cf. third person plural: \(\gamma a/d\text{\text{i}l/nī})
\]
\)[nā/t\text{c}l\text{i}l/\text{L}l\text{ō “we write” (cf. }nā/t\text{c}l\text{i}l/\text{L}l\text{ō “you write”}]


If, in an indefinite tense form, the pronominal element is preceded by a prefix ending in a vowel and is, besides, followed by third modal -i- or -t-, both -i- and -t- have to disappear and there is nothing left of the pronominal element except, in the case of -i- verbs, the change of -i- to -t-:

\[ \text{nél/}i \text{ "let us look at him!" (cf. nél/}i \text{ "look at him!")} \]
\[ \text{tcš/}ā/γšl/se, \text{ very likely misheard for tcš/}ā/γšl/se \text{ "we'll cry" (cf. definite: tcš/}ā/γšl/θšl/se \text{ "we cry")} \]

Second Person Plural ē- (cf. Hupa ē-; Kato ē-; Chipewyan ē-):

\[
\begin{align*}
t'ō/\ellatl & \text{ "ye sleep"} \\
t'ē/\elld/\ellal & \text{ "ye have been sleeping"} \\
t'ē/nō/\ellal & \text{ "ye drown"} \\
yō/γō/lōa & \text{ "ye fly"} \\
t'ē/\ellan/γō/\ellal & \text{ "ye sink in the water"} \\
t'ō/γšl/θšl/nō & \text{ "ye drink"} \\
dō/ō/\ellse & \text{ "ye are not crying"}
\end{align*}
\]

No aspiration was heard after ē in Chasta Costa. This does not seem due to faulty perception, as ē- verbs keep their ē- after ē-, whereas, under similar circumstances, Hupa, Kato, and Chipewyan change -ē- to -l- (ō-ē- becomes ōl-). Indeed, in Chasta Costa ē- verbs change their ē- to -l- after second person plural ē-. Examples of ē- before ē- verbs are:

\[
\begin{align*}
nō/dōl/\ellnic & \text{ "ye work"} \\
nə/\ellda/γōl/čl & \text{ "ye bathe;"} \\
nō/dōl/čl & \text{ "ye will bathe"} \\
t'ōl/\ellxwλθ & \text{ "ye cough"} \\
nō/xōl/γē/\ellle & \text{ "ye play" (for -xwōl-)} \\
oō/āz & \text{ "ye sneeze"}
\end{align*}
\]

Examples of -l- becoming ē- after ē- are:

\[
\begin{align*}
yā/dōl/nō & \text{ "ye utter, make a sound" (cf. third person plural } \\
yā/dāl/nō \text{)} \\
nē/xōl/ōl/ī & \text{ "ye look at him" (cf. nēl/i "you're looking at him")}
\end{align*}
\]
When, in an indefinite tense form, ő- is preceded by a prefix ending in a, a and ō contract to long ā (which, it would seem, remains long even in closed syllables):

$$\text{dō/}yā/tla \text{ “ye won’t fly” (<}^*\text{yaō“; cf. third person singular dō/}yā/tla \text{ with original yā-; and second person singular dō/}yā/tla <^*\text{ya“<}^*\text{yan“}}$$

$$\text{tčlā/γāl/se/t’e “ye will cry” (cf. definite: tčlā/γāl/θōl/se “ye cry;” and contrast tčlā/γāl/se “we’ll cry” with short -ā-)$$

**Third Person.** As already noted, the third person, apart from possible deictic prefixes, is marked by the absence of any pronominal element. If the element preceding the third modal prefix or the stem consists of a consonant which must begin its syllable, an inorganic -A- is found between the two; if a third modal prefix is absent, the syllable preceding the stem is closed by a consonant borrowed from the first consonant of the stem. Examples of third persons with -A- before a third modal prefix are:

$$\begin{align*}
yā/dāl/yAc & \text{ “he is ashamed”} \\
\text{t’Ac/dAc} & \text{ “he runs”} \\
\text{nā/xwāl/yē} & \text{ “he plays”} \\
\gammaā/γAl/γθ & \text{ “he climbs”} \\
yā/\text{wis} \ dAl/nī & \text{ “he whistles”} \\
t’ā/γAl/nā & \text{ “he drinks”}
\end{align*}$$

Examples of third persons with -A- followed by an inorganic consonant are:

$$\begin{align*}
dā/nAt/t’Ac & \text{ “he went to bed” (-t- is not third modal; cf. second person singular dā/nī/t’Ac) } \\
t’ē/an/γAl/la & \text{ “he is sinking in the water” (-l- is not third modal; cf. second person singular t’ē/an/γī/la) }
\end{align*}$$

First modal n-, reduced from ne-, however, has in several cases been found without following inorganic vowel and consonant.
In such cases it closes the preceding syllable, which may even belong to another word. Examples are:

$dô/śľť 'bun/m ťe "not-anywhere there-is" (cf. Kato qn/ťe "it is;" Hupa ūn/m ťe "there is")

$ťn/dô "nine" (really ṭa n/dô "one is-lacking"); nā/xān/dô "eight" (reduced from nā/xi n/dô "two are-lacking") (cf. Kato n/dô/ bûn "it will not be," but also nūt/dô "all gone")

cīc/mānèn/dô' (=cī c/mānè n/da') "I my-house is" (cf. Chipewyan ne/da "she sat")

If the verb form consists, properly speaking, of the stem alone, without prefix of any kind, an inorganic A- completed by a consonant that depends for its form on the first consonant of the stem is prefixed for the third person:

$as/śē/tďe "he must cry" (<*sē/tďe; cf. dô/śas/šē "I'm not crying" <*Ac/sē)

dō/wa/Al/tďe "he will become" (<*tďe; dō/wa is adverb not influencing form of verb proper. That -l- is here no third modal element is shown by forms like Hupa ō/le "let him become")

This A- at the beginning of a third personal form appears also when the verb begins with a third modal element:

Al/Asz "he sneezes"

In this respect Chasta Costa differs from Kato, which need have nothing preceding the stem; with As/se compare Kato tce' "he cried."

In the third person of definite tenses with second modal γ- or ŋ- prefix this element is followed by -i, in case there is no third modal prefix present. This goes back, without doubt, to nasalized -i- or -A-, in turn reduced from original -in- (or -Aη). This nasal element, characteristic of definite third personal forms (except such as have θ-, Athabascan s-, as second
modal prefix) is found also in Hupa (-iñ-), Kato (-un-), and Chipewyan (-n-, -in-). Examples are:

\[t'e/ni/lat\] “he drowns” (cf. Kato tc'n/nål/lat “it floated there,” nål assimilated from nun-; t'e/ni/lat also “you drown”)

\[γl/dac\] “he dances” (cf. Kato tc'/gån/dac/kwañ “he had danced”)

\[yā/γl/la\] “it flies” (cf. Hupa na/win/tau “it will settle down;” yā/γl/la also “it flies”)

\[dā/s'ta\] “it pains” (dā-<*dη-, contracted\(^{11}\) from *de/-γη; cf. Hupa dā/win/teat “it got sick”)

Rather hard to understand is:

\[t'ē/An/γAl/lāl\] “he is sinking in the water”

One would have expected -γī-, not -γAl- (as seen above, -l- is not third modal, but inorganic). Is γAl- reduced from first modal γe-, this form being indefinite in tense?

