77-31,364

GALLOWAY, Brent Douglas, 1944-
A GRAMMAR OF CHILLIWACK HALKOMELEM.

University of California, Berkeley,
Ph.D., 1977
Language, linguistics

University Microfilms International, Ann Arbor, Michigan 48106

A Grammar of Chilliwack Halkomelem

By

Brent Douglas Galloway

A.B. (University of California) 1965
C.Phil. (University of California) 1973

DISSERTATION

Submitted in partial satisfaction of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

Linguistics

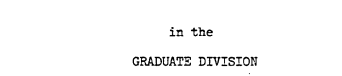
in the

GRADUATE DIVISION

of the

UNIVERSITY OF CALIFORNIA, BERKELEY

Approved:



Committee in Charge

DEGREE CONFERRED JUNE 18, 1977

Dedication

This work is dedicated to the Indian people of the Stalo Nation, who have worked to keep their language and culture alive; to my grandmother, Viola, who met an Indian chief on the banks of the Willamette River as a child, whose trip to B.C. showed that it could be made, and whose father was a pioneer of the Pacific Northwest; to my parents, Joan and Quince, whose trip to B.C. in 1969 and support and interest and encouragement made my field work possible and my study enjoyable; and to my wife, Wendy, whose support and encouragement and patience made my writing and typing and completion of this grammar possible.

Acknowledgements

I would like to acknowledge the financial support of the Survey of California and Other Indian Languages, at the University of California at Berkeley, which funded my field work in 1970, 1971, 1972 and 1973, and the moral and financial support of Coqualeetza Education Training Centre at Sardis, B.C., which encouraged my work and supported it especially for the last six months. Without the help of Coqualeetza and the Survey this first grammar of Halkomelem could never have been completed.

TABLE OF CONTENTS

INTRODUCTION

The Halkomelem-speaking people of the Fraser River, B.C. and its tributaries are called the Stalo. Upper Stalo dialects of Halkomelem are spoken along the Fraser River from Yale, B.C. to Chehalis, B.C., Deroche and Chilliwack, B.C. The Upper Stalo dialects share certain phonological and morphological features which allow them to be considered as a unit in contrast to Lower Stalo dialects and Vancouver Island dialects of Halkomelem.

Within the Upper Stalo area are the Tait, Chehalis, and Chilliwack River dialects. Within each of these are microdialects or subdialects whose differences are so far not well documented; Tait may include Yale, Hope-Katz, Seabird Island, Laidlaw-Cheam; Chehalis may include Chehalis and Scowlitz; and Chilliwack River includes Chilliwack Landing (Pilalt), Sardis-Tzeachten, and Soowahlie-Cultus Lake (perhaps). This grammar will only differentiate between Tait, Chehalis (Cheh.), and Chilliwack River (Chill. or Chwk.) dialects. In the Nooksack-Everson-Deming area of Washington, some members of the Nooksack Tribe speak the Chilliwack River dialect (Sardis-Tzeachten) and some speak a dialect of Lower Stalo (Kilgard/Sumas and Matsqui microdialects). Actually the terms Upper and Lower Stalo are not very sat-

isfactory because of connotations of Upper and Lwer; perhaps Upriver and Downriver Halkomelem are better. At present there seem to be about 50 to 75 fluent speakers of Upper Stalo or Upriver dialects, almost all over 60 years of age.

My field work on Halkomelem began in August 1970 with Mrs. Mary "Amy" Cooper of the Soohwahlie Reserve. That year I worked with her for one month. In 1971 we worked again, from September to December; in 1972 I had only a week in the area but met the Stalo Heritage Project's Elders Group and worked with some of them twice; in 1973 Amy and I worked together from August to December; during that period I also visited on several occasions Mrs. Mary Charles of Seabird Island and Mrs. Cecilia Thomas of Seabird Island who was able to tell us a number of stories in Halkomelem. I also met with Mrs. Nancy Phillips of Chehalis who was teaching the language in the Chehalis Day School. Amy, her husband Albert and I also made a trip to Yale and visited with Mrs. Margaret Emory of Yale (who speaks only Halkomelem and Thompson). At the end of the year I gave a speech in Halkomelem at a large spirit dance; the speech was in honor of the chief who put on the dance and also encouraged the preservation and revival of the language. Amy had corrected my grammar on the speech and gave me stylistic pointers. Amy was

good to work with, patient, dilligent, always willing to work and always willing to travel with me to visit others. She would even call people up to track down particular words she could not remember.

During summer of 1974 I was employed by the Nooksack tribe to work with a group of their elders who were meeting weekly in a Halkomelem Workshop. In January 1975 I was employed by Coqualeetza Education Training Centre at Sardis, B.C. to set up lessons, classes and other Halkomelem language programs. This has involved, among other things, teaching Halkomelem classes on three different reserves and at Coqualeetza and giving a teacher training course to ten Halkomelem speakers, three of whom have now taught their own courses (one, Nancy Phillips, was already teaching Halkomelem).

The Stalo Elders Group was still meeting every week to speak and preserve the language and was now called the Coqualeetza Elders Group. I have been fortunate to work with them for several hours weekly on the language ever since. I also work once a week with the Halkomelem Workshop in Deming, Washington, sometimes eliciting, sometimes teaching Halkomelem spelling, words discovered from the Coqualeetza Elders Group, or Halkomelem grammar.

Through several grants at different times Coqua-

leetza was able to employ Wilfred Charlie, Tillie Gutierrez, and Edna Bobb to help with language research and file-slipping. Tillie is fluent in the Tait dialect (Katz) and Edna is fluent in the Chehalis dialect; Wilfred knows a little of the Chilliwack (Sardis) dialect. Edna and I especially worked together from November 1975 to October 1976; as a result I recorded and she file-slipped several thousand Chehalis forms from her as well as all the forms from the weekly Elders Meetings since 1975, and we also translated a number of songs and stories. Wilfred and Edna each also helped me transcribe some tapes of Elder's Meetings going back to 1972, though many remain to be transcribed. My work at Coqualeetza is continuing. The Elders Group is our most valuable group in preserving and saving the language and culture. Their talent and dedication and humor make every meeting rewarding and enjoyable.

Through the help and kindness of Casey Wells I was able also to copy tapes which his late brother, Oliver Wells, had made with two of the best speakers of Sardis Halkomelem alive between 1962 and 1965, Bob Joe (1884-1970) and Daniel Milo (1867-1967), as well as with a number of other speakers. I was able to transcribe several of the tapes with Bob Joe and Dan Milo, and they provided a good balance and perspective

on the dialects of Halkomelem. This grammar is based on Chilliwack Halkomelem but has considerable data and comparisons from Tait and Chehalis dialects as well.

A number of people have worked with me, sharing their knowledge of Halkomelem (they are identified by their initials in the grammar):

Chilliwack dialect: Amy (Mary Laurencetto) Cooper (1886-1975)(Vedder Crossing, Soohwahlie Reserve)(AC), Nancy Phillips (Sardis, now of Chehalis)(NP), Lawrence James (Chilliwack Landing), Danny Charlie (Chilliwack Landing), Susan Jimmie (Sardis, now of Everson, Wash.)(SJ), Marie Villanueva (Sardis, now of Everson), Mamie Cooper (Sardis, now of Everson area)(MC), Roy Point (Sardis)(RP), Richard Malloway (Sardis)(RM), Philomena Solomon (of Everson area, now deceased), (I have only worked with tapes of Dan Milo (Sardis, Scowkale Reserve)(DM) and Bob Joe (Sardis, Tzeachten Reserve)(BJ)).

Chehalis dialect: Ed Leon Sr. (Chehalis)(EL), Dolly Felix (Scowlitz, now of Chehalis), Hank and Maggie Pennier (Scowlitz and Chehalis respectively)(HP, MP), Lizzie Johnson (now of Seabird Island), Edna Bobb (Chehalis, now of Seabird Island)(EB), Teresa Michell (now of Cheam Reserve), Philomena Kelly (Deroche).

Tait dialect: Cecilia and Henry Thomas (Cheam, now of Seabird Island)(CT, HT), Susan (Josh) Peters (Union

Bar or Yale, now of Seabird Island)(SP), Amelia Douglas (Cheam Reserve)(AD), Tillie and Al Gutierrez (Katz) (TG, AG), Agnes Kelly (Laidlaw)(AK), Joe Laurencetto (Laidlaw, now of Boston Bar)(JL), Mary Peters (now of Chilliwack and Seabird Island)(MP), Philomena Seymour (now of Seabird Island), Maggie Emery (Yale), Stanley Jones (Laidlaw, deceased).

