A PRACTICAL HEILTSUK-ENGLISH DICTIONARY
with a Grammatical Introduction

Volume One

JOHN C. RATH

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Cover Illustration: Prepared by Mr. David Gladstone, Bella Bella, British Columbia.

ABSTRACT

This dictionary contains approximately 9500 Heiltsuk entries which, in selected cases, feature grammatical derivates and/or examples of usage in addition to their English glosses. It is primarily a reference work for the teachers and students of Heiltsuk and the Heiltsuk practical orthography is therefore used. A grammatical introduction is included relating the orthography to the phonetics and the phonemics of the language and outlining the essentials of morphology and syntax.

Heiltsuk is spoken in the villages of Bella Bella and Klemtu, both situated on B.C. coastal islands not far from Bella Coola and Ocean Falls. It is one of the four North Wakashan languages, the others being Haisla (spoken in Kitimaat), Oowekyala (in Rivers Inlet), and Kwakwala (in Alert Bay, Port Hardy, and various settlements).

RESUME

Ce dictionnaire contient plus de 9500 mots de la langue Heiltsuk et leur version anglaise. En des cas spéciaux ils sont présentés avec des dérivés grammaticaux et/ou des exemples de leur usage. Le dictionnaire contient une introduction grammaticale expliquant les données essentielles de la prononciation du Heiltsuk, ainsi que les structures élémentaires des mots et des phrases. Puisqu'il s'agit d'une oeuvre de référence pour les enseignants et les étudiants de la langue Heiltsuk, l'orthographe pratique plutôt que la transcription phonémique a été employée.

La langue Heiltsuk est parlée à Bella Bella et à Klemtu, villages situées sur la côte occidentale du Canada. C'est une des quatre langues du type Nord-Wakashan, les autres étant le Haisla (parlé à Kitimaat), le Oowekyala (à Rivers Inlet), et le Kwakwala (à Alert Bay, Port Hardy, et plusieurs autres villes et villages).

Les personnes désireuses de recevoir en français de plus amples renseignements sur cette publication sont priées d'adresser leurs demandes à: Service canadien d'Ethnologie, Musée national de l'Homme, Musées nationaux du Canada, Ottawa, Ontario, K1A 0M8.

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PREFACE

This work realizes one of the goals of the Heiltsuk
Language Studies Programme, which is part of a number of
native culture preservation projects instigated by or carried
out at the Heiltsuk Cultural Education Centre in Bella Bella,
British Columbia. The idea of a Heiltsuk Language Studies
Programme dates back to the time when Mr. Cecil Reid, as Chief
Councillor of the Bella Bella Indian Band, first tried to
arouse scholarly interest in the Heiltsuk language. As a
result of his efforts, Dr. Frits H. Kortlandt, then of the
University of Amsterdam, spent the summer of 1972 in Bella
Bella and Klemtu to collect linguistic data. Dr. Kortlandt's
work was continued in the summers of 1973 and 1974 by the
present writer who, at the end of the latter period, was
invited to stay in Bella Bella as resident linguist. In sub-
sequent years, two local people, Mrs. Evelyn Windsor and Mrs.
Lillian Gladstone, became permanent cooperators of the Heiltsuk
Language Studies Programme. They assist with the analysis of
the language and take charge of the teaching of the language
at the local schools. Although, in 1977, this writer stopped
being an employee of the Heiltsuk Cultural Education Centre,
the cooperation with Mrs. Windsor and Mrs. Gladstone, as with
the Centre as a whole, has continued.

The purpose of this work is first of all to provide
spelling guidance when preparing Heiltsuk lessons or tran-
scribing taperecorded Heiltsuk texts. It can in addition serve
as a resource to learners of the language and, not least, to
native speakers who would like to learn to read and write their

language at home. The Heiltsuk practical orthography is used throughout. For the convenience of the Heiltsuk language teachers as well as linguists in general, a grammatical introduction is included which outlines the structure of Heiltsuk.

The core of the information on Heiltsuk supplied in this book stems from the following four consultants (in alphabetic order), Angus Campbell of Bella Bella, William Freeman (deceased) of Klemtu, Willie Gladstone (deceased) and Eli Wallace (deceased), both of Bella Bella. For the elicitation of data, use was made, among other things, of the vocabulary at the end of Franz Boas' publication Bella Bella Texts (1923). Among the many other persons also consulted from time to time are Willie Brown (deceased), Beatrice Brown, Hannah Hall, Henry Hall, Robert Hall, John and Mable Humchitt, Edwin Hunt, Maggie Windsor, and Marshall Windsor, all of Bella Bella. After preliminary analysis of the data, including simple texts, much additional information was obtained by checking the existence of conjectured words and simple sentences. This work, which started in 1976 and continues to the present day, was done mostly in cooperation with Eli Wallace, Evelyn Windsor, Lillian Gladstone, Clarence Martin, and George Housty. The danger of prompting, especially when a list of items with similar structure is presented, is that it may make the consultant forget the difference between the recognizability of the meaning of an item and the actual usability of the item in communication. It is therefore worth mentioning that whenever possible a conjectured item was checked with several consultants. Multiple checking was also imperative because the native language of one of the consultants, Mrs. Evelyn Windsor, is not Heiltsuk but Oowekyala, closely related as the languages are. All consultants are

PART I - GRAMMATICAL INTRODUCTION

1. INTRODUCTORY REMARKS ON THE HEILTSUK LANGUAGE AND ITS SPEAKERS

The Heiltsuk language is spoken in the almost exclusively Indian villages of Bella Bella and Klemtu, British Columbia, which are situated on coastal islands relatively close to Ocean Falls and Bella Coola. The inhabitants of Bella Bella, numbering more than 1000, are predominantly descendents of four groups of people which originally resided in different areas but which gathered together towards the end of the 19th century, namely the ´Uyalitx̌v, the Uẃíthitx̌v, the ʼQvúqvayaitx̌v, and the ´Isdaítx̌v. Each of these groups reportedly spoke a distinct dialect of Heiltsuk but of this diversity only traces actually survive. The about 250 inhabitants of Klemtu have two main origins. One is a group of people speaking a Tsimshian language, the other a group which is called the ˇX̌íx̌ís in Heiltsuk and which resided at Kynoch Inlet, east of Klemtu and adjoining the original territory of the people now residing in Kitimaat. The language of the ˇX̌íx̌ís was Heiltsuk, although there are as yet unconfirmed reports that some elders of the group spoke Tsimshian. Today, both Heiltsuk and Tsimshian are spoken in Klemtu, although the number of completely fluent speakers is in decline. In Bella Bella, too, only for the elders is Heiltsuk really still the first language. There are differences in vocabulary between Bella Bella Heiltsuk as a whole on the one hand, and Klemtu Heiltsuk on the other, but they are small and sometimes evidently of recent origin. For instance, in Bella Bella the word for "cat" is "maúx̌va" (literally: "to say 'mew'"), whereas the Klemtu Heiltsuk word is "dús", which is probably

a borrowing from Tsimshian. Indian proper names of probable
Tsimshian origin occur both among the people of Bella Bella
and the Heiltsuk part of Klemtu, but the phenomenon is more
frequent among the latter.

In order of degree of similarity, the languages most
closely related to Heiltsuk are Oowekyala (spoken in the
village of Rivers Inlet, southeast of Bella Bella), Haisla
(spoken in Kitimaat, northeast of Klemtu), and Kwakwala (in
Alert Bay, Port Hardy, Campbell River, and various other
settlements). Heiltsuk, Oowekyala, Haisla, and Kwakwala are
the four North Wakashan languages; as a group these languages
are related to the South Wakashan languages spoken on the west
coast of Vancouver Island and on the Olympic Peninsula
(Washington State).

Klemtu is only one example of people speaking different
and even unrelated languages forming one community. It is for
instance reported that the population of the area of Kwatna
Inlet, northeast of Namu between Bella Coola and Rivers Inlet,
spoke both Heiltsuk Wakashan and Bella Coola Salishan. People
speaking Heiltsuk, Oowekyala, and probably also the Bella Coola
language co-occupied or at least used jointly the area of Koeye,
south of Namu. Not only does this indicate that there is some
overlap of the geographic boundaries within which the mentioned
languages used to be spoken, but also that one cannot take for
granted that these boundaries are ethnic boundaries at the same
time. The aforementioned Heiltsuk speaking groups: ´Uyalitx̌v,
Uẃíłhitx̌v, ´Isdaítx̌v, ’Qvúqvaẏaítx̌v, and ˇX̌íx̌ís were inter-
twined socially with each other, but also with some or all of
the various original groups speaking Oowekyala Wakashan, Haisla
Wakashan, and Bella Coola Salishan, and with some Tsimshian
speaking groups. For this linguistically heterogenuous conglom-

erate the name of Central Groups has been suggested; especially as far as the Heiltsuk, Oowekyala, and Haisla Wakashan speaking groups are concerned this name provides an appropriate alternative to the frequently used but misleading name of Northern Kwakiutl.

2. PHONETIC GUIDE

2.1 SPELLING UNITS

These sections explain the Heiltsuk practical orthography used in the dictionary. The orthography uses letters and combinations of letters of the English alphabet. Henceforward these are referred to as spelling units and see section 2.5 on the relationship between spelling units and phonemes. There are two groups of spelling units, labelled "consonants" and "vowels". These groups and their subdivisions are presented in the charts which follow. With each spelling unit the pronunciation is indicated in phonetic writing between square brackets. The meaning of the consonant symbols of the phonetic transcription can be seen from the articulatory details given in the chart of consonants. For the vowel symbols of the phonetic transcription the following chart shows their approximate positions of articulation.
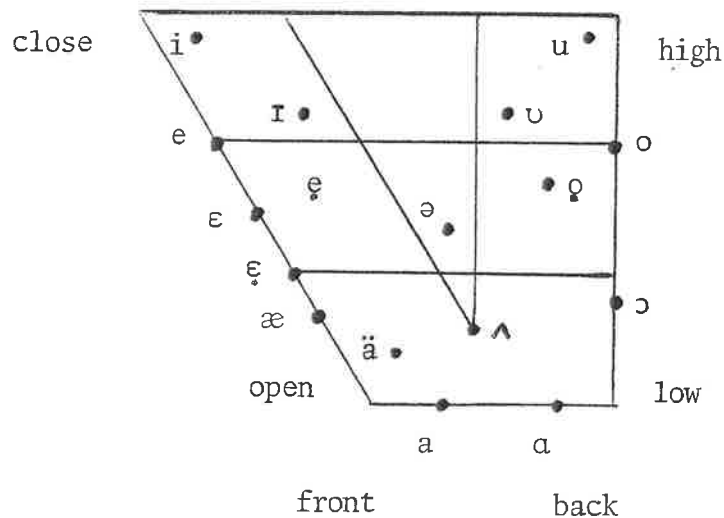
Henceforward, both in the orthography and in phonetic tran-
scriptions, an acute (ˊ) over a vowel indicates high tone where-
as its absence indicates low tone. Variation in the pitch level
of the high and the low tone is ignored.

Many spelling units can be pronounced in slightly dif-
ferent ways. Consonants vary less than vowels and their main
pronunciation variants are therefore given in the chart of
consonants itself. For instance, [y,h^y] represents the two
possible pronunciations of the spelling unit "y". An asterisk
(*) after a group of pronunciation variants (cf. [ʔy,ʔ^y] *)
means that the choice of a particular pronunciation variant is
not free but depends on position in the word. Details on this
are given in section 2.4. Vowels are very variable in pronun-
ciation and the chart of vowels shows only the most character-
istic pronunciations. See sections 2.2 and 2.3 for deviations
from the "characteristic" pronunciation.

| | obstruents | | | | resonants | |
| consonants | plosives | | | frica-tives | | |
	plain	aspirated	glottalized		plain	glottalized
labial	b [p]	p [pʰ]	p̓ [p̓]		m [m]	m̓ [ʔm]
alveolar	d [t]	t [tʰ]	t̓ [t̓]		n [n]	n̓ [ʔn]
affricate-alveolar	z [t͜s]	c [t͜sʰ]	c̓ [t͜s']	s [s]		
affricate-lateral	dh [λ]	th [λ]	t̓h [λ̓]	lh [ɬ]	l [l]	l̓ [ʔl]
palato-velar	g [kʸ]	k [kˣʸ]	k̓ [k̓ʸ]	x [xʸ]	y [y,hʸ]	y̓ [ʔy,ʔʸ]*
velar (with liprounding)	gv [kʷ]	kv [kˣʷ]	k̓v [k̓ʷ]	xv [xʷ]	w [w,hʷ]	w̓ [ʔw,ʔʷ]*
uvular (with liprounding)	ǧv [qʷ]	qv [qˣ̌ʷ]	q̓v [q̓ʷ]	x̌v [x̌ʷ]		
uvular (plain)	ǧ [q]	q [qˣ̌]	q̓ [q̓]	x̌ [x̌]		
laryngeal				h [h,hʸ, hʷ]*		' [ʔ,ʔl, ʔʸ,ʔʷ]*
						'ǎ [ʔʌ,ʔa]*

| vowels | | |
| plain | | glottalized |
with high tone	with low tone	(always with low tone)
ém [ə́m]	em [əm]	emm̓ [əm̓ʔm , ə̓ʔm]
én [ə́n]	en [ən]	enn̓ [ən̓ʔn , ə̓ʔn]
él [ə́l]	el [əl]	ell̓ [əl̓ʔl , ə̓ʔl]
í [í]	i [i]	iy̓ [i̓ʔy]
ú [ú]	u [u]	uw̓ [u̓ʔw]
á [á]	a [a]	

Note that word-initially "'ă" (see chart of consonants) is
written "ă". A resonant may be preceded by the mark "-" the
function of which is explained at the end of section 2.4. The
letter "e" occurs <u>only</u> as part of a larger spelling unit: "em",
"ém", "emm̓", etc.

The following words illustrate the vowels and some of
the consonants. čém [ts̓ə́m], kbém [k$^{x^y}$pə́m], demxs [təmx^{y}s],
dábént [tápə́nt^h], t̓élc [t̓ə́lts^h], pel [p^{h}əl], mít [mít^h], k̓vîsbis
[k̓^{w}íspis], númás [númás], dhá [λá], dápa [táp^{h}a], čemm̓ít
[ts̓əm̓ʔmít^h] or [ts̓ə̓ʔmít^h], benn̓álá [pən̓ʔnálá] or [pə̓ʔnálá],
mell̓á [məl̓ʔlá] or [mə̓ʔlá], siy̓á [si̓ʔyæ], luw̓á [lu̓ʔwá]. All of
these words are listed in the dictionary.

As the chart of vowels shows, glottalized vowels occur
with low tone exclusively. However, there are sequences of high
tone "ém" + "m̓", etc. Here one has a sequence of two spelling
units and not a single spelling unit. Compare:

kbem̓m̓ú   [k$^{x^y}$pəm̓ʔmú , k$^{x^y}$pə̓ʔmú]   "little button"
<u>   </u>
1

čém̓m̓u   [ts̓ə́m̓ʔmu]   "little index
<u> </u>   finger"
1 2

tk̓iy̓ú   [t^{h}k̓^{y}i̓ʔyú]   "little belly"
<u> </u>
1

lhk̓vániy̓u   [ɫk̓^{w}ání̓ʔyu]   "little old lady"
<u> </u>
12

2.2 PRONUNCIATION RULES FOR PLAIN VOWELS

Note: the superscript $\square$ is used to refer to a vowel regardless of tone. In the remainder of this book, whenever reference is made to "m", "n", "l", the spelling units (consonants) "m", "n", "l" are meant, not the final elements of the vowels "ėm", "e̊n", "e̊l".

1. Word-initial vowels are pronounced with a preceding glottal catch that exhibits the following variation. Word-initial "e̊n" is pronounced [ʔn̩̊], as e.g. in énx'it [ʔn̊xʸʔʸitʰ], endhís [ʔn̩λís]. Word-initial "i̊" is pronounced [ʔʸi̊] and word-initial "ů" [ʔʷů]. Examples: íta [ʔʸítʰa], Isdax̌sém [ʔʸistax̌sə́m], úta [ʔʷûtʰa], us [ʔʷus]. Otherwise the unwritten initial glottal catch sounds [ʔ], as in ák [ʔákxʸ].

2. Always when preceded by "th", "lh", or "s'" and optionally when preceded by "dh", "t̓h", "p", "t", "c", "s", or "lh'", the vowels "e̊m", "e̊n", "e̊l" are pronounced [m̩̊], [n̩̊], [l̩̊], respectively. Examples: lhel [ɬl̩] , nís'em [nísʔm̩̊] "mine indeed".

3. When preceded by "g", "k", "k̓", "x", "y", "y̓" or "iy̓", the vowels "e̊m", "e̊n", "e̊l" are pronounced [i̊m], [i̊n], [i̊l]. Examples: gélt [kʸíltʰ], zígens [tsíkʸɪns], nûyém [nûyím]. The vowel "å" is pronounced [æ̊] when preceded by these same spelling units "g", "k", etc., and not followed by another vowel. Examples: x̌áka [xʸǽkxʸæ], yábem [yǽpəm], siy̓á [siʔyǽ].

4a. When preceded by any obstruent featuring "v", or by "w", "w̓", or "uw̓", the vowel "e̊m" is pronounced [ům]. Examples: q̓vém [q̓ʷúm], k̓vémta [k̓ʷúmtʰa], xvémqa [xʷúmqx̌a].

4b. When preceded by "gv", "kv", "ǩv", "xv", "w", "ẘ", or "uẘ", the vowels "en̈" and "el̈" are pronounced [ʊn] and [ʊl], respectively. Examples: wénbis [wúnpis], xvélta [xᵂúltʰa].

4c. When preceded by "ǧv", "qv", "q̇v", or "x̌v", the vowels "en̈" and "el̈" are pronounced [ɔn] and [ɔl], respectively. Examples: q̇vénk [q̇ᵂɔ́nkxʸ], x̌vel [x̌ᵂɔl], q̇vélca [q̇ᵂɔ́ltsʰa].

5. When preceded by "ǧ", "q", "q̇", or "x̌", the sound of the vowels "em̈", "en̈", "el̈", "ï", "ü" is indistinguishable from that of the vowel combinations "aem̈", "aen̈", "ael̈", "aï", "aü", respectively; for the latter see the chart on the next page. Examples: ǧems [qams], qénx̌a [qx̌ʌ́nx̌a], x̌élpa [x̌ʌ́lpʰa], ǧína [qeína] or [qʌ́ɪna], ǧúx̌va [qoʊ́x̌ᵂa] or [qaʊ́x̌ᵂa].

6. The chart on the next page gives the most characteristic pronunciations of combinations of two plain vowels beginning with "í", "i", "ú", "u", or "a". The phonetic notation [‾] indicates a high tone ranging over more than one vowel. Examples of the vowel combinations: k̇vastáĺiem [k̇ᵂastʰáliyɪm]; miémča [miyɪmts'a], [miymts'a], or [mímts'a] (plural of "míča"); címáníi [tsʰímáníhʸi] or [tsʰímání] "the-one-that-is-there is a horse clam"; ǧvuẘíí [qᵂuʔwihʸí], [qᵂuʔwihʸi], or [qᵂuʔwí] "the-one-that-is-over-there is a raven"; cínáčii [tsʰínáts'ihʸi] and [tsʰínáts'i] "the-one-that-is-over-there is a gutter"; siá [siyǽ] or [siyæ]; dhuél [λuwʊl], [λuwl̈], or [λúl]; sgáẙúux̌v [skʸǽyúhᵂux̌ᵂ] and [skʸǽyúx̌ᵂ] "the-one-that-is-there-with-you is a spear"; pkvuúx̌v [pʰkxᵂuhᵂúx̌ᵂ], [pʰkxᵂuhᵂúx̌ᵂ], and [pʰkxᵂúx̌ᵂ] "the-one-that-is-there-with-you borrows a boat"; pkváláẙuux̌v [pʰk̇ᵂáláʔyuhᵂux̌ᵂ] and [pʰk̇ᵂáláʔyux̌ᵂ] "the-one-that-concerns-you is a talk"; múala [múwala]; tuá [tʰuwá] or [tʰuwá]; maém [mám]; naén [nʌ́n]; haéntha [hʌ́nλa]; aenq̇vénx̌ [ʔʌnq̇ᵂɔ́nx̌]; n̈aélba [ʔnʌ́lpa]; aels [ʔʌls]; aík [ʔeɪ́kxʸ] or [ʔʌ́ɪkxʸ]; maúx̌va [moʊ́x̌ᵂa] or [maʊ́x̌ᵂa].

10

	with high tone		with low tone
íem [íyɪm , íy̥m̥]	iém	[íyɪm , íy̥m̥ , ím]	iem [iyɪm , iy̥m̥ ,im]
íen [íyɪn , íy̥n̩]	ién	[íyɪn , íy̥n̩ , ín]	ien [iyɪn , iy̥n̩ , in]
íel [íyɪl , íy̥l̩]	iél	[íyɪl , íy̥l̩ , íl]	iel [iyɪl , iy̥l̩ , il]
íi [íhʸi , í]	ií	[ihʸí , íhʸí , í]	ii [ihʸi , i]
íu [íyu]	iú	[iyú , íyu]	iu [iyu]
ía [íyæ]	iá	[iyǽ , íyæ]	ia [iyæ]
úem [úwʊm , úw̥m̥]	uém	[úwʊm , úw̥m̥ , úm]	uem [uwʊm , uw̥m̥ , um]
úen [úwʊn , úw̥n̩]	uén	[úwʊn , úw̥n̩ , ún]	uen [uwʊn , uw̥n̩ , un]
úel [úwʊl , úw̥l̩]	uél	[úwʊl , úw̥l̩ , úl]	uel [uwʊl , uw̥l̩ , ul]
úi [úwi]	uí	[uwí , úwi]	ui [uwi]
úu [úhʷu , ú]	uú	[uhʷú , úhʷú , ú]	uu [uhʷu , u]
úa [úwa]	uá	[uwá , úwa]	ua [uwa]
	aém	[ɑ́m]	acm [ɑm]
	aén	[ʌ́n]	aen [ʌn]
	aél	[ʌ́l]	ael [ʌl]
	aí	[ɛ́ɪ , ʌ́ɪ]	ai [ɛ̂ɪ , ʌ̂ɪ]
	aú	[ő̞ʊ , ʌ́ʊ]	au [ôʊ , âʊ]

Special Cases:

1. When a word contains a part "uels" meaning "to a posi-
tion out of the house", the vowel combination "uel" in this word
part <u>cannot</u> be pronounced in three ways as indicated in the chart,
the pronunciation [ul] being excluded. Thus, kʼíx̌vuéls "to run out
of the house" is pronounced either [kʼʸíx̌ʷuwʊls] or [kʼʸíx̌ʷuw̥l̩s].

2. When "ğ", "q", "q̓", "x̌" are followed by a vowel combi-
nation beginning with "i̜" or "u̜", the pronunciation of the latter
vowels is broadly similar to that of the vowel combinations "ai̜"
and "au̜", respectively (and see rule 5 above). Examples:
ğiála [qɛ̂yǽla], [qʌ̂yǽla], [qä̂yǽla]; x̌uá [x̌ôwá], [x̌âwá], [x̌âwá].

3. The vowel combinations "ae̜m", "ae̜n", "ae̜l" are pro-
nounced [ɛ̜̂m], [ɛ̜̂n], [ɛ̜̂l] when preceded by "g", "k", "k̓", "x",
"y", "y̓", "iy̓", or by the plain vowel "i" (for the latter case,
see also below). Examples: gaélstut [kʸɛ̜̂lstʰutʰ], yaélkva [yɛ̜̂lkxʷa],
bîkaémth [píkˣʸɛ̜̂mλ] "going to light with a match indeed".

Unlike "i̜", "u̜", and low tone "a", high tone "á" and "e̜m",
"e̜n", "e̜l" are never followed directly by another plain vowel,
apart from a very small number of cases of "e̜ná". The latter occur
only after "'" and word-initially. Examples: t̓hs'ená [ƛəs'n̥á],
ená [ʔn̥á].

Series of three consecutive plain vowels are also possible.
If such a series contains the combinations "ae̜m", "ae̜n", "ae̜l",
"ai̜", or "au̜", these are pronounced as indicated in the chart --
allowing for the special pronunciations [ɛ̜̂m], [ɛ̜̂n], [ɛ̜̂l] for "ae̜m",
"ae̜n", "ae̜l" if they follow "i" in the series; see above. Examples:
c̓uaémth [ts̓uwámλ], [ts̓uwámλ] "going to give indeed", siaémth
[siyɛ̜̂mλ], [siyɛ̜̂mλ] "going to push with a pole indeed", c̓uaúx̌v
[ts̓uwôux̌ʷ], [ts̓uwôux̌ʷ] "the-one-that-is-there-with-you gives",
siaí [siyɛ̂ɪ], [siyɛ̂ɪ] "the-one-that-is-over-there pushes with a
pole", tsaíutha [tʰsɛ̂ɪyuλa] "the-one-that-is-over-there pushes
you", tsaíentha [tʰsɛ̂ɪyɪnλa] "the-one-that-is-over-there
pushes me", laúels [lóuwʊls]. In a series of three consecutive
plain vowels not containing "ae̜m", etc., e.g. "iu̜i", the second

vowel is the end of a combination of two vowels ("iú") and at the same time the beginning of another vowel combination ("úi"). Example: páǧagiúi [pʰáqakʸiyúwi] "the-one-that-is-over-there is a board (at the bow of a boat)".

Series of four consecutive plain vowels contain "aí" (pronounced as indicated in the chart); these series occur in certain syntactic constructions. Example: čuaíutha [tṣ'uwáɨyuλa] "the-one-that-is-over-there gives to you".

2.3 PRONUNCIATION RULES FOR GLOTTALIZED VOWELS

The variation of the glottalized vowels broadly follows the same pattern as that of the plain vowels.

1. Always when preceded by "th", "lh", or "s'", and optionally when preceded by "dh", "t́h", "p", "t", "c", "s", or "lh'", the glottalized vowels "emm̀", "enǹ", and "elĺ" are pronounced [m̩ʔm], [n̩ʔn], [l̩ʔl]. Examples: nís'emm̀ílá [nís̀ʔm̩ʔmílá] "indeed mine now", themm̀ít [λm̩ʔmítʰ], lhelĺúyá [łl̩ʔlúyǽ].

2. When preceded by "g", "k", "k̀", "x", "y", "ÿ", the glottalized vowels "emm̀", "enǹ", "elĺ" are pronounced [ɪm̩ʔm , ɪʔm], [ɪn̩ʔn , ɪʔn], [ɪl̩ʔl , ɪʔl], respectively. Example: gelĺém [kʸɪl̩ʔlə́m] or [kʸɪʔlə́m].

3a. When preceded by any rounded obstruent ("gv", "kv", etc.) or by "w", "ẁ", the glottalized vowel "emm̀" is pronounced [um̩ʔm] or [uʔm]. Example: sáyágvemm̀a [sáyǽkʷum̩ʔma] or [sáyǽkʷuʔma].

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3b. When preceded by "gv", "kv", "ǩv", "xv", "w",
or "ẘ", the glottalized vowels "enň" and "elĺ" are pronounced
[ʊn̯ˀn , ʊˀn] and [ʊl̯ˀl , ʊˀl], respectively, but occasionally
also [uˀn] and [uˀl], respectively. Examples: kvenňá
[kxʷʊn̯ˀná] or [kxʷʊˀná], occasionally [kxʷuˀná]; gvágvelĺa
[kʷákʷʊl̯ˀla], [kʷákʷʊˀla], [kʷákʷuˀla].

3c. When preceded by "ǧv", "qv", "q̓v", or "x̌v", the
glottalized vowels "enň" and "elĺ" are pronounced [ɔn̯ˀn , ɔˀn]
and [ɔl̯ˀl , ɔˀl], but occasionally also [uˀn], [uˀl]. Examples:
x̌venňá [x̌ʷɔn̯ˀná], [x̌ʷɔˀná], [x̌ʷuˀná]; q̓vellĺéms [q̓ʷɔl̯ˀléms],
[q̓ʷɔˀléms], [q̓ʷuˀléms].

4a. When preceded by "ǧ", "q", "q̓", or "x̌", the
pronunciation variation of "emm̓", "enň", "elĺ" is as follows.
"emm̓" sounds [ɑm̯ˀm], [ɑˀm], or [aˀm], as e.g. in
ǧemm̓ís [qɑm̯ˀmís], [qɑˀmís], [qaˀmís]. The variant spelling
"am̓" for "emm̓" is permitted.
"enň" sounds [ʌn̯ˀn], [ʌˀn], or [aˀn], as e.g. in
q̓enňálá [q̓ʌn̯ˀnálá], [q̓ʌˀnálá], [q̓aˀnálá]. The variant spelling
"aň" for "enň" is permitted.
"elĺ" sounds [ʌl̯ˀl], [ʌˀl], or [aˀl], as e.g. in
ǧelĺílh [qʌl̯ˀlíɬ], [qʌˀlíɬ], [qaˀlíɬ]. The variant spelling
"aĺ" for "elĺ" is permitted.

4b. Following "ǧ", "q", "q̓", or "x̌", the combinations
"aẙ" and "aẘ" are pronounced [aˀy, ʌˀy, ɑˀy, ɛˀy, e̞ˀy] and
[aˀw, ʌˀw, ɑˀw, o̞ˀw], respectively, the pronunciations with
an open vowel being the more frequent ones. Examples: q̓aẙux̌v
[q̓aˀyux̌ʷ], [q̓ʌˀyux̌ʷ], [q̓ɑˀyux̌ʷ], [q̓ɛˀyux̌ʷ], [q̓e̞ˀyux̌ʷ];
q̓aẘá [q̓aˀwá], [q̓ʌˀwá], [q̓ɑˀwá], [q̓o̞ˀwá]. Optionally one can
write "iẙ" for "aẙ" and "uẘ" for "aẘ".

5a. When "iẙ" is followed by "e̅m", "e̅n", "e̅l", or "i̅", it is pronounced [i?ʸ] rather than [i?y]. Examples: miẙémxa [mi?ʸímxʸæ] (plural of "mxá"), hiẙíx̌va [hʸi?ʸíx̌ʷa] (plural of "y̌x̌vá").

5b. When "uẘ" is followed by "e̅m", "e̅n", "e̅l"; or "u̅", it is pronounced [u?ʷ] rather than [u?w]. Examples: muẘêmkva [mu?ʷúmkxʷa] (plural of "múkva"), dhuẘelstú [λu?ʷʊlstʰú], tuẘút [tʰu?ʷútʰ].

6. The following are the pronunciations of series of spelling units consisting of (1) the consonant "h" or "'", (2) the plain low tone vowel "a", (3) the glottalized vowel "emm̊", "enn̊", or "ell̊",

    haemm̊   [ham̰?m , ha?m]
    haenn̊   [hʌn̰?n , hʌ?n]
    haell̊   [hʌḻ?l , hʌ?l]

    'aemm̊   [?am̰?m , ?a?m]
    'aenn̊   [?ʌn̰?n , ?ʌ?n]
    'aell̊   [?ʌḻ?l , ?ʌ?l]

Word-initially "'" is left out from the last three combinations. Examples: haenn̊ís [hʌn̰?nís], [hʌ?nís]; haell̊álá [hʌḻ?lálá], [hʌ?lálá]; aemm̊úkv [?am̰?múkxʷ], [?a?múkxʷ]; aell̊á [?ʌḻ?lá], [?ʌ?lá]; thậx̌'aemm̊ílá [ƛáx̌?am̰?mílá], [ƛáx̌?a?mílá] "rigid indeed now". There are no cases of "iẙ" or "uẘ" preceded by "h"+"a" or by "'"+"a".

2.4 PRONUNCIATION RULES FOR CONSONANTS

1. When a glottalized plosive (i.e. "p̓", "t̓", "č̓", "t̓h", "k̓", "k̓v", "q̓v", or "q̓") is written immediately before any other obstruent or at the end of the word, it is pronounced with phonetic shwa following. Learners of the language may pronounce this shwa as [ə] (approximately as in English "about"), but in reality there is a great deal of variety in its pronunciation. For instance, t̓hsá sounds [ƛəsá], but t̓hxvá [ƛʊxᵂá]. With many native speakers, shwa after word-final glottalized plosives tends towards or is identical to [a]. For instance, w̓áč̓ is pronounced [ʔwáts̪ʼ], but also [ʔwáts̪ʼʌ] and [ʔwáts̪ʼa].

2. When followed by any obstruent, the plain resonants "m", "n", "l", "y", "w" and the glottalized resonants "m̓", "n̓", "l̓", "y̓", "w̓" are pronounced with a following phonetic shwa. The cases concerned involve practically only word-initial resonants (for an exception see the last example below). As in the case of glottalized plosives followed by another obstruent (see the preceding rule), there is considerable variety in the pronunciation of the shwa, but learners may pronounce it as [ə]. Examples: mtá [mətʰá], npá [nəpʰá], mxá [mɪxʸǽ] (occasionally also [mixʸǽ]), w̓s [ʔwʊs], y̓x̌vá [ʔyɔx̌ᵂá], nx̌á [nʌx̌á], m̓ím̓sʼit [ʔmíʔməsʔitʰ] (plural of "m̓sʼit").

3. In the middle of a word between a consonant and a vowel, the spelling units "m", "n", "l" are pronounced as the low tone vowels "em", "en", "el". Examples: č̓má [ts̪ʼəmá], dná [təná], m̓núkv [ʔmənúkxᵂ], mámálma [mámáləma], k̓nís [k̓ʸɪnís], yélx̌má [yɪ́lx̌amá], wnút [wʊnútʰ], w̓ná [ʔwʊná], blá [pəlá], slá [səlá] or [sl̩á], sáplá [sápʰəlá] or [sápʰl̩á], Bélxvlá

[pə́lx^Wʊlá], Wáglísla [h^Wák^Yɪlísəla] or [h^Wák^Yɪlísḷa],
límnála [lí?mənála].

4. "ẏ" is pronounced [?^y] rather than [?y] when fol-
lowed by "e̲m", "e̲n", "e̲l", "i̲", "m", "n", "l", and see the
preceding rule no. 3 concerning the pronunciation of the
latter three spelling units. Examples: haẏénx̌ [ha?^Yínx̌],
ẏels [?^Yɪls], t̓hkáẏí [x̓ɪkx^Yá?^Yí] "the-one-that-is-over-
there is an island", púẏlá [p^hú?^Y͟ɪlá]. "ẇ" is pronounced
[?^W] rather than [?w] when followed by "e̲m", "e̲n", "e̲l",
"u̲", "m", "n", "l". Examples: ẇens [?^Wʊns], lháẇném
[ɬá?^Wʊném], ẇáẇux̌v [?wá?^Wux̌^W] "the-one-that-is-near-you
is the same size".

5. The pronunciation of "h" varies with the kind of
spelling unit that follows. "he̲m", "he̲n", and "he̲l" are
pronounced [^hm̲̣], [^hṇ̲], [^hḷ̲], respectively. When followed by
"i̲", "h" sounds [h^y], when followed by "u̲" it sounds [h^W].
Otherwise "h" sounds [h]. The pronunciations [h], [h^y], [h^W]
are all strongly voiced. Examples: hémkéls [^hm̓kx^Yíls], hímás
[h^Yí?más], hisút [h^Yisút^h], húx̌va [h^Wúx̌^Wa], hásbis [háspis].
"h" is always followed by a vowel or by "n". In the latter
case the above rule no. 3 applies, so "hn" is pronounced
in the same way as "hen", cf. hnála [^hṇála]. A sequence of
"h" and low tone "a" is always pronounced [hʌ] or [ha] when
followed by an obstruent, cf. halhlá [hʌɬḷá], hax̌vá [hax̌^Wá].
The sequences "ham", "han", "hal", "hay", "haw" (all with low
tone "a") are pronounced approximately as [h] followed by the
low tone vowel combinations "aem", "aen", "ael", "ai", "au"
(see the chart on page 10). Examples: haná [hʌná], hawíkv
[hawîkx^W], [howîkx^W], [hâwîkx^W].