In Hupa this -iñ- does not seem to be found before third modal prefixes; in Chipewyan -n- (-in-) may, however, occur before -l- and, as inferred from Father Legoff’s Montagnais paradigms, also -l-. As for Chasta Costa, what examples are available on this point show that -i- does not occur before -l- (e. g. yā/γAl/gāθ “he climbs”). For l- verbs I have no safe example. Before -l- it seems that -i- is present in some cases, not in others:

\[tclō/γit/sil/la\] “he pointed with his finger”

but, without -i-:

\[na/da/γAl/tlō\] “he is bathing”

On the whole, it seems possible that Athabascan -An- (or -An- -iñ-) was originally a more freely movable element than it has

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\(^{11}\) Parallel in form to Hupa verbs belonging to Class I, Conjugation 1 D, in which prefixed first modal e- or deictic k plural contracts with -η, w- (Athabascan γ-) being lost. See Goddard, \textit{op. cit.}, p. 113.
become in e. g. Hupa, being required by certain verbs in their definite tenses, but not by others. This is suggested also by Father Legoff’s Montagnais paradigms.

**THIRD MODAL PREFIXES.** There are three of these: -I-, -L-, and -t-; they always complete a syllable immediately before the stem. -I- is characteristic of many verbs which are either transitive or, at any rate, imply activity directed outward; in some cases, however, this significance is not obvious. As we have seen, this -I- becomes -l- in the first and second persons plural. Examples of -l-(l-) are:

- ñci/ñcl/ñcl “I kicked him”
- ñci/ñcl/dal ná/ñcil/ñci “story to-me you-told, made”
- nácl/nácl “I’m looking at him”
- nácl/dé “he washes (something)”
- nácl/ló “he writes”
- tcl/ló/ló “he sucks”
- yá/wásl dal/ná “he whistles;” yá/wásl dal/ná “I whistle”
- xwan/né/ñcl/yá “you win”

If nothing precedes this element, it seems (unlike -l-) to begin its word without preceding inorganic A-:

- dö/wa/ñt/ñtal/ná “they will be broken” (dö/wa is merely proclitic)
- l/ñt “he is important”

Verbs in -l- are regularly intransitive; they denote states of mind or bodily activities that may be thought of as self-contained, not directed outwards. A reflexive meaning is sometimes apparent. After first person subjective -s- (-s-) it always appears as -l-. Hence the first person singular, the first person plural, and the second person plural of -l- verbs and -l- verbs are always alike (but contrast ñci/ñcl-*sacil- with sasI<*sacil-). As -l-, when standing after s, becomes -l- also in the third person. The second person singular alone remains

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*This verb is irregular, inasmuch as -l- does not occur in the second person singular: yá/wásl dal/ná “you whistle.”*
as an infallible criterion of whether a verb belongs to the /- class or /- class. Examples of /- are:

\[
\begin{align*}
  &ya/d\text{"he is ashamed"} \\
  &xw\text{"I believe;" xwil/\text{"do you expect?"} \\
  &\text{t\text{"he runs"} \\
  &y\text{"he climbs"} \\
  &n\text{"he washed himself"} \\
  &\text{a\text{"he sneezes"} \\
  &t\text{"he coughs"} \\
  &na/\text{"they are bathing"} \\
  &n\text{"he plays"} \\
  &n\text{"he works"} \\
  &\text{tcl\text{"he cries;" tcl\text{"you cry"} \\
  &\text{tcl\text{"you'll cry"} \\
  &h\text{"I stop, cease;" h\text{"stop!"} \\
  &\end{align*}
\]

Verbs in /- are also intransitive. Examples are:

\[
\begin{align*}
  &t\text{"you drink"} \\
  &ye/\text{"he bit (it)"} \\
  &tcl\text{"he pointed with his finger"} \\
  &q\text{"it lies thrown down on top, table-cloth"} \\
  &\text{\text{"I laugh" (\text{"you laugh"})} \\
  &ya/\text{"we are ashamed"} \\
  &\end{align*}
\]

There may be a passive significance in:

\[
\begin{align*}
  &\text{q\text{"whereon it is eaten, table"} \\
  &na/\text{"we vomit"} \\
  &\end{align*}
\]

With iterative na-:

\[
\begin{align*}
  &na/\text{"I vomit"} \\
  &\end{align*}
\]

**Verb Stems.** The stems that have been determined for Chasta Costa are:

\[
\begin{align*}
  &\text{\text{"to have position, to be" (cf. Hupa -ai, -a; Kato -ai, -a):} \\
  &\text{\text{"one table was"}} \\
  \end{align*}
\]
-'Ac “to bring” (cf. Hupa -an, -ān, -auw “to transport round objects”; Kato -qān, -qac): γan/na/'Ac “he will bring it”

-'An “to bring to a halt, stop” (perhaps another form of preceding stem): nā/nī/an “stop him”

-áz “to sneeze”: ACl/āz “I sneeze”

-al “to come” (cf. Chipewyan -us, -'az, -'ais “to travel, used of two persons only?”) an/γi/'al “come on!”

-êl, -el “to bathe (plur. subject)” (cf. Chipewyan -el, -el, -āl “to move on the surface of water”): na/da/γīl/êl “we are bathing”

-‘i “to see, look at” (cf. Hupa -en, -ēn; Kato -‘ēn “to look”): γe/θic/‘i “I saw”

-‘i “to stop, cease” (cf. Hupa -en, -ēn “to do, to act, to deport one’s self?”): hō/γACL/‘i “I stop (laughing)”

-‘i “to believe, expect”: xwACL/‘i “I believe”

-ya, -yac, -yic “to go, come” (cf. Hupa -ya, -ya, -yaug; Kato -ya, -ya, -yac): t’e/θic/ya “I go;” t’AC/γAC/t’e “I must go”

-ya “to eat” (cf. Hupa -yan, -yān, -yaug; Kato -yan “-yil’): tc!Alg/γe/θic/ya “I eat;” q!wAtl/tc!At/dja (<-t/ya) “whereon one eats, table”


-yan “to upset” (cf. Kato -yañ “to clear off”?): dō/wā/An/-nā/yān/nAl “he will upset them”

-ya, -yac “to be ashamed” (cf. Kato -yañ “to be ashamed”): ya/dAl/γAc “he is ashamed;” ya/da/γīl/dja (<-t/ya) “we are ashamed”

-ye “to play” (cf. Hupa -ye “to dance”): nā/xwAtl/ye “he plays”