Sumas/Kilgard dialect: Jeanne Silver (now of Vedder Crossing), Peter "Speedy" Bolan, Ella Reid (Kilgard, now of Everson area), Alice Hunt (Matsqui, now of Everson area).

All but RM, DM, and BJ are or were members of the Coqualeetza Elders Group or the Halkomelem Workshop at Deming. All of those listed are fluent speakers, but this is not a complete list of the members of the two groups, nor of all the fluent speakers. It is a list of those from whom I have had specific forms or interviews.

One other use of initials should be mentioned. In the first chapter I have used ES as an abbreviation for the article by William W. Elmendorf and Wayne Suttles: "Pattern and Change in Halkomelem Salish Dialects," in Anthropological Linguistics, vol.2, no.7, 1960, pp.1-32. And in the same chapter I referred to JH as an abbreviation for Jimmy Gene Harris: "The Phonology of Chilliwack Halkomelem," M.A. thesis, 1966,

University of Washington (unpublished). To have used footnotes every time I mentioned these two sources would have made Chapter 1 too complex and difficult to read.

The name Halkomelem, /həlq'əméylem/, derives from the Upriver pronunciation of the name of Nicomen Island, /ləq'éməl/ with the addition of the continuative prefix hə-, the -í·l ~ -éyl suffix 'go, come, get' (which replaces any preceding əl), and -əm 'middle voice'. Although the derivation of ləq'éməl is less certain, it seems to have root ləq' 'level' and -á·məl 'member, part' (see Chapter 5); this would give it a meaning like 'level part', which is a good description of Nicomen Island in the Fraser River. /həlq'əméylem/ would then have come from a meaning like 'going/coming/getting to a level part' or 'going/coming/getting to Nicomen Island'.

There is also a tradition that the people of the Chilliwack River (before 1800 according to Captain John Sualis in Hill-Tout (1902)) used to speak the Nooksack language, ɬéčələsəm. Some time around 1800 or before, the people of the Chilliwack River began to adopt the language of Nicomen Island. Some ɬéčələsəm place names in the Chilliwack River Valley are quoted by Amy Cooper in evidence, st'əpt'óp '(perhaps Ryder Lake Creek or a ridge nearby)' and səlísi or syəlísi 'Mt. Slesse' (said

to mean 'fang' in łéčələsəm). This deserves further research from a linguistic viewpoint.

Chilliwack, /sc'əlx^{w}ɛ́yeq^{w} ~ sc'əlx^{w}íq^{w}/ derives from sc'élέx^{w} 'quieter water, backwater, slough' + -iq^{w} 'on top of the head, hair'? (possibly metaphor for a delta or many twisting channels). In canoes, upriver or downriver travellers could take a rest by going through Hope Slough or some of the other sloughs which had quieter water than the Fraser and were connected to the Chilliwack River. In the days before 1875 when a great logjam changed its course, the Chilliwack River flowed west from Chilliwack Lake, then north to the Fraser River through what is now Vedder Crossing, Sardis (by the present Chilliwack River Road), and Chilliwack Landing. At first the villages were on the upper reaches of the Chilliwack River, but as landslides wiped out villages there and enemy slaving raids decreased with the influence of the white man on the Fraser River spreading, new villages were established further down the Chilliwack River, eventually including several in the Sardis area and at Chilliwack by the 1850's. That brings us to the time of the first white settlement in the area.

Finally, I should mention that the chapters were written in the order presented, the first chapter being written several years before the last. Thus although

I have done some revision on the early chapters, a few inconsistencies may occur for example in spelling of Halkomelem words. For any of these inconsistencies, the information later in the grammar is probably more definitive.

CHAPTER 1. PHONETICS AND PHONEMICS

1.1. Phonemes. The consonant phonemes of Chilliwack Halkomelem are shown below. The points of articulation given are applicable to the allophones. The phonemes /k/ and /k'/, parenthesized, are found only in borrowings. Apico-alveolar [n], retroflex [r], voiced bilabial [b], and others, are found in a few temporary borrowings from English, like [tʰǽwn] 'town', [kʷɔ́rtr̥] 'quarter', and [bÚč] 'Butch', but they do not form part of the phonemic system. Since every speaker of Chilliwack Halkomelem is bilingual in English, it is clear (in the cases found to date) that the words so "borrowed" are cases of code-switching (language switching) rather than real borrowings.

The dental-alveolar consonants are pronounced between the roots of the upper teeth and the front of the alveolar ridge. Only /ƛ'/ is pronounced at the bend at the back of the alveolar ridge.

Alveolar-palatal consonants each have a lamino-alveolar allophone and a lamino-palatal allophone.

/θ'/ and /ƛ'/ were chosen instead of the symbols tθ' and tł' to demonstrate the unit nature of these affricates. /c/ and /c'/ were chosen as phonemic symbols because their allophones cover both [¢] and [č], and [¢'] and [č'] respectively. /ɛ/ was chosen instead of e because its allophones are [æ] most frequently, [ɛ] next most frequently, and [e]

least frequently ([e] is relatively uncommon).

Consonant Phonemes:

	Apico-				Dorso-					
	Bilabial	Interdental	Dental-alveolar Plain	Dental-alveolar Lateral	Lamino-Alveolar-palatal	Palatal	Velar Plain	Velar Labialized	Postvelar Plain	Postvelar Labialized	Glottal
Stops vl.	p		t				(k)	k^W	q	q^W	
glottalized	p'		t'				(k')	k'^W	q'	q'^W	ʔ
Affricates vl.					c						
glottalized		θ'		ɬ'	c'						
Spirants vl.		θ		ɬ	s	x^y		x^W	χ	$χ^W$	h
Nasal vd.	m										
Semivowels vd.	w			l		y					

and • (length) and : (double length)

Vowel Phonemes:

	Front Unrounded	Central Unrounded	Back Unrounded	Back Rounded
High	i			u
Mid	ɛ	ə		o
Low			a	

Suprasegmental Phonemes:

´ (high and high-falling pitch stress)

` (mid pitch stress)

unmarked (low pitch, unstressed)

‡ (word boundary)

‡‡ (sentence boundary)

For functional reasons and convenience the table of phonemes can be summarized as follows:

Obstruents plain	p		t		c	(k)		k^w	q	q^w		•	:
glottalized	p'	θ'	t'	χ'	c'	(k')		k'^w	q'	q'^w	ʔ		
Spirants		θ		ɬ	s	x^y		x^w	χ	χ^w	h		
Sonorants	m		l			y		w					
High						i		u				ˊ	
Mid						ɛ	ə	o				ˋ	ǂ
Low							a				unmarked		ǂ ǂ

It is worth noting here that Chilliwack Halkomelem is unusual among languages of the world in that it has only one nasal, which is /m/. There are no other nasal phones than [m] and [m̥], both allophones of /m/. This solitary /m/ violates one of the universals proposed by Ferguson[1] to the effect that, "If in a given language, there is only one primary nasal consonant, it is /n/, that is, its most characteristic allophone is apical." Also worth noting here are the prominent glottalized, labialized, and post-velar series, which are characteristic of languages of the Northwest Coast.

1. Ferguson, Charles A.: "Assumptions About Nasals: A Sample Study in Phonological Universals," in Universals of Language, edited by Joseph H. Greenberg, 2nd ed. 1966, M.I.T. Press, Cambridge, Mass.

1.2. Allophones and Phonetics.

Consonants.

1.2.1. Voiceless stops have unaspirated allophones in two positions: s__V (prevocalically after [s̥]) and __C̥ (before syllabic consonants, i.e. before [m̥] or [l̥]). For example: [spâ·θ] 'black bear', [stâ·lo] 'river', [skû·k^{h}s] 'her cooking', [sk^{w}ɨt^{h}ɛ́x^{w}] 'the inside', [sqəmâ·] '(female) breast; milk', [sq^{w}ɛ́t^{h}x̂Im] 'fog; mist', [mɨ́stUx^{w}] 'bring (fetch) something, give me something', [ʔalâɨstex^{w}Is] 'they are/were in a canoe', [ʔimɨ́xsʉ̂Ux^{w}] 'make someone walk; take someone for a walk', [ʔâ·ystUx^{w}] 'chasing something', [šx^{w}əq$^{'w}$l̥éq^{h}stɪ̄l] 'nose-ring' (DM); [ʔâ·pl̥] 'ten', [ʔɛ́ɨtl̥] 'to eat', [p^{h}áysɪkl̥] 'bicycle', [k^{w}l̥â·t^{h}] ~ [k^{hw}ɨlâ·t^{h}] 'hold s-th' (s-th is an abbreviation for 'something'; s-o will abbreviate 'someone'), [mâ·cl̥] 'human hair', [θáy^{ə}q^{w}l̥s] 'digging'; and [tm̥k$^{'w}$ó·k$^{'w}$əs] (tm̥- ~ t^{h}ɛn-, ɔ· ~ a·) 'summer; hot time', [k^{w}ɬ̥lUx^{w}] ~ [k^{hw}ɬ̥UmlUx^{w}] 'root', [sɨ́áq^{w}m̥] ~ [sɨ́áq^{hw}Um] 'breath (noun)'.