6. The mark "'" is used both as orthographic component

of certain spelling units (e.g. "p̓" , "’ă", "emm̓") and as a
spelling unit in its own right. When "’" is a spelling unit
and preceded by a fricative, the pronunciation variation of
"’" is as follows. After "s" and "x̌", "’" sounds [ʔ]. Exam-
ples: nîs’em [nîsʔm̩] "mine indeed", łháx̌’aem [ƛ̓áx̌ʔam] "rigid
indeed". After "lh", the spelling unit "’" can be pronounced
[ʔ], but often it assimilates to the preceding fricative and
resembles [ʔl], as e.g. in hiúlh’a [hʸiyúɬʔa] and [hʸiyúɬʔla]
(and see page 10 for the variation of "iú"). After "x", "’"
sounds [ʔʸ], as e.g. in p̓áx’it [p̓áxʸʔʸitʰ]. After "xv" and
"x̌v", "’" sounds [ʔʷ], as e.g. in túxv’it [tʰúxʷʔʷitʰ],
dúx̌v’it [túx̌ʷʔʷitʰ]. After "a", "’" is pronounced [ʔ], cf.
p̓a’aénx̌ [p̓aʔʌ́nx̌], a’aént [ʔaʌ́ntʰ], kva’aílh [k̓ʷaʔέɪɬ ,
k̓ʷaʔʌ́ɪɬ], tslá’aem [tʰsəláʔam , tʰsláʔam] "pushing indeed"

7. When followed by an obstruent, "’ă" (word-initially
written "ă") is pronounced [ʔʌ] or [ʔa]. Examples: aélx̌’ăsa
[ʔʌ́lx̌ʔʌsa , ʔʌ́lx̌ʔasa]; ăs [ʔʌs , ʔas]; ăx̌bá [ʔʌx̌p̓á]. A sequence
of "’ă" (word-initially "ă") and "m", "n", "l", "y", or "w",
is pronounced approximately as [ʔ] followed by the sound of
the low tone vowel combinations "aem", "aen", "ael", "ai",
"au", respectively. Examples: ma’ămúǧvuala [maʔamúqʷuwala];
ma’ălúkv [maʔʌlúkxʷ]; ăyása [ʔʌŷǽsa , ʔεŷǽsa , ʔāŷǽsa];
ăwáyat [ʔʌŵáyætʰ , ʔoŵáyætʰ , ʔaŵáyætʰ].

8. When followed by "m", "n", or "l", the mark "-"
indicates that these resonants are pronounced as in word-
initial position. Examples: ms-ms [məsməs], miás-miasa
[miyǽsmiyǽsa], ns-nx̌ [nəsnʌx̌], lix̌-lǧís [lix̌lʌqéɪs]. In the
dictionary the mark "-" is otherwise used whenever expedient
in cases of reduplication of the root-initial element. Thus,
it is used in: ŷx-ŷlís [ʔʸixʸʔʸɪ̱lís] (plural of "ŷlís"),

ẃís-ẃlh [ʔwís ʔwʉɫ] (plural of "ẃílh"). Also, when an English word is used with a Heiltsuk suffix, the English word is underlined and in addition separated from the suffix by "-". Examples:

<u>John</u>-a   "John-who-is-over-there"

<u>government</u>-aẋi   "a/the government-there"

<u>logs</u>-ila   "to log, work on logs".

2.5 PHONETICS, PHONEMICS, AND PRACTICAL ORTHOGRAPHY

In the preceding sections, the relation orthography-phonetics was treated. The Heiltsuk practical orthography was designed -- in response to public demand -- before the phonemics and the morphology of the language were fully understood. As a result the orthography is on various points not phonemic. Certain spelling conventions were adopted to avoid mistakes in reading out words, these mistakes resulting from the spelling conventions of English. In other cases the users' preference was taken into account. Whereas the obstruents of the orthography are all phonemes, the practical transcription of the resonant and vowel phonemes (the two groups can ultimately be collapsed into one, see section 2.5.8) reflects variants in some cases and is ambiguous in others. The following sections 2.5.1 - 2.5.7 detail the phonetic-to-phonemic-to-orthographic correspondences. The phonetic-to-phonemic correspondences are quite regular, the orthographic representation is less so. Therefore the correspondences are presented in the form of lists enumerating all possible cases. In the phonemic notation used, /m̩, n̩, l̩, m̰̩, n̰̩, l̰̩/ represent vocalic /m, n, l, m̰, n̰, l̰/, and /a̰, ḭ, ṵ/ represent glottalized

/a, i, u/. Glottalized /ṁ̥, ṅ̥, l̥̇, a̓, i̓, u̓/ are not found before consonants or word-finally, and they always have low tone. Note that in all transcriptions (phonetic, phonemic, practical) the absence of an acute (´) over a vowel (including /m̥/, etc.) indicates low tone. The superscript □ is used to refer to a vowel regardless of its tone. $\overset{\square}{V}$ represents any phonetic or phonemic plain vowel, V̓ any glottalized vowel, C any consonant or the word end, T any consonant other than /ʔ/ preceded by /#/ or /:/, /h/, or a plain uvular. /#/ indicates the (initial) word-boundary, /:/ indicates that the following phoneme is the reduplicated word-initial phoneme. Note finally that /h/ is always preceded by /#/ or /:/.

2.5.1 /CV̌/ and /CV̓/

The tabulations in this section contrast /CV̌/ and /CăR/, /CV̓/ and /CăR/, /R/ and /R̓/ being the consonantal counterparts of /V̌/ and /V̓/, respectively. /C/ is exemplified as /T/, /h/, and /ʔ/; cases in which /C/ is a plain uvular are considered in section 2.5.5.1. The tabulations ignore that the practical orthography does not use "'" word-initially. The practical transcriptions "before a consonant" occur also word-finally.

Phonetic		Phonemic	Practical Orthography	
before [V̌]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
[Təm]	[Təm]	/Tm̥/	Tm	Tem
-.-	[Tə́m]	/Tḿ̥/		Tém
[Tam]	[Tɑm]	/Tam/ [1]	Tam	Taem
[Tám]	[Tɑ́m]	/Tám/ [1]	Tám	Taém

Phonetic		Phonemic	Practical Orthography	
before [V̄]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
[hɑm]	[hɑm]	/hm̩/	ham [2)]	haem
-.-	[hɑ́m]	/hḿ̩/		haém
[ham]	-.-	/ham/	ham [2)]	
[hám]	-.-	/hám/	hám	
[ʔɑm]	[ʔɑm]	/ː#ʔm̩/	' ám	' aem
-.-	[ʔɑ́m]	/ː#ʔḿ̩/		' aém
[ʔam]	-.-	/ː#ʔam/	' am	
[ʔám]	-.-	/ː#ʔám/	' ám	
[Təmʔm̩, Təʔm]	-.-	/Tm̩̌/	Temm̌	
[Taʔm]	-.-	/Tam̌/	Tam̌	
[Táʔm]	-.-	/Tám̌/	Tám̌	
[hɑm̯ʔm̩, hɑʔm]	-.-	/hm̩̌/	haemm̌	
[haʔm]	-.-	/ham̌/	ham̌ [3)]	
[háʔm]	-.-	/hám̌/	hám̌	
[ʔɑm̯ʔm̩, ʔaʔm]	-.-	/ː#ʔm̩̌/	' aemm̌	
[ʔaʔm]	-.-	/ː#ʔam̌/	' am̌ [3)]	
[ʔáʔm]	-.-	/ː#ʔám̌/	' ám̌	

Phonetic		Phonemic	Practical Orthography			
before [V̥]	before [C]		before a vowel (of chart in 2.1)		before a consonant (of chart in 2.1)	
			standard spelling	variant spelling	standard spelling	variant spelling
[ʰm̩]	[ʰm̩]	/#m̩m̩/ 4)	hm		hem	
-.-	[V̥ʰm̩ , V̥m̩]	/Vm̩m̩/			V̥em ,V̥mem	V̥hem
-.-	[ʰḿ̩]	/#m̩ḿ̩/			hém	
-.-	[V̥ʰḿ̩]	/V̥m̩ḿ̩/			V̥mém	V̥hém
[ʔm̩]	[ʔm̩]	/#m̩m̩/	'em		'em	
[V̥ʔm̩]	[V̥ʔm̩]	/Vm̩m̩/	V̥m̩m	V̥'em	V̥mem	V̥'em
-.-	[ʔḿ̩]	/#m̩ḿ̩/			'ém	
-.-	[V̥ʔḿ̩]	/Vm̩ḿ̩/			V̥mém	V̥'ém
		*/#m̩ḿ̩/				
[ʔm̩ʔm , ʔməʔm]	[ʔm̩ʔm, ʔməʔm]	/#m̩:m̩/	m̩m	'emm̩	m̩m	'emm̩

The tabulation follows the same pattern when starting, not with [Təm] = /Tm̩/ = "Tm" or "Tem" (see page 19), but with [Tən] = /Tn̩/ = "Tn" or "Ten", or with [Təl] = /Tl̩/ = "Tl" or "Tel". The pattern is also similar when starting with [Ti(y)] or [Tu(w)], except for the point mentioned in footnote no. 3 and various orthographic details. A full tabulation starting with [Ti(y)] is

presented after the following footnotes to the preceding
tabulation.

1. The interpretation of both [Tᵃ̈mV] and [Tᵃ̈mC] as
/Tᵃ̈m/ is preliminary; see the review in footnote no. 4.

2. Orthographic "ham" is ambiguous: it represents
both /hm̩/ and /ham/ before a vowel. In practice the diffi-
culty is negligeable as the sequence /hamV/ (with low tone
/a/) occurs only in vocatives and exclamations. The origin
of this ambiguity -- the spelling "ham" for /hm̩/ is incon-
sistent -- lies in the fact that phonetic [ʰm̩] was spelled
"hm" before a vowel, whereas subsequent analysis led to the
interpretation /mm̩/, see note no. 4 below.

3. The pair /ham̃/ (low tone) and /hm̩̃/, phonetically
[haʔm] and [ham̩ʔm, haʔm], is not matched by pairs /hay̆/ and
/hĭ/, /haw̆/ and /hŭ/. Nor is the pair /ʔam̃/ and /ʔm̩̃/,
phonetically [ʔaʔm] and [ʔam̩ʔm, ʔaʔm], matched by pairs
/ʔay̆/ and /ʔĭ/, /ʔaw̆/ and /ʔŭ/. Instead of pairs one finds
the following single units,

Phonetic	Phonemic	Practical Orthography
[haʔy]	/hĭ/	hay̆
[haʔw]	/hŭ/	haw̆
[ʔaʔy]	/ʔĭ/	ʼay̆
[ʔaʔw]	/ʔŭ/	ʼaw̆

See also section 2.5.7.3 .

4. The interpretation of [ʰm̩] as /mm/ and of [ʰm̩̃]
as /mm̃/ is indicated (besides by reduplication patterns)
by the following phonetic-phonemic proportions.

[hām] /hā̪m/	⟷	[T̄amV / T̄amC] /T̄am/	⟷	[māmV / māmC] /mām/
⇕		⇕		⇕
[hām] /hm̩/	⟷	[Təm] /Tm̩/	⟷	[ʰm̩] /mm̩/
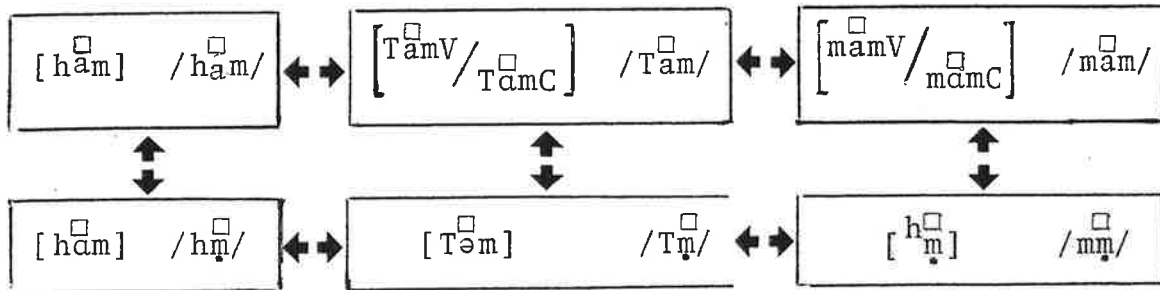
N.B. There is no *[məm] or *[mm̩].

The complementary distribution of [T̄am] and [T̄am]
(the first followed by a vowel, the second by a consonant or
the word end), leads to the interpretation of both as /T̄am/.
On the other hand, /T̄amV/ clearly fits into paradigm 1 below
whereas paradigm 2 lacks a member:

1			2
[Tənmv̄]	/Tm̩mV/		/Tm̩mC/
[Timv̄]	/TimV/		/TimC/
[Tumv̄]	/TumV/		/TumC/
[Tāmv̄]	/TāmV/		-.-

Paradigm 2 can be made complete by interpreting [T̄amC] not as
/T̄amC/ but as /T̄amC/. For details on paradigm 2 see section
2.5.3.

The following tabulation parallels the one given previously in this section.

Phonetic		Phonemic	Practical Orthography	
before [V̥]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
[Tiy] [6]	[Ti]	/Ti/	Ti [5]	Ti
-.-	[Tí]	/Tí/		Tí
[Tay]	[Tɛ̂ɪ]	/Tay/ [7]	Tay	Tai
[Táy]	[Tɛ́ɪ]	/Táy/ [7]	Táy	Taí
[hɛ̂y]	[hɛ̂ɪ]	/hi/	hay [8]	hai
-.-	[hɛ́ɪ]	/hí/		haí
[hay]	-.-	/hay/	hay [8]	
[háy]	-.-	/háy/	háy	
[ʔɛ̂y]	[ʔɛ̂ɪ]	/#:ʔi/	'ăy	'ai
-.-	[ʔɛ́ɪ]	/#:ʔí/		'aí
[ʔay]	-.-	/#:ʔay/	'ay	
[ʔáy]	-.-	/#:ʔáy/	'áy	
[Tiʔy]	-.-	/Tĭ/	Tiẙ	
[Taʔy]	-.-	/Taẙ/	Taẙ	
[Táʔy]	-.-	/Táẙ/	Táẙ	
*[hɛ̂ɪʔy] [9]				
[haʔy] [9]	-.-	/hĭ/	haẙ	
[háʔy]	-.-	/háẙ/	háẙ	

Phonetic		Phonemic	Practical Orthography	
before [V̄]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
*[ʔɛ̂ɪʔy] 9)				
[ʔaʔy] 9)	-.-	/#ʔí/	'aý	
[ʔâʔy]	-.-	/#ʔáy/	'áý	

			standard spelling	variant spelling	standard spelling	variant spelling
[hʸiy]	[hʸi]	/#yi/ 10)	hi 11)		hi	
-.-	[V̄hʸi]	/V̄yi/			V̄hi 12)	
13)	[hʸî]	/#yî/			hî	
13)	[V̄hʸî]	/V̄yî/			V̄hî 12)	
[ʔʸiy , ʔy] 14)	[ʔʸi]	/#ʔyi/	'i	ý	'i	
[V̄ʔʸiy , V̄ʔy] 14)	[V̄ʔʸi]	/V̄ʔyi/	V̄ýi	V̄ý , V̄'i	V̄ýi	
15)	[ʔʸî]	/#ʔyî/			'î	
15)	[V̄ʔʸî]	/V̄ʔyî/			V̄ýî	
[hʸiʔy]	-.-	/#yî/	hiý			
[ʔʸiʔy]	[ʔʸiʔy]	/#ý:ý/	ýý	'iý	ýý	'iý

Notes:

  5. The orthography renders phonemic /Tm̥/ (low tone) fol-
lowed by a vowel as "Tm" and not as *"Tem"; see page 19. Phonemic

/Ti/ and /Tu/ followed by a vowel are however written "Ti" and "Tu", not *"Ty" and *"Tw".

6. With [Tiy] (low tone) followed by a vowel, one has to distinguish between (a) [TiyV́], which is interpreted as /TiV́/, and (b) [TiyV], which is interpreted either as /TiV/ or as /TiyV/. In case (b), the choice of interpretation has a phonetic basis if [TiyV] is [Tiyɪm, Tiym̩]. That is, if beside [Tiyɪm, Tiym̩] there is a third variant, [Tim], the sequence [Tiy] is interpreted as /Ti/. If there is no third variant, the sequence [Tiy] is interpreted as /Tiy/ (analogously to high tone [Tíy], which is always interpreted as /Tí/ followed by a consonant, /y/). The different interpretations of phonetic [Tiyɪm, Tiym̩] also have a morphophonemic basis. In [Tiy] = /Ti/ there is a morpheme-boundary <u>after</u> the phonetic element [y], whereas in [Tiy] = /Tiy/ (and also in [Tíy] = /Tíy/) there is either a morpheme-boundary <u>before</u> [y] = /y/, or [y] = /y/ is a morpheme-final alternant of /s/ which occurs before certain suffixes. For illustrations of the alternation, see section 3.2. Again in case (b) above, if [TiyV] is <u>not</u> [Tiyɪm, Tiym̩] (or [Tiyɪ$_1^n$, Tiy$_1^n$], which are similar to [Tiyɪm, Tiym̩]), but e.g. [Tiyu], the choice of interpretation of [Tiy] is only morphophonemic as there is no phonetic difference between /Tiu/ and /Tiyu/; see also section 2.5.4. The interpretation of phonetic [Tuw] + vowel follows the pattern of [Tiy].

7. Paradigmatic considerations similar to those in the previous note no. 4 subsequently lead to rewriting /Tay/ followed by a consonant as /Tai/. See also section 2.5.3.

8 and 9. See notes nos. 2 and 3, respectively.

10. The argument for the interpretation of [h^{y}i] as /yi/ follows the pattern presented in note no. 4.

11. See note no. 5 on the fact that the orthography uses "hi" rather than *"hy" before a vowel.

12. Whereas the orthography renders phonemic /mm̩/ preceded

by a vowel as "mĕm" or "hĕm" (and /V̄mṃ/ more particularly also
as "V̄ĕm"; see page 21), /yĭ/ preceded by a vowel is written
like in word-initial position: "hĭ". Similarly, /wŭ/ is written
"hŭ" both word-initially and after a vowel.

13. There are cases of high tone [h^y íy] (followed by a
vowel) beside those of low tone [h^y iy] (followed by a vowel),
but whereas [iy] in the latter is interpreted /i/ (see tabula-
tion), [íy] in the former is interpreted /íy/, not * /í/. For
details, see note no. 6.

14. This range of variation of /ẏi/ (and the similar one
of /ẇu/ has no parallel on page 21.

15. There are cases of [ʔ^y íy] (high tone) followed by a
vowel, in which [íy] is interpreted /íy/, not * /í/. See notes
nos. 13 and 6.

2.5.2   /ʔV̄/ and /ʔV̇/

Whereas the first tabulation in the preceding section
indicates that phonemic /ṁṃ/ corresponds to orthographic "ṁm",
"ṁĕm", or "hĕm", the inverse does not necessarily hold true as
the latter may also represent variants of /ʔṃ/ not tabulated
yet. Similarly, orthographic sequences representing /ẏĭ/ or /ẇŭ/
are also used to represent variants of /ʔĭ/ or /ʔŭ/, respective-
ly. The following tabulations show the wide range of variation
of /ʔV̄/ and /ʔV̇/, and its reflection in the orthography. Note
that /ʔV̄/ and /ʔV̇/ occur in the following positions:

1. preceded by the word-boundary (/#/) or the redupli-
cation-boundary (/:/);

2. preceded by a fricative;

3. preceded by a plain vowel.

The cases of /#?V̄/ and /:?V̌/ have been tabulated in the preceding
section but are repeated in the tabulations below. When exempli-
fying fricatives followed by /?V̄/ or /?V̌/, the notation /Xᵂ/ rep-
resents both /xᵂ/ and /x̌ᵂ/. As for the occurrences of /?V̄/ and
/?V̌/ after a plain vowel, only those cases are tabulated in which
this plain vowel has high tone and is <u>not</u> itself preceded direct-
ly by another plain vowel, the remaining types of case being com-
mented upon after each tabulation. Different practical trans-
criptions of the same phoneme sequence are separated by a comma
when they are phonetically identical, but by a semi-colon when
they represent actual variants. Correspondingly, in the phonetic
transcription the semi-colon separates (groups of) variants that
correspond to different practical transcriptions. As in the pre-
vious tabulations it is ignored that the practical orthography
does not use "'" word-initially.

The reader will not fail to notice that a relatively
simple rule of assimilation determines the variants of /?V̄/ and
/?V̌/ after a fricative or a vowel, but that the practical orthog-
raphy is irregular. In some cases all variants are expressed
orthographically, in others only a few , particularly if a fric-
ative is followed by /?i/, /?ū , ?ǔ/, or /?ā , ?ǎ/. One should
therefore know that there is always a morpheme-boundary between
/?/ and preceding fricative; whenever a morpheme beginning with
/?/ is frequent and easily recognizable by its meaning, the
practical orthography ignores the variation of /?/ (and follow-
ing /V̄/ or /V̌/) after a fricative, except after /x̌/. For cases
in point, see pages 31-32, 34, 38-39.

Phonetic		Phonemic	Practical Orthography	
before [V̄]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
[ʔɑm]	[ʔɑm]	/ˣ̣ʔm̩/	'ăm	'aem
-.-	[ʔɑ́m]	/ˣ̣ʔḿ̩/		'aém
[ʔɑmʔm, ʔɑʔm]		/ˣ̣ʔṁ̩/	'aemm̀	
[sʔm̩; sʔm]	[sʔm̩]	/sʔm̩/	s'em; sm̀	s'em
	[sʔḿ̩]	/sʔḿ̩/		s'ém
[sʔm̩ʔm]		/sʔṁ̩/	s'emm̀	
[ɬʔm̩; ɬʔləm; ɬʔm]	[ɬʔm̩; ɬʔləm]	/ɬʔm̩/	lh'em; lhl̀m; lhm̀	lh'em; lhlem
-.-	[ɬʔḿ̩; ɬʔlə́m]	/ɬʔḿ̩/		lh'ém; lhlém
[ɬʔm̩ʔm; ɬʔləmʔm]		/ɬʔṁ̩/	lh'emm̀; lhlemm̀	
[xʸʔʸɪm; xʸʔm]	[xʸʔʸɪm]	/xʔm̩/	x'em, xʏ́m; xm̀	x'em, x'iem
-.-	[xʸʔʸɪ́m]	/xʔḿ̩/		x'ém, x'iém
[xʸʔʸɪmʔm, xʸʔʸɪʔm]	-.-	/xʔṁ̩/	x'emm̀, x'iemm̀	
[xʷʔʷum; xʷʔm]	[xʷʔʷum]	/xʷʔm̩/	xʷ'em, xʷm̀; xʷm̀	xʷ'em, xʷ'uem
	[xʷʔʷúm]	/xʷʔḿ̩/		xʷ'ém, xʷ'uém
[xʷʔʷumʔm, xʷʔʷuʔm]	-.-	/xʷʔṁ̩/	xʷ'emm̀, xʷ'uemm̀	

Phonetic		Phonemic	Practical Orthography	
before [V]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
[x̌ʔɑm; x̌ʔm̩]	[x̌ʔɑm]	/x̌ʔm̩/	x̌'ăm; x̌ḿ̩	x̌' aem
-.-	[x̌ʔɑ́m]	/x̌ʔḿ̩/		x̌' aém
[x̌ʔɑm̩ʔm, x̌ʔa ʔm]	-.-	/x̌ʔḿ̩/	x̌' aemḿ̩	
[ə́nʔnəm]	[ə́nʔnəm]	/ń̩ʔm̩/	énń̩m	énń̩em
-.-	[ə́nʔném]	/ń̩ʔḿ̩/		énń̩ém
[ə́nʔnəm̩ʔm, ə́nʔnə ʔm]	-.-	/ń̩ʔḿ̩/	énń̩emḿ̩	
[ə́mʔm̩]	[ə́mʔm̩]	/ḿ̩ʔm̩/	émḿ̩m, ém' em	émḿ̩em, ém' em
-.-	[ə́mʔḿ̩]	/ḿ̩ʔḿ̩/		émḿ̩ém, ém' ém
[ə́mʔm̩ʔm]	-.-	/ḿ̩ʔm̩/	émḿ̩emḿ̩, ém' emḿ̩	
[í ʔʸɪm]	[í ʔʸɪm]	/í ʔm̩/	íy̩m	íyem
-.-	[í ʔʸɪ́m]	/í ʔḿ̩/		íy̩ém
[í ʔʸɪm̩ʔm, í ʔʸɪ ʔm]	-.-	/í ʔḿ̩/	íy̩emḿ̩	
[ú ʔʷum]	[ú ʔʷum]	/ú ʔm̩/	úw̩m	úwem
-.-	[ú ʔʷúm]	/ú ʔḿ̩/		úw̩ém
[ú ʔʷum̩ʔm, ú ʔʷu ʔm]	-.-	/ú ʔḿ̩/	úw̩emḿ̩	

| Phonetic | | Phonemic | Practical Orthography | |
before [V̄]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
[á?ɑm]	[á?ɑm]	/á?m̩/	á' aem	á' aem
-.-	[á?ɑ́m]	/á?ḿ̩/		á' aém
[á?ɑm?m, á?ɑ?m]	-.-	/á?m̩̈/	á' aemṁ	

After a single plain vowel with low tone, or a series of plain vowels (regardless of tones), one finds only /?m̩/ and /?ḿ̩/ (not also */?m̩̈/), which are phonetically and orthographically as when preceded by single /V̄/, except for the complication outlined in section 2.5.6.

The sequences /?n̩/ and /?ń̩/ , /?i̯/ and /?í̯/ follow the pattern of /?m̩/ and /?ḿ̩/.

| Phonetic | | Phonemic | Practical Orthography | |
before [V̄]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
[?ɛŷ]	[?ɛ́ɪ]	/#:?i/	' ăy	' ai
-.-	[?ɛ́ɪ]	/#:?í/		' aí
[?a?y] 1)	-.-	/#:?ǐ/	' ay̌	
-.-	[s?i]	/s?i/		s' i
-.-	[s?í]	/s?í/		s' í
-.-		*/s?ǐ/		

Phonetic		Phonemic	Practical Orthography	
before [V̥]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
-.-	[ɬ⁷i, ɬ⁷li]	/ɬ⁷i/	lh'i	
-.-	[ɬ⁷í, ɬ⁷lí]	/ɬ⁷í/	lh'í	
-.-	-.-	*/ɬ⁷i̋/		
-.-	[xʸʔʸi]	/xʔi/	x'i	
-.-	[xʸʔʸí]	/xʔí/	x'í	
-.-	-.-	*/xʔi̋/		
-.-	[xʷʔʷi]	/xʷʔi/	xʷ'i	
-.-	[xʷʔʷí]	/xʷʔí/	xʷ'í	
-.-	-.-	*/xʷʔi̋/		
-.-	[x̌ʔɛ́ɪ]	/x̌ʔi/	x̌'ai [2)	
-.-	[x̌ʔɛ́ɪ]	/x̌ʔí/	x̌'aí [2)	
-.-	-.-	*/x̌ʔi̋/		
-.-	[ə́mʔmi]	/m̩ʔi/	émmi	
-.-	-.-	*/m̩ʔí/		
-.-	-.-	*/m̩ʔi̋/		

Phonetic		Phonemic	Practical Orthography	
before [V]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
[î?ʸiy ; î?y]	[î?ʸi]	/î?i/	íy̓i, î'i; íy̓	íy̓i , î'i
-.-	-.-	*/î?î/		
-.-	-.-	*/î?ị́/		
[û?ᵂiy]	[û?ᵂi]	/û?i/	úw̓i	úw̓i
-.-	-.-	*/û?î/		
-.-	-.-	*/û?ị́/		
[â?ɛ̂y]	[â?ɛ̂ɪ]	/â?i/	á'äy, á'ai	á'ai
-.-	[â?ɛ́ɪ]	/â?í/		á'aí
-.-	-.-	*/â?ị̂/		

After a single plain vowel with low tone, and after a series of
plain vowels, one finds only /?i/ (low tone), the pronunciation
and orthographic representation of which is as when preceded by
single /V́/.

Notes:

    1. See note no. 3 on page 22.

    2. See the remark on the orthographic practice on page 28.

       Note further that in both the preceding tabulation and the
following ones, /m̥?../ is also representative of /n̥?../, /l̥?../.

Phonetic		Phonemic	Practical Orthography	
before [V̇]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
[ʔôw]	[ʔôʋ]	/ː#ʔu/	ʼăw	ʼau
-.-	[ʔốʋ]	/ː#ʔú/		ʼaú
[ʔaʔw] [1]	-.-	/ː#ʔu̓/	ʼaw̓	
[sʔuw; sʔw]	[sʔu]	/sʔu/	sʼu; sw̓	sʼu
-.-	[sʔú]	/sʔú/		sʼú
[sʔuʔw]	-.-	/sʔu̓/	sʼuw̓	
[ɫʔuw, ɫʔluw; ɫʔw]	[ɫʔu, ɫʔlu]	/ɫʔu/	lhʼu; lhw̓	lhʼu
-.-	[ɫʔú, ɫʔlú]	/ɫʔú/		lhʼú
[ɫʔuʔw, ɫʔluʔw]	-.-	/ɫʔu̓/	lhʼuw̓	
[xʸʔʸuw; xʸʔw]	[xʸʔʸu]	/xʔu/	xʼu; xw̓	xʼu
-.-	[xʸʔʸú]	/xʔú/		xʼú
[xʸʔʸuʔw]	-.-	/xʔu̓/	xʼuw̓	
[xʷʔʷuw; xʷʔw]	[xʷʔʷu]	/xʷʔu/	xʷʼu; xʷ̓w	xʷʼu
-.-	[xʷʔʷú]	/xʷʔú/		xʷʼú
[xʷʔʷuʔw]	-.-	/xʷʔu̓/	xʷʼuw̓	

Phonetic		Phonemic	Practical Orthography	
before [V̆]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
[x̌ʔôw; x̌ʔw]	[x̌ʔôʊ]	/x̌ʔu/	x̌'ăw, x̌'au; x̌w̌	x̌'au [2)
-.-	[x̌ʔóʊ]	/x̌ʔú/		x̌'aú [2)
[x̌ʔaʔw]	-.-	/x̌ʔǔ/	x̌'aw̌	
[ə́mʔmuw; ə́mʔw]	[ə́mʔmu]	/ḿ̥ʔu/	ə́mḿu; ə́mẃ	ə́mḿu
-.-	[ə́mʔmú]	/ḿ̥ʔú/		ə́mḿú
[ə́mʔmuʔw]	-.-	/ḿ̥ʔǔ/	ə́mḿuw̌	
[í̜ʔyuw; í̜ʔw]	[í̜ʔyu]	/í̜ʔu/	íẙu; íẃ	íẙu
-.-	[í̜ʔyú]	/í̜ʔú/		íẙú
[í̜ʔyuʔw]	-.-	/í̜ʔǔ/	íẙuw̌	
[ú̜ʔ^W uw; ú̜ʔw]	[ú̜ʔ^W u]	/ú̜ʔu/	úẃu, ú'u; úẃ	úẃu, ú'u
-.-	[ú̜ʔ^W ú]	/ú̜ʔú/		úẃú, ú'ú
[ú̜ʔ^W uʔw]	-.-	/ú̜ʔǔ/	úẃuw̌, ú'uw̌	
[á̜ʔôw]	[á̜ʔôʊ]	/á̜ʔu/	á'ăw, á'au	á'au
-.-	[á̜ʔóʊ]	/á̜ʔú/		á'aú
[á̜ʔaʔw]	-.-	/á̜ʔǔ/	á'aw̌	

After a single plain vowel with low tone, or a series of plain
vowels (regardless of their tones), one finds only /ʔu/ and /ʔu̯/
(not also */ʔú/), which are phonetically and orthographically
as when preceded by single /V̂/.

Notes:

      1. See note no. 3 on page 22.

      2. See the remark on the practical orthography on page
28.

      The tabulation for /ʔa̅/ and /ʔa̋/ further below goes with
a phonetic complication. The phoneme sequence /ʔa̅/, when pre-
ceded by a fricative or a vowel, can be followed by /m̥/, /n̥/,
/l̥/, /i/, or /u/, in which case /am̥/, /an̥/, etc., are pronounced
as in the position /T _ C/. (The reader is reminded that C rep-
resents any consonant or the word end, and that T represents any
consonant other than /#ʔ/, /:ʔ/, /h/, or a plain uvular.) The
pronunciation of /am̥/, etc., in the environment /T _ C/ is exem-
plified in column 1 of the tabulation directly below and con-
trasted with the pronunciation of /m̥/, etc., in the same envi-
ronment (column 2). The rationale of the phonemic interpretation
in column 1 has been explained at the end of note no. 4 in sec-
tion 2.5.1.

1		2	
[a̅m]	/am̥/	[ə̅m]	/m̥/
[ʌ̅n]	/an̥/	[ə̅n]	/n̥/
[ʌ̅l]	/al̥/	[ə̅l]	/l̥/
[ɛ̅ɪ]	/ai/	[i̅]	/i/
[o̅ʊ]	/au/	[u̅]	/u/

After plain uvulars, /h/, /#ʔ/, and /:ʔ/, the phoneme sequences /am̥/, /an̥/, /al̥/, /ai/, /au/ do not occur (phonetic [ɑm], [ʌn], [ʌl], [ɛ̂i], [ôʋ] here being actualizations of /m̥/, /n̥/, /l̥/, /i/, /u/, respectively). To understand the tabulation for /ʔa/ and /ʔa̋/, it is further necessary to know that in a series of two consecutive plain vowels only one can have high tone, the other necessarily having low tone (on this, see also section 2.5.3). Thus, for instance, the above transcription /am̥/ actually represents only:

(1) /ám̥/ and /aḿ̥/ (both phonetically [ɑ́m])

(2) /am̥/ (phonetically [ɑm])

Of the two possible transcriptions featuring a high tone, the first, /ám̥/, is actually used in phonemic transcription whereas the other, /aḿ̥/, forms the basis of the practical transcription; see the following tabulation.

Phonetic	Phonemic		Practical Orthography
	used	not used	
[ɑm]	/am̥/	-.-	aem
[ɑ́m]	/ám̥/	= /aḿ̥/	aém
[ɛ̂ɪ]	/ai/	-.-	ai
[ɛ̂́ɪ]	/ái/	= /aí/	aí
[ôʋ]	/au/	-.-	au
[ốʋ]	/áu/	= /aú/	aú

In the following tabulation of variants and orthographic rep-

resentations of /ʔa̅/ and /ʔa̋/, [D̅] stands for any one of
phonetic [a̅m], [ʌ̅n], [ʌ̅l], [ɛ̅ɪ], [o̅ʊ] . "V₍ₒᵣ₎" stands for
any orthographic plain vowel ("e̅m", etc., see chart in
section 2.1).