-lal “to sleep” (cf. Hupa -lal, -lal; Kato -lal, -lql): t’ēį/-lal/la “he’s been sleeping”

-lal “to sink in water;” -lat “to drown” (cf. Hupa -lat,
-la “to float”: t’ê/â/γαν/αlinear “I am sinking;” t’e/-nic/linear “I drown”
-lê “to become” (cf. Hupa -len, -liŋ, -lů, -le; Kato -liŋ, -le): dō/wa/linear/lê “it will become”
-lec “to wager, bet”: nê/τελιν/τετ “I’ll bet you”
-lec “to smoke”: m/τελιν/τετ/s/τετ/τετ “wherewith it is smoked”
-lō “to laugh, smile” (cf. Chipewyan -dlō, -dlōk’): γíl/γí “laugh!”
-nā “to drink” (cf. Hupa -nan, -nān; Kato -nän): t’ā/-γάτ/γάτ “I drink”
-nā “to lie” (cf. Kato nō/τετ/tin/τετ “were left”?): q/ω/τι/ν/τετ/ν “it was lying on it”
-ne “to bite, seize with one’s teeth”: ye/γάτ/νε/να “he bit it”
-nī, -n “to make a sound, to say” (cf. Hupa -ne, -n “to speak, to make a sound;” Kato -nī, -ne, -n, -nec, -nī): yā/wis d/τι/ν “he whistles;” ā/djan “he says”
-nic “to work”: n/τετ/ν/τετ/nic “he works” (cf. Montagnais -ni “exprime l’action des mains”
-Θal “to wash oneself (plur. subject)” (cf. Hupa -sel, -sel “to be or to become warm;” Kato -sil “to steam,” -súl, -súl “to be warm”): τετ/τι/Θal “we wash ourselves”
-Θel “to throw”: yā/γí/Θel “you threw”
-se “to cry” (cf. Hupa -tewan, -tew “to cry, to weep;” Kato -tew, -tew): τετ/τι/se “he cries”
-si “to cause” (cf. Hupa -tewen, -tewiŋ, -tew “to make, to arrange, to cause;” Kato -tewiŋ, -tew, -tewiŋ): náel/si “I cause”
-sil “to point with one’s finger”: τετ/γί/τετ/τετ/τετ “he pointed with his finger”

68 Father L. Legoff, “Grammaire de la Langue Montagnaise,” p. 139.
   dā/θ̣/dā “you are sitting”
-dāc “to run” (cf. Hupa -dal, -daL, -dauk “to pass along,
to go, to come;” Kato -dac “to travel”): t'/āl/dāc
   “he runs”
-dac “to dance” (cf. Kato -dac “to dance”): ml/dac “you
dance”
-de “to wash (sing. subject)” (cf. Kato -deγ, -deγ̣): ná/-
dāl/dè “he washed himself”
-t'āl “to kick” (cf. Hupa -tal, -tāl, -tâl, -tll “to step, to
kick;” Kato -tal', -ḷḷḷ): ṭḷḷ/t'āl “I kicked him”
-t'āc “to lie down, go to bed” (cf. Hupa -ten, -ṭṇ, -ṭuḳ “to
lie down;” Kato -ṭṇ, -ṭụḷ): dā/nac/t'āc “I go to bed”
-t'at “to break, go to pieces” (cf. Chipewyan -tal, -tāl “to
break”): dō/wa/l/t'at/nal “they will be broken”
-te “to want” (cf. Hupa -te “to look for, to search after”?):
   dō/ucl/t'e “I do not want;” dē/ucl/t'e “what I want”
-t'ī “to be, make valuable” (cf. Carrier tīl/thī “thou makest
him valuable, treatest him as important”): l/l't
   γ̣̣̣̣/nā/’ā “he brags”
-t'a “to fly” (cf. Hupa -tαu; Kato -t'ac, -t'a): dō/yāc/l'αu
   “I won't fly”
-t'e “to be of (that) sort” (cf. Hupa -te; Kato -t'e): dō/dαl
   t'αn/l'e “there is not anywhere (one like him)”
-tlō “to swim, bathe (sing. subject)”: nac/tlō “I swim,
bathe”
-tlō “to suck” (cf. Kato -t'ōl): lcḷḷ/l'lō “he sucks”
-tḷl ‘i “to sit (plur. subject)” (cf. Hupa -tse; Chipewyan
-t'γ): dā/de/θ̣ḷḷ/l'γ “we are sitting”
-tsḷl “to hurt, pain (intr.)” (cf. Hupa -tcat, -tcα “to be
sick, to become ill”): ḍḷ/s'at “(my eyes) hurt”
-ts “to go about, live” (cf. Hupa -waL, -wa “to go, to go
about;” Kato -ga, -gaL): nā/γ̣a “he goes about, lives”
-xe “to paddle” (cf. Hupa -xen, -xuk “to float, used only
of plural objects;” Kato -ke “to bathe (plural only);”
Chipewyan -kî “to paddle a canoe, to travel by canoe”)

\[\text{nác}/xe\] “I paddle”

-\[\text{xwAθ}\] “to cough” (cf. Kato \[\text{kös}\] “cough,” as noun; Carrier \[\text{xxwes}\]): \[\text{t'\textlt{A}l}/\text{xwAθ}\] “he coughs”

-\[\text{xxw}\] “to vomit” (cf. Carrier \[\text{khu}\] “vomiting,” as noun): \[\text{na}/\text{γāl}/\text{θAθ}/\text{xxw}\] “I vomit”

-\[\text{gAθ}\] “to climb” (cf. Hupa -\[\text{kas}\] “to throw”): \[\text{γāl}/\text{γAθ}/\text{gAθ}\] “he climbs”

-\[\text{gA}\]c “to throw”? (cf. Hupa -\[\text{kas}\] “to throw”): \[\text{q'wA\textlt{t}/\text{da\textlt{t}}}/\text{gA}\]c “it lies thrown down on top, table-cloth”

It will be observed that several verb stems are restricted in their use as regards number of subject (or object). This trait is characteristic of Athabascan, as also of other American linguistic stocks.