Voiceless stops elsewhere are aspirated. For example: [p^{h}áp^{h}c$^{'w}$m̥] 'puffball; Popkum', [ǿk^{hw}ɪ·m] 'red', [ɨ́$^{'}$áq^{h}t^{h}] 'be long', [stát^{h}ew] 'light, illumination', [mə́q$^{'}$ət^{h}] 'swallow s-th', [spapl̥əq^{hw}ɪtə́$^{'}$ə] 'screech owl, pigmy owl; little ghost', [t^{h}lá] ~ [tl̥á] 'this', [t^{h}á·k^{h}t^{h}ɛ] 'doctor' (NP), [k^{h}á·p^{h}tl̥] 'captain' (NP). [k^{hw}] was occasionally transcribed [k^{h}] before rounded vowels, but in actuality the rounding is still present, only obscured in the more prominent rounding of the following vowels (as in [k^{h}ó^{w}əθ]

'coho salmon' for example). From here on aspiration will not be written in phonetic transcriptions.

1.2.2. /θ'/ has allophones [θ'] after [s], and [tθ'] elsewhere. For example, [tθ'əx̣^{W}át] 'wash something', [p'á·tθ'ɨs] 'baby basket, basketry cradle', [sp'æ̂·tθ'] 'Indian currant', [sθ'î·m] 'berry, fruit', [sθ'æ̂·qəl] 'bullrush; bullrush mat'. There is no unglottalized affricate version of this affricate; cases of /tθ/ which occur are clusters of /t/ plus /θ/ since they invariably have the t aspirated ([t^{h}θ]). /θ'/ and /θ/ are interdental in the sense that the air is released in the spaces between the upper teeth; the tongue rests on the back of the upper teeth, not between the upper and lower teeth.

1.2.3. /ƛ'/ is the phonemic symbol for [tɬ'] or [tl'] (equivalents except that [tl'] would probably have less spirantal release than [tɬ']). I began my field work trying to hear a difference and using both symbols, but it soon became obvious that there was either free variation or I could not hear the difference. There is no plain /ƛ/ because clusters of /tɬ/ and /tl/ feature aspirated t^{h} except when the /l/ is syllabic, i.e., [t^{h}ɬ], [t^{h}l] and [tl̥].

1.2.4. /c/ has the following allophones:

[¢] freely varies with [č] in the environment ɬ,s__I,ε

[¢] elsewhere before I,ε,l̥,m̥, all consonants but x^{W}, and finally (__#)

[č] elsewhere (before the other vowels and x^{W}).

Examples: [ʔí·ɬɸIt] ~ [ʔí·ɬčIt] 'we were', [qá·ɬčɛ] 'juice', [sɸIčɸ] ~ [sčIčɸ] 'be on top', [tɛmtɸmIsčɛ] 'when will it be?'; [lɸmɸIl] 'I go, I'm going', [ƛ'á·ɸɛ] 'that will be', [χ̣á·ɸɛ] 'lake', [ʔɛlxʷí·ɸl̥] 'be in the middle, between', [(ƛ'æ)p'Íl·æɸm̥] 'wagging its tail', [lɛɸt] 'we're going', [lÍpəɸt] 'send something', [ɸčɸxʷ] 'to get a wife', [ɸkʷí·m] 'red', [ɸqá(·)lə] 'be thirsty', [ɸqʷɸ̂·y] 'yellow, green', [ɸq'í(·)χ̣] 'black', [ɸq'ʷíq'ʷəχ̣əl] ~ [ɸq'ʷíyUχ̣ʷ] 'brown', [sʔÍɸʔIɸ] 'stuttering', [ɸmÍtθ'] 'blue', [kʼʷÚɸlUxʷ] 'see something', [ʔá·lmɸθá·me] 'waiting for you', [ɸɬilɸ̂·m] 'step-parent', [ɸIl ɸsɸθà·m] 'I told you'.

[číčəɬ] ~ [čí·čəɬ] 'be above, high', [sčî·ɬ] 'first-born', (DM has [šxʷčæčéyIɬæwtxʷ] 'smokehouse' and [čæčé·yIɬ-təl] 'fish ready to dry'), [čɛ́ɬIχ̣] 'hand', [ɸÍlqčUxʷčæ] 'you'll fall down, drop', [ʔówəčɸp] 'you (pl.) didn't, you (pl.) don't', [yéqʷl̥čəp] 'light a fire', [čɛɬɛ́qəɬ(Iɬ)](I~ə) 'yesterday', [sčutéɬ] 'son-in-law, daughter-in-law', -[čUxʷ] 'you (sg. subj.)', [sqʼʷəčÚm] 'a boil' (BJ), [sčowát] 'know how to', [čâ·kʷ] 'be far away, distant', [líčxʷ] 'do you?', [xʷowɛ́čxʷ] 'you're not yet', [čxʷÚtm̥] 'swelling'.

There is some idiolectal variation among speakers of the Chilliwack dialect, mainly in the direction of increasing free variation. AC has [ɸ] and [č] in the environments listed above. DM and BJ have the same distribution in most instances but have some examples of free variation before I, ə and ♯. RM and SJ appear to have [ɸ] in free variation

with [č] everywhere. English provides pressure against complementary distribution via loans like [čIkəl] 'chicken' and [kǽ•p'Ič] 'cabbage' (both NP citations).

1.2.5. /c'/ has the following allophones:

[č'] in free variation with [ǵ'] in the following environments[2]: # __(i, í•, ə́(•), ǽ•, Í, ə́, ə)

s __(ɛ, ǽ•, á•)

w__I

± _(Í, ǽ•)

[ǵ'] elsewhere.

For example: [č'iyə́qtəl] ~ [ǵ'iyə́qtəl] 'fish trap' (also placename 'Tzeachten')(DM), [č'í•talə́ǵIl] ~ [ǵ'í•talə́ǵIl] 'I thank you (pl.)', [č'e(•)yx^{W}] ~ [ǵ'ə́(•)yx^{W}] 'dry', [č'ǽ•x^{W}t] ~ [ǵ'ǽ•yx^{W}t] 'dry s-th' (ǽ• ~ ə́•)(AC, DM), [č'Íməṯ] ~ [ǵ'Íməṯ] (Í ~ ə́) 'bite on s-th', [č'ə́pəq] ~ [ǵ'ə́pəq] ~ [sə́'ə́pəq] 'skunk' (/c'/ ~ /ə'/ is here micro-dialectal variation), [sč'ɛ?í•ləs] ~ [sǵ'ɛ?í•ləs] 'Chehalis, B.C.', [sč'ǽ•x̣t] ~ [sǵ'ǽ•x̣t] 'branch, limb of tree' (AC, BJ), [sč'á•ɬɛ] ~ [sǵ'á•ɬɛ] 'leaf' (AC, BJ), [hə́wč'Iʀ'] ~ [hə́wǵ'Iʀ'] 'falling off, dropping off', [wɬč'Iʀ'] ~ [wɬǵ'Iʀ'] 'fall off, drop off', [č'ɬč'ə́•] ~ [ǵ'ɬǵ'ə́•] 'be on top of'. The above are attested examples of free variation.

All examples of [č'] found so far have been in variation with [ǵ']. In other environments, especially before conson-

---

2. Items set off by commas and contained within parentheses are alternatives; a single item within parentheses is optional in this system of rule notation. Thus A → B: C __ D (E, F)(G) is to be read "A is realized as B in the environment after C and before D followed by E or F and optionally by G."

ants (syllabic or non-syllabic) and word-finally, the only variety recorded is [ȼ']. For example: [ȼ'ǽȼ'l̥] 'very' [ȼ'q'ʷə́ɬp] 'spruce', [sx̣ɪ́lȼ'] 'feather', [ȼ'm̥xá·yəl̥] 'jaw (incl. chin)', [ɬǽȼ'tl̥] 'knife', [sí·ȼ'əɬp] 'vine maple', [lə́ȼ'ə] ~ [lə́ȼ'ɛ] 'one (in counting), one thing', [lɪlɪ́ȼ'] 'bile; gall-bladder', [mǽȼ'ɪl] ~ [mǽȼ'əl] 'black hawthorn berry'.