Phonetic		Phonemic	Practical Orthography	
before [V̅]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
-.-	[ʔa]	/#:ʔa/		'a
-.-	[ʔá]	/#:ʔá/		'á
	.	*/#:ʔaV/ 1)		
		*/#:ʔáV/ 1)		
[ʔaʔ]	-.-	/#:ʔa̋/	'a'	
-.-	[sʔa]	/sʔa/		s'a
-.-	[sʔá]	/sʔá/		s'á
-.-	[sʔD]	/sʔaV/		s'aV₍ₒᵣ₎
-.-	[sʔD́]	/sʔáV/		s'aV́₍ₒᵣ₎
[sʔaʔ]	-.-	/sʔa̋/	s'a'	
-.-	[ɬʔa, ɬʔla]	/ɬʔa/		lh'a
-.-	[ɬʔá, ɬʔlá]	/ɬʔá/		lh'á
-.-	[ɬʔD, ɬʔlD]	/ɬʔaV/		lh'aV₍ₒᵣ₎
-.-	[ɬʔD́, ɬʔlD́]	/ɬʔáV/		lh'aV́₍ₒᵣ₎
[ɬʔaʔ, ɬʔlaʔ]	-.-	/ɬʔa̋/	lh'a'	

Phonetic		Phonemic	Practical Orthography	
before [V]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
-.-	[xʸʔʸæ]	/xʔa/		x'a
-.-	[xʸʔʸǽ]	/xʔá/		x'á
-.-	[xʸʔʸD]	/xʔaV/		x'aV$_{or}$
-.-	[xʸʔʸD́]	/xʔáV/		x'aV́$_{or}$
[xʸʔʸæ̣ʔ]	-.-	/xʔa̰/	x'a'	
-.-	[χʷʔʷa]	/χʷʔa/		χʷ'a
-.-	[χʷʔʷá]	/χʷʔá/		χʷ'á
-.-	[χʷʔʷD]	/χʷʔaV/		χʷ'aV$_{or}$
-.-	[χʷʔʷD́]	/χʷʔáV/		χʷ'aV́$_{or}$
[χʷʔʷa̰ʔ]	-.-	/χʷʔa̰/	χʷ'a'	
-.-	[x̌ʔa]	/x̌ʔa/		x̌'a
-.-	[x̌ʔá]	/x̌ʔá/		x̌'á
-.-	2)	*/x̌ʔaV/		
-.-	2)	*/x̌ʔáV/		
[x̌ʔa̰ʔ]	-.-	/x̌ʔa̰/	x̌'a'	
-.-	[ə́mʔma]	/m̥ʔa/		ém̥ma
		*/m̥ʔá/		
		*/m̥ʔaV/		
		*/m̥ʔáV/		
[ə́mʔma̰ʔ]	-.-	/m̥ʔa̰/	ém̥ma'	

Phonetic		Phonemic	Practical Orthography	
before [V̥]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
-.-	[î?yæ]	/î?a/		íÿa
		*/î?á/		
		*/î?aV/		
		*/î?áV/		
[î?ya?]	-.-	/î?a̧/	íÿa'	
-.-	[û?wa]	/û?a/		úẘa
		*/û?á/		
		*/û?aV/		
		*/û?áV/		
[û?wa?]	-.-	/û?a̧/	úẘa'	
-.-	[â?a]	/â?a/		â'a
-.-	[â?á]	/â?á/		â'á
		*/â?aV/		
		*/â?áV/		
		*/â?a̧/		

After a single plain vowel with low tone, or a series of plain
vowels (regardless of their tones), only low tone /?a/ occurs
followed by /C/. Phonetically and orthographically it is as
when preceded by /V̂/.

Notes:

1. Phonemic /ʔaV/ and /ʔáV/ do not occur word-initially and after /:/, but in these positions the practical orthography nevertheless uses "'aV$_{or}$" and "'aV́$_{or}$", viz. to represent /$^{\#}_.$ʔV/ and /$^{\#}_.$ʔV́/ (followed by /C/), respectively. See the previous tabulations in this section.

2. Cases of phonetic [x̌ʔ□DC] are interpreted as follows.

Phonetic	Phonemic	Practical Orthography
[x̌ʔɑ̄m]	/x̌ʔm̩̄/	x̌'aēm
[x̌ʔɛ̂ɪ]	/x̌ʔī/	x̌'ai
[x̌ʔôʊ]	/x̌ʔū/	x̌'au

See the preceding tabulations.

2.5.3 /TV̄V̄C/ and /TV̄V̄V̄C/

Plain vowel phonemes (including /m̩/, etc.) can occur in series of maximally three. In a series of three, the middle vowel is always /a/. Consecutive identical vowels do not occur, with the exception of /ii/ and /uu/. The latter sequences have a special range of variation including simple [i] and [u]; see also the tabulation below. In a series of plain vowels only <u>one</u> can have high tone, the other(s) necessarily having low tone. The cases concerned are here exemplified; to avoid distributional and phonetic complications, the tabulation shows only vowel combinations preceded by /T/ (see 2.5).

/TV̆V̆C/		
Phonetic	Phonemic	Practical Orthography
	used / not used	
[Tənəm C]	/Tṇ̃mC/ -.-	TnemC (not *TenemC)
[Tənə́m C]	/Tṇ̃mC/ = /Tíṇ̃mC/	Tném C (not *Tenём C)
[Tiyɪm C , Tiyṃ C , TimC]	/TiṃC/ -.-	TiemC
[Tíyɪm C , Tíyṃ C , TímC]	/TíṃC/ = /Tiṃ́C/	Tiém C
[Tuwum C , Tuwṃ C , TumC]	/TuṃC/ -.-	TuemC
[Túwúm C , Túwṃ C , TúmC]	/TúṃC/ = /Tuṃ́C/	Túém C
[TɑmC]	/TaṃC/ [1] -.-	TaemC
[Tɑ́mC]	/Táṃ C/ [1] = /Taṃ́C/ [1]	Taém C
[Təni C]	/TṇiC/ -.-	TniC (not *TeniC)
[Tənɪ́C]	/TṇíC/ = /Tṇ́iC/	TníC (not *TeníC)
[TihᵞiC , TiC]	/TiiC/ -.-	TiiC
[TihᵞíC , TihᵞíC , TíC]	/TiíC = /TíiC/	TiíC
[TuwiC]	/TuiC/ -.-	TuiC
[Tuwíc , Túwic]	/TuíC/ = /TúiC/	TuíC
[Tɛ̂ɪ C]	/TaiC/ [1] -.-	TaiC
[Tɛ́ɪ C]	/TáiC/ [1] = /TaíC/ [1]	TaíC

Notes:

1. See also pages 36-37 and note no. 4 in section 2.5.1.

The practical transcriptions illustrated in the preceding tabulation are also used to represent phoneme sequences that are not consecutive vowels. See the following section for details on this and also on orthographic vowel combinations beginning with high tone "í" and "ú" (listed in the chart on page 10).

/TVaVC/			
Phonetic	Phonemic		Practical Orthography
	used	not used	
[TənɑmC]	/TṇamC/		TnaemC (not *TenaemC)
[Tənɑ́mC]	/Tṇá̱mC/ = /Tṇ́amC/ = /Tṇa̱ḿC/		TnaémC (not *Tenaémc)
[Tiyɛ̣mC]	/TiamC/		TiaemC
[Tíyɛ̣mC , Tiyɛ̣́mC]	/Tía̱mC/ = /Tíamc/ = /Tia̱ḿC/		Tiaémc
[TuwɑmC]	/Tua̱mC/		TuaemC
[Tuwɑ́mC , Tuwɑ́mC]	/Túa̱mC/ = /TúamC/ = /Tua̱ḿC/		Tuaémc
[Tənɛ̂ɪC]	/TṇaiC/		TnaiC (not *TenaiC)
[Tənɛ̂ɪC]	/Tṇá̱iC/ = /Tṇ́aiC = /Tṇa̱íC/		Tnaíc (not *Tenaíc)
[Tiyɛ̂ɪC]	/TiaiC/		TiaiC
[Tiyɛ́ɪC , Tiyɛ̂ɪC]	/Tía̱iC/ = /Tíaic/ = /Tia̱íC/		Tiaíc
[Tuwɛ̂ɪC]	/TuaiC/		TuaiC
[Tuwɛ́ɪC], Tuwɛ̂ɪC]	/Túa̱iC/ = /TúaiC/ = /Tua̱íC/		Tuaíc

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In practice vowel sequences of the types /a̅V/ and /V̅aV̅/
almost always have a high tone, the exceptions to this rule being
vocatives, exclamations, and cases of complete reduplication
(cf. /máux̌ᵂ:maux̌ᵂļs/ "bobcat").

2.5.4 /TV̅R̅V̅C/; /Tn̥nV̅C/, /TiyV̅C/, and /TuwV̅C/

A sequence of the type /V̅R̅V̅C/ (R is /m, n, l, y, w/) may
exhibit the following tone configurations when preceded by any ob-
struent, /h/, /ʔ/, /#R/ or /:R/, any glottalized resonant, or any
glottalized vowel: low-low , high-low , high-high. Low-high occurs
also, but only in vocatives, exclamations, and the special cases
mentioned in section 2.5.5.3. When preceded by /V̅/ or /...R/, a
sequence /V̅R̅V̅C/ exhibits the tone configurations low-low or high-
low; in vocatives, exclamations, and the special cases of section
2.5.5.3 (point 2) one also finds low-high. The following tabulation
features instances of /V̅R̅V̅C/ in which /R/ is the consonantal counter-
part of the preceding vowel; sequences of this kind are at the ori-
gin of the orthographic "vowel combinations" beginning with high
tone "í" and "ú" (see listing on page 10). The instances of /V̅R̅V̅C/
are always preceded by /T/ to avoid phonetic complications.

Phonetic	Phonemic	Practical Orthography
[TənnəmC ; TənəmC] [Tə́nnəmC]	/Tn̥nm̥C/ /Tń̥nm̥C/ */Tń̥nḿ̥C/	TennemC ; TnemC TénnemC
[TiyɪmC , Tiym̥C] [Tíyɪmc , Tíym̥C]	/Tiym̥C/ /Tíym̥C/ */Tíyḿ̥C/	TiemC TíemC
[TuwumC , Tuwm̥C] [Túwumc , Túwm̥C]	/Tuwm̥C/ /Túwm̥C/ */Túwḿ̥C/	TuemC TúemC

Note that the range of variation of /Tn̥n̥mC/ includes the
unique variant of /Tn̥mC/ (see 2.5.3). Conversely, the range
of variation of /Tim̥C/, /Tum̥C/ includes the two variants
of /Tiym̥C/, /Tuwm̥C/. The practical orthography is not
phonemic (1) in allowing two spellings, "TennemC" and "TnemC"
for /Tn̥n̥mC/, (2) in writing "TíemC", "TúemC" for /Tíym̥C/,
/Túwm̥C/, and (3) in writing "TiemC", "TuemC" for both /Tim̥C/,
/Tum̥C/ and /Tiym̥C/, /Tuwm̥C/.

Phonetic	Phonemic	Practical Orthography
[Tən̥niC ; Tən̥iC]	/Tn̥niC/	TenniC ; TniC
[Tə́n̥niC]	/Tń̥niC/	TénniC
[Tə́n̥nîC]	/Tń̥nîC/	Ténnîc
[Tihʸic , TiC]	/TiyiC/	TiiC
[Tíhʸic , TíC]	/TíyiC/	TíiC
	*/Tíyíc/	
[TuwiC]	/TuwiC/	TuiC
[TúwiC]	/TúwiC/	TúiC
	*/Túwíc/	

The tabulations starting with /Tn̥nuC/ and /Tn̥naC/ are similar
to this one. Note that the difference between /TuwiC/ and
/TuiC/ is morphophonemic, not phonetic. See also section
2.5.5.3.

2.5.5 Special Cases Involving Plain Vowels

(H represents /h/, /#?/, and /:?/; K any palato-velar, K^W any rounded velar or uvular, and Q any plain uvular. Other symbols as defined on page 19.)

2.5.5.1 The Absence of /a̅V̅/ after /Q/ and /H/

The following tabulation contrasts cases of /CV̅/, /Ca̅R/, and /Ca̅VC/ in which /R/ is the consonantal counterpart of /V̅/. The tabulation restates the first 12 items of either tabulation in section 2.5.1 in the light of the observations in note no. 4 in this latter section, and those in section 2.5.3. In addition, cases are considered in which /C/ is /Q/ or /x̌?/.

Phonetic		Phonemic	Practical Orthography	
before [V̅]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
[Təm]	[Təm]	/Tm̥/	Tm	Tem
-.-	[Tə́m]	/Tḿ̥/		Tém
[Tam]	-.-	/Tam/	Tam	
-.-	[Tɑm]	/Tam̥/		Taem
[Tám]		/Tám/	Tám	
-.-	[Tɑ́m]	/Tám̥/		Taém
[Qɑm]	[Qɑm]	/Qm̥/	Qm	Qem
-.-	[Qɑ́m]	/Qḿ̥/		Qém

Phonetic		Phonemic	Practical Orthography	
before [V̄]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
[Qam]	-.-	/Qam/	Qam	
[Qám]	-.-	/Qám/	Qám	
[x̌ʔɑm; x̌ʔm̩] [x̌ʔɑm]	[x̌ʔɑm]	/x̌ʔm̩/	x̌'ăm; x̌m̩	x̌'aem
-.-	[x̌ʔɑ́m]	/x̌ʔḿ̩/		x̌'aém
[x̌ʔam]	-.-	/x̌ʔam/	x̌'am	
[x̌ʔám]	-.-	/x̌ʔám/	x̌'ám	
[Hɑm]	[Hɑm]	/Hm̩/	{ ham / 'ăm	Haem
-.-	[Hɑ́m]	/Hḿ̩/		Haém
[Ham]	-.-	/Ham/	Ham	
[Hám]	-.-	/Hám/	Hám	
[Tuw] [1]	[Tu]	/Tu/	Tu	Tu
-.-	[Tú]	/Tú/		Tú
[Taw]	-.-	/Taw/	Taw	
-.-	[Toʊ̂]	/Tau/		Tau
[Táw]	-.-	/Táw/	Táw	
-.-	[Toʊ̂]	/Táu/		Taú
[Qow]	[Qoʊ̂]	/Qu/	Qu	Qu
-.-	[Qoʊ̂]	/Qú/		Qú

Phonetic		Phonemic	Practical Orthography	
before [V̄]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
[Qaw]	-.-	/Qaw/	Qaw	
[Qáw]	-.-	/Qáw/	Qáw	
[x̌ʔôw; x̌ʔw]	[x̌ʔôʋ]	/x̌ʔu/	x̌'ǎw, x̌'au; x̌w	x̌'au
-.-	[x̌ʔóʋ]	/x̌ʔú/		x̌'aú
[x̌ʔaw]	-.-	/x̌ʔaw/	x̌'aw	
[x̌ʔáw]	-.-	/x̌ʔáw/	x̌'áw	
[How]	[Hôʋ]	/Hu/	{ haw 'ǎw	Hau
-.-	[Hóʋ]	/Hú/		Haú
[Haw]	-.-	/Haw/	Haw	
[Háw]	-.-	/Háw/	Háw	

Notes:

1. Phonetic [Tuw] followed by a vowel parallels [Tiy] followed by a vowel (see note no. 6 in section 2.5.1).

2.5.5.2 The Absence of /im̦/, etc., after /K/, and of /um̦/, etc., after /K^W/.

With the exception of loanwords, there are no cases of

*/Kiṃ̇C/, */Kiṇ̇C/, */Kiḻ̇C/ or */K^Wuṇ̇C/, */K^Wuṇ̇C/, */K^Wuḻ̇C/. (For details on the tones in these items, see section 2.5.3.) An example of an exception (borrowing from English) is /sg^Wúḻ/, phonetically [sk^Wuwʊl , sk^Wuwḻ́], orthographically "sgvuél".

2.5.5.3 /uwḻ̇s/, /ūwis/, /ūwiḻ/

The above three sequences can be allomorphs of (compound) morphemes meaning, respectively, "to a position out of the house", "out of a position in open space", and "out of a position in enclosed space (e.g. out of a room)", in which case the sequences are preceded by /T, Q, V̊/ or /V̊/ and have the following peculiarities.

1. After /T, Q, V̊/, a sequence of the type /V̊RV̊C/ can occur with the following tone configurations: low-low, high-low, or high-high; in vocatives and exclamations one moreover finds low-high (see section 2.5.4). Now, after /T, Q, V̊/ the allomorphs /ūwḻ̇s/, /ūwis/, /ūwiḻ/ are instances of the pattern /V̊RV̊C/ and can have two particular tone configurations. But although one of these is a "normal" tone configuration, viz. low-low, the other is the configuration that is otherwise characteristic of vocatives and exclamations, viz. low-high. Thus, after /T, Q, V̊/ one has: /uwḻ̇s/, /uwḻ́s/ and /uwi^S_ḻ/, /uwî^S_ḻ/. These are pronounced as follows.

/uwḻ̇s/ [uwʊls , uwḻ̇s]	/uwi^S_ḻ/ [uwi^S_ḻ]
/uwḻ́s/ [ūwʊ́ls , uwḻ́s], very occa- sionally also [úwʊ́ls , úwḻ́s]	/uwî^S_ḻ/ [uwî^S_ḻ , ūwî^S_ḻ]

Note: (a) /uwḻ/ in /uwḻ̇s/ differs phonetically from the vowel series /uḻ/ only in that the former lacks and the latter has a third variant, [ul] (the variation of /uḻ/ is similar to that of /uṃ/, see chart on page 42); (b) /uwḻ́/ in /uwḻ́s/ lacks the variants *[uwʊ́l, uwḻ́] which the placing of the high tone could suggest, but it has (rare) variants with two high tones; otherwise /uwḻ́/ differs phonetically from /úḻ/ only in that it lacks a variant [úl] (see page 42); (c) /uwî/ in /uwi^S_ḻ/ is phonetically indistinguishable from /uï/ (see page 42). Examples of the allomorphs are as follows.

Phonetic	Phonemic	Practical Orhtography
[ʔákʸū́wʊls , ʔákʸū́wl̥s]	/ʔáguwl̥s/	águéls
[tʰxʷū́wʊls , tʰxʷū́wl̥s]	/txʷuwl̥s/	txvuéls
[lámuwʊls , lámuwl̥s]	/lámuwl̥s/	lámuels

(The last item is a plural form of /láuwl̥s/ mentioned below.)

2. /uwl̥s/, etc., can occur also after /V̄/, in which case the pattern /V₁V₂RV₃C/ is formed in which normally only /V̄₁/ or /V̄₂/ can have high tone, not /V̄₃/ (apart from vocatives and exclamations). Nevertheless, the particular sequences /V̄₁uwl̥s/, /V̄₁uwis/, /V̄₁uwil̥/ follow this rule only if /V̄₁/ is /ā/, otherwise it is /l̥/ or /i/ that has the high tone (if at all). Examples:

Phonetic	Phonemic	Practical Orthography
[ló̇úwʊls]	/láuwl̥s/	laúels
[tʰxʷumū́wʊls , tʰxʷumū́wl̥s]	/txʷm̥uwl̥s/	txvmuéls

(The second example is a plural form of /txʷuwl̥s/ , see above.)

It is noteworthy that /uwl̥s/, etc., have synonyms /uyl̥s/, etc., which occur with normal tone configurations.

2.5.6 /ṁ̥ , ṅ̥ , l̥̇ , i̇ , u̇ , ȧ/ and /m̥ʔ , n̥ʔ , l̥ʔ , iʔ , uʔ , aʔ/

Glottalized vowels are preceded by any phoneme except

(1) /m, n, l, y, w/ preceded by a plain vowel, and (2) plain
vowels. They are always followed by a vowel (plain or glottal-
ized). Their characteristic variants and their orthographic
representations are as follows. The reader is reminded that
glottalized vowels always have low tone.

Phonetic	Phonemic	Practical Orthography
[əm̰ʔm , əʔm]	/m̰̩/	emm̊
[ən̰ʔn , əʔn]	/n̰̩/	enn̊
[əl̰ʔl , əʔl]	/l̰̩/	ell̓
[iʔy]	/ḭ/	iy̓
[uʔw]	/ṵ/	uw̓
[aʔ]	/a̰/	a'

Phonetic [aʔ] has to be followed by [◻D̲] (i.e., any one of [◻a̲m],
[◻ʌn], etc.; see page 38) or by [◻a̲]. For details, see also section
2.5.7.4. For other variants than those tabulated, see sections
2.3, 2.5.2, and 2.5.7.1 - 2.5.7.3.

The practical orthography uses "emm̊", "enn̊", etc., also
to represent low tone /m̩/ followed by /ʔ/, low tone /n̩/ followed
by /ʔ/, etc. The cases concerned are exemplified below. V◻ᵒʳ refers
to an orthographic plain vowel ("em", etc., see section 2.1).

Phonetic (before a vowel)	Phonemic	Practical Orthography (before a vowel, see 2.1)
[◻V̄ləm̰ʔm , ◻V̄ləm̰ʔm , ◻V̄ləʔm] ◻[V̄li ʔy]	/◻V̄lm̩ʔ/ /◻V̄liʔ/	◻V̄ₒᵣlemm̊ ◻V̄ₒᵣliy̓

Phonetic (before a vowel)	Phonemic	Practical Orthography (before a vowel, see 2.1)
[V̄luʔw] [V̄laʔ] 2)	/V̄luʔ/ /V̄laʔ/	V̄ₒᵣluẘ V̄ₒᵣlaʼ
[V̄yɪmʔm , V̄ym̩ʔm , V̄yɪmʔm , V̄ym̩ʔm , V̄yɪʔm] [V̄yuʔw] [V̄yaʔ] 2)	/V̄ym̩ʔ/ */V̄yiʔ/ /V̄yuʔ/ /V̄yaʔ/	V̄ₒᵣyemm̊ V̄ₒᵣyuẘ V̄ₒᵣyaʼ
[V̄wumʔm , V̄wm̩ʔm , V̄wumʔm , V̄wm̩ʔm , V̄wuʔm] [V̄wiʔy] [V̄waʔ] 2)	/V̄wm̩ʔ/ /V̄wiʔ/ */V̄wuʔ/ /V̄waʔ/	V̄ₒᵣwemm̊ V̄ₒᵣwiẙ V̄ₒᵣwaʼ

Notes:

1. In some cases, depending on morphophonemics, the same variants are interpreted /V̄lm̩m̊/ rather than /V̄lm̩ʔ/.

2. Followed by [D̄] or [ā], see the remark in the preceding paragraph.

Note further that the range of variation of /m̩ʔ/ in /V̄lm̩ʔ/ includes the variants of /m̩/ listed at the beginning of this section., viz. [əmʔm , əʔm]. The practical orthography is not phonemic in using "emm̊" both to represent /m̩/ (with two

variants) and /m̥ʔ/ (with three). On the other hand, /iʔ/ in /V̇liʔ/ and /V̇wiʔ/ is not phonetically distinct from /i̇/. Paradigmatic considerations and morphophonemics are the basis of the interpretation of [V̇liʔy] and [V̇wiʔy] as /V̇liʔ/ and /V̇wiʔ/. Similarly for the interpretation of [V̇luʔw] , [V̇laʔ], etc.

The following tabulation differs from the preceding one only in that /m̥ʔ/, /iʔ/, etc., are preceded by /ḷ, i, u/ (low tone) instead of /l, y, w/.

Phonetic (before a vowel)	Phonemic	Practical Orthography (before a vowel, see 2.1)	
[ələmʔm , ələmʔm , ələʔm]	/ḷm̥ʔ/ [1)	lemm̥	
[əliʔy]	/ḷiʔ/	liy̓	(not *el...)
[əluʔw]	/ḷuʔ/	luw̓	
[əlaʔ] [2)	/ḷaʔ/	la'	
[iyɪmʔm , iym̥ʔm , iyɪmʔm , iym̥ʔm , iyɪʔm]	/im̥ʔ/	iemm̥	
	*/iiʔ/		
[iyuʔw]	/iuʔ/	iuw̓	
[iyaʔ] [2)	/iaʔ/	ia'	
[uwumʔm , uwm̥ʔm , uwumʔm , uwm̥ʔm , uwuʔm]	/um̥ʔ/	uemm̥	
[uwiʔy]	/uiʔ/	uiy̓	
	*/uuʔ/		
[uwaʔ] [2)	/uaʔ/	ua'	

Notes:

    1. In some cases, depending on morphophonemics, the same variation is interpreted as /ḷm̥m̥/ rather than /ḷm̥ʔ/.

    2. See note no. 2 to the preceding tabulation.

2.5.7 Special Cases Involving /m̥, n̥, ḷ, i̥, u̥, ḁ/

    (K represents any palato-velar, K^W any rounded velar or uvular, Q any plain uvular, H the consonants /h/ and /ʔ/ preceded by /#/ or /:/.)

2.5.7.1 /Km̥/ and /Kim̥/

Phonetic	Phonemic	Practical Orthography	
		standard spelling	permitted variant spelling
[Kɪmʔm , Kɪʔm]	/Km̥/	Kemm̥	-.-
[Kiʔm , Kɪʔm , Kɪmʔm]	/Kim̥/	Kim̥	Kemm̥
[Kíʔm]	/Kím̥/	Kím̥	-.-

Similarly for /Kn̥/- /Kin̥/ and /Kḷ/- /Kil̥/.

2.5.7.2 The Absence of /um̥/ after /K^W/

Phonetic	Phonemic	Practical Orthography	
		standard spelling	permitted variant spelling
[K^{W}umʔm , K^{W}uʔm]	/K^{W}m̥/	K^{W}emm̥	K^{W}um̥
	*/K^{W}um̥/		
[K^{W}úʔm]	/K^{W}úm̥/	K^{W}úm̥	-.-

Phonetic	Phonemic	Practical Orthography	
		standard spelling	permitted variant spelling
[Kᵂʊn?n , Kᵂʊ?n , Kᵂu?n]	/Kᵂn̩/ */Kᵂuṅ/	Kvenṅ	Kvuṅ
[Kᵂúṅ]	/Kᵂúṅ/	Kvúṅ	-.-

Similarly for /Kᵂı̩/- /Kᵂuı̇/ - /Kᵂúı̇/.

2.5.7.3   The Absence of /am̊/, /aṅ/, /aı̇/, /aẙ/, /aẘ/ after /Q/, and of /aẙ/, /aẘ/ after /H/

Phonetic	Phonemic	Practical Orthography	
		standard spelling	permitted variant spelling
[Qam?m , Qa?m , Qa?m]	/Qm̩/ */Qam̊/	Qemm̊	Qam̊
[Qá?m]	/Qám̊/	Qám̊	
Similarly for /Qn̩/, etc., and /Qı̩/, etc.			
[Qa?y, Qʌ?y, Qa?y, Qɛ?y , Qe̞?y]	/Qı̇/ */Qaẙ/	Qaẙ	Qiẙ
[Qá?y]	/Qáẙ/	Qáẙ	-.-

Phonetic	Phonemic	Practical Orthography	
		standard spelling	permitted variant spelling
[Ha?y]	/Hǐ/	Haẏ	-.-
	*/Haẏ/		
[Há?y]	/Háẏ/	Háẏ	-.-
[Qa?w , Qʌ?w , Qa?w , Qo?w]	/Qǔ/	Qaẘ	Quẘ
	*/Qaẘ/		
[Qá?w]	/Qáẘ/	Qáẘ	-.-
[Ha?w]	/Hǔ/	Haẘ	-.-
	*/Haẘ/		
[Há?w]	/Háẘ/	Háẘ	-.-

2.5.7.4   /a̦m̥/ vs. /am̥m̥/, /a̦m̥/ vs. /am̥m̥/, etc.

Following /a̦/, /V̥/ or /V̦/ has the same variation as after /Q/. The tabulation below shows how this variation is expressed orthographically while contrasting /a̦m̥/ with /am̥m̥/, /a̦m̥/ with /am̥m̥/, etc. Note that the variation of /V̥/ after /Q/ (see tabulation in section 2.5.5.1) is not expressed in the practical orthography whereas the orthography is forced to express the variation after /a̦/ due to (1) the occurrence of particularly /am̥m̥/ (initial low tone) beside /a̦m̥/ and (2) the occurrence of the spelling variant "a'em" for the former. One is reminded that glottalized vowels always have low tone.

Phonetic		Phonemic	Practical Orthography			
before [V̇]	before [C]		before a vowel (of chart in 2.1)		before a consonant (of chart in 2.1)	
			standard spelling	variant spelling	standard spelling	variant spelling
[aʔɑm]	[aʔɑm]	/ả m̥/	a'ăm		a' aem	
-.-	[aʔɑ́m]	/ả ɱ́/			a' aém	
[aʔɑm̯ʔm , aʔɑʔm]	-.-	/ảɱ̥/	a' aemm̊			
[aʔm̥]	[aʔm̥]	/am̥m̥/	am̊m	a' em	am̊em	a' em
-.-	[aʔɱ̥]	/am̊ɱ́/			am̊ém	a' ém
[âʔm̥]	[âʔm̥]	/âm̥m̥/	âm̊m	â' em	âm̊em	â' em
-.-	[âʔɱ̥]	/âm̊ɱ́/			âm̊ém	â' ém
[aʔm̥ʔm]	-.-	/am̊ɱ̥/	am̊emm̊	a' emm̊		
		*/âm̥ɱ̥/				
[aʔɛ̂y]	[aʔɛ̂ɪ]	/ải/	a' ăy	a' ai	a' ai	
-.-	[aʔɛ́ɪ]	/ảí/			a' aí	
		*/ảỉ/				
[aʔʸiy]	[aʔʸi]	/aẙi/	aẙ 1)	aẙi , a' i	aẙi	a' i
-.-	[aʔʸí]	/aẙí/			aẙí	a' í
[âʔʸiy]	[âʔʸi]	/âẙi/	âẙ 1)	âẙi , â' i	âẙi	â' i

Phonetic		Phonemic	Practical Orthography			
before [V̅]	before [C]		before a vowel (of chart in 2.1)		before a consonant (of chart in 2.1)	
			standard spelling	variant spelling	standard spelling	variant spelling
-.-	[áʔʸí]	/áyí/ */ayí/ */áyí/			áyí	á'í
[aʔṍw; aʔw]	[aʔṍʊ]	/áu/	a'ăw	a'au; aw̌	a'au	
-.-	[aʔṍʊ́]	/áú/			a'aú	
[aʔṍʊʔw; aʔaʔw; aʔw]	-.-	/áǔ/	a'auw̌	a'aw̌; aw̌		
[aʔʷuw]	[aʔʷu]	/awu/	aw̌ 1)	aw̌u, a'u	aw̌u	a'u
-.-	[aʔʷú]	/awú/			aw̌ú	a'ú
[áʔʷuw]	[áʔʷu]	/áwu/	áw̌ 1)	áw̌u, á'u	áw̌u	á'u
-.-	[áʔʷú]	/áwú/ */awú/			áw̌ú	á'ú
[áʔʷuʔw]	-.-	/áwǔ/	áw̌uw̌	á'uw̌		

Phonetic		Phonemic	Practical Orthography	
before [V̄]	before [C]		before a vowel (of chart in 2.1)	before a consonant (of chart in 2.1)
-.-	[aʔa]	/a̧a/		a'a
-.-	[aʔá]	/a̧á/		a'á
		*/a̧á̧/		

Notes:

    1. See note no. 14 in section 2.5.1.

2.5.8 /m/ and /m̧̄/, etc., as Single Phonemes

    The phonemic notation used in the preceding sections distinguishes between on the one hand the consonants /h, y, w, m, n, 1/ (and their glottalized counterparts, /ḩ/ being written /ʔ/), and on the other hand the group of vowels, divided into vowels proper, /ā̄, ī̄, ū̄/ (and their glottalized counterparts), and vocalic resonants, /m̧̄, ņ̄, 1̧̄/ (and their glottalized counterparts). On the basis of distribution and morphophonemics, this distinction can be dropped and a single category of phonemes introduced -- conveniently referred to as resonants -- of which the former consonants and vowels are the consonantal and vocalic actualizations. This requires more particularly a review of the opposition type /SŖ/ and /SV̧/, which is exemplified below. S represents any fricative.

	/SR̓/			/SV̓/
[Sʔm]	/Sm̓/	[Səmʔm , Səʔm]	/Sm̥̓/
[Sʔn]	/Sn̓/	[Sənʔn , Səʔn]	/Sn̥̓/
[Sʔl]	/Sl̓/ ¹⁾	[Səlʔl , Səʔl]	/Sl̥̓/
[Sʔy]	/Sy̓/	[Siʔy]	/Si̓/
[Sʔw]	/Sw̓/	[Suʔw]	/Su̓/
[Sʔ] ²⁾	/Sʔ/	[Saʔ] ³⁾	/Sa̓/

¹⁾ Disregarding cases of [ɬʔl] = /ɬʔ/, see section 2.5.2.

²⁾ Followed by any vowel.

³⁾ Followed by [◻D̲] (i.e., any one of [ɑ̲m], etc.; see page 38) or [a̲], not for instance by [m̲̣]. In the latter case [aʔ] would correspond to /am̓/, see the tabulation in section 2.5.7.4.

In the type /SR̓/ there is always a morpheme-boundary between /S/ and /R̓/. A juncture-symbol /./ can therefore be introduced (cf. /S.R̓/), resulting in /S.m̓/, /S.n̓/, /S.l̓/, /S.y̓/, /S.w̓/, /S.ʔ/ . This brings /R̓/ (including /ʔ/) in complementary distribution with /V̓/.

In addition, cases of /ṃ̲mV̲/, /i̲yV̲/, /u̲wV̲/, can be written /ṃ̲hV̲/, /i̲hV̲/, /u̲hV̲/ whenever there is a morpheme-boundary after /ṃ̲/, /i̲/, /u̲/, respectively. After this, /h/ occurs no longer only after /#/ and /:/, but has the distribution of /m, n, l, y, w/ (which occur after /#/, /:/, and plain vowels).

Finally, to unite the vowels and their consonantal

counterparts into a single series of phonemes ("resonants"), rules have to be given determining the consonantal and vocalic nature of a resonant. These are as follows (R representing any plain resonant, Ř any glottalized one; the consonant symbols (including ḣ for ?) are used for particular resonants: m, n, 1, y, w, h ; m̓, n̓, 1̓, y̓, w̓, h̓).

Plain Resonants

1. /R/ preceded by /#/ or /:/ is always consonantal.

2. Otherwise, /R/ not adjoining another /R/ is always vocalic.

3. For series of plain resonants (not counting a word-initial one):

a. with an odd number of resonants one has

$$...\text{VCVCVCV}...$$

(alternating) unless the second resonant of the series is /h/, in which case one has

$$...\text{VVVCVCV}...$$

b. with an even number of resonants, one has

$$...\text{VVCVCVCV}...$$

(alternating, except at the beginning).

From position 3 (odd series) and 2 (even series) on, consonantal occurrences of /h/ are not phonemically distinct from consonantal occurrences of the preceding vocalic resonant, i.e. there is no distinction /mh/ vs. /mm/, /yh/ vs. /yy/, /wh/ vs. /ww/, etc.

Glottalized Resonants

An Ř is consonantal in the following positions:

1. after /#/ and /:/

2. after /R/ that is not preceded by /#/ or /:/

3. after /S./ (S is any fricative).

Elsewhere an Ř is vocalic. After /...R/, the resonant /h̓/ is not phonemically distinct from the consonantal occurrence of the glottalized counterpart of this /R/. Thus, there is no distinction /mh̓/ vs. /mm̓/, /yh̓/ vs. /yy̓/, /wh̓/ vs. /ww̓/, etc. After /S./, the pronunciation of /h̓/ is as follows.

/s.h̓/	[sʔ]
/ɬ.h̓/	[ɬʔ , ɬʔl]
/x.h̓/	[xʸʔʸ]
/xʷ.h̓/	[xʷʔʷ]
/x̌ʷ.h̓/	[x̌ʷʔʷ]
/x̌.h̓/	[x̌ʔ]

The variation of the (vocalic) resonant that almost always follows /S.h̓/, has been described in detail in section 2.5.2. The most important features are that after /x.h̓/ this resonant is pronounced as after /y̓/, after /xʷ.h̓/ and /x̌ʷ.h̓/ as after /w̓/, and after /x̌.h̓/ as after /#h̓/.

The phonemic notation for the Heiltsuk roots in Lincoln and Rath (1980) actually uses only a single series of resonants (represented by means of the consonant symbols, including h̓). In the examples of the roots vocalic and consonantal positions are marked by the use of separate vowel and consonant symbols (but h̓ instead of ʔ). In addition, the juncture-symbol /./ is

used in certain series of plain resonants. This particular use of
/./ is correlated with the fact that non-initial consecutive iden-
tical plain resonants are sometimes transcribed (in the examples)
as a single vocalic resonant. The latter orthographic practice
however reflects (predominant) variants rather than phonemic struc-
ture proper; rigorously maintaining the correspondence between pho-
nemics and orthography makes the use of /./ between plain resonants
redundant.