DEFINITE AND INDEFINITE TENSES. My material on Chasta Costa is not full enough to enable me to give a satisfactory idea of its tense-mode system. It is clear, however, that absolute time (present, past, future) is quite subordinate to whether activities are thought of as taking place at some definite time (generally present or past) or are more indefinite as to time occurrence. Indefinite forms are apt to be used for general statements that apply irrespective of any particular time, for future acts, for negative (particularly negative future) acts, and regularly for imperative and prohibitive forms. The contrast between definite and indefinite present forms comes out in:

- **Definite:** \[\text{nā}/\text{dā}/\text{γAcl}/\text{llō}\] “I bathe” (i.e. am now engaged in bathing)
- **Indefinite:** \[\text{cA}/\text{q'wē} \text{na}/\text{dAcl}/\text{llō}\] “I’m used to bathing” (here bathing is not restricted as to time)
- **Definite:** \[\text{tcā}/\text{sās}/\text{se}\] “I cry”
- **Indefinite:** \[\text{t'wē}/\text{dan A}/\text{se}\] “I always cry”

(i.e. laughs at one particular point of time)

- **Definite:** \[\text{γēt}/\text{llō}\] “he breaks into laughter”
- **Indefinite:** \[\text{γA}/\text{llō}\] “he laughs”
definite: *xatl/te/lal/la “they have been sleeping” (may be said of them at moment of waking up)
definite: *xatl/t’Al/lal “they sleep”

Futures, as we shall see, are explicitly rendered by suffixing -te to present (generally indefinite) forms; but simple indefinite forms, particularly with adverbs pointing to future time, may often be used as futures in contrast to definite present forms. Examples are:

definite: *nacdac-yI/l “we are bathing”
definite: *nā/dil/el “we’ll bathe”
definite *θl/θl/dā cal na/θiI/sī “story to-me you-told”
definite: *xün/dē *θl/θl/dā nāI nācl/sī “tomorrow story to-you I-tell”
definite: *n/γe/θIc/i “I saw you”
definite: *xAtl/lsIt/θan dō/θan/γAc/i “this-evening I’ll see-you”
definite: t’e/θlIc/ya “I go”
definite: xun/dē t’Ac/γIc “tomorrow I’ll-go”

Negative presents or futures are regularly expressed by prefixing dō “not” to indefinite forms; when more explicitly future, -te is suffixed to them. Examples of indefinite forms preceded by dō are:

definite: tclāc yā/γI/l I “bird is-flying”
definite: dō/yā/l I “he won’t fly”
definite: na/γI/θlI/θI/I “I vomit”
definite: dō/na/γIc/θI/I “I do not vomit”
definite: tclā/θI/l/θI/I “I cry;” tclā/θI/l/θI/I “you cry”
definite: dō/θI/I/θI/I “I’m not crying;” dō/θI/I/θI/I “you’re not crying”
definite: γe/θIc/I “I saw him;” c/γe/θI/I “you saw me”
definite: dō/γIc/I “I didn’t see him;” dō/θI/I/θI/I “you didn’t see me”
definite: t’e/θIc/ya “I go;” t’é/θI/ya “he goes”
definite: dō/t’Ac/yIc “I’ll not go;” dō/t’Ac “he won’t go” (<*t’A/γIc)
Imperatives are simply second person subjective indefinite forms. Examples are:

\[\gamma l/\bar{i} \text{ "see him!"} \quad c/\gamma l/\bar{i} \text{ "see me!"} \]
\[n\ell/\bar{i} \text{ "look at him!"} \quad (\text{identical with indefinite present: } n\ell/\bar{i} \text{ "you're looking at him"}) \quad ne/c\ell/\bar{i} \text{ "look at me!"} \]
\[n\bar{a}/n\ell/\bar{n} \text{ "stop him!"} \]

Prohibitives are simply imperative forms preceded by \(l\alpha:\)

\[l\alpha/\gamma l/\bar{i} \text{ "don't see him!"} \]

First person plural indefinite forms may have hortatory significance:

\[n\bar{a}/x\ell l/y e \text{ "let us play!"} \]

As regards form, definite tenses are primarily distinguished from indefinite tenses by the presence of second modal prefixes in the former, often also by the appearance of the first modal prefixes in a fuller form than in the latter; the presence of \(-i-\) or \(-i-\) in certain third person definite forms may also be recalled. It seems, further, that certain adverbial prefixes which have a short vowel (even though in an open syllable) in definite forms lengthen it in corresponding indefinite forms:

<table>
<thead>
<tr>
<th>Definite</th>
<th>Indefinite</th>
</tr>
</thead>
<tbody>
<tr>
<td>n\bar{a}/d\alpha/\gamma \ell t/t\bar{o} \text{ &quot;I bathe;&quot;}</td>
<td>n\bar{a}/d\alpha/\gamma \ell t/t\bar{o} \text{ &quot;you bathe;&quot;}</td>
</tr>
<tr>
<td>na/da/\gamma \ell t/t\bar{o} \text{ &quot;he's bathing&quot;}</td>
<td>na/da/\gamma \ell t/t\bar{o} \text{ &quot;you'll bathe;&quot;}</td>
</tr>
<tr>
<td>n\bar{a}/d\ell t/t\bar{o}/t\bar{e} \text{ &quot;he'll bathe&quot;}</td>
<td>n\bar{a}/d\ell t/t\bar{o}/t\bar{e} \text{ &quot;you'll bathe;&quot;}</td>
</tr>
<tr>
<td>na/da/\gamma l/\ell \text{ &quot;we are bathing;&quot;}</td>
<td>na/da/\gamma l/\ell \text{ &quot;we'll bathe;&quot;}</td>
</tr>
<tr>
<td>na/\ell t/d\alpha/\gamma \ell l/\ell \text{ &quot;we are bathing&quot;}</td>
<td>na/\ell t/d\alpha/\gamma \ell l/\ell \text{ &quot;we'll bathe;&quot;}</td>
</tr>
<tr>
<td>n\bar{a}/d\ell l/\ell \text{ &quot;ye will bathe;&quot;}</td>
<td>n\bar{a}/d\ell l/\ell \text{ &quot;ye will bathe;&quot;}</td>
</tr>
<tr>
<td>n\bar{a}/x\ell t/d\alpha/\ell \text{ &quot;they will bathe;&quot;}</td>
<td>n\bar{a}/x\ell t/d\alpha/\ell \text{ &quot;they will bathe;&quot;}</td>
</tr>
<tr>
<td>t\ell a/\gamma l/\ell l/\ell \text{ &quot;we cry;&quot;}</td>
<td>t\ell a/\gamma l/\ell l/\ell \text{ &quot;we'll cry;&quot;}</td>
</tr>
<tr>
<td>t\ell a/\gamma l/\ell l/\ell \text{ &quot;we cry&quot;}</td>
<td>t\ell a/\gamma l/\ell l/\ell \text{ &quot;we'll cry;&quot;}</td>
</tr>
</tbody>
</table>

These changes of quantity, however, are doubtless only secondarily connected with change of tense, as indicated, e. g., by
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tclā- in definite singular forms: tclā/sâst/se “I cry;” tclā/-
thul/se/ha “do you cry?” It is very likely that we are dealing
here primarily with considerations of syllabic and quantitative
rhythm or balance.44

In Hupa Goddard has exhaustively shown that verb stems
often assume different forms for different tenses and modes.
This is very likely also true to a considerable extent of Chasta
Costa, but I have but little material bearing on this point.
A quantitative change is found in:

| definite -el: na/da/γâ/êl “we are bathing”
| indefinite -el: nā/dîl/el “we’ll bathe”