There are also cases of idiolectal or microdialectal variation, in which one speaker prefers one alternate and another speaker prefers another alternate. If a word is only attested once or only by one speaker and the attestation is with [ȼ'], there remains a possibility that it also has a [č'] variant. This possibility and idiolectal preferences may account for a few cases of [ȼ'] in [č'] ~ [ȼ'] environments (such as [ȼ'í·səm] 'to grow' and [ȼ'iȼ'ɬǽ̂·m] 'to hear').

1.2.6. /s/ has allophones [š] before [xʷ], and [s] elsewhere (including before [x̣ʷ]). For example: [šxʷUmlí·kʷ] 'parents', [šxʷâ·xʷtθ'] 'crazy', [lUxʷšxʷiyɪ́θəqəl] 'gossiping', [ʔǽ̂·šxʷ] '(hair) seal'; [sɬə́m·Uxʷ] 'rain (noun)', [sɬíȼ'ɬs] 'cut and dried salmon'; [sî·si] 'to be afraid', [sx̣ʷó·sm̥] 'soapberry; Indian ice cream', [st'í·ləm] 'song', [ɬsə́q'] 'half; half-breed; half-dollar', [kʷÚmlUxʷs] 'its root'.

At times /s/ before /ɬ/ sounds somewhat like [š], but close hearing shows this to be more the sound of [ɬ] after an [s] than the [š] allophone. A few borrowings have [š]

not before a [x^{W}]. For example: [k^{W}əšû·] 'pig' (< Chinook jargon) and [šúk^{W}a] 'sugar' (< English) and [hέšu(w)] 'to sneeze' (beside native [hέs·əm] 'to sneeze'). These will be considered outside the phonemic system. The alternative would be to say /s/ → [š] also before [u], but examples (not borrowed) like [qέsu] 'and so' forbid that.

1.2.7. /x^{y}/ is everywhere realized as fronted [x̲] (or [x^{y}]). There is no plain velar [x]. Examples include: [x̲έ·ysəm] 'ant', [swɪ́x̲ix̲əq(')] 'marsh blueberry', [sx̲ə́px̲ɪl] 'fish tail', [tθ'ə̀x̲^{W}x̲ɪ́l·əm] 'wash one's feet', [ʔímɪx̲] 'to walk', [sč'έ·x̲t] ~ [sɛ́'έ·x̲t] 'branch, limb of a tree'.

1.2.8. /k/ appears only in loanwords but in a number of loanwords that have been otherwise adjusted to eliminate non-Chilliwack phonemes. /k/ appears in borrowings from other Indian languages and from Chinook jargon and French as well as from English. Some examples: [kInɪ́kInɪk] 'Kinnickinnick, Indian tobacco, bearberry', [kapû·] 'coat' (< Chinook, or French "capote"), [lesέk] 'sack' (< French "le sac"), [ləklí] 'key' (< French "le clef"), [kέ·ptn̩] 'captain' (< English).

1.2.9. /k'/ appears very rarely and has a similar status to /k/. The words found to date with /k'/ are: [sk̲'Ik̲'eyέp](the first [k̲'] ~ [n]) 'coyote' (< Thompson language), [sk'æk'έWə] 'Saskatoon berries (usually dried)' (< Thompson language), and [p'ɪ́sk'ɛ] 'hummingbird' (BJ) (< Thompson [p'ə́sk'^{y}ey] 'hummingbird').

A slight de-labialization appears to take place for

all labialized consonants (/k^W, k'^W, q^W, q'^W, x^W, χ^W/) before rounded vowels (/u, u·, o, o·/). This produced a few cases of [k] and [k'] (in addition to [q, q', x, χ]) in my transcriptions. For example, [kû·tIs] 'he fetched it, he got it', [kóx^{W}əə] 'coho salmon', [sk'ó·lmUx^W] 'blackberry', [q'ô·l] 'ear', [xówə·] 'not yet', [sχósəm] 'soapberry', and [qú·lq^{W}l̥] 'all talking'. However, close listening reveals some labialization still present, and all such cases have been phonemicized with labialized consonants.

ES also mentioned a [k^y], which I have so far found in only one word, [k^yə́·k^y] 'younger sibling (pet name for [sqə̂·q] 'younger sibling')'. The feeling AC had for this implied that it was a baby-word, perhaps only used in her family. At any rate, with the pressure from loan words and from /x^y/, there is pressure to fill in the hole in the pattern and develop a /k/ and a /k'/. But at present the latter are both peripheral to the Chilliwack system.

1.2.10. /x^W/ has allophones [W] (voiceless bilabial spirant) which occurs occasionally in allegro or normal-speed speech and lenis articulation, and [x^W] which occurs elsewhere. [W] is so far attested only in 21 words (six percent of the words with /x^W/), and in each case a slower or more careful pronunciation has yeilded [x^W]. The surrounding allophones do not determine this allophony. In careful and slow speech only [x^W] occurs. Some examples: [líčW ʔèy ʔal] 'How are you?' (lit. 'Are you just fine?'),

[s$\not{c}$'IlWéyUq^W] 'Chilliwack', [Wλ'á·qtəs] 'long face; morose', [WáWa] 'lightweight', [W$\mathring{l}$məWέwt] (lenis and fast) ~ [x^W$\mathring{l}$məx^{W}έwtx^W] (citation form) 'Indian house'. [W] occurs only sporadically even in lenis or fast speech, while [x^W] occurs in all careful, slow, or citation-speed speech and in most lenis or fast speech words. In a few other cases it seems that /x^W/ has an allophone [w] after [š] preceding a syllable beginning with [w], for example: [šwÚwə] 'cougar' and [šwɨwǽ·li] 'parents'. But later hearings of these words sounded more like a [šx^W] was detectable.

1.2.11. /m/ and /l/ can be considered together because they have similar allophony in similar environments.

/m/ has allophone [$\mathring{m}$] and /l/ has allophone [$\mathring{l}$] in the following remaining environments (where C is any non-syllabic consonant, V is any vowel, and $C^{-s,\not{c}}$ for example means any consonant except [s] or [$\not{c}$]):

$\#(C)C^{-s,\not{c}}$___

C___$(C^{-m,l})\#$

CC___V

C___$C^{-m,l}(C,V)$.

In addition, /l/ has syllabic allophone [$\mathring{l}$] in the following environments: #___# and $\acute{V}$(p,m,w,s)___(ə,I) (for BJ and DM this last environment should instead be $\acute{V}C^W$___($\acute{V}$,V) where C^W is any labialized consonant).

Elsewhere /m/ has allophone [m] and /l/ has allophone [l].

It is interesting to note that [m̥] and [l̥] can occur with stress (/ˊ/ or /ˆ/), for example as in [kʷḿ̥lUxʷ] 'root', [sĺ̥ʔ'a] 'older, oldest (of children)', [k'ʷqʷḿ̥] 'axe' (DM), and [qál̥qal̥] 'thief'. The last two of these examples highlight the effect of /ə/ deletion which occurs in normal-speed and fast speech--the words have no vowels in them, only syllabic consonants. /ə/ deletion results in a zero grade of ablaut and is sometimes an option when it is not a morphological process.

The remaining consonant phonemes not yet discussed, /p', t', kʷ', q', qʷ', ʔ, θ, ɬ, x̌, x̌ʷ, h, y, w/, have the phonetic values indicated by the phonemic symbol chosen.

1.2.12. /ˑ/ is lengthening and /ːˑ/ is superlengthening. /ˑ/ can occur after any vowel but /ə/ and is so far attested after the following medial consonants: /t, q, s, θ, m, l, w, y/. For example: [xʷétˑəs] 'heavy', [lə́qˑəm] ~ [lə́qəm] (the [qˑ] may be erroneous) 'to dive', [qəʔ'asʔíˑsˑu] 'and so', [yílθˑàˑm] 'poison you, you got poisoned' (/yélθˑàˑm/ < //yélθ-θ-àˑm//, compare [le yílθtəm] 'he got poisoned'). Examples of long resonants are somewhat more common[3]: [tə́mˑúxʷ] 'earth, land, dirt', [sx̌él·ə] 'leg, foot', [sx̌éyˑəs] ~ [sx̌éyəs] ~ [sx̌éyˑəs] (AC, BJ) 'head', [syêwˑə] ~ [syêˑwə] 'fortune-teller, seer'. Examples of long vowels

3. ES has 39 examples (with /ˑ/ only after vowels or resonants /m, l, w, y/), including some with word-final length; in a number of examples ES /éwˑ/ corresponds to my /éˑ/ and ES /éyˑ/ to my /íˑ/.

are plentiful: [ʔîˑ] 'be here', [síˑlə] 'grandparent', [ʔêˑy] 'be good', [χêˑyɬˀ] 'be cold', [χâˑm] 'weep', [qˀáˑmi] 'adolescent girl (10 to 15 years old)', [tûˑxᵂ] 'nine', [lə kᵂûˑtIs] 'he got (fetched) it', [qˀᵂôˑl] 'ear', [skˀᵂóˑlmUxᵂ] 'blackberry', [qâˑ] 'water', [slâˑs] ~ [slôˑs] 'fat', [skᵂóˑwIɬ] ~ [skᵂáˑwIɬ] 'sturgeon'. In all cases primary stress must occur on the syllable lengthened (on the long vowel or on the vowel immediately before the long consonant).