3. SOME ASPECTS OF HEILTSUK WORD STRUCTURE

3.1 MORPHEME AND ALLOMORPH, ROOT AND SUFFIX

The words "k̓átlá" and "k̓átí" contain the same part "k̓át"
which refers to writing, painting, or drawing pictures. The words
"zúslá" and "zúsí" have a common part "zús" referring to digging.
"lá" in "k̓átlá" and "zúslá" refers to continuous action, "í" in
"k̓átí" and "zúsí" to the tangible thing on or in which an action
is carried out. "k̓át" and "zús" occur in several, "lá" and "í" in
many words beside those mentioned here. "lá" and "í" may express
other shades of meaning as well. Beside "k̓átlá" and "k̓átí" there
are words containing a part that is slightly different in com-
position from "k̓át" but that nevertheless has the same meaning.
Examples: k̓ádáyú , k̓átákv , k̓álh'it . These parts "k̓ád", "k̓át" ,
"k̓át", and "k̓álh" are called allomorphs of one and the same mor-
pheme. This morpheme is the abstract common component of its
allomorphs and the actual carrier of the meaning "to write, paint,
draw pictures". The difference in composition between the allo-
morphs "k̓ád", "k̓át", "k̓át", "k̓álh" is called alternation. Just
as "k̓ád" alternates with "k̓át", "k̓át", "k̓álh", the allomorph
"lá" alternates with "la", "l", "álá", "ál", "ala", "al". Ex-
amples are as follows; the word-final allomorph "i" that is some-
times used refers to "the one that is there".

ǩátlá   'thiy̆ál̆í

m̆íthélsla   suála

m̆íthélsli   múǧvuala

'thiy̆álá   múǧvuali

"lá", "la", etc. are allomorphs of a morpheme that refers to continuous action (among other things as well). The word "ǩátlá" is therefore composed first of all of allomorphs, "ǩát" and "lá", but ultimately it analyzes into morphemes. There are two kinds of morpheme in Heiltsuk, roots and suffixes. Roots are always the first morpheme of a word, suffixes follow a root or each other. "ǩád", "ǩát", "ǩát", and "ǩálh" are therefore allomorphs of a root, "lá", "la", "l", "álá", etc. of a suffix. Words with the same root are said to derive from this root. Examples of such words are "ǩátlá", "ǩádáyú", etc. Henceforward a morpheme will be written as the set of its allomorphs, root allomorphs with a final hyphen and suffix allomorphs with an initial hyphen. Thus,

{ǩád- , ǩát- , ǩát- , ǩálh- , ...}

{-lá , -la , -l , ...}

Individual allomorphs outside the context of a word are cited between quotation marks. Allomorphs are set off against the context of a word by means of underlining, cf. ǩádáyú , ǩátlá, etc. The concept of allomorph will not be applied strictly linguistically: what are called different allomorphs of the same morpheme are sometimes in reality the same phoneme(s) in different practical orthography.

The large majority of Heiltsuk words are composed of

several morphemes. Among the exceptions consisting of only a
root are: aík , ẏák , gvúkv , gélt , ḱvénq , q̓vénk , čkv .

3.2   EXAMPLES OF ALTERNATION OF ALLOMORPHS

     The rows in the following chart indicate which allomorph-
final spelling units alternate with which others. To the extent
possible, the order of the presentation of the rows follows the
order of the rows of spelling units in the charts in section 2.1.

1	b	p	p̓			ṁ	ém	em	emṁ	dábáyú, dáplá, dáṗx̌dí, dáṁit; sbáyú, splá, sṗá, semṁít; kvúbnúčx̌dha, kvúplá, kvúṗx̌u, kvúṁit, kvuẃémsis, kvíkvuẃemsis
2						m	ém	em	emṁ	masmáx̌ut, masém, masems, masemṁís; t̓hbém, t̓hbemṁáči; nígvem; nígvemṁáči
3	d	t	t̓	lh						ḱádáyú, ḱátlá, ḱátákv, ḱálh'it
4					n		én	en	enṅ	ẃnála, ẃénx'it, ẃens, ẃenṅílh
5			x	n	ṅ		én	en	enṅ	cíxlá, cínáči, cíṅálá; tíxlá, tínís, tíṅa, tiẏéns; mxlá, mṅáči, menbút, menṅút
6	z	c	č	s						ṁénzáyú, ṁéncí, ṁénčs[1], ṁéns'it
7	z	c	č	s	y	ẏ	í	i	(iẏ)[2]	t̓haczú, t̓hasa'aí, t̓haíkv; ṗáčs, ṗaíkv; púsa, púẏlá, puíṅakvla, puẃíx̌u; cáslá,

8					í	i	iỷ	ẃíx'it, ẃiála, ẃiỷís; ḱvuẃémsí, ḱvuẃémsiỷut
9	dh	th	'th	lh				ğádháyú, ğáthkv, ğáğatha, ğálh'it
10				lh	l	'l	él	el (ell)²⁾ — nílha, nílém, náníla; tílha, tíláci, tiélkv; ńúlha, ńúla; mlhlá, mláyu; ẃílha, ẃiỷélx̌t; lháğilha, lháğiélkv
11					l	él	el	ell — wlála, ẃélx'it, welkv, wellílás
12	g	k	'k	x				ǫgáyú, ǫklá, ǫǩx̌dí, ǫx'ít
13	gv	kv	'kv	xv				m̈gváyú, m̈kváx̌út, m̈kválá, m̈xvsiỷút
14	xv … x̌v				w	ẇ	ú	u uẇ — lháxvlá, lháẃis, lháẇa; Bélxvlá, Bélẃálá, Bellús; mxvlá, muáci; cáxvlá, cácaẃáyú, cácúx̌vdhi; dháx̌vláthla, dháẃis, dháẇa, dha'aús³⁾; yx̌vá, yuílas, yuẃínúx̌v
15					ú	u	uẇ	úxvčem, us, uẃís; p̓áỷu, p̓áỷuẇaci; thuxválásu, thuxválásuẇaci
16	ğv	qv	q̓v	x̌v				díğváyú, díqvlá, díq̓vínúx̌v, díx̌v'it
17	ğ	q	q̓	x̌				náğáyú, náqkv, náq̓bu, náx̌ps
18					á	a	a'	p̓áx'it, p̓akv, p̓a'aénx̌ ³⁾,

ṗa'ăwí [3]; k̓vâxdemm̓a,
k̓vas, k̓va'aís [3]

Notes:

  1. Not listed in dictionary. Meaning: to measure on the
ground outside.

  2. Regular, but no example available.

  3. dha'aús = /λa̓ús/ (=/λhw̓s/), ṗa'aénx̌ = /ṗa̓n̓x̌/ (=/ṗhn̓x̌/),
ṗa'ăwí = /ṗa̓uí/ (=/ṗhw̓ý/), k̓va'aís = /k̓ʷa̓ís/ (=/k̓ʷh̓ýs/). See
sections 2.5.7.4 and 2.5.8.

  Note the similarity between:

  (a) 2, 4, and 11 ;

  (b) 3, 6, 9, 12, 13, 16, and 17 ;

  (c) 5, 10, and 14 .

Rows 1 and 7 stand by themselves; in 1 one has "m̓" and vowels
instead of a fricative, while 7 combines the characteristics of
(b) and (c).

3.3 CATEGORY A, B, AND C SUFFIXES

  Suffixes that can immediately follow a root are called
category A suffixes. For instance, "lá", "la", "l", etc. (see
3.1) are allomorphs of a category A suffix. Category A suffixes
occur sometimes also in series, cf. m̓íthélsla (m̓íth-éls-la).
Category A suffixes have a wide variety of meanings. They refer
to body parts, shapes of things (round and/or bulky, long, etc.),
locations (in open space, in enclosed space, on a large surface,

on a small surface, etc.), directions (into something, out of something, etc.), characteristics of people and things (e.g. habit or capability of doing something)', implements, modes of occurrence (transition from non-existence to existence or vice versa, continuous state or action, passivity, etc.). There are also category A suffixes that hardly have any definable meaning.

In addition to category A suffixes, Heiltsuk has a large number of suffixes that can only follow a word stem, i.e., they can follow a combination of a root and one or more category A suffixes provided this combination suffices to make a word. In addition they can follow those roots that can make a word by themselves (see the end of 3.1). These suffixes can also occur in series. They fall into two groups, category B and C suffixes.

Category B suffixes refer to time and mode of occurrence, probability, necessity, etc., and also to attitudinal features such as endearment, awe, surprise, irritation, etc. Category C suffixes have deictic meaning; with minor exceptions, they are always the last suffixes of a word. They divide into three main groups, primary deictics, secondary deictics, and personal deictics. The personal deictics are really enclitics, but for practical purposes they are treated as suffixes in writing and naming. Heiltsuk also has a few proclitic elements, which are written and referred to as separate words.

The category A suffixes are not listed here, as words involving them are entered in the dictionary. Words involving category B suffixes are only occasionally listed in the dictionary. Section 3.3.1 therefore lists those category B suffixes that are used frequently in illustrations of dictionary entries. The category C suffixes are all treated in section 3.3.2.

3.3.1 Some Category B Suffixes

The suffixes are represented below as sets of allomorphs in practical orthography. An acute (´) over a vowel means that it is found only with high tone, the superscript □ over a vowel means that it is found with either high or low tone, and absence of a diacritical mark over a vowel means that it occurs only with low tone. The mark _ under an allomorph-initial vowel indicates that the allomorph becomes preceded by "m", "n", or "l", respectively, after:

(a) word stems ending in a sequence of "m", "n", "l", "y", or "w" and high tone "ém", "én", or "él" (cf. "ǧném", "nîlém", "núyém");

(b) word stems ending in two consecutive plain vowels the last one of which is "ém", "én", or "él" (cf. "kvdién", "kvastáliem").

An example is suffix no. 1 below, {-a̱}. If used after "ǧném", the allomorph of this suffix is "ma" (cf. "ǧnémma"); if used after "kvdién", the allomorph is "na" (cf. "kvdiénna"). On the meaning of the mark _ , see also the remark at the end of this section. The notation type $\frac{kv}{xv}$ indicates alternation of spelling units. The symbol (v) after velars indicates the liprounding which occurs if the preceding allomorph ends with "u̱" or a rounded obstruent, or which may be due to the following contraction:

$$\dots \frac{kv}{xv} - \frac{g}{\underset{\dot{k}}{k}} \dots \longrightarrow \dots \frac{gv}{\underset{\dot{k}v}{kv}} \dots$$

Otherwise the distribution of allomorphs is not gone into beyond an occasional remark. The presentation of the suffixes follows the same alphabetic order as the dictionary, which is basically the order of the English alphabet. Suffixes with allomorphs that begin differently are listed only once, with the longer allomorph at the beginning of the set. The longer allomorph is not necessarily the

more frequent one. If the allomorphs have the same length, an arbitrary one of the set is put at the beginning. The full range of meaning of some suffixes is uncertain, in particular of nos. 9, 12, 26, and 33.

1 {-a̱ }

(Used optionally at the end of the last word of questions that can be answered with "yes"or "no". Popularly referred to as the question mark suffix.)

2 { -a'aem , -a'ăm , -a'aemm̓ ,
-am̓ , -aem , -em , -m ,
-'em 1) , -'emm̓ 1) }

indeed , real(ly) , complete(ly) , genu-ine(ly)

3 { -a'ailă , -a'aił , -ailă ,
-aił , -iłă , -ił , -'iłă 1) ,
-'ił 1) , -ilă , -ił }

(Perfective suffix indicating that some-thing exists or is the case by way of transitional stage in or end point of events.)

4 { -a'au , -a'ăw , -a'auw̓ ,
-a'aw̓ , -aw̓ , -au , -aw̌ ,
-auw̓ , -'u 1) , -'uw̓ 1) , -u }

(Diminutive, hypocoristic, appreciative, and apologetic suffix for the singular. See also no. 11.)

5 { -a'aulh , -aulh , -u̱lh ,
-'u̱lh 1) }

long ago (cf. no. 13)

6 {-ai , -a̱y̓ , -i̱ }

(1. Interrogative suffix for the 1st and 3rd person. Can be followed by 1st or 3rd person subject suffixes -- see list-ing in 3.3.2. However, 3rd person subject suffixes nos. V and VI, {-i̱ } and {-i̱c} , cannot follow the interrogative suffix directly, but are in this case replaced by {-l-i} , {-l-ic} ;

2. Factualizing suffix (broadly meaning

"the fact that ..."). Not followed by subject suffixes.)

7 { -a̱s }

(Interrogative suffix for the 2nd person corresponding to "Are you...?, Do you ...?". Its presence excludes the use of the 2nd person subject suffix -- see 3.3.2.)

8 { -aẍa , -aẍ , -ẍa , -ẍ }

also, likewise, again (Found preceded by no. 2 and/or followed by no. 9 or 26. May be a component of no. 33.)

9 { -dhа̄ , -dh }

contrary to what one would expect

10 { -ellā' , -ella' , -elí , -ía , -ia' , -í }

reportedly, as they say, as the story goes, as another person puts it

11 { -emʾınıẍv , -ʾmnıẍv }

(Diminutive, hypocoristic, appreciative, and apologetic suffix for the plural. See also no. 4.)

12 { -g(v)ānem , -g(v)anm }

perhaps, it could be that ... , possibly, probably

13 { -gvaúlh , -gvulh }

long ago (cf. no. 5)

14 { -g(v)ı̄lh }

1. ground, reason, cause, motive for something ;
2. to be the beneficiary, addressee, recipient, or victim of something

15 { -k(v)ā , -k(v)a' }

non-... , un-... (Occurs as component of nos. 16, 17, and 23a-b; possibly also of no. 18.)

16 $\begin{Bmatrix} \text{-k(v)a'a\overset{\square}{u}} , & \text{-k(v)a'ăw} , \\ \text{-k(v)a'au\overset{?}{w}} , & \text{-k(v)a'a\overset{?}{w}} , \\ \text{-k(v)a\overset{?}{w}} \end{Bmatrix}$ (Augmentative, etc., suffix for the singular: opposite meanings of no. 4. In addition used in myths in the names of personified animals.)

17 $\{ \text{-k(v)a\overset{\square,\square}{mni\check{X}v}} \}$ (Plural of no. 16)

18 $\begin{Bmatrix} \text{-k(v)a\overset{\square}{s}'u} ; & \text{-k(v)a\overset{\square}{s}\overset{?}{w}} , \\ \text{-k(v)a\overset{\square}{s}'u\overset{?}{w}} \end{Bmatrix}$ (Used to indicate the plural but can also have honorific meaning.)

19 $\{ \text{-k(v)l\overset{\square}{a}} , \text{-k(v)l} \}$ to refer to something as ... , to call something (a) ... , to use the word '...' for something

20 $\{ \text{-l\overset{\square}{i}sem} , \text{-l\overset{\square}{i}sm} , \text{-l\overset{\square}{i}sem\overset{?}{m}} \}$ a fair time ago

21 $\{ \text{-nu}^{\square kv}_{\quad xv} \}$ 1. to have, own, use, employ, possess something ;
2. to have something for someone to do, use, enjoy ;
3. to have something done

22 $\{ \text{-\overset{?}{q}al\overset{\square\square}{a}} , \text{-\overset{?}{q}a\overset{\square}{l}} \}$ (Component of nos. 23, 23a-b)

23 $\begin{Bmatrix} \text{-\overset{?}{q}al\overset{\square\square}{a}'aem} , & \text{-\overset{?}{q}al\overset{\square\square}{a}'aem\overset{?}{m}} , \\ \text{-\overset{?}{q}al\overset{\square\square}{a}'ăm} , & \text{-\overset{?}{q}al\overset{\square\square}{e}m} , & \text{-\overset{?}{q}al\overset{\square\square}{a}m} , \\ \text{-\overset{?}{q}al\overset{\square\square}{a}\overset{?}{m}} \end{Bmatrix}$ simply, only, merely, exactly, just, literally (Combination of nos. 22 and 2)

23a $\begin{Bmatrix} \text{-\overset{?}{q}al\overset{\square}{a}ka\overset{\square}{m}ni\check{X}v'em} , \\ \text{-\overset{?}{q}al\overset{\square}{a}ka\overset{\square}{m}ni\check{X}v\overset{?}{m}} \end{Bmatrix}$ (Combination of nos. 23 and 17)

23b $\{ \text{-\overset{?}{q}al\overset{\square}{a}ka\overset{\square}{m}u} , \text{-\overset{?}{q}al\overset{\square}{a}ka\overset{\square}{m}u\overset{?}{w}} \}$ (Combination of nos. 23 and 16)

24 $\{ \text{-s}^{2)} , \text{-c}^{3)} \}$ (Left-hand adjunct suffix; see 4.1 ff.)

25 $\{ \text{-s\overset{\square}{u}} , \text{-su\overset{?}{w}} \}^{2)}$ 1. to be ...ed , to undergo ...ing ; thing or person that is ...ed ;
2. thing or person with a certain

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characteristic ;
3. there is ... , there exists ... ;
... takes place

26 $\{$ -tá'□ , -t' $\}$ (probably:) of course

27 $\{$ -th $\}$

1. it will be the case that ... ;
2. it would be (have been) the case
that ... (if ...) ;
3. having to do, having to be

28 $\{$ -x(v)$_t^d$, -$_t^d$ $\}$

1. in the recent past ;
2. absent; not actual, present, or alive
any more; over and done with (When having
these shades of meaning, the suffix can
be preceded by nos. 5, 13, 20.)

29 $\left\{\begin{array}{l} \text{-x(v)dém , -x(v)demḿ ,} \\ \text{-x(v)dm , -dém ,-demḿ , -dm} \end{array}\right\}$

there is ... , there exists ... ;
... takes place

30 $\left\{\begin{array}{l} \text{-x(v)sí , -x(v)s , -sí } ^{2)}, \\ \text{-cí } ^{3)}, \text{ -s } ^{2)}, \text{ -c } ^{3)} \end{array}\right\}$

(Imperative and exhortative suffix. The
allomorphs with final "i" have to be used
if more suffixes follow; otherwise the
use of final "i" is optional.)

31 $\left\{\begin{array}{l} \text{-x(v)staú}_{xv}^{kv} , \text{-x(v)stu}_{xv}^{kv} , \\ \text{-staú}_{xv}^{kv} , \text{-stu}_{xv}^{kv} , \text{-taú}_{xv}^{kv} , \\ \text{-tu}_{xv}^{kv} \end{array}\right\}$

approximately, sort of, more or less

32 $\left\{\begin{array}{l} \text{-x(v)thá , -x(v)tha' ,} \\ \text{-x(v)th , -thá , -tha' , -th} \end{array}\right\}$

to bear the name of ...

33 $\{$ -x̌en$_t^d$, -x̌en $\}$

apparently, presumably; considering the
evidence one would say that ...

Notes:

      1. The allomorphs "'em" and "'emm" of category B suffix
no. 2, the allomorphs "'ila" and "'il" of no. 3, the allomorphs
"'u" and "'uw" of no. 4, and the allomorph "'ulh" of no. 5, each
have a range of alternants beside them. For instance, instead of
"'em" one can have "iem", "'iem", "'uem", "'aem" (to mention only
a few possibilities). The alternants occur after fricatives and
vowels; strictly speaking they are not allomorphs but orthograph-
ic reflections of the allophonic variation of the phoneme /?/
(= /h/, see section 2.5.8), and a following vowel, after frica-
tives and vowels. The allophonic variation, and its orthographic
representation, are tabulated in section 2.5.2. Thus, in the col-
umn "Practical Orthography" of the tabulation on pages 29-31, the
items beginning with a fricative or a vowel feature actual "allo-
morphs" of category B suffix no. 2 after this fricative or vowel.
Similarly, the items beginning with a fricative or vowel on pages
31-33, feature the initial part of "allomorphs" of category B
suffix no. 3 after the fricative or vowel. The items beginning
with a fricative or vowel on pages 34-35, feature "allomorphs"
of category B suffix no. 4 after this fricative or vowel, and at
the same time the initial part of "allomorphs" of category B suf-
fix no. 5. See also the remark in section 3.1 on the use of the
term "allomorph" in these sections.

      2. The element "s" has certain peculiarities detailed
in section 3.3.2.1, points 2 and 3.

      3. The allomorph beginning with "c" occurs after "lh";
see section 3.3.2.1, point 4.

         - - -

      Note also that the explanation of the meaning of the

mark _ on page 69 takes into account the devices of the practical orthography, which do not always reflect phonemic structure (on this, see in particular section 2.5.4). In terms of the abstract phonemic system explained in section 2.5.8 (in which vowels are vocalic resonants), the mark _ simply means that the allomorph begins with the phoneme /h/ whenever the preceding stem ends in two or more consecutive plain resonant phonemes the last one of which is not /h/. (For details on /h/, see in particular page 60, last paragraph.)

3.3.2 Category C Suffixes

The Category C suffixes are presented in the charts on pages 77-78. The same abbreviating devices are used as for the category B suffixes, including the mark _ (see the beginning of section 3.3.1). Many category C suffixes are actually polymorphemic -- as are many category B suffixes. For instance, some primary deictics and 3rd person deictics (see charts) feature a final element "c", which is strictly speaking a suffix in its own right indicating that something is invisible or that it is seen only "with one's mind's eye". Below this element is glossed simply as "invisible". It has a phonetic peculiarity detailed in section 3.3.2.1. Otherwise the analysis of the category C suffixes is not gone into. To characterize the meaning of the suffixes, the following code is used.

I	here with me
II	idem, invisible
III	here with you, there with you, concerning you particularly
IV	idem, invisible
V	over there, near neither you nor me ; under discussion, being talked about

VI   idem, invisible

VII   absent, gone

Other abbreviations used:

1   first person (i.e., the speaker)

2   second person (i.e., the listener, the addressee)

3   third person (i.e., neither the speaker nor the
            listener)

sg.   singular

pl.   plural

incl.   inclusive of the addressee

excl.   exclusive of the addressee

Nomenclature of the Category C Suffixes. Their Translation in Running Texts

Category C suffixes perform various syntactic functions which are detailed in section 4.1 ff. Roughly, primary and secondary deictics occur with words and word groups functioning as subject or object of a sentence (among other things as well). The names of the 5 kinds of personal deictics (see pages 77 and 78) reflect their function. Subject and object suffixes are so called because they can perform the function of subject and object of a sentence, respectively, while "his"-adjunct suffixes are so called because they can substitute for an adjunct beginning with the prepositional element "his". (Object suffixes and "his"-adjunct suffixes serve other functions as well, though.) The "la̱" and "q"-suffixes are so called because they occur only after the root allomorphs "la̱" and "q", respectively. Very broadly, "la̱" means "at, on, in, to", while "q" means "for the benefit of", "concerning".

Primary Deictics		Secondary Deictics	
Order no. (also meaning code)			Order no.
I	$\{-g(v)\overset{\square}{\underline{a}}\ ,\ -g(v)\}$	$\{-\check{x}g\overset{\square}{\underline{a}}\ ,\ -\check{x}g\}$	a
II	$\{-g(v)\overset{\square}{\underline{a}}c\}$		
III	$\{-i\overset{\square}{\underset{\check{x}}{\underline{a}}}q\ ,\ -y\overset{\square}{\underset{\check{x}}{\underline{a}}}q\ ,\ -\overset{\square}{\underset{\check{x}}{\underline{a}}}q\}$ [1]	$\{-\check{x}v\}$ [2]	b
IV	$\{-i\overset{\square}{\underset{\check{x}}{\underline{a}}}c\ ,\ -y\overset{\square}{\underset{\check{x}}{\underline{a}}}c\ ,\ -\overset{\square}{\underset{\check{x}}{\underline{a}}}c\}$		
V	$\left\{\begin{array}{l}-i\overset{\square}{\underline{a}}\ ,\ -i\ ,\ -y\overset{\square}{\underline{a}}\ ,\ -y\ ,\\ -\overset{\square}{\underline{a}}\ ,\ -\emptyset\end{array}\right\}$ [3]	$\{-\check{x}\overset{\square}{\underline{i}}\}$	c
VI	$\{-i\overset{\square}{\underline{a}}c\ ,\ -y\overset{\square}{\underline{a}}c\ ,\ -\overset{\square}{\underline{a}}c\}$		
VII	$\{-\overset{\square}{\underline{i}}\}$ [4]	$\{-\check{x}g\overset{\square}{\underline{a}}\ ,\ -\check{x}g\}$ [5]	d

Personal Deictics			
	Subject Suffixes	Object Suffixes	"his"-Adjunct Suffixes
1 sg.	$\{-n\overset{\square}{\underline{u}}gva\ ,\ -n\overset{\square}{\underline{u}}gv\}$	$\{-\overset{\square}{\underline{en}}tha\ ,\ -\overset{\square}{\underline{en}}th\}$	[6]
1 pl. incl.	$\{-\overset{\square}{\underline{en}}c\}$	$\{-\overset{\square}{\underline{en}}thenc\}$	[6]
1 pl. excl.	$\{-\overset{\square}{\underline{en}}t^{kv}_{xv}\}$	$\{-\overset{\square}{\underline{en}}thent^{kv}_{xv}\}$	[6]
2 sg./pl.	$\{-s\overset{\square}{\underline{u}}\ ,\ -c\overset{\square}{\underline{u}}\}$ [8]	$\{-\overset{\square}{\underline{u}}tha\ ,\ -\overset{\square}{\underline{u}}th\}$	$\{-\overset{\square}{\underline{u}}s\}$ [7]
3^{I} sg./pl.	$\{-\underset{x}{k}(v)\}$	$\{-q^k_x\}$	$\{-s^k_x\ ,\ -c^k_x\}$ [8]
3^{II} sg./pl.	$\{-\underset{x}{k}(v)c\}$	$\{-q^k_xc\}$	$\{-s^k_xc\ ,\ -c^k_xc\}$ [8]
3^{III} sg./pl.	$\{-\overset{\square}{\underline{u}}\underset{xv}{qv}\ ,\ -\overset{\square}{\underline{u}}\}$ [9]	$\{-qv\}$	$\{-s^{qv}_{xv}\ ,\ -c^{qv}_{xv}\}$ [8]
3^{IV} sg./pl.	$\{-\overset{\square}{\underline{u}}\check{x}vc\}$	$\{-qvc\}$	$\{-s\check{x}vc,\ -c\check{x}vc\}$ [8]
3^{V} sg./pl.	$\{-\overset{\square}{\underline{i}}\}$ [10]	$\{-q\overset{\square}{\underline{i}}\}$	$\{-s\overset{\square}{\underline{i}}\ ,\ -c\overset{\square}{\underline{i}}\}$ [8]
3^{VI} sg./pl.	$\{-\overset{\square}{\underline{i}}c\}$ [10]	$\{-q\overset{\square}{\underline{i}}c\}$	$\{-s\overset{\square}{\underline{i}}c\ ,\ -c\overset{\square}{\underline{i}}c\}$ [8]
3^{VII} sg./pl.	$\{-k(v)\overset{\square}{\underline{i}}\}$	$\{-qk\overset{\square}{\underline{i}}\}$	$\{-sk\overset{\square}{\underline{i}}\ ,\ -ck\overset{\square}{\underline{i}}\}$ [8]

	Personal Deictics (Continued)	
	"1$\overset{\square}{\text{a}}$"-Suffixes	"q"-Suffixes
1 sg.	{-éntha , -énth }	{-enńúgva , -enńúgv } [11]
1 pl. incl.	{-énthenc }	{-a'aénc }
1 pl. excl.	{-énthent$_{xv}^{kv}$ }	{-a'aént$_{xv}^{kv}$ }
2 sg./pl.	{-útha , -úth }	{-encǔ$^{\square}$ } [12]
3^{I} sg./pl.	{-x̌$_{x}^{k}$ }	{-a'aén$_{x}^{k}$ }
3^{II} sg./pl.	{-x̌$_{x}^{k}$c }	{-a'aén$_{x}^{k}$c }
3^{III} sg./pl.	{-x̌v }	{-enńú$_{x̌v}^{qv}$, -enńú } [9,11]
3^{IV} sg./pl.	{-x̌cx̌v }	{-enńúx̌vc } [11]
3^{V} sg./pl.	{-x̌i$^{\square}$ }	{-enńi$^{\square}$ } [11]
3^{VI} sg./pl.	{-x̌ic$^{\square}$ }	{-enńic$^{\square}$ } [11]
3^{VII} sg./pl.	{-x̌ki$^{\square}$ }	{-a'aénki$^{\square}$ }

(For notes to the charts, see further below.)

The primary deictics are referred to by the code number of their meaning. Thus, "primary deictic suffix no. I", "primary deictic suffix no. II", etc. The secondary deictics are distinguished as a , b , c , and d (on the relationship between a and d , consult note no. 5 below). If used at all in a construction (on which see section 4.1), the secondary deictics go with primary deictics in the way indicated in the chart: secondary deictic a with primary deictic no. I or II, b with no. III or IV, c with no. V or VI, d with no. VII. The secondary deictics have only a syntactic function (see 4.1) and add no

meaning to the primary deictics, with the exception of secondary deictic d , which determines that primary deictic no. VII refers to an absent, gone, or deceased one that was near the speaker. Unlike primary deictics nos. I-VI, primary deictic no. VII can be followed by another primary deictic, viz. one of nos. III-VI, in which case the latter can go with its corresponding secondary deictic. To translate the primary deictics, the numbers I, II, etc. can be used. Examples:

hiḿásgax̌ga (hiḿás-ga-x̌ga) "a chief^I", "the chief^I", "chief^I"

hiḿásax̌i   (hiḿás-a-x̌i)   "a chief^V", "the chief^V", "chief^V"

It depends on the context of utterance whether a primary deictic has to be translated with an indefinite or definite article, or with no article at all. If primary deictic no. VII is followed by another primary deictic, the translation has to use two Roman numerals. Compare the following examples.

hiḿásdix̌ga   (hiḿás-d-i-x̌ga)   "a chief^{VII}", "the chief^{VII}", "chief^{VII}"

hiḿásgvulhiax̌i (hiḿás-gvulh-i-a-x̌i)   "a chief (long ago)$^{VII-V}$", "the chief ...", "chief..."

A full translation of the first of these two examples would run: "(a, the) chief who was here a while ago"; that of the second example: "(a, the) one who was a chief long ago and who is absent and being talked about" (long ago = "gvulh"; absent = "i" (no. VII), talked about = "a" (no. V)).

The personal deictics are referred to as "1st person singular subject (object, "his"-adjunct", "1a", or "q"-) suffix", "1st person plural inclusive subject (object, etc.) suffix", "3rd person (singular or plural) subject (object, etc.) suffix no. I", and so on. To translate 3rd person suffixes, use can be made of

the symbols "3^I", "3^{II}", etc. Examples:

híɱásk (híɱás-k) "3^I is (was) a chief"

híɱáski (híɱás-ki) "3^{VII} is (was) a chief"

In suitable contexts one can also use "he^I", "she^I", "it^I", "they^I"; "he^{II}", "she^{II}", and so on, or "him^I", "her^I", "them^I", and so on. As for "his"-adjunct suffixes, they can be translated (broadly) as "with (by, than, of) me (us, you, 3^I, etc.)". For the use and meaning of the "1$\overset{\square}{a}$" and "q"-suffixes, see page 96 and also dictionary entry "1$\overset{\square}{a}$", section 1, and dictionary entry "qen".

Notes to the Charts

1. The alternants with final "q" occur only before allomorphs beginning with a vowel. See also note no. 9.

2. $\{-\check{x}v\}$ merges with directly preceding $\{-i\overset{\square q}{\underset{\check{x}}{a}}$, $-y\overset{\square q}{\underset{\check{x}}{a}}$, $-\overset{\square q}{\underset{\check{x}}{\underline{a}}}\}$ into $\{-ia\check{x}v$, $-ya\check{x}v$, $-\underline{a}\check{x}v\}$. Example:

híɱás-$\overset{q}{\underset{\check{x}}{a}}$-$\check{x}v$ $\longrightarrow$ híɱása$\check{x}v$ "(a, the) chief^{III}"

3. The low tone allomorph "a" of primary deictic suffix no. V is lost before an allomorph beginning with a low tone vowel. This is indicated by the mark $\emptyset$.

4. Primary deictic suffix no. VII is always preceded by category B suffix no. 5 (or 13), 20, or 28, or by a combination of these.

5. Secondary deictic suffix d has the same allomorphs as secondary deictic suffix a , but the former puts a condition on the tone of preceding primary deictic suffix no. VII ($\{-\overset{\square}{i}\}$),

whereas the latter does not do this on "a̅□" of "g(v)a̅□" (primary deictic suffix no. I). Details on this are beyond the scope of these sections.

6. There are no "his"-adjunct suffixes for the 1st person; instead one uses the following "his"-adjuncts or proclitics.

	complete "his"-adjuncts	proclitics
1 sg.	his núgva	qs
1 pl. incl.	his núgvaénc	qenc
1 pl. excl.	his núgvaént$_{xv}^{kv}$	qent$_{xv}^{kv}$

"His" is a prepositional element; its meanings, and phonetic details, are explained in the dictionary. Details on the use of "his núgva", etc., or "qs", etc., are given in section 4.2.1 (pages 95-96), and section 4.2.2. Note however that "qs", etc., can have possessive meaning, in which case this particular meaning can be emphasized optionally by the additional use of the suffix {-énc□}. This suffix is formally identical to the 1st person plural inclusive subject suffix, but is in this case referred to as the optional 1st person possessive suffix.

7. Instead of {-u̲s□} one can use the complete adjunct "his qsú" (plural: "his qíqsu"), except when {-u̲s□} has possessive meaning. See also the preceding note.

{-u̲s□} merges with preceding primary deictic no. III, {-ia̲x̲□q , -ya̲x̲□q , -a̲x̲□q}, into {-iaqvs , -yaqvs , -a̲qvs}. Example:

híṁás-a$_{x̲}^{q}$-us $\longrightarrow$ híṁásaqvs   "your chief[III]"

8. The allomorph beginning with "c" occurs after "1h".

See section 3.3.2.1, also for details on allomorphs beginning
with "s".

9. The alternant with final "qv" occurs only before allo-
morphs beginning with a vowel; see also note no. 1. If no other
suffix follows, both "u̱x̱v" and "u̱" can be used.

10. Directly following the interrogative suffix {-aí , -a̱ý ,
-i̱} (category B suffix no. 6), the subject suffixes {-i̱} and {-i̱c }
are substituted by {-1-i} and {-1-ic}, respectively.