-c characterizes indefinite forms in:

| definite -ya: t'e/θîc/ya “I go;” t'e/θî/ya “you go”
| indefinite -yâc: t'âc/yâc/t'âe “I must go;” t'î/yâc/t'e “you
must go”
| negative indefinite -yic: dâ/t'âc/yîc “I’ll not go;” dî/t'î/-
yîc “don’t go!”
| definite -ya: ya/da/γûl/djâ(<t/ya) “we are ashamed”
| indefinite -yâc: ya/dâc/yâc “I am ashamed”

PRONOMINAL OBJECTS. Pronominal objects are regularly
prefixed to the verb. They come before deictic and first modal
elements, but after adverbial prefixes. Thus, while not as
thoroughly immersed in the verb form as the subjective pronominal
elements, they cannot well be considered apart from it.
The third person singular object is not designated. In
form the objective elements are, on the whole, identical with
the possessive pronominal prefixes of the noun. They are:

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. c-</td>
<td>1. nô-</td>
</tr>
<tr>
<td>2. n-, ne-</td>
<td>2. nô-</td>
</tr>
<tr>
<td>3. —</td>
<td>3. xô-</td>
</tr>
</tbody>
</table>

44 Hardly stress accent as such. I cannot help feeling that such rhythmic phenomena
will turn out to be of fundamental importance for Athabascan generally.
"He—them" or "they—them" is expressed by means of *xθ-.* c- and n-, when standing at the beginning of a verb form, take no inorganic *A- before them (contrast subjective *Ac-).

The definite forms of *γθΩ/ι "he saw him" with combined pronominal subject and object are:

With first person singular object:

Sing. 2. *c/γe/θi/ι" you saw me"
   3. *c/γcθ/ι
   3. *c/xΑ/γcθ/ι

With second person singular object:

Sing. 1. *n/γe/θic/ι"I saw you"
   3. *n/γcθ/ι
   3. *n/xΑ/γcθ/ι

With first person plural object:

Sing. 2. *nθ/γe/θθ/ι"you saw us"
   3. *nθ/γcθ/ι
   3. *nθ/xΑ/γcθ/ι

For *nθ/γe/θθ/ι "you saw us" one would have expected *nθ/-
   *γe/θi/ι. It seems that "ye saw us" has been extended in its usage to embrace also "you (sing.) saw us." It may indeed be that my data on this point rest on a misunderstanding, but there seems to be something analogous in Hupa. "You (sing.) are picking us up" would be expected in Hupa to be *yθn/nθ/-

   *hil/law (hil- assimilated from hiñ-). Instead of this form, however, Goddard lists *yθn/nθ/h5/law, which is not identical with but seems, as regards its second θ- vowel, to have been influenced by *yθn/nθ/h5/law "ye are picking us up."

With second person plural object:

Sing. 1. *nθ/γe/θic/ι"I saw you (pl.)"
   3. *nθ/γcθ/ι/ι
   3. *nθ/xΑ/γcθ/ι/ι

—Goddard, op. cit., p. 186.
With third person singular object:

Sing. 1. \( \text{γε}/\text{θί}\text{ί}/\text{i} \) “I saw” Plural 1. \( \text{γε}/\text{θί}\text{ί}/\text{i} \)
2. \( \text{γε}/\text{θί}/\text{i} \)
3. \( \text{γε}/\text{θί}/\text{i} \)

With third person plural object:

Sing. 1. \( \text{xθ}/\text{γε}/\text{θί}\text{ί}/\text{i} \) “I saw Plural 1. \( \text{xθ}/\text{γε}/\text{θί}/\text{i} \) (heard them)”
2. \( \text{γε}/\text{θί}/\text{i} \)
3. \( \text{xθ}/\text{γε}/\text{θί}/\text{i}/\text{la} \)

Here again, one would have expected \( *\text{xθ}/\text{γε}/\text{θί}/\text{i} \) for “you (sing.) saw them.” As it is, “you (pl.) saw him” seems to be used also for “you (sing.) saw them,” both forms being logically parallel in that both involve a second person—third person relation, only one of the two persons, however, being plural.

Objective forms of indefinite tenses of this verb are:

With first person singular object:

\( \text{dθ}/\text{wα}/\text{c}/\text{γί}/\text{i}/\text{t’e} \) “you’ll see me”
\( \text{dθ}/\text{wα}/\text{c}/\text{γί}/\text{i}/\text{t’e} \) “you didn’t see me”
\( \text{c}/\text{γί}/\text{i}/\text{t’e} \) “see me!”
\( \text{c}/\text{γα}/\text{i}/\text{i}/\text{t’e} \) “he’ll see me”

With second person singular object:

\( \text{dθ}/\text{wα}/\text{n}/\text{γί}/\text{i}/\text{t’e} \) “I’ll see you”

With third person singular object:

\( \text{dθ}/\text{wα}/\text{γί}/\text{i}/\text{t’e} \) “I’ll see him”
\( \text{dθ}/\text{γί}/\text{i}/\text{t’e} \) “I didn’t see him”
\( \text{dθ}/\text{γί}/\text{i}/\text{t’e} \) “I won’t see him”
\( \text{dθ}/\text{wα}/\text{γί}/\text{i}/\text{t’e} \) “you’ll see him”
\( \text{γί}/\text{i}/\text{t’e} \) “see him!”
\( \text{la}/\text{γί}/\text{i}/\text{t’e} \) “don’t see him!”

Objective forms of indefinite tenses of \( \text{ne}-\text{t’i} \) “to look at” are:

With first person singular object:

\( \text{ne}/\text{cι}/\text{i}/\text{t’e} \) “look at me!”
\( \text{ne}/\text{cά}/\text{i}/\text{t’e} \) “he looks at me!”
With third person singular object:

- néd/ɨ “I’m looking at him”
- dô/néd/ɨ “I’m not looking at him”
- nê/ɨ “you’re looking at him;” “look at him!”
- nê/ɨ “let’s look at him!”
- ne/xô/ɬɨ/ɨ “you (plur.) look at him”

This last form may, likely enough, have been mistranslated for “you (plur.) look at them” (cf. xô/ɨ/ɩ/ɨ above).