/:/ can occur after any vowel, including /ə/, and is not attested after any consonant; /:/ is a morpheme of emphasis (as in English), which can be translated as 'really' and can be applied to any stressed vowel. For example: [qáːχ tə qᵂâˑl] 'really a lot of mosquitoes', [su yáːt] 'so he really threw up' (CT), [láːm ʔímIχ̂ tûxˀa ‡ ʔíːmíχ̂] 'he went really walking; he walked and walked' (CT).

Vowels.

1.2.13. /i/ and /iˑ/ (front high unrounded) receive schwa off-glides before postvelars (the symbol Q can be used for q, qᵂ, qˀ, qˀᵂ, χ, χᵂ). With /iˑ/ the effect is often so great that a y-glide precedes the schwa glide, making it difficult to distinguish /iˑq/ [iʸᵊq] for example, from /iyəq/ [iyəq]. For /i/ the result is a plain glide, as in [iᵊq]. Examples: [swíʸᵊqə] /swíˑqə/ or [swíyəqə] /swíyəqə/ 'a man; male', while on the other hand [θáyᵊqᵂéls] 'dig' is /θiy(ə)qᵂéls/ because of [θáyᵊqᵂ̥ls] /θáy(ə)qᵂls/

'digging'; [syí^ə^q] /syíq/ 'a snowfall', [yí^ə^q] /yíq/ 'have a snowfall', [yíyəq] ~ [yí·yəq] /yí(·)yəq/ 'having a snowfall'; [sqí^ə^qəwɛ̀θ] /sqíqəwɛ̀θ/ 'rabbit', [q^W^í^ə^q^W^Iläč] 'gossiping', [q'^W^í^ə^q'^W^əmá·θl̥] 'fishing with a line', [θí^ə^x̣] 'spring (of water)', [ʔí^ə^x̣^W^ət] 'sweep s-th, clean s-th'.

Elsewhere than beside postvelars /i/ has the allophone [i] and /i·/ appears as [i·]. For example: [sî·si] 'be afraid', [wiyáθ] 'always', [sísəmayɛ] 'bee', [ƛ'ík'^W^əl] 'pea, bean', [šx^W^ix^W^áx^W^tθ'] 'stupid'. It is also possible to hear [əy] in some words, so /i/ is best left separate from /əy/. For example, [q'^W^əyílIx̂] ~ [q'^W^əyílÍx̂] 'to dance', and [ʔaʔəyálawɨt] 'doing s-th, managing s-th'.

Harris (1966) says that /i/ has allophones [i] adjacent to [č, č', k', k, x̂, y] and [I^] in free vaiation with [e] elsewhere, and similarly that /i·/ has allophones [i·] adjacent to [č, č', k', k, x̂, y] and [i·] in free variation with [e·] elsewhere. My data contradicts this with minimal pairs like [ʔíyIs] 'female friend', [ʔéyIs] 'fun, pleasant, to have fun', and [ʔéy] 'good', [ʔí·] ~ [ʔi·] (which could also be interpreted [ʔíy]) 'be here'. In my data neither [I] nor [i] are in free variation with [e], and I find no [I^] in my field notes. In addition, my [I] occurs precisely adjacent to [č, č', x̂, y] (among other consonants) where Harris found only [i].

1.2.14. /ɛ/ has allophony which is difficult to state because it involves a combination of free variation and

complementary distribution. Its allophones are [e] upper-mid front unrounded, [ɛ] mean-mid front unrounded, and [æ] upper-low front unrounded.

a.) /ɛ/ has allophones

[e] in the environment (Q,ʔ,h,l)(ˊ)___y

[e] in free variation with [æ] in the environment

(p,m,w)ˊ___y

[æ] elsewhere before y

[æ] in variation with [ɛ] elsewhere, with the the following strong tendencies in the speech of AC:

b.) [æ] when stressed (ˊ or ˋ) before C^{-y}, and

[ɛ] when unstressed before C^{-y}

The tendencies in b.) hold for every occurence of [æ] and [ɛ] except the following:

[ɛ]: (ʔ,x̂^{w},h,m,y)ˊ___l, (x̂,m)ˊ___x̂, (t',ƛ',č',ɬ)ˊ___m, (ʔ,ɬ,x̂)ˊ___ɬ, (p',m)ˊ___tθ', mˊ___θ, wˋ___θ, (q,x^{w})ˊ___w, ʔˊ___ƛ', (x̂,w)ˊ___#

[æ]: (ƛ',ʔ,x̂^{w},h,l)___l, (k'^{w},q',ʔ)___s, č___p, (l,m)___m, (p,x̂,m)___t, ƛ'___t', k'___W, ɬ___x̂, ƛ'___ʔ, (t,č,q,tθ',k'^{w}, q',ʔ,s,ɬ,l)___#

c.) Other tendencies are the following in AC's speech:

[ɛ] occurs ___(tθ',ʔ,θ,ɬ,x̂,x^{w},h,m)

(ʔ,x̂^{w},h,m,y)ˊ___l

(ǵ,ǵ',x̂,y)___#

[æ] occurs ___(s,y,ǵ,ǵ',p,p',w,t,t',ƛ',K,Q)

elsewhere ___(l,#)

___some (θ,ɬ,x̂,m)

Environments allowing [é,ɛ,ǽ,æ] are (ʔ,h,m)___l

Cases with [é] in free variation with [ǽ] are

ʔ_ʌ', (m,p')_ tθ', and q_ w.

d.) In a.) the solution for prediction of [æ] and [ɛ] not before y is variation. In b.) the solution is [æ] under stress and [ɛ] unstressed. In c.) the solution is [æ] before certain consonants and before l and ǂ after certain consonants, [ɛ] before other consonants and before l and ǂ after other consonants.

Solutions b.) and c.) show that [ɛ] and [æ] are nearly in a state of complementary distribution with each other; the problem is that there are exceptions (as given) to both environments. If solution a.) is chosen it must be noted that the variation between [æ] and [ɛ] is not free variation but variation conditioned by the environments in b.) and c.) and conditioned in the cases of the exceptions by idiolectal preferences within free variation (and possibly by sociolinguistic and semantic factors as well).

e.) /ɛ·/ occurs but is always stressed and therefore only has allophones [e·] and [æ·].

[e·] occurs (q,q',ɣ,h)_ y

[e·] is in free variation with [æ·]: (y,m.w.č')_ y

[æ·] occurs elsewhere.

Examples of /ɛ/ and /ɛ·/ follow:

[ʔéɬqey] 'snake', [q'éyq'əɣəl] 'getting black', [Woq^{W}éylm̥] 'downriver', [ɣéypət] (ES has p') 'scrape s-th,

scratch s-th', [χéyət] 'fight s-o', [ʔéyčŪx^{W}] 'you're good', [ɸ(')ɛhéyIɬâ•wtx^{W}] 'church (building)', [léyleyIm] 'laughing'; [χəpéy] ~ [χəpéy] 'cedar (material or wood from)', [méyt] ~ [méyt] 'help s-o', [swéyIl] ~ [swéyIl] 'day'; [qəlqê•yIl] 'dirty', [q'é•yt'ə] 'swing', [χê•yʌ'] 'be cold', [hé•yUq^{W}] ~ [héyUq^{W}] 'fire'; [siyé•yɛ] ~ [siyé•yɛ] 'friend', [sq^{W}(ɨ)mê•y] ~ [sq^{W}(ɨ)mê•y] 'dog', [sχ^{W}ɨwê•ys] ~ [sχ^{W}ɨwê•ys] 'his parents', [č'é•yx^{W}tIs] ~ [č'é•yx^{W}tIs] 'he's drying it'; [χ^{W}i^{o}χ^{W}iyéyɛ](AC) ~ [χ^{W}ɛχ^{W}iyéyə](AD of Agassiz, TG of Katz) 'small fly', [sxéyə] '(younger) co-wife', [sk'^{W}éy] 'impossible, be impossible'.