11. In accordance with rule no. 4a in section 2.3, "qenn̊"
can also be spelled "qan̊".

12. See section 3.3.2.1 on the pronunciation of "c".

3.3.2.1 "ts" and "c"

The orthographic sequence "ts" is distinct from single "c"
when "t" and "s" belong to the same morpheme. That is, in practice
"ts" as distinct from "c" occurs only in the root allomorph "ts"
(cf. ts̱á, ts̱'ít, ts̱lá) and in root allomorphs involving redupli-
cation of initial "d" or "t", such as: tîts̱a (plural of "ts̱á"),
dúts̱a (plural of "dúsa"), dáts̱a (plural of "dása"). In contrast,
"c" as distinct from "ts" occurs relatively frequently in both
root allomorphs and suffix allomorphs. Examples of root allomorphs:
cás̱a (plural: cács̱a), cús̱a (plural: cúcs̱a), m̊énca , m̊éncî , m̊énckv ,
tếlc . Examples of suffix allomorphs: naéncx̱va "grizzly bear!!",
naéncs̱ "typical of a grizzly bear". In the following cases the dis-
tinction between "ts" and "c" is neutralized to the effect that
both the pronunciations "ts" and "c" are possible, or that one may
hear a sound complex of which it is impossible to tell whether it
is "ts" or "c":

1a. orthographic "c" of {-e̱nc} (1st person plural inclu-
sive subject suffix and optional 1st person possessive suffix --
see note no. 6 on page 81), {-e̱nthenc } (1st person plural inclu-

sive object suffix, also functioning as "1a̅□"-suffix), and {-a'aénc}
(1st person plural inclusive "q"-suffix);

      1b. orthographic "c" of "q"-suffix {-encu□};

      1c. the element "c" of (1) primary deictics nos. II, IV,
VI, (2) 3rd person suffixes with these same numbers, (3a) the de-
monstrative proclitics gacx̌v, qux̌vcx̌v, qicx̌v (explained in sec-
tion 4.1, page 87-88), and (3b) the demonstrative full words gácqv,
qúx̌vcqv, qícqv (see section 4.1.1);

      2. all cases where "c" represents the contraction of stem-
final "c" or "s" with suffix-initial "s". Example:

ƙús-su p̓ála	⟶ ƙúcu p̓ála	"you do not work"
(cf. ƙús-i p̓ála	⟶ ƙúsi p̓ála	"3^V does not work")

      3. all cases where a stem ending in "d" is followed by a
suffix beginning in "s", the result being written "ts". Example:

túxv'id-sú	⟶ túxv'itsú	"you take a walk"
(cf. túxv'id-í	⟶ túxv'idí	"3^V takes a walk")

      4. all cases where a stem ending in "t", "th" (but not
category B suffix no. 27), or "1h" is followed by a suffix begin-
ning in "s", the result being written "1hc". Examples:

ƙús gvúkvlaút-si	⟶ ƙús gvúkvlaúlhci	"3^V has no fellow-villagers"
(cf. ƙús gvúkvlaút-us	⟶ ƙús gvúkvlaútus	"you have no fellow-villagers")
q̓a'aúth-su	⟶ q̓a'aúlhcu	"you know"
(cf. q̓a'aúth-i	⟶ q̓a'aúthi	"3^V knows")
ǧválh-sú p̓ála	⟶ ǧválhcú p̓ála	"you stop working"
(cf. ǧválh-í p̓ála	⟶ ǧválhí p̓ála	"3^V stops working")

- - -

4. <u>OUTLINE OF HEILTSUK SENTENCE STRUCTURE</u>

In this section the following abbreviations are used.

A   right-hand adjunct (i.e., (1) phrase introduced
             by one of the prepositional elements "his", "la",
             or "qen", or (2) subordinate clause)

d_1 primary deictic suffix

d_2 secondary deictic suffix

fact   factualizing suffix (i.e., category B suffix
             no. 6)

O   object

ob   object suffix

P   predicate

prep   prepositional element (i.e., one of the elements
             "his", "la", or "qen")

R   relatum

S   subject

š   left-hand adjunct suffix (category B suffix
             no. 24)

*s   suffix used in subordinate clauses, see 4.4

*sf   "his"-adjunct suffix

sub   subject suffix

SuCl   subordinate clause

X   word without category C suffixes and syntacti-
             cally relevant category B suffixes (such as
             the interrogative suffixes (nos. 6 and 7), the

factualizing suffix (no.6), the left-hand
adjunct suffix (no. 24), the imperative and
exhortative suffix (no. 30))

4.1 THE BASIC SENTENCE TYPE. THE STRUCTURE OF A RELATUM

Basic Sentence Type:

P	S	O	A	A	A

Composition of Constituents:

X	R	R	prep R	prep R	prep R
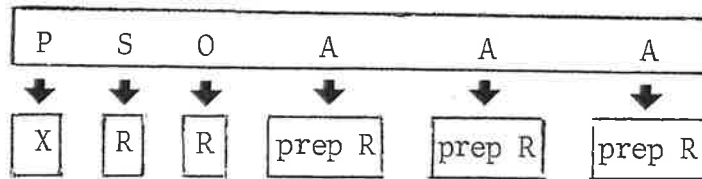
The structure of R is explained further below.

Example:

Dáduqvlá wísmáx̌i w̌áčiáx̌i	"A (the) man^V watch$^{es}_{ed}$ a (the) dog^V
his dûǧváyúax̌i la uxvthiásax̌i	with binoculars^V on a (the) roof^V
qen hírmásax̌i	for a (the) chief^V"

Analysis:

P	S	O	A		A		A	
X	R	R	prep	R	prep	R	prep	R
Dáduqvlá	wísmáx̌i	w̌áčiáx̌i	his	dûǧváyúax̌i	la	uxvthiásax̌i	qen	hírmásax̌i
watch	man^V	dog^V	with	binoculars^V	on	roof^V	for	chief^V
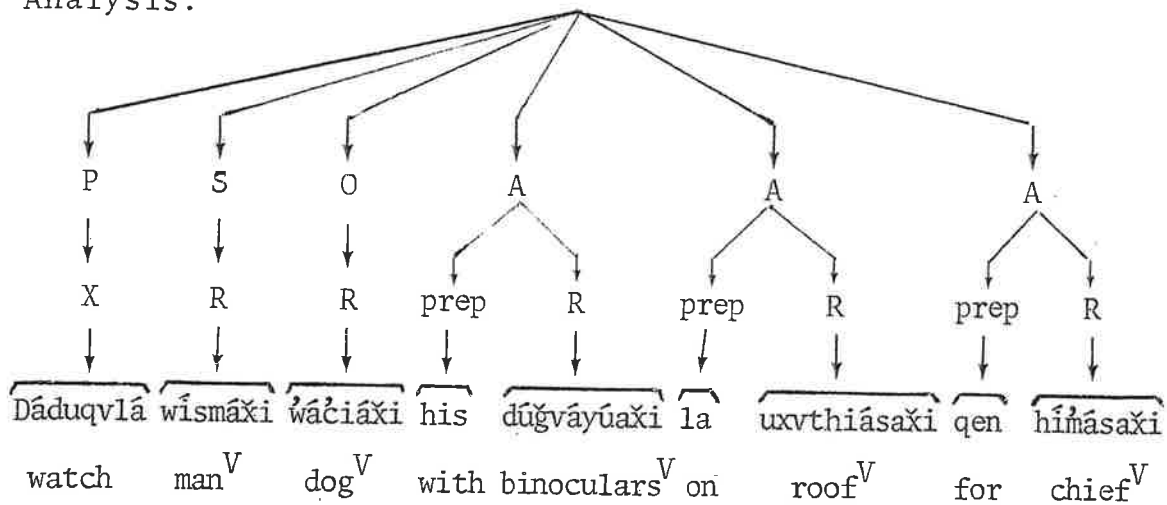
The sentence constituent A does not begin with one of
the prepositional elements "his", "la", or "qen" in the follow-
ing cases:

1. a number of temporal adjuncts, e.g. lhaénca (lhaénc-a)
"yesterday", lhaénsthac (lhaéns-th-ac) "tomorrow", x̌vísénx̌a
(x̌vísénx̌-a) "last year". Being one-word relata (see explanation
below), these examples have an unusual structure in that they
lack a secondary deictic after primary deictic "a" or "ac";

2. some types of adjunct consisting of a subordinate
clause. For details, see section 4.4.1 ff.

A relatum (R) has one of the structures R 1 - R 11 exem-
plified below. Underlining indicates the centre of a construc-
tion, parentheses surround an optional constituent. The struc-
tures R 1 - R 11 are put together in a chart on the next page.

R 1:   X   cf. miás "meat", miá "fish (esp. salmon)",
            naénqk̇vimas "soft drinks". Generally, the examples
are words that refer to classes of things or materials and that
are used as object or after a prepositional element (i.e., in
an adjunct) without any particular class member or portion of
the material being intended. Example:

P	S	O
thiẏá-th	wísmáx̌i	miás
buy will	man^V	meat

"A (the) man^V will buy meat"

R 2a: $\underline{X-d_1-d_2}$ cf. $\underline{miás}$-a-x̌i "(the) meat^V", $\underline{miá}$-ya-x̌i "(a,
                the) fish^V", $\underline{wísm}$-á-x̌i "(a, the) man^V",
$\underline{wáč}$-iá-x̌i "(a, the) dog^V". $\underline{uxvthiás}$-a-x̌i "(a, the) roof^V".

The Structure of a Relatum					
R 1		X	R 6b	$X(-d_1)-\dot{s}$ $X-\dot{s}$ $\underline{X}$ A	
R 2a		$\underline{X}-d_1-d_2$	R 7	$\underline{X}-d_1$ X	
R 2b	(proper names)	$\underline{X}-d_1$	R 8	$\underline{X}-d_1$ X R	
R 3	$X-d_1-\dot{s}$	$\underline{X}(-d_2)$	R 9	$\underline{X}-d_1$ X A	
R 4	$X-d_1-\dot{s}$ $X-\dot{s}$	$\underline{X}(-d_2)$	R 10	$\underline{X}-d_1$ X R A	
R 5		$\underline{X}-d_1$ A	R 11	$X-d_1-\dot{s}$ $\underline{X}$ X R A	
R 6a	$X(-d_1)-\dot{s}$	$\underline{X}$ A	R 12	SuCl (see 4.4)	

R 2b: $\underline{X}-d_1$ cf. Haémzid-iá "Haémzit[V]", "Dháw̓á-yá "Dháw̓a[V]", John-a "John[V]", Peter-ya "Peter[V]". $\underline{X}$ is a proper name in the regular examples, but occasionally this is not so, type R 2b being only a substitute for type R 2a.

R 3: $X-d_1-\dot{s}$ $\underline{X}(-d_2)$ cf. p̓áč̓uá-ya-s wísem(-x̌í) "(a, the) diligent man[V]", w̓ála-ya-s w̓áč̓(-x̌í) "(a, the) real dog[V]", aík-a-s uxvthiás(-x̌i) "(a, the) good roof[V]". The constituent $X-d_1-\dot{s}$ is referred to as a left-hand adjunct. In a small number of cases the adjunct lacks $\dot{s}$. Example: la-ya 'Wáwísklasu(-x̌i) "one[V] that is today ("la") referred to (-kla-su) as 'Wáwís", "what[V] is today called 'Wáwís". Not every X can be used in a left-hand adjunct; on this see section 4.3.1. A special kind of left-hand adjunct are the following demonstrative proclitics:

        gax̌v   "this[I]"
        gacx̌v   "this[II]"
        qux̌v   "this[III], that[III]"
        qux̌vcx̌v   "this[IV], that[IV]"
        qix̌v   "this[V], that[V]" (that[V] = that-one-there ; this[V] =

this one that is being or going to be talked
about)

qicx̌v   "this^{VI}, that^{VI}"

qkix̌v   "this^{VII}, that^{VII}"

"gax̌v" can precede a word (centre of construction or otherwise)
which contains primary deictic no. I, "gacx̌v" a word containing
primary deictic no. II, and so on. In the first two of the fol-
lowing examples, the demonstrative proclitic precedes a construc-
tion of the type $\underline{X}$-d_1-d_2 , in the second two it precedes a con-
struction of the type X-d_1-š $\underline{X}$(-d_2).

gáx̌v wîsem-ga-x̌ga   "this man^{I}"

qix̌v wîsm-á-x̌i   "this man^{V} (talked about),
                                    that man^{V} (over there)"

gáx̌v ṗác̓uá-ga-s wîsem(-x̌ga) "this diligent man^{I}"

qix̌v tx̌-a-s Géldith   "this (that) geographical
                                    place of ("tx̌") Géldith^{V}"

R 4:   X-d_1-š   X-š $\underline{X}$(-d_2)   cf. w̓ála-ya-s ṗác̓uá-s $\underline{\text{wîsem}}$(-x̌i)
                                           "(a, the) really diligent $\underline{\text{man}}^{V}$".

R 5: $\underline{X}$-d_1 A   cf. $\underline{\text{wîsm-á}}$ la uxvthiás-a-x̌i "$\underline{\text{man}}^{V}$ on roof^{V}"
                               (henceforward no more indication will be given
of possible articles in the translations), uxvthiás-a his
wîsm-á-x̌i "$\underline{\text{roof}}^{V}$ of man^{V}", $\underline{\text{nuáqay̓}}$-a qen uxvthiás-a-x̌i "$\underline{\text{thoughts}}^{V}$
(ideas) about roof^{V}". (Note: "la", "his", and "qen" are preposi-
tional elements in the constituent A . For their range of meaning,
see the dictionary.)

R 6a: X(-d_1)-š $\underline{X}$ A   cf. ṗác̓uá(-ya)-s $\underline{\text{wîsem}}$ la uxvthiás-a-x̌i
                               "diligent $\underline{\text{man}}^{V}$ on roof^{V}", haîlhxs(-a)-s

<u>uxvthiás</u> his wîsm-á-x̌i "pretty <u>roof</u>^{V} of man^V", aíkag̈awá(-ya)-s <u>nuáqi</u> qen uxvthiás-a-x̌i "better <u>thoughts</u>^{V} (ideas) about roof^V". The possible absence of $-d_1$ from $X(-d_1)-\dot{s}$ $\underline{X}$ A secures the interpretation of A as part of the relatum and not as a separate sentence constituent. Compare the following sentences (I) and (II), which differ formally only in that (I) lacks and (II) has primary deictic "ya" after "p̓áćuá". Sentence (I) has only one meaning ("Diligent man^V on roof^V work$^S_{ed}$") because "on roof^V" belongs unambiguously to R ; sentence (II) allows this same interpretation but can also mean "Diligent man^V work$^S_{ed}$ on roof^V".

(I) ʼPála p̓áćuás wîsem la uxvthiásax̌i.
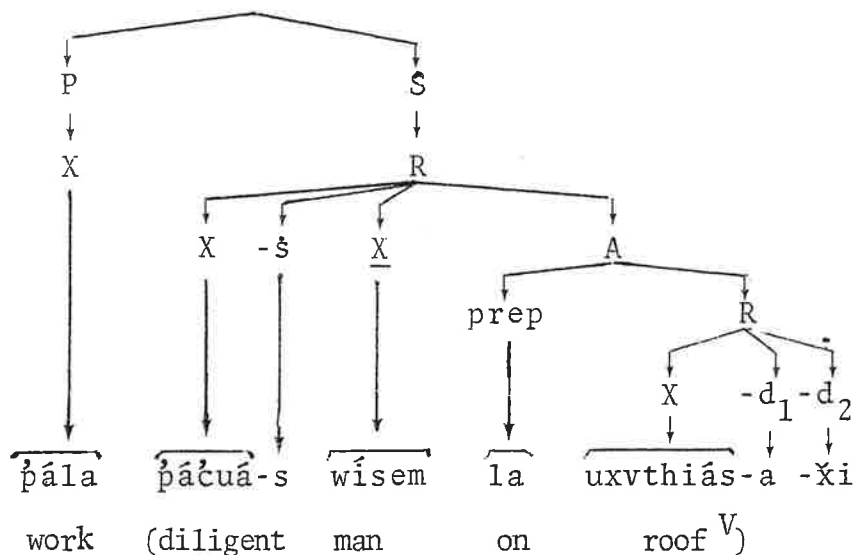
(II) ʼPála p̓áćuáyas wîsem la uxvthiásax̌i.

This sentence can be analysed in the same way as the preceding one, except that the constituent X-ṡ is substituted by $X-d_1-\dot{s}$, $-d_1$ being "ya". This leads to the same interpretation as for sentence (I). Alternately, (II) can be analysed as follows,

$$P \qquad S \qquad A$$
$$X \qquad R \qquad prep \qquad R$$
$$X \quad -d_1 -\dot{s} \quad \underline{X} \qquad \underline{X} \quad -d_1 -d_2$$

p̓ála	p̓áčuá-ya-s	wîsem	la	uxvthiás-a -x̌i	
work	diligent^V	man	on	roof^V	
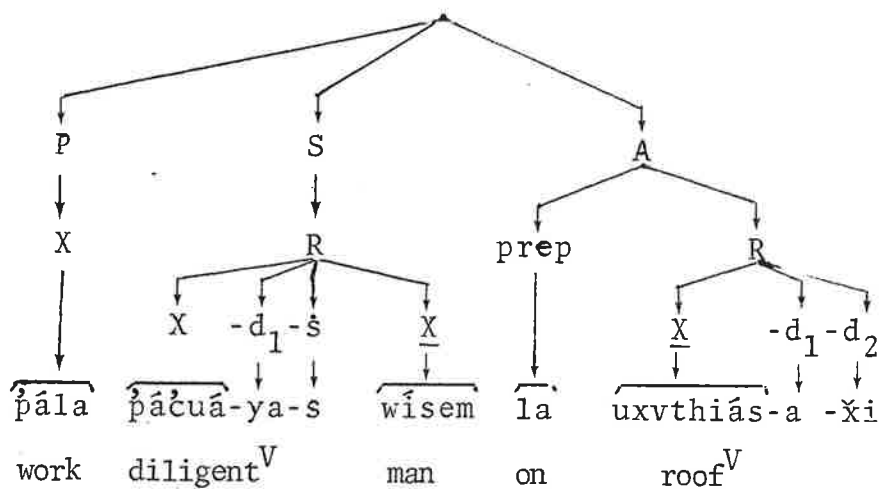
"Diligent man^V work$^S_{ed}$ on roof^V"

The latter meaning can be unambiguously expressed by using a
secondary deictic after "wîsem" (cf. p̓áčuá-ya-s wîsem-x̌í ; see
relatum type R 3).

R 6b: $X(-d_1)-\dot{s} \quad X-\dot{s} \quad \underline{X} \quad A$ cf. ẘála(-ya)-s p̓áčuá-s wîsem la
uxvthiás-a-x̌i "really diligent
man^V on roof^V", ẘála(-ya)-s aix-s uxvthiás his wîsm-á-x̌i
"really good roof^V of man^V, ẘála(-ya)-s aíkag̓áwá-s nuáqi qen
uxvthiás-a-x̌i "really better thoughts^V (ideas) about roof^V".

R 7: $\underline{X}-d_1 \quad X$ cf. wîsm-á t̓hiẙá "man^V that buys", ẘáč-iá
t̓hiẙakv "dog^V purchased"

R 8: $\underline{X}-d_1 \quad X \quad R$ cf. wîsm-á t̓hiẙá ẘáč-iá-x̌i "man^V that buys
dog^V" (R = ẘáč-iá-x̌i has the structure
$\underline{X}-d_1-d_2$ here).

R 9: $\underline{X}-d_1 \quad X \quad A$ cf. wîsm-á t̓hiẙá la t̓hiẙa'aílás-a-x̌i "man^V
that buys at store^V", wîsm-á p̓ála qen
hím̓ás-a-x̌i "man^V that works for chief^V", ẘáč-iá t̓hiẙaxv his
wîsm-á-x̌i "dog^V purchased by man^V".

R 10: $\underline{X}$-d$_1$ X   R   A   cf. wísm-á thiẏá wác-iá-x̌i la
thiẏa'aílás-a-x̌i "man^V that buys dog^V at
store^V".

R 11: X-d$_1$-ś $\underline{X}$ R   A   cf. p̓áčuá-ya-s wísem thiẏá wác-iá-x̌i
la thiẏa'aílás-a-x̌i "diligent man^V
that buys dog^V at store^V".

R 12:   see section 4.4.

4.1.1 Demonstratives as Relata

Instead of the relata described above, one can also use
one of the following demonstratives. Unlike the demonstratives
mentioned under R 3, which are proclitics and function as a kind
of left-hand adjunct, they are full words with high tone.

gáqv	"this^I", "this one^I"
gácqv	"this^{II}", "this one^{II}"
qúqv	"this^{III}, that^{III}", "this one^{III}, that one^{III}"
qúx̌vcqv	"this^{IV}, that^{IV}", "this one^{IV}, that one^{IV}"
qíqv	"this^V (i.e., being or going to be talked about), that^V (i.e., over there)", "this one^V, that one^V"
qícqv	"this^{VI}, that^{VI}", "this one^{VI}, that one^{VI}"
qkíqv	"this^{VII}, that^{VII}", "this one^{VII}, that one^{VII}"

Final "qv" of these demonstratives alternates with "x̌v", espe-
cially if another word follows. Instead of "gáqv", etc., one can
also use derivates such as "gáqvá", "gáqváṅa", etc.; see dic-
tionary.

4.2 THE USE OF PERSONAL DEICTICS

(The reader is reminded that personal deictics, although for practical purposes referred to here as suffixes, are really clitics.)

4.2.1 Personal Deictics as Sentence Constituents

In the basic sentence pattern (P S O A A A) described in 4.1, the constituents S and O consist of an R, while the right-hand adjuncts (A) in the sentence consist of "his R", "la R", or "qen R", the elements "his", "la", and "qen" having a prepositional character. Note that a sentence may contain right-hand adjuncts beginning with the same prepositional element, and that the order of adjuncts beginning with different prepositional elements is free. Thus, one can have "his R - la R - qen R", but also "la R - his R - qen R" or "qen R - his R - la R". As illustrated below, the sentence constituents S and O can also have the form of a subject suffix and an object suffix, respectively.

1. The Use of Subject Suffixes

Example: Dáduqvlaí ẃačiáx̌i   "3^V watch$^{es}_{ed}$ dog^V"
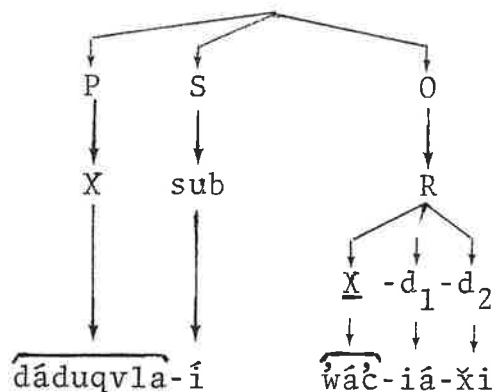
Thus, subject suffixes follow P directly if P consists of one word

(X). See section 4.3 on the placing of subject suffixes with predicates of a more complex structure.

2. The Use of Object Suffixes

If the subject of the sentence consists of only a subject suffix following P (see the preceding paragraph), the object suffix follows the subject suffix.

Example: Dáduqvlaíqi "3^V watch$^{es}_{ed}$ 3^V"

```
           _____
          |     |     |
          ↓     ↓     ↓
          P     S     O
          ↓     ↓     ↓
          X    sub    ob
          ↓     ↓     ↓
     ⌐‾‾‾‾‾‾‾¬
     dáduqvla-í   -qi
      watch  3^V  3^V
```
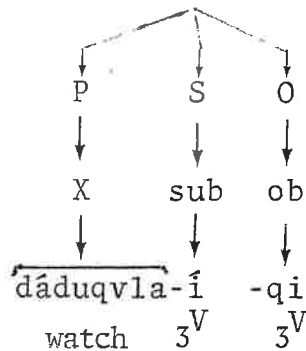
If the subject of the sentence consists of an R , the object suffix follows R ; see example a. below. Alternately, the object suffix can be attached to a subject suffix following P, while the subject relatum follows P-sub-ob, see example b. below. Note that in the latter type of construction the subject suffix must feature the same Roman numeral as the primary deictic in R .

a. Example: b. Example:

Dáduqvlá wísmáx̌iqi   Dáduqvlaíqi wísmáx̌i

"Man^V watch$^{es}_{ed}$ 3^V"   (same meaning)
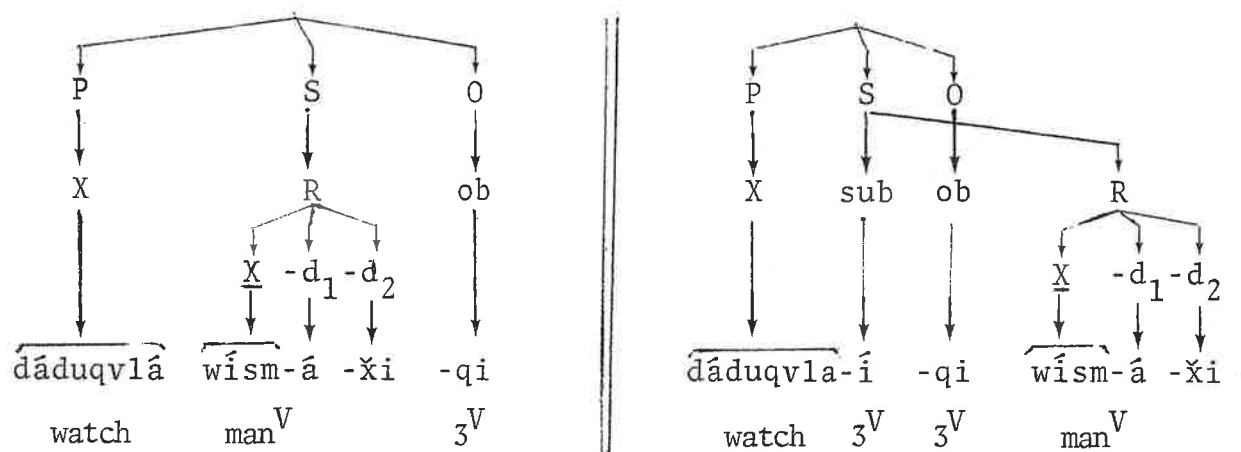
3. The Use of "his"-Adjunct Suffixes

Instead of a sentence constituent (adjunct) of the type "his R",
one can use a "his"-adjunct suffix (*sf). This suffix can be
attached to R of another right-hand adjunct in the sentence, or
to O . The constituent O can be an R (see first example below)
or only an object suffix (see second example below), but should
not be an object suffix followed by a subject relatum (see above). In
the latter type of case the "his"-adjunct suffix is attached to
the subject relatum (see third example below).

Examples:

Dáduqvlá wísmáǧi ẃáčiáǧisi   "Man^V watch$^{es}_{ed}$ dog^V with 3^V"
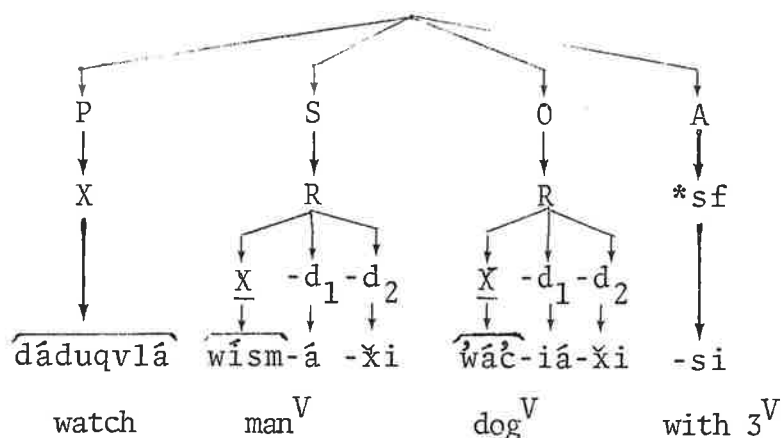
Dáduqvlá wísmáx̌iqisi

"Man^V watch$_{ed}^{es}$ 3^V with 3^V"
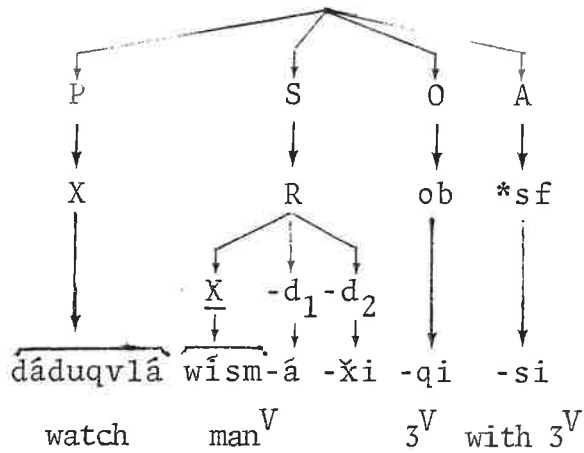
Dáduqvlaíqi wísmáx̌isi

(same meaning)
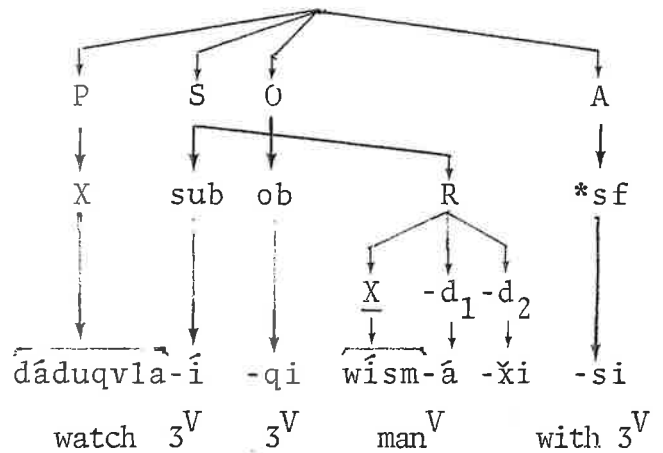
In the following example, the constituents S, O, and A consist all three of a suffix.

Dáduqvlaíqisi   "3^V watch$_{ed}^{es}$ 3^V with 3^V"
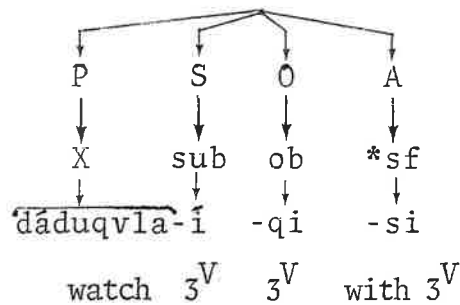
For 1st person "his"-adjuncts one uses "his núgva", "his núgvaénc", "his núgvaént$_{xv}^{kv}$". Example:
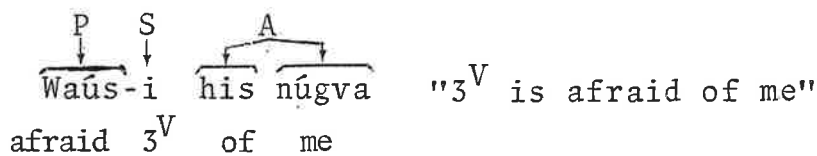
"3^V is afraid of me"

One can use both "his qsú" (plural: "his qíqsu") and the 2nd per-
son "his"-adjunct suffix {-u̲̲s}. Example:

     Waús-i   his qsú

                            } "3^V is afraid of you"

     Waús-i-us

4. The Use of "1a̲̲" and "q"-Suffixes

     Instead of adjuncts of the types "1a R" or "qen R", a
sentence may contain one-word adjuncts consisting of, respective-
ly, the root "1a̲̲" and a "1a̲̲"-suffix, or the root "q" and a "q"-
suffix (see section 3.3.2). Example:

P	S	O	A	A	A
D̄áduqv1a-í-qi	-si		1á-x̌í	q-enhí	
watch	3^V	3^V with 3^V	on 3^V	for 3^V	

"3^V watch$_{ed}^{es}$ 3^V with 3^V on 3^V for 3^V"

4.2.2 Personal Deictics as Relatum Constituents. The Use of the Proclitics "qs", "qenc", "qent$_{xv}^{kv}$".

     Adjuncts of the types "his R", "1a R", "qen R" are not
only used as sentence constituents, but also as sub-constituents
of a relatum; see the examples of the types R 5-6b and R 9-11 in
section 4.1. Here, too, these adjuncts can be substituted by,
respectively, a "his"-adjunct suffix, the root "1a̲̲" followed by
a "1a̲̲"-suffix, or the root "q" followed by a "q"-suffix. The
following examples are type 5 relata ($\underline{X}$-d$_1$ A).

uxvthiás-a-si   "roof^V of 3^V"

  wîsm-á   lá-x̌î   "man^V on 3^V"

 nuáqay̓-a   q-enḣî   "thoughts^V (ideas) about 3^V"

When used as constituents of an R, the 1st person adjuncts "his núgva", "his núgvaénc", "his núgvaént$_{xv}^{kv}$", and the 2nd person adjunct "his qsú" (plural: "his qîqsu") have the following peculiarities.

1. When the element "his" of "his núgva", "his núgvaénc", and "his núgvaént$_{xv}^{kv}$" has one of the following meanings:

  a. "by", "through the agency of" (cf. "done by me"),
  b. "reckoning from", "with respect to the position of"
     (cf. "far from me", "ahead of me"),
the adjuncts can be substituted by the proclitics "qs", "qenc", "qent$_{xv}^{kv}$", respectively. The following examples represent relatum type 5 ($\underline{X}$-d$_1$ A); underlining indicates the centre of construction.

R with full adjunct		R with clitic		
dúqvlh-a	his núgva	qs	dúqvlh-a	"one^V seen by me"
dúqvlh-a	his núgvaénc	qenc	dúqvlh-a	"one^V seen by us (incl.)"
dúqvlh-a	his núgvaént$_{xv}^{kv}$	qent$_{xv}^{kv}$	dúqvlh-a	"one^V seen by us (excl.)"
aémba-ya	his núgva	qs	aémba-ya	"one^V ahead of me"
aémba-ya	his núgvaénc	qenc	aémba-ya	"one^V ahead of us (incl.)"
aémba-ya	his núgvaént$_{xv}^{kv}$	qent$_{xv}^{kv}$	aémba-ya	"one^V ahead of us (excl.)"

The following are examples with relatum type 6a: X-d_1-ś $\underline{X}$ A .

R with full adjunct	R with proclitic
ẃála-ya-s <u>dúqvlh</u> his núgva = "one^V really <u>seen</u> by me"	ẃála-ya-s qs <u>dúqvlh</u> (same meaning)
ẃála-ya-s <u>aémba</u> his núgva = "one^V really <u>ahead</u> of me"	ẃála-ya-s qs <u>aémba</u> (same meaning)

Occasionally the proclitics "qs", "qenc", "qent$^{kv}_{xv}$" precede the constituent ("left-hand adjunct") X-d_1-ś, cf. "qs ẃála-ya-s dúqvlh".

When the element "his" of "his qsú" or its plural, "his qíqsu", has the meanings a. or b. indicated above, the alternative is to use the 2nd person "his"-adjunct suffix {-ụ̄s}. Example:

$\left.\begin{array}{l}\text{<u>dúqvlh</u>-a   his qsú}\\[4pt]\text{<u>dúqvlh</u>-a-ús}\end{array}\right\}$ "one^V <u>seen</u> by you"

$\left.\begin{array}{l}\text{<u>aémba</u>-ya   his qsú}\\[4pt]\text{<u>aémba</u>-y-us}\end{array}\right\}$ "one^V <u>ahead</u> of you"

2. With neither "his núgva", "his núgvaénc", "his núgvaént$^{kv}_{xv}$" on the one hand, nor "his qsú" and its plural "his qíqsu" on the other, can "his" mean "belonging to", "being the property of". To express belonging to the 1st person, one can only use the above mentioned proclitics "qs", "qenc", "qent$^{kv}_{xv}$"; to express belonging to the 2nd person one must use the 2nd person "his" adjunct suffix {-ụ̄s}. In the case of the 1st person one can in addition optionally use the 1st person possessive suffix {-ēnc} (see note 6 on page 81). Examples based on relatum

type $\underline{X}$-d$_1$ A (cf. ẃác̓-iá his wîsm-á-x̌i "dog^V of man^V"):

qs	ẃác̓-iá	=	qs	ẃác̓-ia-énc	"my dog^V"
qenc	ẃác̓-iá	=	qenc	ẃác̓-ia-énc	"our (incl.) dog^V"
qent$^{kv}_{xv}$	ẃác̓-iá	=	qent$^{kv}_{xv}$	ẃác̓-ia-énc	"our (excl.) dog^V"
	ẃác̓-ia-ús				"your dog^V"

Examples based on relatum type X-d$_1$-ṡ $\underline{X}$ A (cf. ǧvúx̌vá-yá-s ẃác̓ his wîsm-á-x̌i "skinny dog^V of man^V"):

ǧvúx̌vá-yá-s	qs	ẃác̓(-énc)	"my skinny dog^V"
ǧvúx̌vá-yá-s	qenc	ẃác̓(-énc)	"our (incl.) skinny dog^V"
ǧvúx̌vá-yá-s	qent$^{kv}_{xv}$	ẃác̓(-énc)	"our (excl.) skinny dog^V"
	ǧvúx̌vá-yá-s	ẃác̓-ús	"your skinny dog^V"

Occasionally the proclitics "qs", "qenc", "qent$^{kv}_{xv}$" precede the left-hand adjunct X-d$_1$-ṡ , as in "qs ǧvúx̌vá-yá-s ẃác̓(-énc)".
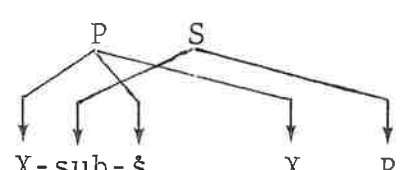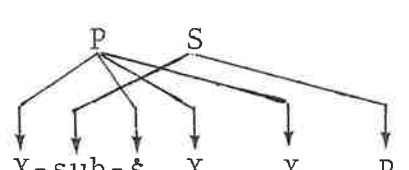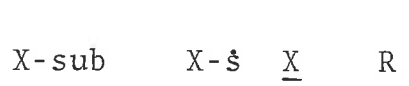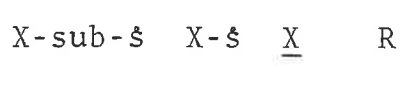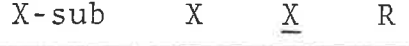
Note finally that in relatum type 8 ($\underline{X}$-d$_1$ X R), the constituent R can be substituted by an object suffix. Example:

wîsm-á t̓hiẏá-qí "$\underline{man}^V$ that buys 3^V" .