Other forms with first person singular object are:

- câs/î “he lets me, causes me to”
- câs/ɬ’â “he kicked me”

With second person singular object:

- nè/ɬ/ɪɛ/ɬɛc “I’ll bet you”

PASSIVES. As in Hupa, pronominal subjects of passive verbs are objective in form. From ne-t-ɨ are formed:

- nès/ts!/ɬ/ɨ “I am seen”
- nên/ts!/ɬ/ɨ “you are seen”
- nê/ts!/ɬ/ɨ “he is seen”
- ne/xô/ɬ/ɪ “ye are seen”
- ne/xô/ɬ/ɪ “they are seen”

-ɪ is, which appears in these forms, probably contains third modal -ɪ- preceded by deictic ts/- implying indefiniteness of logical subject: “man sieht mich.” Apparently connected with this ts/- is ts/- in:

- mâ/ɭɛ/ɬɛc “wherewith it is smoked, smoking utensils”

VERBAL SUFFIXES. A number of enclitic elements of temporal or modal significance are found rather loosely suffixed to verb forms. These, so far as illustrated in our material, are:

- t’e future particle (cf. Hupa -te, -tel; Kato -tel, -të/le):
  - ɬɛ/ɬɛ/ɭɛ/ɬɛ “I shall sneeze”
  - t’â/ɬɛ/ɭɛ/ɬɛ “I shall sleep”
  - nâ/ɭɛ/ɭɛ/ɬɛ “I shall bathe”
  - nê/ɬ/ɪ/ɬɛ “I’ll look at him”
  - dô/ɭɛ/ɬɛ “I won’t see him”
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nā/dAÇL/nic/t'e “I shall work”
dō/nā/dAÇL/nic/t'e “I shall not work”
tc!áÇL/se/t'e “I shall cry”
dō/As/se/t'e “I'll not cry”
tc!áÇL/se/t'e “you will cry”

-t'e seems to imply obligation to some extent, as well as simple futurity, as is shown by its translation as “must” in some cases:

As/sé/t'e “he must cry”
t'Ac/yAc/t'e “I must go”
t'i/yAc/t'e “you must go”

All forms with suffixed -t'e, it will be noticed, are indefinite; none has been found that is definite.

-nAl seems to be used for future acts:

dō/wā/An/nā/yan/nAl “he will upset them”
dō/wā/1/t'ál/nAl “they will be broken, go to pieces”

-ha, -hā interrogative:

nā/xwil/ye/ha “are you playing?”
t'e/θő/lat/ha “have ye been sleeping?”
nō/yē/θő/i/ha “did you see us?”
nel/1/ha “did you look at him?”
tc!ā/θi1/se/ha “did you cry?”
dō/ō/se/ha “are ye not crying?”
As/sē/t'e/ha “will he cry?”
tc!ā/γāl/se/t'e/ha “will ye cry?”
t'ā/γīl/nā/hā “do you drink?”

ha seems to both precede and follow in:

ha/xwil/1/ha “do you expect?”

-la probably inferential (cf. Hupa -xō/lan, -xō/lān):
t'e/θAθ/lat/la “I’ve been sleeping” (said on waking up)
Lāθ/ā/la “there was one (table)”
txAs/xē/la “(evidently) rich”
Probably also in:

*dô/ωî/la* "of course"

-la seems also to be used of simple narrative in past time, with very weak, if any, inferential force:

*tc ámb /γλ/σî/la* "he pointed with his finger"

*ye/γά/νε/la* "he bit it"

*nά/νάθ/γά/la* "he went around it"

*nó/γέθ/ι/la* "he saw you (plur.)" (cf. *nó/γέθ/ί "he saw us")

*nó/xα/γέθ/ι/la* "they saw you (plur.)" (cf. *nó/xα/γέθ/ί "they saw us")

*xî/γέθ/ι/la* "they saw them" (cf. *xî/γέθ/ί "they saw him")

I do not know whether the contrasts in person and number found in the last three pairs of forms are real or only apparent.

-*le* of unknown significance

*nά/xό/γέ/le* "you (plur.) play"

**Syntactic Combination of Verbs.** Two verb forms sometimes combine syntactically, one depending on the other. The second verb is subordinate to the first in:

*dô/ακ/ί/ε nά/xακ/ε/γε* "I-do-not-want I-play," i. e. "I don't want to play"

*hό/γακ/ί/ε γακ/ι/ο* "I-stop I-laugh," i. e. "I stop laughing"

*hό/ι/ε γακ/ι/ο* "stop laugh!" i. e. "stop laughing!"

*ha/xακ/ι/ε ha γακ/ι/ο* "do-you-expect he-will bring?"

It seems that sometimes the first verb, which is then a third personal form, acts as a sort of complementary infinitive to the second:

*yά/γι/τ/λα θικ/σι* "he-flies I-make-him," i. e. "I let him fly"

*yά/γι/τ/λα κασ/σι* "he-flies he makes-me," i. e. "he lets me fly"

*l/τ/ι γακ/ι/ο* "he-is-important he-has-for(?)," i. e. "he brags about him"
TEXT: THE GOOD DOG. 

\[ \text{l/t}^\text{17} \quad \gamma\text{an}/\text{na}^\text{28} \quad \text{x}^\text{24}/\text{dAt}^\text{29} \quad \text{li}/\text{tc'le}^\text{40} \quad \text{dO}/\text{dAt}^\text{41} \]

Make important he has his own dog. "Nowhere

\[ '\text{An}/\text{t'le}^\text{42} \quad \text{n'\text{a}/\text{ya}^\text{43} \quad \text{a}/\text{dJan}^\text{44} \quad \text{dé}/\text{ucl}/\text{t'e}^\text{49} \quad \text{hI}/\text{t'li}^\text{46} \]

is like him moves about," he says. "What I want that thing

\[ \text{56} \text{Wolverton Orton claimed not to know any regular Chasta Costa myth texts. The} \]

following, which is merely an English joke anecdote taken from a popular periodical that

happened to be lying about and translated into Chasta Costa by Mr. Orton, will at least

serve to give some idea of Chasta Costa word order and sentence construction.

\[ \text{57 i}, \text{third modal element. -'t, verb stem. Cf. Carrier tI/} \text{thi} \text{"thou makest him} \]

valuable, treatest him as important."

\[ \text{58 yAn-} \text{and na-, adverbial prefixes. -'a, verb stem. For na'/} \text{u- "to have," cf. Hupa} \]

\text{na/h/} \text{a/te} \text{"you will have." "He has his dog made valuable, treated as important," i.e.,} \]

"he brags about his dog." Indefinite tense, because statement is general and does not

refer to any one point of time.

\[ \text{59 x-, third personal pronominal element. -dAt, reflexive possessive element.} \]

\[ \text{60 Possessed form of 1/ "dog." Observe change of i- to l-, and suffxing of -tclp. Cf.} \]

Hupa -Ii\text{n/k(y!)}e; Chipewyan \text{zIn/k'e}.\]

\[ \text{61 dO, negative adverb. -dAt, postpositive element.} \]

\[ \text{62 'A-, reduced from a-, prefix used with verbs of saying, doing, and being. It is} \]

probably equivalent to indefinite demonstrative: "(there is of) that (kind)." -n-, first

modal element. -Ile, verb stem. Cf. Hupa \text{uN}/\text{e} "there is;" Kato \text{qN}/\text{e} "it is;" Chipewyan \text{an/} \text{l'e/hi/k'e} "it was." Indefinite tense, because statement is general.