The next examples are arranged in pairs showing [ɛ] and [æ] in the same or similar environments, differing only by stress. [tɛmtém] 'when?, what time?', [ɬɛlqí] 'to soak (dried fish)' and [ɬélqi] 'soaking (dried fish)', [lɛm, lɛ, lɛɬ, lɛɸ̣, lɛɸ̣t] are unstressed forms of the verb 'go' which always appear immediately before a stressed word, compare [lém] 'go', [lɛ́] 'go', [sp'àʌ'mɸ̣́lɛ́] 'pipe' (DM, BJ), [sqɛlɛ́ɬ] 'diapers', [ɬəq'lɛ́ɸ̣] 'hip', and many others; [q^{W}áyɛl] 'be yellow', [ʔəyéləwɨt] 'do s-th, manage s-th', [sɸ̣'ɛlɛ́χ^{W}əm] (ɛ ~ ə) 'spirit dancer', [sɸ̣'ɛ́ləɸ̣təl] 'chair', [qâ•ɬčɛ] 'juicy', [ɬlímèɬčɛ̀] 'it will be you (pl.)', [hélp'Ix] 'eating (like an animal, without hands)', [hɛ̀lq'eméyləm] 'Halkomelem', [čɛ́lməl] 'Chinese person', [k^{W}i•k^{W}əməl] 'turning red', [méləqləx^{W}] 'forget s-th', [sxIməl] 'enemy', [tɛlŰwə] 'it's you (sg.)', [tɛ́lə(s)]

'dollar', [x^{W}ɛθtɬ̥lm̥] 'be cloudy', [yiθɬ̥] 'they, them', [ʔɬ̥ʔɛlθɛ] 'it's me', [ʔɛlɬ̥ǿɛ] 'where?', [ʔɬ̥lθɛ] 'it's me', [ʔɬ̥lIx̥] 'sibling', [tɛ] 'the (present, visible, masc. or sex unspecified)', [tɬ̥] 'your (sg.)(present, visible, masc. or sex unspecified)', [ʔowU̇tɛ] 'nobody', [sx̥ɐtɬ̥] 'the same thing', [tɛmk$^{'W}$ɛ·k$^{'W}$ɐs] 'hot time, summer', [ptɬ̥mɨt] 'ask s-th, ask s-o', [ʔɛx^{W}i·l] 'be small', [ʔɬ̥x^{W}ɐt] 'give s-th', [ʔɛƛ$^{'}$q̓l̥] 'be outside', [sʔɬ̥ƛ$^{'}$q] (æ ~ a·) 'the outside', [smɛ́tθ$^{'}$qəl] (ɛ ~ ɐ, ɛ preferred) 'brain', [smɛ́tθ$^{'}$əlčUx^{W}] 'you're smart' (EK), [p$^{'}$ɛtθ$^{'}$tl̥] 'needle', [p$^{'}$ɐ̂(·)tθ$^{'}$ɬ̥Il] 'I sew', [qɛ́wx̥] 'steelhead trout' and [sqɬ̥ɐ́wθ] 'potato, Indian potato (wapato or broad-leafed Arrowhead [Sagittaria Latifolia])'.

[ʔɐ̂·y] 'keep on going', [slɐ̂·y] 'fir bark', [k^{W}ɐ̂·y] 'bluejay', [k$^{'W}$x̂ɐ̂·m] 'counted', [hɬ̥·wɐ] 'to hunt (animals)', [sp$^{'}$ɐ̂·tθ$^{'}$ɐɬ̥p] 'Indian currant bush (probably Ribes Sanguineum 'flowering red currant' which has red to pink flowers and blue berries)', [q$^{'}$ɐ̂·mi] 'adolescent girl', [q$^{'}$ɐ̂·q$^{'}$əmi] 'little girl', [sɨIlɨɬ̥·li] 'women', [θi^{y}ɐ$^{'W}$ɐ̂·ls] 'dig'.

1.2.15. /ɐ/ has allophones determined by the speed of speech and by three sets of consonants: Y = [l,ɬ,x̂,y,s,ǿ,ǿ$^{'}$] (the palatal and alveolar consonants except [ƛ$^{'}$]), W = [m,w,k^{W},k$^{'W}$,x^{W},q^{W},q$^{'W}$,x̥^{W}] ([m], [w] and labialized consonants), and X = [p,t,č,q,p$^{'}$,tθ$^{'}$,t$^{'}$,ƛ$^{'}$,č$^{'}$,q$^{'}$,ʔ,θ,š,x̥,h] (remaining consonants). The allophones of /ɐ/ are [ɨ] central unrounded lower-high vowel, [I] front unrounded

lower-high, [U] back rounded lower-high, and [ə] central unrounded mean-mid (stressed or unstressed).

/ə/ ⟶ [∓] in allegro unstressed syllables, especially adjacent to a stressed syllable with length (long vowel or long consonant)(cited in phonetic quotations throughout as [±] instead of more cumbersome [∓]).

At normal speed ⟶ [I]: (x̲,ɸ)___, ___x̲, y___m

At normal speed ⟶ [U]: k'^{w}__ʻ ɸ, x^{w}__ʻ l

At normal speed ⟶ [ə]: X__X, (Y,W,X)__‡, l__(ɸ,ɸ')

At normal speed elsewhere ⟶ [I] in free variation with [ə]: (Y,W,X)__Y, Y__X

At normal speed elsewhere ⟶ [U] in free variation with [ə]: (Y,W,X)__W, W__X

The free variation is noticeable especially with different speakers (in a given word for example one speaker might use [U] adjacent to [q^{w}] while another speaker might use [ə]). The free variation is also noticeable in citations of a word on different dates by the same speaker. In comparing the occurrences of [I] in the speech of different speakers, there appear to be a few differences in conditioning environments. The statements above are for the speech of AC. In the speech of DM, BJ and RM [ɸ] and [č] are nearly in free variation, and as a result [č] is a member of the palatal set, Y, which conditions /ə/ ⟶ [I]. Also in the speech of DM and BJ, the environment l___ɸ conditions

/ə/ —→ [I] (instead of [ə] as in the speech of AC). In the speech of AC, DM and BJ the borrowed phones [k] and [k'] function as member of the palatal set Y in conditioning [I].

Among the words analyzed for this chapter there are 993 examples with [ə], 321 with [I], and 96 with [U] in the speech of AC. In the prime environment for [I], Y___Y, [ə] occurs in 30 examples and [I] in 130 examples; in the prime environment for [U], W___W, [ə] occurs in 32 examples at most and [U] in 32 examples. These figures provide further guidance for the free variation at normal speed. The frequency of these allophones in the words gathered from DM and BJ is the same (615 examples with [ə], 140 with [I], and 61 with [U]). The proportions are similar to those for AC in the W___W environment, about equal numbers of examples with [ə] as with [U], but in the Y___Y environment BJ and DM have 64 examples with [I] (71 if one includes l___ɸ as Y__Y) and only 18 examples with [ə] (22 if one includes l___ɸ as Y___Y). So it appears that the environments in which [I] can occur produce [I] more dependably in the speech of BJ and DM than in the speech of AC.

Examples of /ə/:

[swɪ́xix̂Iq(')] 'marsh blueberries', [sq^{W}ə́tx̂Im] 'fog, mist', [ʔí·ɬɸIt] 'we were (here)', [k'^{W}Ix̂ə́t] 'count s-th', [šx^{W}iy̓Imtəl] 'belt', [sə́yIm] 'it hurts', -[ɸIl] 'I (subject)', -[ɸIs] 'hand', -[x̂Il] 'foot'.

[k'^{W}Ú́ɸlUx^{W}] 'see s-th, see s-o', [x^{W}ÚlmUx^{W}] 'Indian', and all inflected forms of these words.

[yɪ́·Ís] ~ [yɪ́·ɨs] 'tooth, teeth', [¢ɪlǽqəɬɪɬ] ~ [čɨlǽqəɬɨɬ] 'yesterday', [lɪlÍp'Ix̭Is] ~ [lɪlÍp'əyx̭Is] 'he is eating (without hands, like an animal)', [wə?á·ɬIs] 'if they get into a canoe', [x̭íx̭I¢'m̥] 'it stinks', [sɪÍlə¢'] 'two different things', [kʷsIs] 'so that he, (subordinate 3rd person subject)', [šxʷq'éyq'asI¢l̥] 'netting shuttle for making nets' (DM), [ƛ'ik'ʷíyɪɬp] 'pea vines, bean vines', [?éyIs] 'to have fun', [s¢'Ixʷéyuqʷ] ~ [s¢'Ixʷíyuqʷ] 'Chilliwack', [¢'í·¢'Isəm] 'growing up'; [lé¢'əs] 'one dollar', [?isá·ləs] 'two dollars', [wətÍsəs] 'when it reaches, when it gets up to', [sésə] 'pintail duck' (BJ), [səlíyəɬp] 'short Oregon grape bush', [sx̭áy·əs] ~ [sx̭áy·Is] (a ~ ə ~ e) 'head', [s¢'əlǽxʷəm] 'seasoned spirit dancer', [sk'ʷí·lə¢] 'lame hip (esp. if congenital)', [?ɛlé¢ɛ] 'where?'.