4.3 COMPLEX PREDICATES

The predicate of the basic sentence type (P S O A A A) can be expanded into a more complex structure than only X .

The following chart shows that this goes with splitting S into
two constituents, a subject suffix and a subject relatum.

	Structure of Predicate			Structure of Sentence						
1			X	(basic sentence pattern)		P↓ X	S↓ R	O↓ R	A prep R
2a		X-š	X	X-sub-š		X	R	R	prep R
2b		X	X	X-sub		X	R	R	prep R
3a	X-š	X	X	X-sub-š	X	X	R	R	prep R
3b	X	X-š	X	X-sub	X-š	X	R	R	prep R
3c	X-š	X-š	X	X-sub-š	X-š	X	R	R	prep R
3d	X	X	X	X-sub	X	X	R	R	prep R

There has to be agreement between the Roman numeral of the primary
deictic in the subject relatum and the Roman numeral of the (3rd
person) subject suffix. The subject relatum may also be absent,
in which case the subject suffix is the only subject indication in
the sentence and could also be a 1st or 2nd person suffix. Exam-
ples are as follows; their numbers refer to the structures rep-
resented in the chart. The subject and object relata of the exam-
ples are given the structure $\underline{X}$-d_1-d_2 (cf. wîsm-á-x̌i "man^V",

w̓ác̓-iá-x̌i "dog^V").

1   Dáduqvlá wísm-á-x̌i w̓ác̓-iá-x̌i   "Man^V watch$^{es}_{ed}$ dog^V"
             watch   man^V dog^V

2a   'Wál-i-s dáduqvlá wísm-á-x̌i w̓ác̓-iá-x̌i   "Man^V really watch$^{es}_{ed}$ dog^V"
     really 3^V

2b   'Kús-i dáduqvlá wísm-á-x̌i w̓ác̓-iá-x̌i   "Man^V does/did not watch dog^V"
      not 3^V

3a 'Wál-i-s k̓s   dáduqvlá wísm-á-x̌i w̓ác̓-iá-x̌i   "Man^V really does/did not watch dog^V"
       not

3b 'Kús-i w̓ála-s   dáduqvlá wísm-á-x̌i w̓ác̓-iá-x̌i   "Man^V does/did not really watch dog^V"

3c 'Wál-i-s aix-s   dáduqvlá wísm-á-x̌i w̓ác̓-iá-x̌i   "Man^V watch$^{es}_{ed}$ dog^V really well"
       well

3d 'Kús-i la   dáduqvlá wísm-á-x̌i w̓ác̓-iá-x̌i   "Man^V does not watch dog^V now", "Man^V did not watch dog^V then"
       now

The following are examples without a subject relatum,

    'Wála-nugva-s dáduqvlá w̓ác̓-iá-x̌i   "I really watch(ed) dog^V"
         I

    'Kús-ent$^{kv}_{xv}$ dáduqvlá w̓ác̓-iá-x̌i   "We (excl.) do/did not watch dog^V"
     we (excl.)

    'Kús-ki dáduqvlá w̓ác̓-iá-x̌i   "3^{VII} does/did not watch dog^V"
     3^{VII}

    'Kús-i dáduqvlá w̓ác̓-iá-x̌i   "3^V does/did not watch dog^V"
     3^V

Note that the last example could also mean "Dog^V does/did not watch", that is, due to the accidental agreement in Roman numeral of the subject suffix "i" and the primary deictic suffix "ia" (in w̓áč-iá-x̌i),"i" and "w̓áč-iá-x̌i" could both be constituents of the subject of the sentence.

4.3.1 Left-Hand Adjuncts

With relata (see the chart in section 4.1, page 87), the name of left-hand adjunct is used for a set of constituents preceding the centre of construction (i.e., X) and consisting of X , possibly a $-d_1$, and in most cases ś ; cf. the left-hand adjuncts $X-d_1-ś$ and X-ś in the relatum type $X-d_1-ś$ X-ś $\underline{X}(-d_2)$. With complex predicates (see the column "Structure of Predicate" in the chart in the preceding section), the name of left-hand adjunct is used for a single constituent X preceding $\underline{X}$ (cf. the left-hand adjunct X in: X $\underline{X}$), or for the combination of X and ś preceding $\underline{X}$ (cf. the left-hand adjunct X-ś in: X-ś $\underline{X}$). Only in subordinate clauses are deictics constituents of the predicate; on this see section 4.4.

Not every word can fill the place of X in left-hand adjuncts, while most of the words that can, require the use of the left-hand adjunct suffix. The following are examples not requiring ś ; to each example one can add its derivates involving category B suffixes, aélm̓ilh , ák , g- (a root, see section 4.6.4), ǧválh , ǧvúy̓álá , lhúxva , haélslá , ḱs , ḱús , la , m̓éns'it , n̓x̌va , q̓venn̓ílh , wa , wakv . The words that do require the use of ś are broadly those referring to mental and physical qualities, including colours, shapes, professions, habits. These words can often be recognized by their category A suffixes. Examples are the words containing the continuative suffix, {-1á□ , -1 , -ā□lā□ , -ā□l} (cf. ḱátlá , w̓ála), and words containing {-inuxv} (cf. dúḱvínúx̌v , puw̓íčínúx̌v). On the other hand, there are items of which the morpheme structure does not indicate that they too

require š when used as left-hand adjunct. Examples: aîk,
ýák , gêlt , ǩvénq , q̓vénk , ǧvúx̌va , zása .

4.4 SUBORDINATE CLAUSES

A subordinate clause (SuCl) is a sentence functioning
either as relatum (subject relatum, object relatum, or adjunct
relatum), or by way of adjunct to another sentence (main clause).
It has its own predicate (P') and subject (S'), and optionally also
its own object (O') and right-hand adjunct(s) (A'). The basic
type of subordinate clause is as follows. Underlining indicates
the centre of a construction.
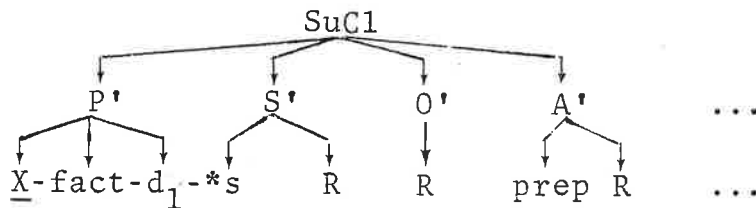
Example:
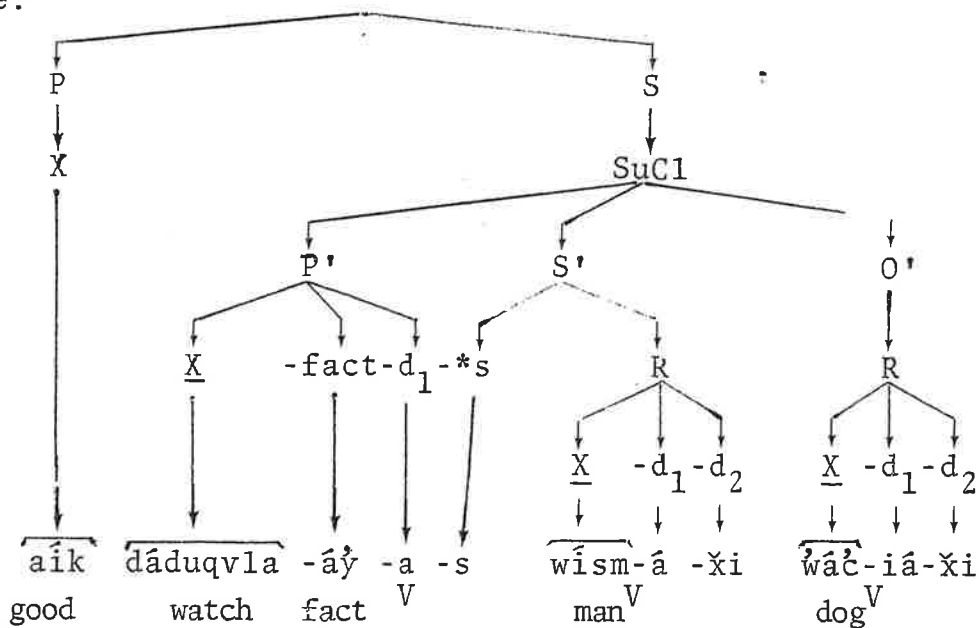
Aîk dáduqvláýas wísmáx̌i w̓áčiáx̌i "The fact^V that man^V watch$^{es}_{ed}$ dog^V is good"

Note the contraction of "a-á" (in: dáduqvla-áẏ-a-s ...) into
"á". The constituent S' consists of *s and R ; *s is attached to
the preceding word. *s differs formally from ṡ (the left-hand
adjunct suffix); see the remark on page 106.

S' can also be a "his"-adjunct suffix (code indication
*sf , not to be confused with *s); O' can also be an object suf-
fix. The placing of the suffixes follows the pattern explained
in section 4.2.1. Compare the following subordinate clauses.

1 dáduqvláẏasi ẇáčiáx̌i

"the fact^V that 3^V watch$^{es}_{ed}$
dog^V
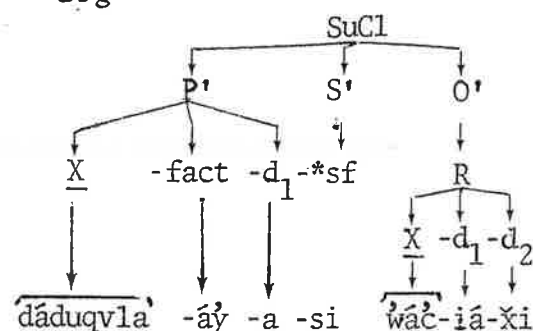
2 dáduqvláẏasiqi

"the fact^V that 3^V watch$^{es}_{ed}$
3^V"
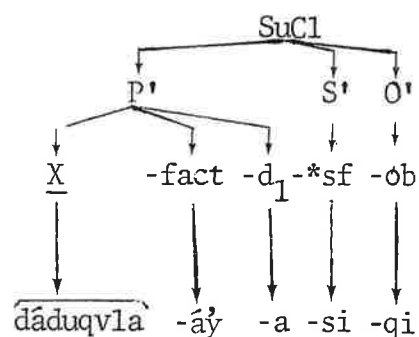
3a dáduqvláẏas wísmáx̌iqi

"the fact^V that man^V
watch$^{es}_{ed}$ 3^V"
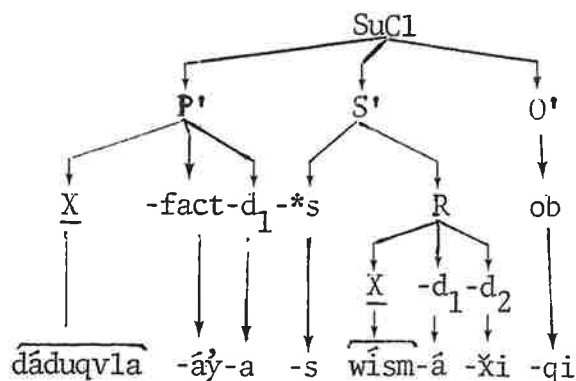
3b dáduqvláẏasiqi wísmáx̌i

(same meaning as 3a)
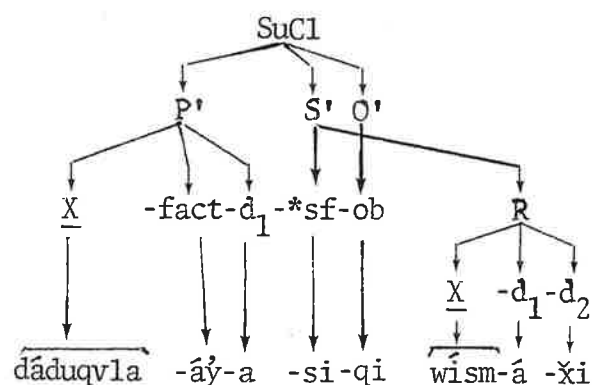
If S' consists of *s and R (see the basic type of SuCl), there
has to be agreement in Roman numeral between d_1 in R and d_1 in
in P'. Similarly, if S' is only a "his"-adjunct suffix, there
has to be agreement in Roman numeral between this suffix and
the constituent d_1 in P', although some irregularity does occur
in this respect: one may e.g. find "dáduqvla-áy̆-a-ski", with d_1
no. V but 3rd person "his"-adjunct suffix no. VII. The following
are the types of construction to be used if S' refers to the
2nd or 1st person.

2 sg./pl. $\underline{X}$-fact-d_1^{III}-$\overline{us}$ (one is reminded of the
                                                     merging of d_1 no. III
                                                     and "us", see note no. 7
                                                     in section 3.3.2)

1 sg.   qs $\underline{X}$-fact-d_1^{I}

1 pl. incl.   qenc $\underline{X}$-fact-d_1^{I}

1 pl. excl.   qent$^{kv}_{xv}$ $\underline{X}$-fact-d_1^{I}
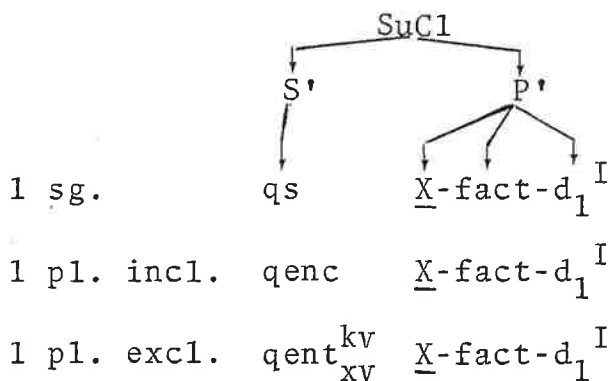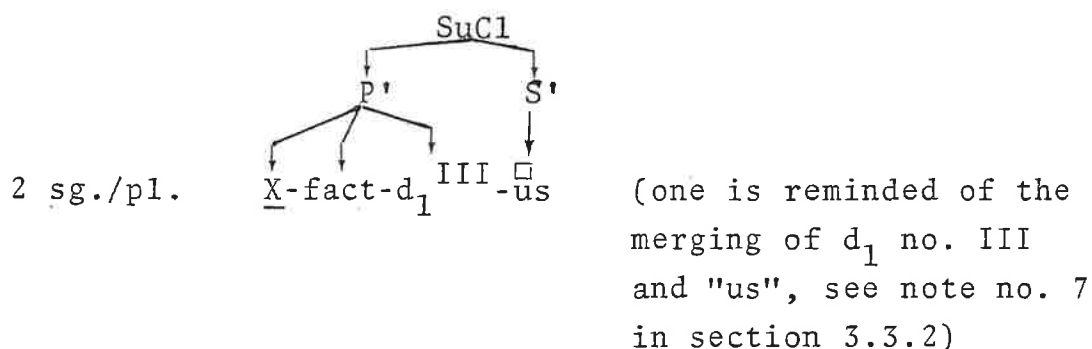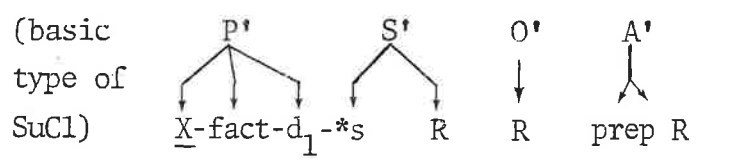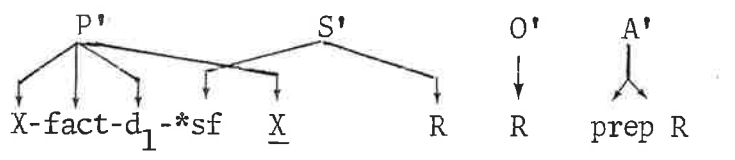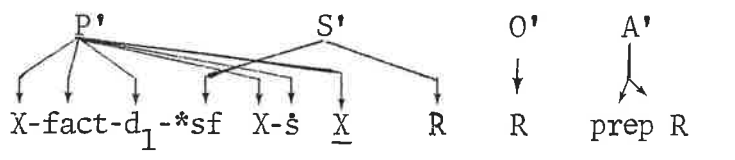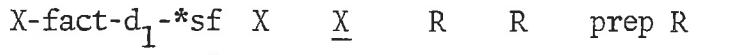
These 1st person constructions differ from the simple possessive
constructions explained in section 4.2.2 in that the use of the
1st person possessive suffix {-$\underline{enc}$} is excluded here.

Examples:

   dáduqvla-áy̆-aq-us ($\rightarrow$ dáduqvláy̆aqvs) "the fact^{III} that you
                                                 watch(ed)"

$$qs\ dáduqvla\text{-}a\acute{i}\text{-}ga\quad (\rightarrow\ qs\ dáduqvla\hat{i}ga)\ \text{"the fact}^I\text{ that I}$$
$$\text{watch(ed)"}$$

Like P of the main clause (see chart in 4.3), P' may
consist of a centre (X) and left-hand adjuncts, in which case
the factualizing suffix and the primary deictic suffix are part
of the first left-hand adjunct. This left-hand adjunct is fol-
lowed obligatorily by a "his"-adjunct suffix that functions as
a constituent of S'; see the following chart. In the examples
recorded, the first left-hand adjunct in P' is of the kind ex-
cluding the use of the left-hand adjunct suffix.

	Structure of P'	Structure of Subordinate Clause
1	X-fact-d$_1$	(basic type of SuCl) X-fact-d$_1$-*s R R prep R
2	X-fact-d$_1$ X	X-fact-d$_1$-*sf X R R prep R
3a	X-fact-d$_1$ X-ś X	X-fact-d$_1$-*sf X-ś X R R prep R
3b	X-fact-d$_1$ X X	X-fact-d$_1$-*sf X X R R prep R

The constituent R of S' may be absent. For the case that *sf
is to refer to the 2nd or 1st person, see above. Examples:

2 ks-aẏ-a-si dáduqvlá wísm-á-x̌i ẁáč-iá-x̌i   "the fact^V that man^V
   not fact ^{V} 3^V watch   man^V dog^V does/did not watch
                                              dog^V"

3a k̓s-ay̓-a-si ẃála-s dáduqvlá wísm-á-x̌i ẃáč-iá-x̌i "the fact[V] that man[V]
      really   does/did not really
                                              watch dog[V]"

3b la-ay̓-a-si k̓s dáduqvlá wísm-á-x̌i ẃáč-iá-x̌i "when man[V] did not
    when   watch dog[V]" (on this
                                              example, see also 4.4.1)

When S' refers to the 1st person (see also page 104):

qs k̓s -i -ga dáduqvlá ẃáč-iá-x̌i "the fact[I] that I do/
    fact   did not watch dog[V]"

    In some special types of subordinate clause (see below),
P' does not contain d_1 , and/or the factualizing suffix is substi-
tuted by another category B suffix.

    As for the constituent *s of the basic type of subordinate
clause (see example on page 103), it occurs also otherwise than in
subordinate clauses, viz. as a component morpheme of the preposi-
tional element (proclitic) "his", and of "his"-adjunct suffixes.
The presence of *s affects the tone of a preceding or following
vowel; this distinguishes this morpheme formally from the left-
hand adjunct suffix, ś . Details are beyond the scope of these sections .

    The following sections detail the meaning and syntactic
function of a number of constructions consisting either (1) wholly
of a subordinate clause or (2) of a prepositional element followed
by a subordinate clause.

4.4.1 Temporal Clauses

    Temporal clauses function as right-hand adjunct to the
main clause. Characteristically, P' is of the complex kind (see the
preceding section) and begins with a left-hand adjunct in which X
is the proclitic "la". Example:

ʼKálha wísmáx̌i lay̓asi q̓ká ẃáčiáx̌i maúx̌vayax̌i "Man[V] slept when
                                                      dog[V] bit cat[V]"

P   S   A

X   R   SuCl

P'   S'   O'

la-fact-d_1-*sf   X   R   R

X -d_1 -d_2 X -d_1 -d_2 X -d_1 -d_2

kálha wísm-á -xi   la -aý -a -si   qká waċ-iá-xi maúxva-ya-xi

sleep man^V when ^{V} $_3^V$ bite dog^V cat^V
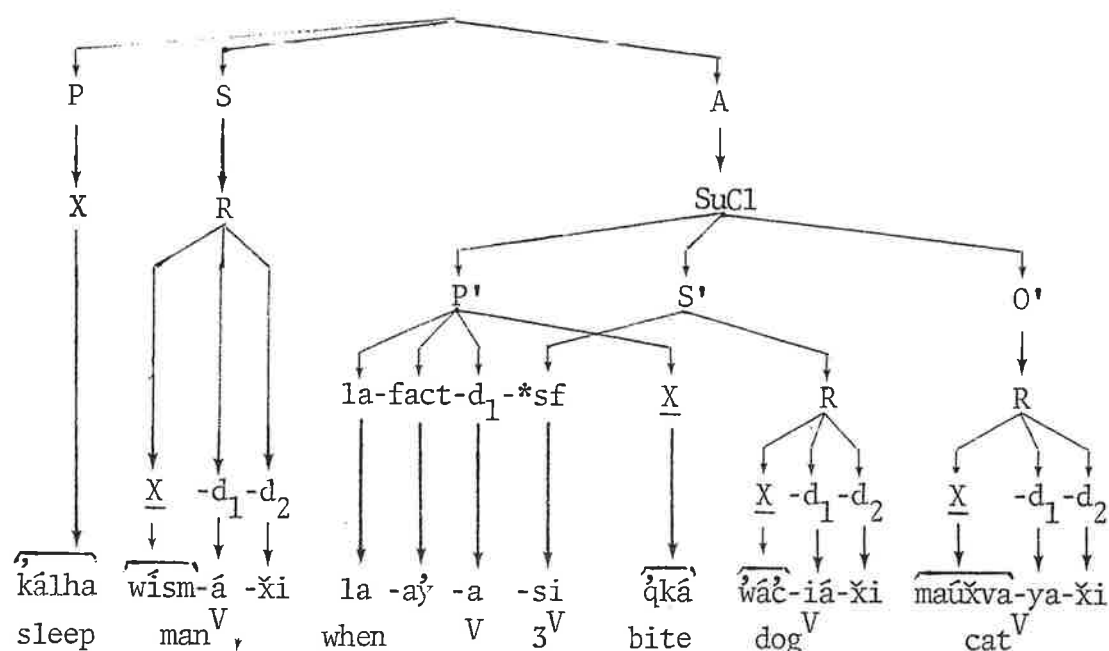
All instances of the pattern "la-fact-d_1-*sf" are proclitics
and feature only low tones. Note the following actualizations
of the pattern if S' refers to the 2nd or 1st person.

2 sg./pl.		la-aý-aq-us	($\rightarrow$ laýaqvs)
1 sg.	qs	la-i-ga	($\rightarrow$ qs liga)
1 pl. incl.	qenc	la-i-ga	($\rightarrow$ qenc liga)
1 pl. excl.	qent$_{xv}^{\overline{kv}}$	la-i-ga	($\rightarrow$ qent$_{xv}^{kv}$ liga)

(For "liga" the spelling "lga" is permitted -- not advised --
because there is no difference in pronunciation.)

The centre of construction of P' (i.e. X , see the above
diagram) can be the word "kús" meaning "non-existent" (or a
derivate involving category B suffixes), in which case *sf is
substituted by *s while the constituent R of S' lacks deictics.
Example:

la-aý-a-s kús waċ   "when there were no dogs"

Occasionally temporal clauses have the form of the prepositional element "la" followed by a subordinate clause, cf.

la q̇ka-áy̓-a-s ẇáċ-iá-x̌i maúx̌va-ya-x̌i "when dog^V bit cat^V"

4.4.2 Local Clauses

Local clauses function as relata, but structurally they are similar to temporal clauses ("la-fact-d_1-*sf $\underline{X}$ R R" ,see preceding section) except for the following. In the left-hand adjunct in P', low tone "la" is substituted by high tone "lá" and the factualizing suffix by "xdm" (category B suffix no. 29, see section 3.3.1). The resulting pattern "lá-xdm-fact-d_1-*sf ...) is not a proclitic.
Example:
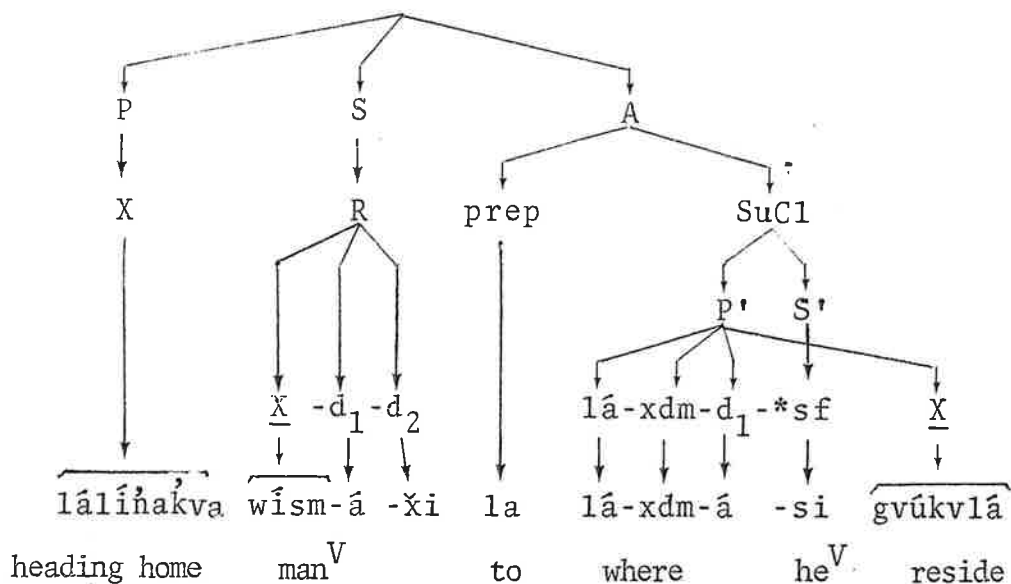
Láliṅakva ẇísmáx̌i la láxdmási gvúkvlá "Man^V is/was heading for his residence^V"

4.4.3 Causal Clauses

Causal clauses have one of the following forms.

1. "his" (the prepositional element) followed by a subordinate clause of the types described in section 4.4 ;

2. this same subordinate clause without preceding "his" (cf. difference between "He did it because he was rich" and "He did it -- he was rich") ;

3. "his" followed by a subordinate clause with the structure of a temporal clause (see 4.4.1).

Examples:

his híṁás-aẏ-a-s wísm-á-x̌i

híṁás-aẏ-a-s wísm-á-x̌i $\left.\rule{0pt}{60pt}\right\}$ "because man^V is a chief"

his la-aẏ-a-si híṁás wísm-á-x̌i

4.4.4. Purposive Clauses

Purposive clauses correspond to English "in order that ...", "to the effect that ...", "that ... should be/do ...". They consist of the prepositional element "qen" followed by a subordinate clause that has any of the structures described in section 4.4, except that the primary deictic is lacking from P'. Example:

Yáṁit híṁásax̌i qen pkvúsuw̓aís gélw̓áyáx̌i   "Chief^V order$^s_{ed}$ that ca-noe^V be borrowed"

(Note: "suw̓" in "pkvúsuw̓aís" is category B suffix no. 25; see section 3.3.1. The word "yáṁit" means "to send someone (e.g. as messenger)", but also "to issue an order".)

P S A

X R prep SuCl

P' S'

X -d$_1$ -d$_2$ X -fact-*s R

X -d$_1$ -d$_2$

yámit himás -a -ẋi qen pkvúsuẇ -aí -s gélẇá-yá-ẋi

issue chief^V that be bor- fact canoe^V
an or- rowed
der
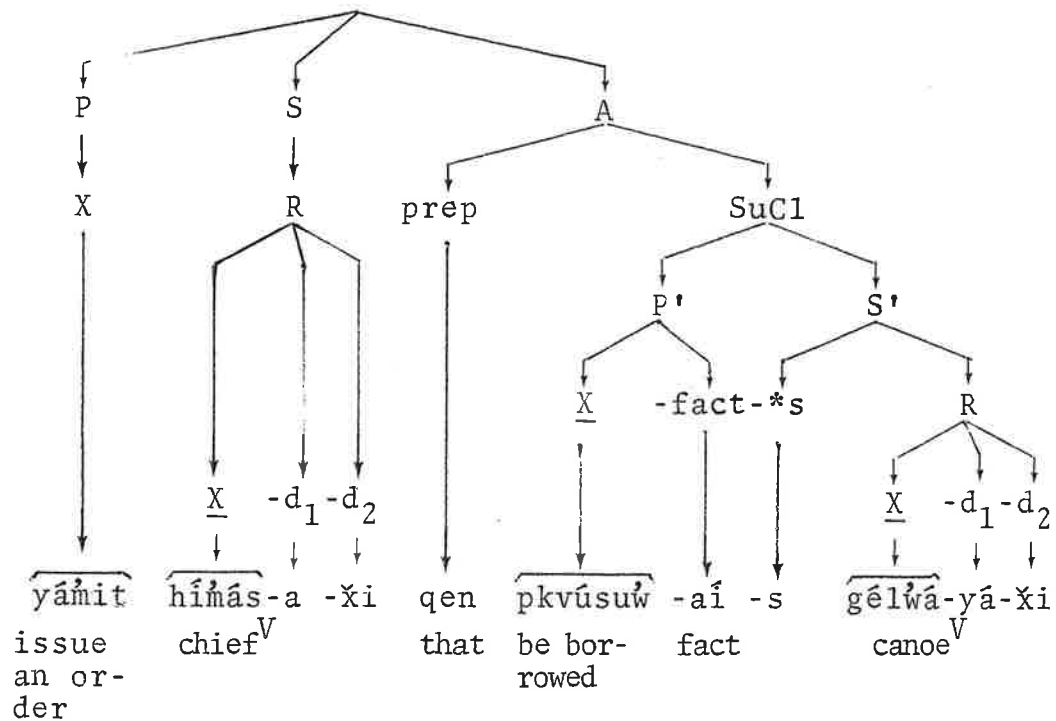
4.4.5 Consequential Clauses

Consequential clauses corresponding to English "therefore
...", "that is why ...", function by way of adjunct to the main
clause. Structurally they are similar to temporal clauses (see
section 4.4.1), except that the factualizing suffix is substi-
tuted by "gilh" and that the primary deictic suffix is lacking
from P'. Example:

'Kálha wĩsmáẋi lagilhci q̧ká ẇáčiáẋi maúẋvayaẋi   "Man^V sleeps/slept;
                                                    therefore dog^V
                                                    bites/bit cat^V"

```
                            P              S                    A
                            │              │                    │
                            X              R                   SuCl
                            │            ╱   ╲        ┌──────────┼──────────┐
                            │           X  -d₁ -d₂   P'          S'         O'
                            │           │   │   │    │           │          │
                            │           │   │   │  la-gilh-*sf   X    R      R
                            │                       │        │   │  ╱ │ ╲   ╱ │ ╲
                            │                       │        │   │ X -d₁-d₂ X -d₁-d₂
```

P	S			A							
X	R			SuCl							
	X	-d₁	-d₂	P'		X	R		O'		
				la-gilh-*sf			X	-d₁ -d₂		X	-d₁ -d₂

ʼkálha	wísm-á	-x̌i	la-gilh	-ci	q̓ká	wác̓-iá-x̌i	maúx̌va-ya-x̌i
sleep	man		therefore	3	bite	dog	cat
	V			V		V	V
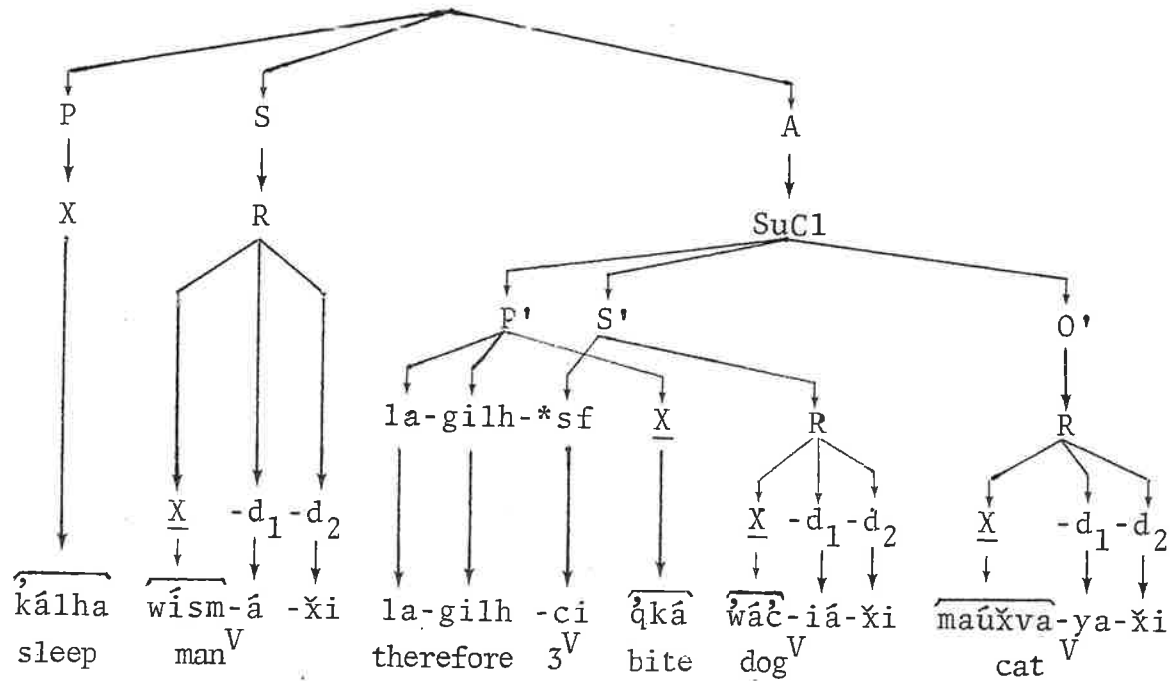
See section 3.3.2.1 on the use of "ci" rather than "si" in
"la-gilh-ci". Instances of the pattern "la-gilh-*sf" are pro-
clitically joined to the word directly following. The 2nd and
1st person forms of the pattern are as follows.

2 sg./pl.	la-gilh-us	
1 sg.	qs	la-gilh
1 pl. incl.	qenc	la-gilh
1 pl. excl.	qent$_{xv}^{kv}$	la-gilh

4.4.6 Factual Objects in Sentences the Predicate of Which Refers to a Cognitive Process

In sentences in which the predicate refers to a cognitive
process, such as knowing, remembering, hearing, or seeing, an
object with the meaning type "that ... is/does ..." can be con-
strued in two different ways.