\[ \text{63 na-, adverbial prefix. -ya, verb stem. "Moves about," i.e., "is living, is to be} \]

found": "there is no (dog) like him anywhere." Cf. Hupa \text{na/} \text{wa} "they were there;" Kato \text{na/} \text{ga/bq}w\text{n} "he had walked;" Navaho \text{na/} \text{wa}, i.e., \text{na/} \text{ya}, "he is going about" (quoted from Goddard, Analysis of Cold Lake Dialect, Chipewyan). Indefinite tense; general statement.

\[ \text{64 a-, prefix used with verb of saying; see note 62. dj-, third personal deictic prefix;} \]

or perhaps \text{dj}j- = \text{*dyA-}, reduced from \text{*dye-}, first modal prefix \text{d-} and third person deictic

prefix ye-. \text{-n}, verb stem. Probably definite in tense, though it shows no second modal

prefix; cf. Hupa present definite third singular a/\text{den}.\]

\[ \text{65 de, apparently relative in force. a-, adverbial prefix. -c-, first person singular} \]

subjective element. \text{-l}, third modal prefix. -'t, verb stem. Indefinite tense; general

statement.\]

\[ \text{66 hi, demonstrative stem. -tl, suffix applying, it would seem, to things. Perhaps} \]

\text{hl/} \text{tli} is assimilated from \text{*hl/} \text{lla}; for -\text{lla}, cf. Chipewyan \text{tla} "that; often used to point} \]

out one of several persons or things characterized by a descriptive phrase or clause."
s/ts/nā/'āc75 a/δ/ac/nī/dan.68 dō t′wī/dē̄99 Lā ā/djan.

to me he brings when I tell him.” “Not everything,” one says.

ī/qi/la74 man/mē/q!

t′/y/ī/72 xat q!wāt/te!at/djā73

Dog-owner around in house he looked around. Then table

Lā/ā/la74 man/mē76 was/xē q!wāt/daθt/gāc76 nāθ/lō77

tablecloth, paper

hi q!wāt/da!śl/nā78 i/γī/tc'ū79 māl/t'c/te!at/ts!a!1/lēc.90

that was lying thereon, that 

wherewith it is smoked.

77 -r, assimilated from c-, objective (or possessive) first person singular pronominal element. -tla, postposition. na-, adverbial prefix. -aمثل, verb stem. Cf. Hupa dō/-

xō/lūh/na/la/asāw "he won’t carry.” Indefinite tense; general statement.

78 -a, as in notes 62 and 64. -t, postposition; refers to implied third person indirect object of verb. -d, first modal prefix. -c, as in note 65. -nī, verb stem. -dan, post-

position; here used to subordinate verb. Cf. Hupa an/nīt/dāy/te "I am telling you.” Indefinite tense; general statement.

79 -f'ā, pronominal stem denoting totality. -de, indefinite demonstrative stem.

80 -hī "dog." -hl/ni "one who has;” evidently contains common Athabascan suffix

71 mAn "house." -me, qle, compound postposition.

72 t′, first modal prefix reduced from t'e-. γ-γ-, first modal prefix γ- reduced from γ-c-

-t, remaining unexplained. -i, verb stem. According to this analysis, t′/y/ī/ is indefinite in tense; this seems hard to understand, as it refers to one act in past time. Another analysis seems more likely: t′-, instead of or misheard for t'e-, form regularly used in definite tenses; γ-, second modal prefix; -i-, definite third person ending for γ-verbs. Cf. Hupa tci/te/wa/le/1 "he looked about as he went along.”

73 q!wat-, postposition “upon” used as adverbial prefix. tc-l-, deictic prefix here indicating indefiniteness of object. -t-, third modal prefix presumably with passive force. -dja, from -ya after -t-, verb stem “to eat.” “It is eaten thereon,” i. e., "table.”

74 Lā, numeral “one,” to which verb proper, θ/ā/la, is attached. θ-, second modal prefix. a-, verb stem. -la, verb suffix. Definite past tense, because referring to definite point of time in narrative. Cf. Chipewyan θe/ā/hī/k'e/la1 "(lake) was there.”

75 -me, postposition.

76 q!wat-, as in note 73. da-, adverbial prefix. θ-, second modal prefix. -t-, third modal prefix. -aθ, verb stem. Verb form (“it lies thrown on top”) used as noun.

77 nā-, adverbial prefix. θ-, second modal element. -lō, verb stem. Verb form (“whereon there is writing”) used as noun.

78 q!wat-, as in note 73. da-, adverbial prefix. s-, second modal prefix. -t-, third modal prefix. doubtless original -l- changed to -l-, -s-, because of preceding s, which in turn is prevented by it from changing to θ-. -nā, verb stem. Definite past tense.

79 Analysis uncertain, presumably demonstrative in force.

80 maθ-, “therewith” consists of pronominal stem m- followed by postposition -t-. t'e-, adverbial prefix. tc-l-, deictic prefix indicating indefiniteness of object. -t-, consonant borrowed from following -ts, to complete syllable begun by tc-l-. ts!a!1, apparently passive in force. -ler, verb stem. Verb form used as noun: “smoking materials.”
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txAs/x6/1a81 d6/at/t,i82 qlwAt/tc!At/dja xâ s/ts!An/na/AC
He was rich bachelor.  “Table quickly he'll bring to me,”
djân/la83 hj/t/i/ni. d6/LAn84 jwAC!t/i/ni.
said dog-owner.  “Not much I believe it,” said bachelor.

n/te/lâc/lec86 c69/dj/i.87 an/y/ni/djân/la hj/t/i/ni tc!ô/yit-
“‘I’ll bet you.’  “All right!” “Come here!” said dog-owner, he pointed
/sîl/la89 li qlwAt/tc!At/dja lât/djân90 nan/nâyi/yâ/la82
with his finger. Dog table once he went around.

xat ye/yât/ne/la92 mâ9/djân93 lâ djân/la dô/at/t/i/ni
Then he bit it at edge. “Don’t!” said bachelor,
t’wi/dô/na/ya/naL94 dô/la95 djân/la qlwAt/tc!At/dja
“everything he will upset.” “Of course,” he said,
“table