[mIstíyUxʷ] 'person', [mÍstUxʷ] 'bring s-th, give me s-th', [mɪ́lə] ~ [mélə] 'child (son or daughter)', [tɛɬwÍləp] 'it's you, you're the one that', [k'ʷɪls] ~ [k'ʷl̥s] 'that I, for me to', [kʷɪlÍx̭] 'shoot (with gun or bow and arrow)', [tÍs] 'get up to, reach', [tɪ mǽ·l] 'my father' (tɪ ~ tl̥), [θɪ tǽ·l] (θɪ ~ θl̥) 'my mother', [xʷɪl] ~ [xʷəl] ~ [xʷl̥] 'still, yet', [?Í¢It lǽm] 'we went', [s?Í¢?I¢](normal speed) ~ [s?é¢?ɛ¢] (hyper slow) 'stuttering', [spɪ́ɬx̭əl] 'prairie, open grassland', [sá·tI¢] 'north-east wind', [qʷéqʷɪlǽ¢] 'to gossip', [ɬÍptɪl] 'eyelash', [yÍθəst] 'tell s-th', [sÍƛ'ætl̥] 'older sibling', [mámət'Is] 'pointing', [mát'əs]

'point at, aim', [č'áltlítθ'xÎl] 'short-legged runt'; [wəlámes] 'if he goes, when he goes', [meyθamə́ć̸Il] 'I help you', [təsáləqəl] 'bump your head', [tə́ləx^{W}ɨs] ~ [tə́l·əx^{W}ɨs] 'he understands it, he finds s-th out', [q^{W}ə?ápəɬp] 'crab-apple tree, apple tree', [q^{W}ə́ls] 'to make boil', [x̣ə́yəθáx̂Is] 'he fought me', [ć̸'εć̸'í·ć̸'əƛ'] 'short'.

[x^{W}Úm] ~ [x^{W}ə́m] 'hurry', [šx^{W}Úwə] 'cougar', [tə́mUx^W] ~ [tə́m·Úx^W] 'earth, land, dirt', [sθ'ə́k^{W}Uk^W] 'blue elder-berry', [q^{W}Uq^{W}mî·l] 'rattles (used in spirit dancing)', [x^{W}Uq^{W}átIs] 'he dragged him', [čalə́x^{W}Um] 'to bleed', [tεlÚwə] ~ [tεlə́wə] 'it's you (sg.), you're the one that', [hə́yUq^W] ~ [hə́yəq^W] 'fire', [sɬə́x^{W}əɬ] ~ [sɬÚx^{W}əɬ] 'canoe (any type); transportation', [sÙq'^{W}əmî·ws] 'inner cedar bark' (AC from LH), -[lUx^W] 'do accidentally to s-o, manage to or happen to do to s-o', -[stUx^W] 'make s-o do, cause s-o to do', -[čUx^W] 'you (sg.)(subject)', [p'Uk'^{W}θí·ləm] 'throw together a light snack' (SJ et al), [sƚ'Uwə́k'^{W}] ~ [st'əwə́k'^{W}] 'white clay (used for paint or coloring)', [tθ'Úx^{W}tθ'Ux^W] ~ [tθ'ə́x^{W}tθ'əx^W] 'osprey', [θÚk'^{W}] 'pulled out, straight', [θək'^{W}Út] 'pull s-th', [?owÚtε] ~ [?owə́tε] 'nobody, nothing', [sθ'íwUq'] ~ [sθ'íwə́q'] 'red elderberry', [?á·x^{W}Ust] ~ [?á·x^{W}əst] ~ [?á·x^{W}ɨst] 'give s-th', [sk'^{W}ÚlwÚs] 'child's in-laws', [sk'^{W}ək'^{W}ílwəs] 'children's in-laws'.

[spəpəlál] 'bunch of small crows', [stəqtá·l] 'doorway, door of a longhouse', [yə́q^{W}l̥čəp] 'light a fire', [swáqəθ] 'husband', [p'ə́q'] 'white', [t'át'ətθ'əm] 'sour, fermenting',

[tθ'éχtθ'əχ] 'stinging nettle', [sƛ'əp'él·əɸ] (l· ~ l) 'tail', [č'épəq] (č' ~ ɸ' ~ sθ') 'skunk', [q'əq'mástəl] 'dip net (on a pole)', [ʔəpɸ·lə] 'ten (people)', [θɛ́t] 'he says', [χəʔá·θl̥] 'four' or [χɛ́θl̥sxɛ] 'forty', [spəhɛ́ls] 'wind (noun)', [qɛ́χ] 'be many', [χɛ́t'əs] 'he says', [(s)č'ɨč'ɛ́] 'to be on top of', [qəƛ'asɛ́su] 'and so', [čɨčíxʷ] 'swollen'; [ʔɛlɛ́ɸɛ] 'where?', [lɛ́ɸ'ɛ] ~ [lɛ́ɸ'ə] 'one'; [sí·lə] 'grandparent', [sɸ'iyáyə] 'twins', [sɛ́sə] 'pintail duck' (BJ), [k'ʷúɸlàmə̀] 'see you (sg.)', [ʔə́wə] ~ [ʔə́wə] 'no, not, to be not', [kʷə] 'the (near but out of sight)', [k'ʷə] 'the (distant, hypothetical, not concrete)', [xʷé] 'to get somewhere, arrive', [tə] 'the (present in sight, masculine or sex unspecified)', [θə] 'the (present, visible, female, human)', [qə] 'and', [tθ'ə] 'to, at' (as in [tθ'ə sq'ʷəyílIx̣] 'to/at the dance'), [spaləqʷítθ'ə] (ə ~ æ) 'ghost; corpse', [q'é(·)yt'ə] ~ [q'é(·)yt'a] 'swing (noun or verb)', [ƛ'ə] 'by (instrumental preposition used with passive)', [q'ə] 'but'.

Besides the examples of [ɨ] seen above (written [ɨ]): [sɨíɸ'ɨs] 'cut and dried salmon', [yɨwɛ́·lml̥s] 'before', [mǽyɨt] (ə ~ i) 'helping s-o', [sk'ʷɨχɛ̂·s] 'month; moon', [sqʷɨmɛ̂·y] ~ [sqʷm̥ɛ̂·y] 'dog' (/sqʷəmɛ́·y/ ~ /sqʷmɛ́·y/), [píwɨtm̥] (i possibly [i·]) 'get frozen', [sɛ́·sq'ɨɸ] 'Sasquatch', [sθ'ɨmíwl̥] (ɨ ~ ə) 'core (of plant, rock, tree, etc.), nut, seed, pith', [stɨtf·s] 'near'.

/ə/ never occurs before /·/.

1.2.16. /u/ always appears as high back rounded [u] but is relatively uncommon (about 25 per 2000 words). In the environment y___w, /u/ frequently varies with /i/ (for example, /syúwəl/ ~ /syíwəl/ 'spirit song'). /u/ appears both in borrowings ([kapú] 'coat' < Chinook Jargon in turn from French "capote", [stútɬlo] 'creek' < Nooksack, [šúkʷa] 'sugar' < English) and in native words. Some examples of native words with /u/ are: [túʌ'á·] 'it's him, he did, he's the one who' (a· ~ a, and rarely u ~ u· here), [θúʌ'á·] 'it's her, she did, she's the one who' (a· ~ a and u ~ u· as above), [yuʌ'á·ləm] 'it's them (sex not given), they did, they're the ones who', [qəʌ'asɪ́su] or [qə́su] 'and then', [kʷú·tɪs] ~ [kʷútɪs] 'he gets (fetches) something'.

/u·/ always appears as [u·] and is also relatively uncommon. It occurs in a few borrowings ([kʷəšú·] 'pig' < Chinook Jargon, [spû·l] 'spoon' < English (NP)), and in native words: [tû·xʷ] 'nine', [tú·xʷl̥sxɛ] 'ninety', [s?ú·met] 'lazy', [p'ɛlyú·s] ~ [p'əlyú·s] 'bark (of a tree)', [qʷú·lqʷl̥] 'all talking'.