1. One can use the same type of construction ("subject-to-object raising") that is used in English. Example:

'Qa'aúlh wísmáx̌i w̓áčiáx̌i q̓ká maúx̌vayax̌i   "Man^V knows (knew) that dog^V bites (bit) cat^V"
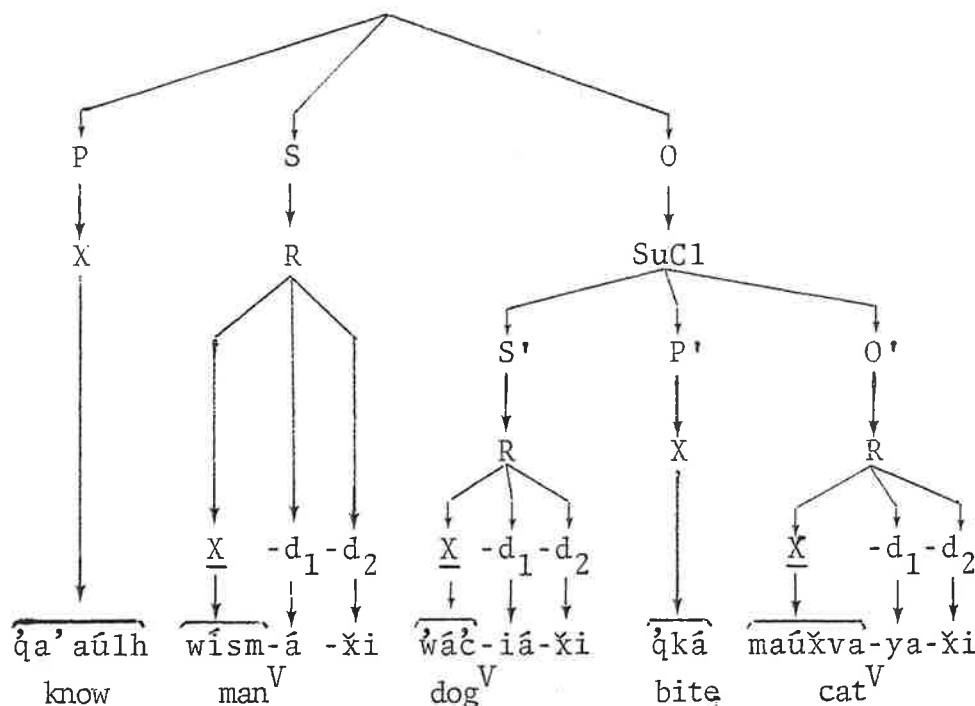
(Note: "q̓a'aúlh" is an alternant of "q̓a'aúth".) Compare the above sentence with:

'Qa'aúlh wísmáx̌i w̓áčiá q̓ká maúx̌vayax̌i   "Man^V knows (knew) dog^V that bites (bit) cat^V"
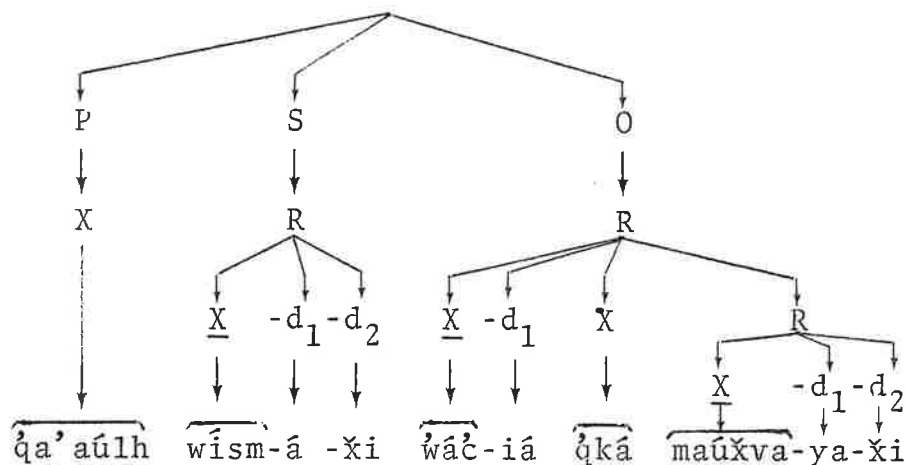
The object of the second sentence consists of relatum type 8 (see page 87). In the first sentence on the preceding page, the constituent S', the constituent O', or both, can be substituted by an object suffix:

'Qa'aúlh wísmáx̌i-qi q̓ká maúx̌vayax̌i   "Man^V knows (knew) 3^V bites (bit) cat^V"

'Qa'aúlh wísmáx̌i ẇác̓iáx̌i q̓ká-qí   "Man^V knows (knew) dog^V bites (bit) 3^V"

'Qa'aúlh wísmáx̌i-qi q̓ká-qí   "Man^V knows (knew) 3^V bites (bit) 3^V"

2. Instead of using "subject-to object raising" as described above, one can use an object consisting of a subordinate clause as described in section 4.4. Example:

P	S	O		
'Qa'aúlh	wísm-á-x̌i	q̓ka-áẏ-a-s	ẇác̓-iá-x̌i	maúx̌va-ya-x̌i
know	man^V	bite fact V	dog^V	cat V

"Man^V knows (knew) that dog^V bites (bit) cat^V"

The structure of the subordinate clause "q̓ka-áẏ-a-s ẇác̓-iá-x̌i maúx̌va-ya-x̌i" is similar to that of the clause "dáduqvla-áẏ-a-s wísm-á-x̌i ẇác̓-iá-x̌i" in the first example in 4.4.

4.4.7 Miscellaneous Clauses

1. "Lest ...", "for fear that ...", "otherwise ...". Type

of construction: subordinate clause (see 4.4) in which P' is
complex, its first left-hand adjunct being a derivate from
"n̊x̌va". This derivate is joined proclitically to the word
directly following. Example:

n̊x̌vaẙasi q̊ká ẘáčiáx̌i maúx̌vayax̌i   "otherwise dog^V bites cat^V"
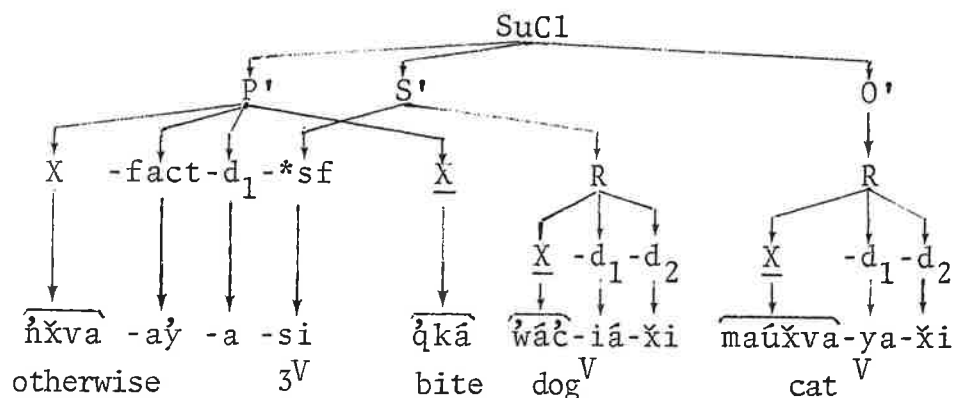
2. "If ...". Type of construction: similar to basic
sentence pattern (cf. P S O A ...) but with complex predicate
(see chart on page 100) in which proclitic "n̊x̌va" is always the
first left-hand adjunct. "n̊x̌va" is never followed by the left-
hand adjunct suffix. Example:

n̊x̌vi q̊ká ẘáčiáx̌i maúx̌vayax̌i   "if dog^V bites cat^V"
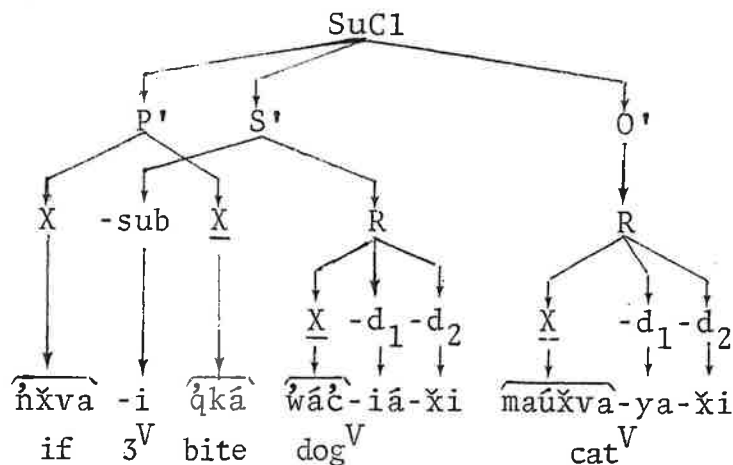
(Note: ƞ̓x̌va-i → ƞ̓x̌vi)

3. "Whenever ...". Type of construction: similar to basic
sentence pattern but with complex predicate (see chart on page 100)
in which "g" (a root) is the first left-hand adjunct, "la" the
second. Neither "g" nor "la" goes with the left-hand adjunct suf-
fix; both are proclitics. Example:

gi la q̓ká w̓áč̓iáx̌i maúx̌vayax̌i   "whenever dog[V] bites (bit)
                                    cat[V]"
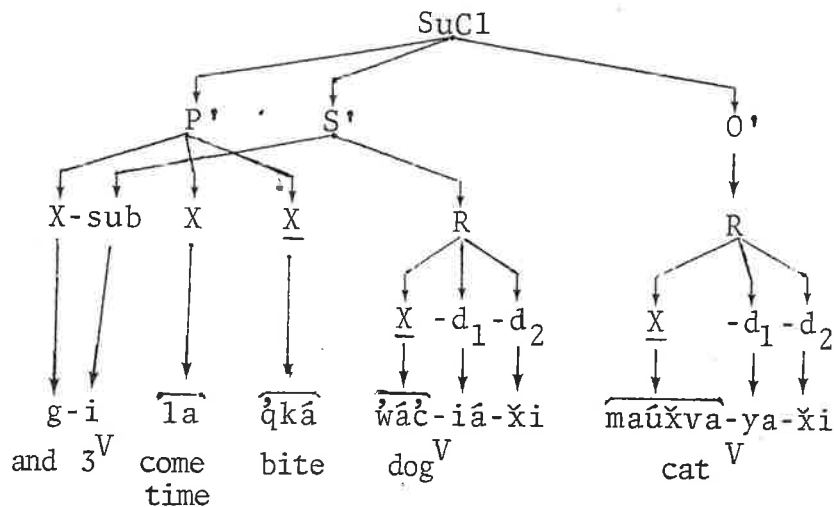
4. "Up to the time (point) that ...", "until ...". Type
of construction: "láká" followed by a subordinate clause as de-
scribed in 4.4. Example:

láká qvúta-áy̓-a-s gélw̓á-yá-x̌i   "until canoe[V] was/is
reach full fact[V]   canoe[V]   full"

5. "Since the time that ...". Type of construction:
"gaíx'ida" followed by a subordinate clause as described in 4.4.
Example:

gaíx'ida q̓ka-áy̓-a-s w̓áč̓-iá-x̌i   "since the time that dog[V]
maúx̌va-ya-x̌i   bit cat[V]"

4.5 ANAPHORIC SENTENCES

In anaphoric sentences something on which the addressee has already focussed his attention or which he can readily identify in view of the context of utterance, is pronounced to be the referent of a particular designation. In the simplest type of case this designation has the form of a relatum (e.g. wîsm-á--x̌i), while the anaphoric reference (to something that is known previously or obvious contextually) takes place by means of only the proclitic element "hi". The latter can often be translated as "it is (was)", "that is (was)", "to be the one (in point)", cf.

> Hi   wîsm-á-x̌i   "It is (was) man^V", "Man^V is (was)
> it is   man^V the one" (i.e., and not someone else)
> (was)

Optionally, the anaphoric reference by means of "hi" can be clarified with descriptive details, as e.g. in

> Hi   wîsm-á-x̌i   dáduqvlá   ẃáč-iá-x̌i
> it is   man^V watch   dog^V
> (was)
>   "It is (was) man^V (and not someone else) that watch$_{ed}^{es}$
>   dog^V", "Man^V (and not someone else) is (was) the one
>   that watch$_{ed}^{es}$ dog^V"

Henceforth additional information such as "dáduqvlá ẃáč-iá-x̌i" is referred to as "optional anaphoric complement". Anaphoric sentences are syntactically peculiar; the following sections present some frequently occurring types. Note that proclitic "hi" is occasionally pronounced as a full word with high tone: "hí". Category B suffixes

can be joined to "hi", cf.

> Hi-th wîsm-á-x̌i "It will be man^V", "Man^V will be the
> one"

> Hi-ganem wîsm-á-x̌i "It is (was) perhaps man^V", "Man^V is
> (was) perhaps the one"

The elements "hi-th", "hi-ganem", etc., are proclitics like "hi",
but they too can be pronounced as full words with high tone(s),
cf. "hî-th", "hî-gáném". In the examples of anaphoric sentences
below, the possibility of using category B suffixes other than
the factualizing suffix is ignored.

4.5.1 Type:

anaphoric reference		(optional anaphoric complement)
hi	R	(see below)
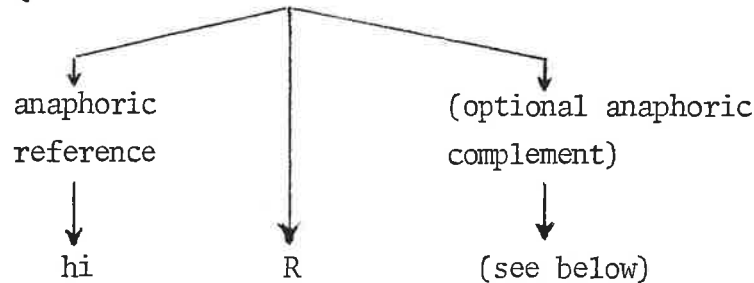
    Instances of this type have been used in the preceding
section. The constituent R can also be a 3rd person subject suf-
fix attached to "hi", cf. hi-í "It is (was) 3^V", "3^V is (was)
the one". Combinations of "hi" and a 3rd person suffix have high
ton(e)s. Unlike "hi" by itself, these combinations are not pro-
clitics. To refer to the 1st person one uses the words "núgva",
"núgvaénc", "núgvaént$_{xv}^{kv}$". To refer to the 2nd person one uses
the word "qsú" (plural: "qîqsu"). Examples:

> Núgva   "It is (was) I", "I am (was) the one"
>
> Qsú   "It is (was) you", "You are (were) the
> one"
>
> Núgvaénc dáduqvlá "It is (was) we (incl.) who watch(ed)",

"We (incl.) are (were) the ones that watch(ed)"

For the optional anaphoric complement the following structures have been recorded. Underlining denotes the centre of construction.

1	(no complement)				6	X R			
2			X		7a-f	.... X R			
3a		X-š	X			(same left-hand adjuncts as in 3a-f)			
3b		X	X		8	X R A			
3c	X-š	X	X		9a-f	.... X R A			
3d	X	X-š	X			(same left-hand adjuncts as in 3a-f)			
3e	X-š	X-š	X						
3f	X	X	X		10	X R A A A ...			
4			X A		11a-f	.... X R A A A ...			
5a-f		....	X A			(same left-hand adjuncts as in 3a-f)			
	(same left-hand adjuncts as in 3a-f)								

In the following examples the translation is simplified by using only the present tense and translating "hi" more particularly as "to be the one".

1 Hi R (∅) cf. Hi wîsm-á-x̌i "Man^V (not someone else) is the one".
         In the following example, R has the structure X-d$_1$ X A (relatum type 9, see chart on page 87): Hi wîsm-á dúqvlh his čklá-ya-x̌i "Man^V seen by police^V (and not some other man) is the one".

2 Hi R (X) cf. Hi wîsm-á-x̌i dáduqvlá "Man^V is the one that

watches", Hi wîsm-á-x̌i hímás "Man^V is the one that is a (the)
chief", Hi wîsm-á dúqvlh his čklá-ya-x̌i thiy̓élks "Man^V seen by
police^V is the one that is a (the) storekeeper".

3a Hi R (X-š X̱)   cf. Hi wîsm-á-x̌i w̓ála-s dáduqvlá "Man^V is
                          the one that really watches".

3b Hi R (X X̱)   cf. Hi wîsm-á-x̌i k̓s dáduqvlá "Man^V is the
                          one that does not watch".

3c Hi R (X-š X X̱) cf. Hi wîsm-á-x̌i w̓ála-s k̓s dáduqvlá "Man^V
                          is the one that really does not watch".

3d Hi R (X X-š X̱) cf. Hi wîsm-á-x̌i k̓s w̓ála-s dáduqvlá "Man^V
                          is the one that does not really watch".

3e Hi R (X-š X-š X̱)   cf. Hi wîsm-á-x̌i w̓ála-s aix-s dáduqvlá
                          "Man^V is the one that watches really
                          well".

3f Hi R (X X X̱) cf. Hi wîsm-á-x̌i k̓s la dáduqvlá "Man^V is
                          the one that does not watch now".

4   Hi R (X̱ A)   cf. Hi wîsm-á-x̌i p̓ála la uxvthiás-a-x̌i "Man^V
                          is the one that works on roof^V", Hi wîsm-á-x̌i
p̓ála qen hímás-a-x̌i "Man^V is the one that works for chief^V", Hi
wîsm-á-x̌i p̓ála his p̓áy̓u-á-x̌i "Man^V is the one that works with
equipment^V", Hi wîsm-á-x̌i dúqvlh his čklá-ya-x̌i "Man^V is the one
that is seen by police^V". (Compare the last example with the second
type "Hi R (∅)" example on page 119.) Note further that the 1st per-
son adjuncts "his núgva", "his núgvaénc", "his núgvaént_{xv}^{kv}" and the
2nd person adjunct "his qsú" (plural: "his qíqsu") have the same
peculiarities as when used as relatum constituents; see pages
97-99. Thus, for instance,

Hi wîsm-á-x̌i dúqvlh his núgva ⎫   "Man^V is the one seen by
Hi wîsm-á-x̌i qs dúqvlh   ⎬   me", "Man^V is the one I
                               ⎭   see"

Hi wísm-á-x̌i aémba his núgva ⎫ "Man[V] is the one that is
Hi wísm-á-x̌i qs aémba ⎭ ahead of me"

Hi wísm-á-x̌i dúqvlh his qsú ⎫ "Man[V] is the one seen by
⎪ you", "Man[V] is the one
Hi wísm-á-x̌i dúqvlh-ús ⎪ you see"

Hi wísm-á-x̌i aémba his qsú ⎫ "Man[V] is the one that is
Hi wísm-á-x̌i aémb-us ⎭ ahead of you"

Hi wísm-á-x̌i qs x̌vlhémp(-énc) "Man[V] is the one that is
my uncle"

Hi wísm-á-x̌i aix-s qs x̌vlhémp(-énc) "Man[V] is the one that is
my good uncle"

6 Hi R (<u>X</u> R)   cf. Hi wísm-á-x̌i dáduqvlá ẇáċ-iá-x̌i "Man[V]
is the one that watches dog[V]"

8 Hi R (<u>X</u> R A)   cf. Hi wísm-á-x̌i dáduqvlá ẇáċ-iá-x̌i la
uxvthiás-a-x̌i "Man[V] is the one that
watches dog[V] on roof[V]", Hi wísm-á-x̌i dáduqvlá ẇáċ-iá-x̌i his
dúǧváyú-a-x̌i "Man[V] is the one that watches dog[V] with binoculars[V]",
Hi wísm-á-x̌i daduqvlá ẇáċ-iá-x̌i qen hiṁás-a-x̌i "Man[V] watches
dog[V] for boss[V]".

10 Hi R (<u>X</u> R A A A)   cf. Hi wísm-á-x̌i dáduqvlá ẇáċ-iá-x̌i
his dúǧváyú-a-x̌i la uxvthiás-a-x̌i qen
hiṁás-a-x̌i (combination of the preceding examples).

In the optional anaphoric complement, an A with the
structure "his R" can be substituted by a "his"-adjunct suffix. An
A with the structure "la R" can be substituted by the root "la◻"
followed by a "la◻" suffix. An A with the structure "qen R" can be

substituted by the root "q" followed by a "q"-suffix. For a survey of these suffixes, see section 3.3.2. Examples:

4   Hi R (X A)   Hi wîsm-á-ẋi dáduqvlá-si "Man^V is the one that watches with 3^V", Hi wîsm-á-ẋi dáduqvlá lá-ẋî "Man^V is the one that watches on 3^V", Hi wîsm-á-ẋi ṗála q-enȟí "Man^V is the one that works for 3^V".

8   Hi R (X R A)   Hi wîsm-á-ẋi dáduqvlá ẇáč-iá-ẋi-si "Man^V is the one that watches dog^V with 3^V", Hi wîsm-á-ẋi dáduqvlá ẇáč-iá-ẋi lá-ẋî "Man^V is the one that watches dog^V on 3^V". (Similarly with q-enȟí .)

Also, R following the constituent X of the anaphoric complement, can be substituted by an object suffix (attached to X), cf.

6   Hi R (X R)   Hi wîsm-á-ẋi dáduqvlá-qi "Man^V is the one that watches 3^V".

10 Hi R (X R A A ...)   Hi wîsm-á-ẋi dáduqvlá-qi-si lá-ẋí q-enȟí "Man^V is the one that watches 3^V with 3^V on 3^V for 3^V".

It is noteworthy that the optional anaphoric complement cannot be considered a main clause from which the subject has been dropped. The alternation of (X his nûgva) and (qs X), which occurs with type 4 , and especially the possessive construction (qs X(-ẹ̄nc)), indicate that the anaphoric complement is a kind of relatum.

4.5.2 Type:

```
                              ┌──────────────────┐
                              │                  │
                              ▼                  │
              anaphoric                          │
              reference                          │
              ┌───┼───┐                          ▼
              ▼   ▼   ▼
              hi  lá  R₁          R₂ (or subordinate
                                  clause, see below)
```
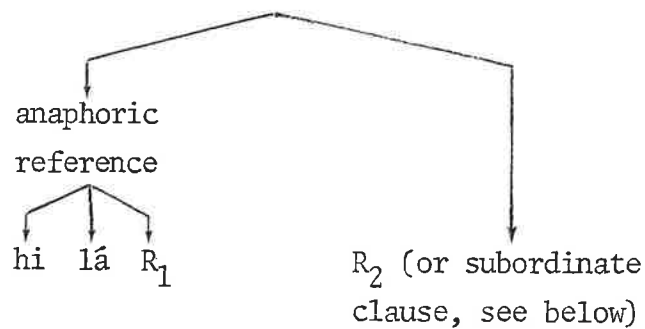
This type lacks the optional anaphoric complement (but see the following section). If the sentence-final constituent is a relatum (R_2), the constituent "lá" (a full word) can be translated as "at", "in", "on", "to". Example:

Hi   lá   wîsm-á-x̌i   gvúkv-a-x̌î   "It is (was) in house^V (and
it is in   man^V house^V not somewhere else) that man^V
(was)   ..." [1], "House^V is the one
                                    (the place) in which man^V ...
                                    ..." [1]

[1] Depending on context one can fill in: "is (was)", "finds (found) himself", "undergoes (underwent) ...ing", "does (did) ...ing". A more elegant translation is obtained by ignoring R_1, cf. "It is (was) in house^V", "House^V is the one".

The constituent R_1 can be substituted by a subject suffix (attached to "lá"), cf.

Hi   lá-nugva   gvúkv-a-x̌î   "It is (was) in house^V that
it is in   I   house^V I ...", "House^V is the one in
(was)   which I ..."

Hi   la-î   gvúkv-a-x̌î   "It is (was) in house^V that
                              3^V ...", "House^V is the one in
                              which 3^V ..."

The final constituent of the sentence type can also be a subordinate clause specifying the time, place, or condition of occurrence of something. Let the following example suffice; for the structure of the clause used, see section 4.4.1. Other examples are given under dictionary entry "lâ".

Hi lâ-nugva la-aẙ-a-si ẙúgva   "It was when it^V rained
it is   I   when V 3^V to rain   that I ..."
(was)

Furthermore, the sentence-final constituent (R_2 or clause) can be substituted by an object suffix (in the examples available attached to a subject suffix following "lâ"), or by an independent demonstrative word (i.e., "gáqv", etc.; see section 4.1.1). Examples:

Hi   lâ-nugva-qi   "It is (was) at (on, etc.) 3^V that
                         I ..."

Hi   lâ-nugva qîqv   "It is (was) at that^V (place, time)
                         that I ..."

4.5.2.1   The anaphoric sentence type "hi lâ R_1 R_2/clause" can be complicated by (1) left-hand adjuncts before "hi" and (2) by an anaphoric complement. Example of (1):

la-sub hi la-îla R_1 R_2/clause

The left-hand adjunct "la" is a proclitic like "hi". Both "la" and the suffix "îla" in "la-îla" have perfective meaning and can be glossed broadly as "now" or "then". For details, see section 6 of dictionary entry "la". The Roman numeral of the (3rd person) subject suffix after initial "la" has to be in agreement with the Roman numeral of the primary deictic in R_1. The use of R_1 is optional; if R_1 is absent, the subject suffix can also refer to the 1st or 2nd person. Example:

La-nugva hi la-íla gvúkv-a-x̌í   "It is in house^V that I

now   I   it is in now   house^V now ..."

(was)

Adding an anaphoric complement to the type "hi lá R_1 R_2/ clause" results in the following structure.
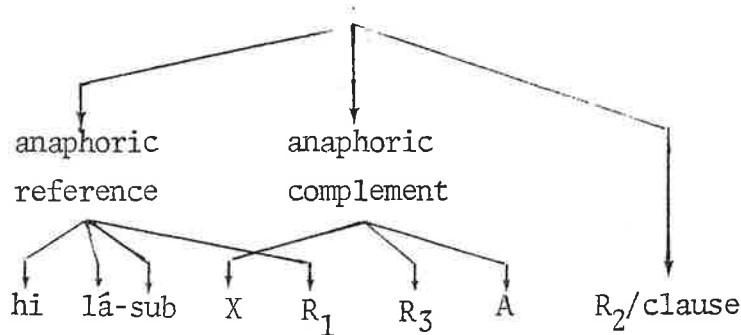
The series of constituents "X R_1 R_3 A" resembles a main clause in which X is the predicate, R_1 the subject, R_3 the object, and A a right-hand adjunct. The constituent X can be expanded into X-ś $\underline{X}$, X $\underline{X}$, etc.; see section 4.3. The Roman numeral of the primary deictic in R_1 has to be in agreement with the Roman numeral of the (3rd person) subject suffix following "lá". Example:

X	R_1	R_3	A	R_2

Hi la-í dáduqvlá wísm-á-x̌i wác̓-iá-x̌i his dúg̓váyú-a-x̌i uxvthiás-a-x̌i

it is on 3^V watch   man^V dog^V with binoculars^V roof^V

(was)

"It is (was) on roof^V (not some place else) that man^V watch$^{es}_{ed}$ dog^V with binoculars"

4.5.3 Other Types

Anaphoric "hi" can be followed by the factualizing suffix ; let the following examples suffice.

Hiaẏas aíxstaúkvaẏasi aíkiqlágilhc wísmáx̌i

"It is because 3^V is well that man^V is glad" (i.e., and not because of something else)

anaphoric reference

anaphoric complement

hi-fact-d_1-*s   SuCl   SuCl

P'   S'   P'   S'

$\underline{X}$ -fact-d_1-*sf $\underline{X}$ -gilh-*s   R

$\underline{X}$ -d_1-d_2

hi -aẏ -a   -s   aíxstaúkv -aẏ -a -si   aíkiqlá-gilh -c   wísm -á -x̌i

it is fact V   well-being fact V 3^V glad there-   man^V
(was)   fore
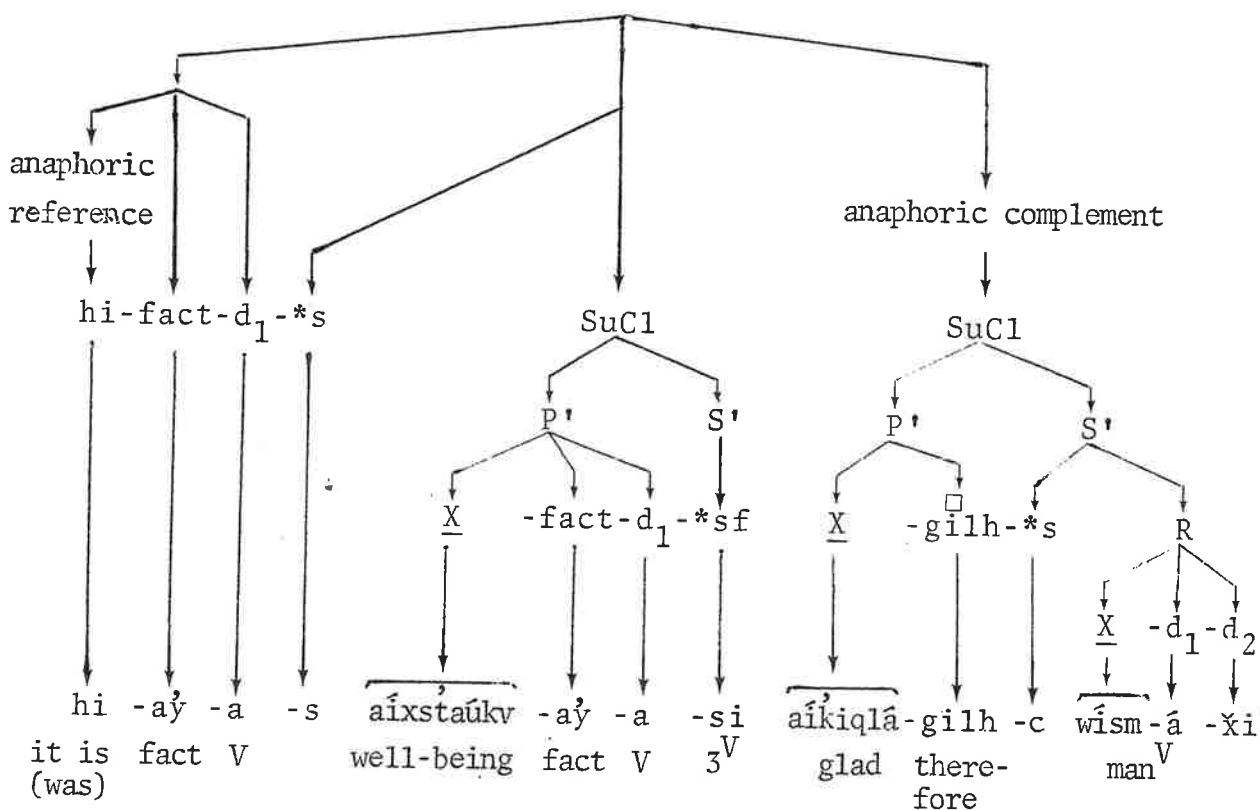
For the occurrence of "c" rather than "s" after the suffix "gilh", see section 3.3.2.1. For the structure of the various subordinate clauses, see section 4.4.

In the following example, "hi" is a constituent of a purposive clause (see section 4.4.4).

Pkválá híḿásax̌i qen hiaísi pkvúsú

"Chief^V argued that 3^V was the one (boat) that should be borrowed" (i.e., and not some other boat).

```
                              ╱│╲
                         ╱    │      ╲
                    P         S          A
                    │         │         ╱ ╲
                    X         R      prep   SuCl
                    │       ╱ │ ╲      │      ╱ ╲
                    │      X -d₁-d₂   │     P'    S'
                    │      │  │  │    │    ╱│╲    │
                    │      │  │  │    │  hi-fact-*sf  X
                  pkválá  hiḿás-a -x̌i qen hi -aí -si  pkvúsú
                  say,argue chief    that it is fact  to be bor-
                          V    that (was)     3 V      rowed (boat)
```

P → X → pkválá (say, argue)
S → R → X̲ -d₁ -d₂ → hiḿás -a -x̌i (chief^V)
A → prep → qen (that) ; SuCl → P' → hi-fact-*sf → hi -aí -si (it is fact (was); 3^V) ; S' → X̲ → pkvúsú (to be borrowed (boat))
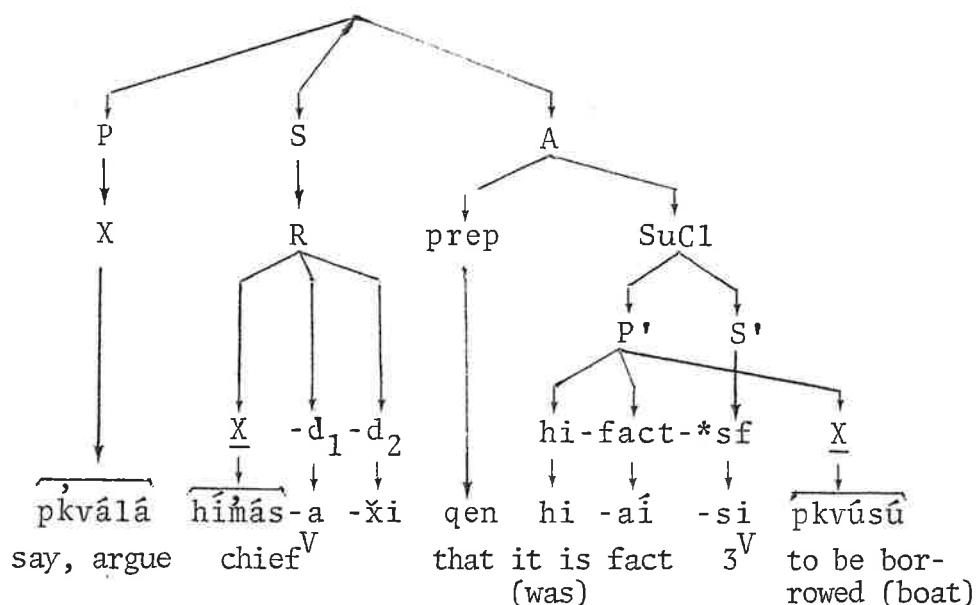
"sú" in "pkvúsú" is category B suffix no. 25, see section 3.3.1.

4.6 MOODS OF SENTENCES

Strictly speaking there are as many moods of sentences in Heiltsuk as there are category B suffixes referring to attitudinal features, and combinations of such suffixes, which can occur in a predicate. The number of these suffixes and suffix combinations being very large, the concept of mood will be used in a limited and ad hoc sense here. 5 Moods are distinguished, (1) the declarative mood, (2) the interrogative mood, (3) the imperative mood, (4) the first connective mood, and (5) the second connective mood.

4.6.1 Declarative Mood

A sentence (main clause) is in the declarative mood when it is not in one of the other four moods. All main clauses presented in preceding sections were in the declarative mood.

4.6.2 Interrogative Mood

Sentences in the interrogative mood are questions and

recognizable as such by the fact that their first word features an allomorph of either the interrogative suffix for the 1st and 3rd person (viz. {-aí , -aỳ , -i̱} -- category B suffix no. 6, see section 3.3.1) or the interrogative suffix for the 2nd person (viz. {-a̱s} -- category B suffix no. 7). Optionally, questions that can be answered with "yes" or "no", can feature the "question mark suffix" {-a̱} (category B suffix no. 1) as last morpheme in the sentence. Examples:

without sentence-final "question mark suffix"	with sentence-final "question mark suffix"	
'Thiỷélks-aí wîsm-á-x̌i	'Thiỷélks-aí wîsm-á-x̌i-a	"Is (was) man^{V} a storekeeper?"
'Thiỷélks-aí-1-i [1]	'Thiỷélks-aí-1-i-a [1]	"Is (was) 3^{V} a storekeeper?"
'Thiỷélks-áỳ-u(x̌v) [2]	'Thiỷélks-áỳ-uqv-a [2]	"Is (was) 3^{III} a storekeeper?"
'Thiỷélks-aí-nugva [3]	'Thiỷélks-aí-nugv-a [3]	"Am (was) I a storekeeper?"
'Thiỷélks-ás	'Thiỷélks-ás-a	"Are (were) you a storekeeper?"
Aíxstaúkv-i wîsm-á-x̌i	Aíxstaúkv-i wîsm-á-x̌i-a	"Is (was) man^{V} well?"
Aíxstaúkv-i-1-i [1]	Aíxstaúkv-i-1-i-a [1]	"Is (was) 3^{V} well?"
Aíxstaúkv-aỳ-u(x̌v) [2]	Aíxstaúkv-aỳ-uqv-a [2]	"Is (was) 3^{III} well?"
Aíxstaúkv-i-nugva [3]	Aíxstaúkv-i-nugv-a [3]	"Am (was) I well?"
Aíxstaúkv-as	Aíxstaúkv-as-a	"Are (were) you well?"