81 txAs/x6, adjective stem “rich,” perhaps related to wAs/x6 “good.” -la, verb suffix of probably inferential value.
82 d6, negative. at = all “wife.” -ti, noun suffix denoting “one who has.” “One who has no wife,” i. e., “bachelor.”
83 djân, as in note 64. -la, verb suffix.
84 dâ, negative. LAn, adverb “much.”
85 x6, adverbial prefix. -c, first person singular subjective pronominal element.
86 ni, third modal prefix; from -c, because of preceding -c- (cf. note 98). -i, verb stem.
87 In indefinite present, negative adverb preceding.
88 Ne-, second person singular objective pronominal element. tciâ, adverbial prefix; very likely really compound of deictic element tci- (indicating lack of specified object, namely wager) and modal c-, c- denoting future imperative. -ci, as in note 85. -tc, verb stem. Indefinite present, because of future or slight hortatory meaning: “let me let with you!” Cf. Chipewyan tâ/ta “let me swim.”
89 With ci, cf. Hupa -hâ “good”; Kato -hâ “to be good.”
90 an-, adverbial prefix. y-, first modal prefix. -i, second person subjective pronominal element. -ul, verb stem. Indefinite tense, used as imperative.
91 tciâ, adverbial prefix; perhaps compound of deictic element tci- (object pointed out is not specified) and first modal c- of unknown significance. y-, second modal prefix. -i, connecting element between second and third modal elements, characteristic of third person of definite tenses with y-.
92 tCh-, adverbial prefix: perhaps compound of deictic element tCh- (object pointed out is not specified) and first modal c- of unknown significance. tCh-, third modal prefix.
93 -i, connecting element between second and third modal elements, characteristic of third person of definite tenses with y-.
94 -ai, verb suffix. Indefinite past; marks point in narrative.
95 Numeral adverb of la “one.” -dAn, postposition.
96 Numeral adverb of la “one.” -dAn, postposition.
97 niL, noun stem “one.” -ni, verb stem. -la, verb suffix. Definite past: refers to definite point of time in narrative.
98 ye-, adverbial prefix, ni, second adverbial prefix. -i, third modal prefix. -ne, verb stem. -la, verb suffix. According to this analysis, this verb is indefinite in tense, which is difficult to understand. More plausibly, yat- may be considered as misheard for yat; yat second modal prefix. In that case, it is definite past.
99 mâ4, noun stem “edge.” -dAn, postposition.
100 dô/ma, proclitic adverb indicating futurity, probably not with absolute certainty.
101 nâ, adverbial prefix. -ya, verb stem. -naL, verb suffix. Indefinite in tense, because future in meaning.
102 Adverb containing inferential -la.
dō/wā/An/nā/yān/nāl96 t'wī/dē dō/wa/l/t'āt/nāl97 θAk/gwē
he will upset, everything will go to pieces, in fragments
s/ts'An/na/āc. ha/xwil/i/ha98 AL/tcā/γl99 γAn/na/āc100
he will bring to me. Do you expect big thing he will bring here
la/mē/ql/e/ca.101 was/xē h. nā/nf/An101 nā/nf/an djān/la
all in one time? Good dog. "Stop him, stop him!" said
lō/at/tā/ni. dō/dā/ql/e103 nā/nāc/An104 djān/la if/tā/ni
bachelor. "Unable I stop him," said dog-owner,
t'wī γān/na/ac/t'ē105 xwan/nē/θil/ya106 djān/la dō/at/tā/ni.
"all he will bring here." "You win," said bachelor

96 As in note 94, except that another adverbial prefix, An-, is present.
97 dō/wa and -nāl, as in note 94. t-, third modal prefix. -tāt, verb stem.
99 An-, of unknown significance. t-, prefix common to several adjectives. -tcā/γl, adjective stem "big."
100 γān- and na-, adverbial prefixes. -ac, verb stem. Indefinite tense, because pointing to future time.
101 la, numeral stem "one." -me/qle, compound postposition. -ca, found also with la alone: id/γa "one."
102 nā-, adverbial prefix. n-, first modal prefix. -i, second person singular subjective pronominal element. -an, verb stem. Imperative mode.
103 Adverb containing negative dō-. Perhaps -qle is postposition (cf. -me/qle).
104 nā-, n-, and -an, as in note 102. -cr, first person singular subjective pronominal element. Indefinite in tense, because of preceding negative adverb.
105 As in note 100. -tē, future suffix; here used because idea of futurity is more explicit.
APPENDIX.

A few Galice Creek words were obtained from Mrs. Punzie, a few Applegate Creek words from Rogue River Jack. These two Athabascan dialects are probably practically identical. $\acute{s}$ indicates something acoustically midway between s and c; r (tongue-tip trilled) and l occur as reflexes of Athabascan n; nasalization (indicated by ') seems to occur. k' and k'w are found as contrasted with Chasta Costa x and xw.

**GALICE CREEK.**

\[\text{ya'}/k'\acute{a}s \text{ "seeds (sp.?);" said to be called b\acute{n}ax or b\acute{q}yu in Chinook Jargon}\]
\[tc\acute{l}a/ba/\acute{a}/k'wa's \text{ "brush used for medicinal purposes (sp.?)"}\]
\[L\acute{o}'/d\acute{a}i \text{ "tar-weed" (cf. Chasta Costa L\acute{o}'/d\acute{e}; Hupa}\]
\[L\acute{o}/daitc\]
\[y\acute{e}l/\acute{y}at/ts\acute{l}ai/\acute{y}\acute{e} \text{ "sunflower" (cf. Chasta Costa tc\acute{l}a/\acute{y}at/ts\acute{l}\acute{e})}\]
\[g\acute{u}s \text{ "camass" (cf. Chasta Costa g\acute{\theta}; Hupa k\acute{o}s "bulbs")}\]
\[d\acute{a}l/si \text{ "pine" (cf. Chasta Costa d\acute{\alpha}/si; Kato d\acute{\alpha}/t\acute{c}i\acute{k})}\]
\[l\acute{a}/L\acute{i} \text{ "pine-nut" (cf. Chasta Costa n\acute{a}/L\acute{\i}e)}\]
\[d\acute{e}/r\acute{e}s \text{ "manzanita" (cf. Chasta Costa d\acute{\alpha}/n\acute{\i}c; Hupa}\]
\[d\acute{\i}n/n\acute{\i}w; Kato t\acute{\i}n/n\acute{\i}c\]
\[m\acute{u}/t\acute{s}\acute{l}i \text{ "cat-tail" (cf. Chasta Costa m\acute{a}t/t\acute{c}l\acute{i})}\]
\[\acute{s}\acute{\i}s/da' \text{ "oak" (cf. Chasta Costa c\acute{\alpha}/d\acute{a})}\]
\[l/\acute{d}\acute{a}/ge \text{ "acorn" (perhaps misunderstood; cf. Kato L/ta\acute{\alpha}\acute{g}\text{ "black oaks")}\]

**APPLEGATE CREEK.**

\[k'\acute{\alpha}'/t\acute{c}'u \text{ "goose" (cf. Chasta Costa x\acute{\alpha}'/t\acute{c}'\acute{\u}; Kato ka')}\]
\[d\acute{\alpha}c/t\acute{c}'\acute{\u} \text{ "grouse" (cf. Chasta Costa d\acute{\alpha}c/t\acute{c}'\acute{\u}; Kato d\acute{\alpha}c/-t\acute{c}\acute{\u}d)}\]

(339)
"bob-white, quail"
"ruffed grouse, pheasant"
"pigeon" (cf. Kato kwï/yïnt)
"screech-owl"
"kingfisher"
"red-headed woodpecker"
"sandhill crane" (cf. Chasta Costa sã'/was/-tslé)