Notes:

  1. The reader is reminded that directly after the inter-

rogative suffix for the 1st and 3rd person, the 3rd person subject
suffixes nos. V and VI (viz. {-ꞮÌ} and {-ꞮÌc}) are replaced by
{-l-ꞮÌ} and {-l-ꞮÌc}. See also the comment on category B suffix
no. 6 on page 70.

2. The reader is reminded that 3rd person subject suffix
no. III is {-u̲qv̲ , -u̲}. The allomorph type "u̲qv" occurs before
allomorphs beginning with a vowel, the allomorph type "u̲x̌v" be-
fore allomorphs beginning otherwise and word-finally. Word-finally
only, "x̌v" of "u̲x̌v" can optionally be dropped; in the examples
given here, this is signalled by placing "x̌v" between parentheses.
On the meaning of the mark _ , see the beginning of section 3.3.1.

3. ...-nugva and ...-nugv-a are different analyses
corresponding to the same phonetic form (viz. "...nugva").

4.6.3 Imperative Mood

Sentences in the imperative mood are recognizable by their
beginning with "ăwá", "wnína" (or words derived from these, e.g.
"ăwáth"), and/or by the fact that the predicate of the sentence
features an allomorph of category B suffix no. 30 (see page 73).
Although sentences in the imperative mood express commands and
exhortations, a command or exhortation need not necessarily be in
this mood as it can also be expressed by a sentence in the declar-
ative, first connective, or second connective moods, the predicate
of which sentence contains {-th} (category B suffix no. 27). Ex-
amples of sentences in the imperative mood are as follows. Note
that the word "must" in the translations is to be taken in the
sense of "to be obliged to", "to be compelled to".

Túxv'it-s	"Take a walk!", "You must take a walk"
Túxv'it-si	

ˇAwá, túxv'it

ˇAwá-xs, túxv'it

ˇAwá-xsi, túxv'it

} "Take a walk!", "You must take a walk"

Túxv'it-s wîsm-á-x̌i

Túxv'it-si wîsm-á-x̌i

} "Let man^V take a walk", "Man^V must take a walk"

Dáduqvlá-xs wîsm-á-x̌i ẇáč-iá-x̌i

Dáduqvlá-xsi wîsm-á-x̌i ẇáč-iá-x̌i

} "Let man^V watch dog^V", "Man^V must watch dog^V"

Dáduqvlá-xsi̯-nugva ẇáč-iá-x̌i

"Let me watch dog^V", "I must watch dog^V"

4.6.4 First Connective Mood

A sentence is in the first connective mood when its predicate has the following left-hand adjuncts:

1. "g" or "k" (allomorphs of a root meaning "and further", "and then");

2. (with most speakers in careful speech:) the word "ăwá" or a derivate (e.g. "ăwáth").

The translation of sentences in the first connective mood varies with the context. Example:

Dúqvlá wîsm-á-x̌i ẇáč-iá-x̌i la ʼthiẏa'aîlás-a-x̌i .
   see   man^V dog^V in   store^V

"Man^V sees (saw) dog^V in store^V"

G-i ăwá ʼthiẏá-qî .
and 3^V buy 3^V

"And he^V buys (bought) it^V".

Alternate translation: "Man^V sees (saw) dog^V in store^V and buys (bought) it^V". This is also an example of the context warranting the use of "he^V" and "it^V" instead of "3^V"; on this see also page 80. Other example:

Dúqvlá-su ẃač-iá- x̌i .   "You see (saw) dog^V"
   see   you   dog^V

K-su   ăwá thiẏá-qí .   "And you buy (bought) it^V"
and you   buy   3^V

K-su   ăwá laíñakv   .   "And you go (went) home"
and you   go home

Alternate translation: "You see (saw) dog^V, buy (bought) it^V and go (went) home". The three sentences could also be written as one:

Dáduqvlá-su ẃač-iá-x̌i, k-su ăwá thiẏá-qí, k-su ăwá

laíñakv .

Third example:

ʼKús-i ğiála , g-i ăwá xvílhcísta .
not 3^V long   and 3^V return
       (time)

"It was not long before 3^V returned"

Note that the allomorphs "g" and "k" and the following subject suffix are joined proclitically to "ăwá".

4.6.5 Second Connective Mood

Sentences in the second connective mood have one of the following types of structure. Underlining of a constituent indicates

the centre of construction; "pf" refers to the perfective suffix
(category B suffix no. 3, see section 3.3.1), and "sub" refers to
a subject suffix.

1a

1b

2a

2b
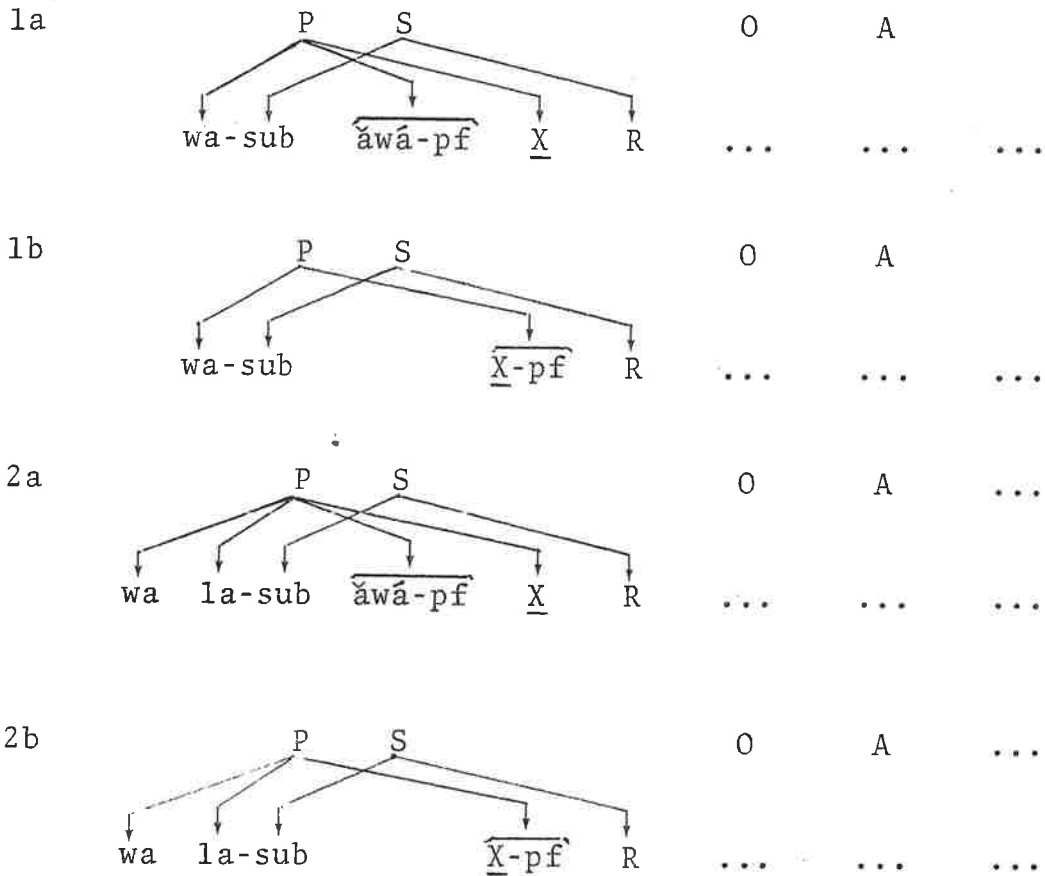
The constituent X of the predicate can be substituted by X-š X ,
X X , etc., see section 4.3. Sentence-initial "wa" and possibly
following "la" (see 2a-b) are proclitics; they can be followed by
a limited number of category B suffixes (e.g. nos. 2, 8, 9, 10, 26).
These same category B suffixes, and those referring to time of
occurrence (e.g. nos. 27, 28), can be attached to "ăwá" or X, in
which case the perfective suffix follows all these suffixes except
nos. 8, 9 , 26. Example: "ăwá-th-iḷa-x̌a-dha". The literal meaning
of "wa" is "well", "well now". The element "la" and the perfective

suffix can be glossed as "now" or "then"; for details see section 6 of dictionary entry "1a". The following example uses the above sentence type no. 1a; compare the example with the first one given on page 131.

Dúqvlá-su   w̌áč-iá-x̌i .   "You see (saw) dog^V"
  see   you   dog^V

K-su   ăwá   thiy̌á-qí .   "And you buy (bought) it^V"
and you   buy   3^V

  Wa-su   ăwa-íla   laíñakv .   "Then you go (went) home"
    well, you   now,   go home
  well then   then

Better translation: "You see (saw) dog^V and buy (bought) it^V, after which you go (went) home".

5. GRAMMATICAL PARADIGMS

The paradigms below illustrate the use of the deictics (primary, secondary, and personal) listed on page 77. The reader is referred to section 3.3.2 (pages 75-82) for all details on the deictics. Use is made of the following words: yábem "person sent, messenger" (also: "to be sent on an errand"), yápa "to send a person, to send on an errand" (also: "to issue an order"), pkvú "to borrow a boat". Each word is used in addition with category B suffixes nos. 13, 27, and 28 (see section 3.3.1). A special section, 5.3.2, gives paradigms involving the interrogative suffixes (category B suffixes nos. 6 and 7).

5.1 EXAMPLES OF RELATUM TYPE $\underline{X}$-d_1-d_2 (SEE PAGE 87)

(The Roman numerals on the left side of the paradigms refer to the primary deictics used.)

	yábem	yábemth	yábemxt	yábemgvaúlh
I	yábemgax̌ga	yábemthgax̌ga	yábemxtgax̌ga	yábemgvaúlhgax̌ga
II	yábemgacx̌ga	yábemthgacx̌ga	yábemxtgacx̌ga	yábemgvaúlhgacx̌ga
III	yábmáx̌v	yábemthax̌v	yábemxdiáx̌v	yábemgvaúlhax̌v
IV	yábmáx̌cx̌v	yábemthax̌cx̌v	yábemxdiáx̌cx̌v	yábemgvaúlhax̌cx̌v
V	yábmáx̌i	yábemthax̌í	yábemxdiáx̌i	yábemgvaúlhax̌i
VI	yábmácx̌i	yábemthacx̌í	yábemxdiácx̌i	yábemgvaúlhacx̌i
VII	-.-	-.-	yábemxdíx̌ga	yábemgvaúlhix̌ga
VII-III	-.-	-.-	yábemxdiáx̌v	yábemgvaúlhiax̌v
VII-IV	-.-	-.-	yábemxdiáx̌cx̌v	yábemgvaúlhiax̌cx̌v
VII-V	-.-	-.-	yábemxdiáx̌i	yábemgvaúlhiax̌i
VII-VI	-.-	-.-	yábemxdiácx̌i	yábemgvaúlhiacx̌i

	yápa	yápath	yápaxt	yápagvaúlh
I	yápagax̌ga	yápathgax̌ga	yápaxtgax̌ga	yápagvaúlhgax̌ga
II	yápagacx̌ga	(etc.,	(etc.,	(etc., see
III	yápáyáx̌v	see	see	above)
IV	yápáyáx̌cx̌v	above)	above)	
V	yápáyáx̌i			
VI	yápáyácx̌i			
VII	-.-	-.-		
VII-III	-.-	-.-		
(etc.)				

	pkvú	pkvúth	pkvúxvt	pkvúgvaúlh
I	pkvúgvax̌ga	pkvúthgax̌ga	pkvúxvtgax̌ga	pkvúgvaúlhgax̌ga
II	pkvúgvacx̌ga	pkvúthgacx̌ga	pkvúxvtgacx̌ga	pkvúgvaúlhgacx̌ga
III	pkvuáx̌v	pkvúthax̌v	pkvúxvdiáx̌v	pkvúgvaúlhax̌v
IV	pkvuáx̌cx̌v	pkvúthax̌cx̌v	pkvúxvdiáx̌cx̌v	pkvúgvaúlhax̌cx̌v
V	pkvuáx̌i	pkvúthax̌í	pkvúxvdiáx̌i	pkvúgvaúlhax̌i
VI	pkvuácx̌i	pkvúthacx̌í	pkvúxvdiácx̌i	pkvúgvaúlhacx̌i

	pkvú	pkvúth	pkvúxvt	pkvúgvaúlh
VII	-.-	-.-	pkvúxvdíx̌ga	pkvúgvaúlhix̌ga
VII-III	-.-	-.-	pkvúxvdiáx̌v	pkvúgvaúlhiax̌v
VII-IV	-.-	-.-	pkvúxvdiáx̌cx̌v	pkvúgvaúlhiax̌cx̌v
VII-V	-.-	-.-	pkvúxvdiáx̌i	pkvúgvaúlhiax̌i
VII-VI	-.-	-.-	pkvúxvdiácx̌i	pkvúgvaúlhiacx̌i

5.2 EXAMPLES OF RELATUM TYPE $\underline{X}\text{-}d_1$ A (SEE PAGE 87)

(A represents "his R", "la R", or "qen R".)

	yábem		yábemth		yábemxt		yábemgvaúlh	
I	yábemga	A	yábemthga	A	yábemxtga		yábemgvaúlhga	A
II	yábemgac	A	yábemthgac	A	yábemxtgac	A	yábemgvaúlhgac	A
III	yábmáx̌	A	yábemthax̌	A	yábemxdiáx̌	A	yábemgvaúlhax̌	A
IV	yábmáx̌c	A	yábemthax̌c	A	yábemxdiáx̌c	A	yábemgvaúlhax̌c	A
V	yábmá	A	yábemtha	A	yábemxdiá	A	yábemgvaúlha	A
VI	yábmác	A	yábemthac	A	yábemxdiác	A	yábemgvaúlhac	A
VII	-.-		-.-		yábemxdi	A	yábemgvaúlhi	A
VII-III	-.-		-.-		yábemxdiáx̌	A	yábemgvaúlhiax̌	A
VII-IV	-.-		-.-		yábemxdiáx̌c	A	yábemgvaúlhiax̌c	A
VII-V	-.-		-.-		yábemxdiá	A	yábemgvaúlhia	A
VII-VI	-.-		-.-		yábemxdiác	A	yábemgvaúlhiac	A

	yápa		yápath		yápaxt		yápagvaúlh	
I	yápaga	A	yápathga	A	yápaxtga	A	yápagvaúlhga	A
II	yápagac	A	(etc.,		(etc.,		(etc., see	
III	yápáyáx̌	A	see		see		above)	
IV	yápáyáx̌c	A	above)		above)			
V	yápáyá	A						
VI	yápáyác	A						

	yápa	yápath	yápaxt		yápagvaúlh	
VII	-.-	-.-	yápaxdi	A	yápagvaúlhi	A
VII-III	-.-	-.-	yápaxdiăx̌	A	yápagvaúlhiax̌	A
VII-IV	-.-	-.-	yápaxdiăx̌c	A	yápagvaúlhiax̌c	A
VII-V	-.-	-.-	yápaxdiă	A	yápagvaúlhia	A
VII-VI	-.-	-.-	yápaxdiác	A	yápagvaúlhiac	A

	pkvú		pkvúth		pkvúxvt		pkvúgvaúlh	
I	pkvúgva	A	pkvúthga	A	pkvúxvtga	A	pkvúgvaúlhga	A
II	pkvúgvac	A	pkvúthgac	A	pkvúxvtgac	A	pkvúgvaúlhgac	A
III	pkvuáx̌	A	pkvúthax̌	A	pkvúxvdiăx̌	A	pkvúgvaúlhax̌	A
IV	pkvuáx̌c	A	pkvúthax̌c	A	pkvúxvdiăx̌c	A	pkvúgvaúlhax̌c	A
V	pkvuá	A	pkvútha	A	pkvúxvdiă	A	pkvúgvaúlha	A
VI	pkvuác	A	pkvúthac	A	pkvúxvdiác	A	pkvúgvaúlhac	A
VII	-.-		-.-		pkvúxvdi	A	pkvúgvaúlhi	A
VII-III	-.-		-.-		pkvúxvdiăx̌	A	pkvúgvaúlhiax̌	A
VII-IV	-.-		-.-		pkvúxvdiăx̌c	A	pkvúgvaúlhiax̌c	A
VII V	-.-		-.-		pkvúxvdiă	A	pkvúgvaúlhia	A
VII-VI	-.-		-.-		pkvúxvdiác	A	pkvúgvaúlhiac	A

5.2.1 Examples of Relatum Type $\underline{X}$-d_1 A in Which A Is 3rd Person "his"-Adjunct Suffix no. V

	yábem	yábemth	yábemxt	yábemgvaúlh
I	yábemgási	yábemthgási	yábemxtgási	yábemgvaúlhgasi
II	yábemgací	yábemthgací	yábemxtgací	yábemgvaúlhgaci
III	yábmáx̌si	yábemthax̌sí	yábemxdiăx̌si	yábemgvaúlhax̌si
IV	yábmáx̌ci	yábemthax̌cí	yábemxdiăx̌ci	yábemgvaúlhax̌ci
V	yábmási	yábemthási	yábemxdiási	yábemgvaúlhasi
VI	yábmáci	yábemthací	yábemxdiáci	yábemgvaúlhaci

	yábem	yábemth	yábemxt	yábemgvaúlh
VII	-.-	-.-	yábemxdísi	yábemgvaúlhisi
VII-III	-.-	-.-	yábemxdiáx̌si	yábemgvaúlhiax̌si
VII-IV	-.-	-.-	yábemxdiáx̌ci	yábemgvaúlhiax̌ci
VII-V	-.-	-.-	yábemxdiási	yábmegvaúlhiasi
VII-VI	-.-	-.-	yábemxdiáci	yábemgvaúlhiaci

5.2.2   Examples of Relatum Type $\underline{X}$-d_1 A in which A is the 2nd
        Person "his"-Adjunct Suffix

	yábem	yábemth	yábemxt	yábemgvaúlh
I	yábemgaús	yábemthgaús	yábemxtgaús	yábemgvaúlhgus
II	yábemgacús	yábemthgacús	yábemxtgacús	yábemgvaúlhgacus
III	yábmáqvs	yábemthaqvs	yábemxdiáqvs	yábemgvaúlhaqvs
IV	yábmáx̌cus	yábemthacús	yábemxdiáx̌cus	yábemgvaúlhax̌cus
V	yábmaús	yábemthaús	yábemxdiaús	yábemgvaúlhus
VI	yábmácus	yábemthacús	yábemxdiácus	yábemgvaúlhacus
VII	-.-	-.-	yábemxdiús	yábemgvaúlhius
VII-III	-.-	-.-	yábemxdiáqvs	yábemgvaúlhiaqvs
VII-IV	-.-	-.-	yábemxdiáx̌cus	yábemgvaúlhiax̌cus
VII-V	-.-	-.-	yábemxdiaús	yábemgvaúlhius
VII-VI	-.-	-.-	yábemxdiácus	yábemgvaúlhiacus

5.3 THE USE OF SUBJECT SUFFIXES

       Note the following. In final position, "kv" of 1st person
plural exclusive forms, and "k" of 3rd person no. I forms, vary
freely with "xv" and "x", respectively. This is not indicated in
the paradigms. On the other hand, in 3rd person no. II forms, the
free variation of "k" and "x" (in certain environments "kv" and
"xv") is indicated (viz. as $\frac{k}{x}$ or $\frac{kv}{xv}$) because it occurs before
an obstruent, in which position the free variation is an excep-
tional phenomenon. For the rationale of the parentheses in 3rd

person no. III forms (e.g. Yábmú(x̌v̱)), see page 129, note no. 2.
Each paradigm is headed by the word that constitutes its derivational stem.

5.3.1 One-Word Sentences in the Declarative Mood (See Section 4.6.1)

	yábem	yábemth	yábemxt	yábemgvaúlh
1 sg.	Yábémnúgva	Yábemthnúgva	Yábemxdnúgva	Yábemgvaúlhnugva
1 pl. incl.	Yábménc	Yábemthénc	Yábemxdénc	Yábemgvaúlhenc
1 pl. excl.	Yábméntkv	Yábemthéntkv	Yábemxdéntkv	Yábemgvaúlhentkv
2 sg./pl.	Yábémsu	Yábemthsú	Yábemxtsú	Yábemgvaúlhcu
3^{I} sg./pl.	Yábémk	Yábemthk	Yábemxtk	Yábemgvaúlhk
3^{II} sg./pl.	Yábém$^{k}_{x}$c	Yábemth$^{k}_{x}$c	Yábemxt$^{k}_{x}$c	Yábemgvaúlh$^{k}_{x}$c
3^{III} sg./pl.	Yábmú(x̌v)	Yábemthú(x̌v)	Yábemxdú(x̌v)	Yábemgvaúlhu(x̌v)
3^{IV} sg./pl.	Yábmúx̌vc	Yábemthúx̌vc	Yábemxdúx̌vc	Yábemgvaúlhux̌vc
3^{V} sg./pl.	Yábmí	Yábemthí	Yábemxdí	Yábemgvaúlhi
3^{VI} sg./pl.	Yábmíc	Yábemthíc	Yábemxdíc	Yábemgvaúlhic
3^{VII} sg./pl.	Yábémki	Yábemthkí	Yábemxtkí	Yábemgvaúlhki

	yápa	yápath	yápaxt	yápagvaúlh
1 sg.	Yápánúgva	Yápathnúgva	Yápaxdnúgva	Yápagvaúlhnugva
1 pl. incl.	Yápaénc	(etc.,	(etc.,	(etc.,
1 pl. excl.	Yápaéntkv	see	see	see
2 sg./pl.	Yápásu	above)	above)	above)
3^{I} sg./pl.	Yápák			
3^{II} sg./pl.	Yápá$^{k}_{x}$c			
3^{III} sg./pl.	Yápaú(x̌v)			
3^{IV} sg./pl.	Yápaúx̌vc			
3^{V} sg./pl.	Yápaí			
3^{VI} sg./pl.	Yápaíc			
3^{VII} sg./pl.	Yápáki			

	pkvú	pkvúth	pkvúxvt	pkvúgvaúlh
1 sg.	Pkvúnúgva	Pkvúthnúgva	Pkvúxvdnúgva	Pkvúgvaúlhnugva
1 pl. incl.	Pkvuénc	Pkvúthénc	Pkvúxvdénc	Pkvúgvaúlhenc
1 pl. excl.	Pkvuéntkv	Pkvúthéntkv	Pkvúxvdéntkv	Pkvúgvaúlhentkv
2 sg./pl.	Pkvúsu	Pkvúthsú	Pkvúxvtsú	Pkvúgvaúlhcu
3^{I} sg./pl.	Pkvúkv	Pkvúthk	Pkvúxvtk	Pkvúgvaúlhk
3^{II} sg./pl.	Pkvú$^{kv}_{xv}$c	Pkvúth$^{k}_{x}$c	Pkvúxvt$^{k}_{x}$c	Pkvúgvaúlh$^{k}_{x}$c
3^{III} sg./pl.	Pkvuú(x̌v)	Pkvúthú(x̌v)	Pkvúxvdú(x̌v)	Pkvúgvaúlhu(x̌v)
3^{IV} sg./pl.	Pkvuúx̌vc	Pkvúthúx̌vc	Pkvúxvdúx̌vc	Pkvúgvaúlhux̌vc
3^{V} sg./pl.	Pkvuí	Pkvúthí	Pkvúxvdí	Pkvúgvaúlhi
3^{VI} sg./pl.	Pkvuíc	Pkvúthíc	Pkvúxvdíc	Pkvúgvaúlhic
3^{VII} sg./pl.	Pkvúkvi	Pkvúthkí	Pkvúxvtkí	Pkvúgvaúlhki

5.3.2 One-Word Sentences in the Interrogative Mood (See Section 4.6.2)

	yábmaí	yábemthaí	yábemxdaí	yábemgvaúlhi
1 sg.	Yábmaínugva	Yábemthaínugva	Yábemxdaínugva	Yábemgvaúlhinugva
1 pl. incl.	Yábmáy̌enc	Yábemtháy̌enc	Yábemxdáy̌enc	Yábemgvaúlhay̌enc
1 pl. excl.	Yábmáy̌entkv	Yábemtháy̌entkv	Yábemxdáy̌entkv	Yábemgvaúlhay̌entkv
2 sg./pl.	Yábmás	Yábemthás	Yábemxdás	Yábemgvaúlhas
3^{I} sg./pl.	Yábmaík	Yábemthaík	Yábemxdaík	Yábemgvaúlhik
3^{II} sg./pl.	Yábmaí$^{k}_{x}$c	Yábemthaí$^{k}_{x}$c	Yábemxdaí$^{k}_{x}$c	Yábemgvaúlhi$^{k}_{x}$c
3^{III} sg./pl.	Yábmáy̌u(x̌v)	Yábemtháy̌u(x̌v)	Yábemxdáy̌u(x̌v)	Yábemgvaúlhay̌u(x̌v)
3^{IV} sg./pl.	Yábmáy̌ux̌vc	Yábemtháy̌ux̌vc	Yábemxdáy̌ux̌vc	Yábemgvaúlhay̌ux̌vc
3^{V} sg./pl.	Yábmaíli	Yábemthaíli	Yábemxdaíli	Yábemgvaúlhili
3^{VI} sg./pl.	Yábmaílic	Yábemthaílic	Yábemxdaílic	Yábemgvaúlhilic
3^{VII} sg./pl.	Yábmaíki	Yábemthaíki	Yábemxdaíki	Yábemgvaúlhiki

The following are the same items as in the column "yábmaí", but with the optional "question mark suffix" added (category B suffix no. 1).

The reader is reminded that this suffix can only be used if the
question can be answered with "yes" or "no".

1 sg.	Yábmaínugva	3^{III} sg./pl.	Yábmáy̆uqva
1 pl. incl.	Yábmáy̆enca	3^{IV} sg./pl.	Yábmáy̆ux̆vca
1 pl. excl.	Yábmáy̆entkva	3^{V} sg./pl.	Yábmaília
2 sg./pl.	Yábmása	3^{VI} sg./pl.	Yábmaílica
3^{I} sg./pl.	Yábmaíka	3^{VII} sg./pl.	Yábmaíkia
3^{II} sg./pl.	Yábmaí$_x^k$ca		

Other interrogative paradigms (without the "question mark suffix"):

	yápaí	yápathaí	yápaxdaí	yápagvaúlhi
1 sg.	Yápaínugva	Yápathaínugva	Yápaxdaínugva	Yápagvaúlhinugva
1 pl. incl.	Yápáy̆enc	Yápatháy̆enc	Yápaxdáy̆enc	Yápagvaúlhay̆enc
1 pl. excl.	Yápáy̆entkv	Yápatháy̆entkv	Yápaxdáy̆entkv	Yápagvaúlhay̆entkv
2 sg./pl.	Yápás	Yápathás	Yápaxdás	Yápagvaúlhas
3^{I} sg./pl.	Yápaík	Yápathaík	Yápaxdaík	Yápagvaúlhik
3^{II} sg./pl.	Yápaí$_x^k$c	Yápathaí$_x^k$c	Yápaxdaí$_x^k$c	Yápagvaúlhi$_x^k$c
3^{III} sg./pl.	Yápáy̆u(x̆v)	Yápatháy̆u(x̆v)	Yápaxdáy̆u(x̆v)	Yápagvaúlhay̆u(x̆v)
3^{IV} sg./pl.	Yápáy̆ux̆vc	Yápatháy̆ux̆vc	Yápaxdáy̆ux̆vc	Yápagvaúlhay̆ux̆vc
3^{V} sg./pl.	Yápaíli	Yápathaíli	Yápaxdaíli	Yápagvaúlhili
3^{VI} sg./pl.	Yápaílic	Yápathaílic	Yápaxdaílic	Yápagvaúlhilic
3^{VII} sg./pl.	Yápaíki	Yápathaíki	Yápaxdaíki	Yápagvaúlhiki

	pkvuaí	pkvúthaí	pkvúxvdaí	pkvúgvaúlhi
1 sg.	Pkvuaínugva	Pkvúthaínugva	Pkvúxvdaínugva	Pkvúgvaúlhinugva
1 pl. incl.	Pkvuáy̆enc	Pkvútháy̆enc	Pkvúxvdáy̆enc	Pkvúgvaúlhay̆enc
1 pl. excl.	Pkvuáy̆entkv	Pkvútháy̆entkv	Pkvúxvdáy̆entkv	Pkvúgvaúlhay̆entkv

	pkvuaí	pkvúthaí	pkvúxvdaí	pkvúgvaúlhi
2 sg./pl.	Pkvuás	Pkvúthás	Pkvúxvdás	Pkvúgvaúlhas
3^I sg./pl.	Pkvuaík	Pkvúthaík	Pkvúxvdaík	Pkvúgvaúlhik
3^{II} sg./pl.	Pkvuaí$_x^k$c	Pkvúthaí$_x^k$c	Pkvúxvdaí$_x^k$c	Pkvúgvaúlhi$_x^k$c
3^{III} sg./pl.	Pkvuáyu(x̌v)	Pkvútháyu(x̌v)	Pkvúxvdáyu(x̌v)	Pkvúgvaúlhayu(x̌v)
3^{IV} sg./pl.	Pkvuáyux̌vc	Pkvútháyux̌vc	Pkvúxvdáyux̌vc	Pkvúgvaúlhayux̌vc
3^V sg./pl.	Pkvuaíli	Pkvúthaíli	Pkvúxvdaíli	Pkvúgvaúlhili
3^{VI} sg./pl.	Pkvuaílic	Pkvúthaílic	Pkvúxvdaílic	Pkvúgvaúlhilic
3^{VII} sg./pl.	Pkvuaíki	Pkvúthaíki	Pkvúxvdaíki	Pkvúgvaúlhiki

5.4 THE USE OF THE LEFT-HAND ADJUNCT SUFFIX (CATEGORY B SUFFIX NO. 24)

5.4.1 Examples of Relatum Type $X-d_1-\acute{s}$ $\underline{X}(-d_2)$ (See page 87)

(X is exemplified as the word "zása" (meaning "dark of skin"), and its derivates involving category B suffixes nos. 13, 27, and 28, respectively. The constituent $\underline{X}$ is exemplified as the word "wísem" (meaning "man" here)).

I	zásagas wísem(x̌ga)	zásathgas wísem(x̌ga)	zásaxtgas wísem(x̌ga)
II	zásagac wísem(x̌ga)	zásathgac wísem(x̌ga)	zásaxtgac wísem(x̌ga)
III	zásáyáx̌s wísem(x̌v)	zásathax̌s wísem(x̌v)	zásaxdiáx̌s wísem(x̌v)
IV	zásáyáx̌c wísem(x̌v)	zásathax̌c wísem(x̌v)	zásaxdiáx̌c wísem(x̌v)
V	zásáyás wísem(x̌í)	zásathas wísem(x̌í)	zásaxdiás wísem(x̌í)
VI	zásáyác wísem(x̌í)	zásathac wísem(x̌í)	zásaxdiác wísem(x̌í)
VII	-.-	-.-	zásaxdis wísem [1]
VII-III	-.-	-.-	zásaxdiáx̌s wísem(x̌v)
VII-IV	-.-	-.-	zásaxdiáx̌c wísem(x̌v)
VII-V	-.-	-.-	zásaxdiás wísem(x̌í)
VII-VI	-.-	-.-	zásaxdiác wísem(x̌í)

[1] With secondary deictic: zásaxdis wísémx̌ga .

I	zásagvaúlhgas wísem(x̌ga)	VII	zásagvaúlhis wísem [1)]
II	zásagvaúlhgac wísem(x̌ga)	VII-III	zásagvaúlhiax̌s wísem(x̌v)
III	zásagvaúlhax̌s wísem(x̌v)	VII-IV	zásagvaúlhiax̌c wísem(x̌v)
IV	zásagvaúlhax̌c wísem(x̌v)	VII-V	zásagvaúlhias wísem(x̌í)
V	zásagvaúlhas wísem(x̌í)	VII-VI	zásagvaúlhiac wísem(x̌í)
VI	zásagvaúlhac wísem(x̌í)		

1) With secondary deictic: zásagvaúlhis wísémx̌ga

5.4.2 Sentences in Which the Predicate Is Complex and Begins with a Left-Hand Adjunct Requiring š

(On complex predicates, see section 4.3. In the following paradigms, "wiẏísem" is the plural of "wísem". In the 1st person plural forms, the use of "wiẏísem" is more colloquial than that of "wísem". In the 2nd and 3rd person forms too, "wísem" could be used for the singular as well as the plural, but it is more colloquial to use "wiẏísem" if the subject refers to a plurality.)

	zásas wísem	zásaths wísem
1 sg.	Zásánúgvas wísem	Zásathnúgvas wísem
1 pl. incl.	Zásaénc wiẏísem	Zásathénc wiẏísem
1 pl. excl.	Zásaéntxvs wiẏísem	Zásathéntxvs wiẏísem
2	Zásásus wísem	Zásathsús wísem
3^{I}	Zásá$\substack{k\\x}$s wísem	Zásath$\substack{k\\x}$s wísem
3^{II}	Zásá$\substack{k\\x}$c wísem	Zásath$\substack{k\\x}$c wísem
3^{III}	Zásaúx̌vs wísem	Zásathúx̌vs wísem
3^{IV}	Zásaúx̌vc wísem	Zásathúx̌vc wísem
3^{V}	Zásaís wísem	Zásathís wísem
3^{VI}	Zásaíc wísem	Zásathíc wísem
3^{VII}	Zásákis wísem	Zásathkís wísem

	zásaxts wísem	zásagvaúlhc wísem
1 sg.	Zásaxdnúgvas wísem	Zásagvaúlhnugvas wísem
1 pl. incl.	Zásaxdénc wiýísem	Zásagvaúlhenc wiýísem
1 pl. excl.	Zásaxdéntxvs wiýísem	Zásagvaúlhentxvs wiýísem
2	Zásaxtsús wísem	Zásagvaúlhcus wísem
3^I	Zásaxt^k_xs wísem	Zásagvaúlh^k_xs wísem
3^{II}	Zásaxt^k_xc wísem	Zásagvaúlh^k_xc wísem
3^{III}	Zásaxdúx̌vs wísem	Zásagvaúlhux̌vs wísem
3^{IV}	Zásaxdúx̌vc wísem	Zásagvaúlhux̌vc wísem
3^V	Zásaxdís wísem	Zásagvaúlhis wísem
3^{VI}	Zásaxdíc wísem	Zásagvaúlhic wísem
3^{VII}	Zásaxtkís wísem	Zásagvaúlhkis wísem

The following examples use category B suffix no. 12. Note the allomorphs of the 1st person plural suffixes and the 3rd person suffixes nos. III-VI, viz. "menc", "mentxv", "mux̌v", "mux̌vc", "mi", and "mic". On the element "m", see the beginning of section 3.3.1.

	zásagánéms wísem
1 sg.	Zásagánémnugvas wísem
1 pl. incl.	Zásagánémmenc wiýísem
1 pl. excl.	Zásagánémmentxvs wiýísem
2	Zásagánémsus wísem
3^I	Zásagáném^k_xs wísem
3^{II}	Zásagáném^k_xc wísem
3^{III}	Zásagánémmux̌vs wísem
3^{IV}	Zásagánémmux̌vc wísem
3^V	Zásagánémmis wísem
3^{VI}	Zásagánémmic wísem
3^{VII}	Zásagánémkis wísem