1.2.17. /o/ always appears as upper-mid back rounded [o] and is somewhat more frequent than /u/ (about 45 per 2000 words). /əw/ is phonetically distinct from /o/ and /ow/ in most cases, although the three sometimes alternate morphophonemically. ES phonemicized [o] as /əw/ for the Cowichan, Musqueam and Chilliwack dialects of Halkomelem and [o·] as /əw·/ for the Chilliwack dialect. This may work reasonably

well for Cowichan and Musqueam where [o·] is very rare, but it is awkward for Chilliwack where [o] and [o·] are more common and well-established. Chilliwack seems to have been influenced in this regard (see Introduction) by the Nooksack language, which has a very prominent /o/ (see Amoss 1961). Phonemicization of [o] as /əw/ and [o·] as /əw·/ would 1.) obscure the phonetic differences between [əw], [Uw], [o] and [ow], 2.) make more difficult the statement of the phonemics of [U] before w, of [l̥] and [n̥] after w, and of delabialization of labialized consonants before rounded vowels, and 3.) make more difficult the statement of root shapes (canonic shapes). In addition, the comparison of Musqueam and Cowichan cognates shows that the use of /əw, əw·/ for Chilliwack would add a /w/ not present in words in the other dialects (for example, ES has Cowichan and Musqueam /q'ʷí·nʔ/, Chilliwack /q'ʷéwəl/[q'ʷô·l] 'ear'; Cowichan /há·nʔ/, Musqueam /héwnʔ/[hó·nʔ], Chilliwack /héw·ləyɛ/(Amy Cooper has [hó·liyɛ]) 'humpback salmon'; Cowichan /wél?/[wó·lʔ], Musqueam /wí·lʔ/, Chilliwack /wéw·l/ (Amy Cooper has [wô·l]) 'tule').

Most cases of /o/ are adjacent to labial or labialized consonants, although some are not. Examples of /o/: [mók'ʷ] 'all', [stá·lo] 'river', [ʔówe] ~ [ʔówə] 'no, not, be not', [kʷóxʷəθ] 'coho salmon', [xʷowé] 'not yet', [wóqʷ] 'drown, float face down', [p'ówí·tes] 'patch s-th up', [sk'ʷíɬo] 'parent-in-law', [sχʷoχʷiyém] (o ~ ə) 'fable, story'.

Compare the following examples of /əw/[əw]: /lə́wə/ [lə́wə] ~ [lʊ́wə] 'you (sg.)', /spípəw/ 'frozen', /stə́təw/ 'light (illumination)', /yəwə́·l/ [yʊwə̂·l] ~ [yəwə̂·l] 'first, preceding', /x̌'əwə́ls/ '(a dog) barks', /sqə́wəqs/ 'raven', /st'əwə́k'ʷ/ [st'ʊwə́k'ʷ] ~ [st'əwə́k'ʷ] 'white clay powder', /lə́c'əwəc/ [lə́ɕ'əwʊɕ] 'hundred', /ʔəwə́·ləm/ 'play'.

/o·/ only occurs stressed and always adjacent to labial or labialized consonants or [l]. Besides the examples above, the following can be cited: [čəwô·ɬp] 'cottonwood', [tθ'ó·ltθ'iyəɬp] 'tall Oregon grape', [sx̣ʷó·sem] 'soapberry; Indian ice cream', [sk'ʷô·lmʊxʷ] 'blackberry', [ləɕ'ó·mʊxʷ] 'different tribe, tribe', [q'əxʷô·wəɬ] 'ocean-going canoe'.

1.2.18. /a/ has two allophones before length, [ɔ] (lower-mid back rounded) and [a] (low back unrounded). [ɔ] appears infrequently in the speech of AC (only in a dozen words attested so far), and in those environments [a] is always an acceptable alternate pronunciation. [ɔ] appears more frequently in the speech of BJ (28 words out of 522 attested) but appears only once ([ʔɔ́·qʷlæɕ] 'back (human)') in the 195 words from DM; in the speech of BJ [a] is always an acceptable alternate.

For AC, /a/ $\longrightarrow$ [ɔ] $\overset{f}{\sim}$ [a]: $C^{w}\_\_\cdot C^{-y,\underset{\wedge}{x}}$, $C\_\_\cdot C^{w}$, $l\_\_\cdot s$

$\longrightarrow$ [a^{y}]: $\_\_\underset{\wedge}{x}$

$\longrightarrow$ [a]: elsewhere

(C ≡ any consonant, C^{w} = labialized consonants, $C^{-y,\underset{\wedge}{x}}$ = any consonant but y or $\underset{\wedge}{x}$)

This means that [ɔ] only occurs preceding length, under primary stress (including [ˆ]) and adjacent to a labialized consonant (length may intervene) or l __´__·s. And when [ɔ] occurs in this environment it varies freely with [a] but appears only 30 percent of the time. Examples: [k'^{w}ɔ́·k'^{w}əs] ~ k'^{w}á·k'^{w}əs] 'hot, be hot'. [sq^{w}ɔ̂·ls] ~ [sq^{w}â·ls] 'something to boil in', [ʔɔ́·q^{w}ɪləɬ] ~ [ʔɔ́q^{w}ələɬ] (and ɔ́· probably also ~ á·) 'back (of a person)', [sk^{w}ɔ́·wɨč] ~ [sk^{w}á·wɨč] 'sturgeon', [lɔ̂·s] ~ [lâ·s] 'to be fat'. Also note the y-glide before [x̭], as in -[θa^{y}x̭] 'me (verb object)'; I have omitted this glide in phonetic citations throughout.

For BJ /a/ ⟶ [ɔ] $\overset{f}{\sim}$ [a]: (C^{w}, C_{lab}, C_{pv}) __´__·C^{-y}, x̭,
C __´__·(C^{w}, C_{lab}, C_{pv}), l __´__·θ
⟶ [a^{y}]: ___x̭
⟶ [a]: elsewhere

(C_{lab} = labial consonants, C_{pv} = postvelar consonants)
For BJ then, [ɔ] only occurs preceding length, under primary stress and either adjacent to labialized, labial or postvelar consonants or l __´__·θ. [ɔ] occurs in this expanded environment in 30 out of 70 cases of /a/ (43 percent), while [a] occurs in the remaining 40 cases. [ɔ] thus is more frequent in BJ's speech than in AC's speech. Examples from BJ: [k'^{w}ɔ́·k'^{w}əs] 'warm, hot, be hot', [x̣^{w}ɔ́·x̣^{w}læ̂·ɬp] 'a little willow tree; Yale, B.C.', [t'ɔ́·q(')^{w}m̥] 'cough', [spɔ̂·l] 'crow', [ʔɔ́·pəl] 'ten', [hamɔ̂·] 'pigeon', [sk^{w}ɔ̂·wɨč] 'sturgeon', [qɔ̂·] 'water', [sp'ɔ́·q'əs] 'bald-eagle', [x̣ɔ́·čɛ]

'lake', [q'ɔ́·q'ɔ́y] 'be sick; dying', [lɔ́·θl̥] 'big trough (for cooking), (wooden) dish'. All cases of [ɔ·] vary with [a·] here.

The speech of AC seems to occupy a middle ground between the speech of DM and that of BJ regarding the frequency and privileges of occurrence of [ɔ]. It seems natural enough that labialized consonants might contribute some rounding to [a] in the speech of AC and BJ, yeilding [ɔ].

Examples of [a·] in the speech of AC include: [sá·x̣ʷl̥] 'grass; hay', [čâ·kʷ] 'be far away', [qʷâ·m] 'moss', [x̣ʷâ·q'ʷ] 'sawbill, fishduck, merganser', [t'â·k'ʷ] '(go) home', [sqəmâ·] '(female) breast; milk', [pá·tIs] 'he blew s-th', [p'á·tθ'ɨs] 'baby basket, basketry cradle', [qâ·] 'water', [x̣á·x̣ɛ́ɛ] 'little lake', [q'â·w] 'to howl', [q'á·q'əy] 'be sick, dying', [θá·θl̥] 'mouth', -[ʔá·lɨ] ~ -[ʔà·lɨ] 'young (human or animal)', [syâ·ys] 'work', [sk'ʷx̣â·s] 'month; moon', [ƛ'â·] 'it's him, it's her, that's ____; he/she/it did; he's the one that ___, she's the one that ___'.

Examples of [a] in the speech of AC: [xʷáxʷa] 'lightweight', [q'ʷáqʷɨt] 'hit s-th', [málsm̥] 'swamp blueberry (tall ones, grow at mouth of Fraser River)', [swáwələs] '(adolescent) boys', [spápi] 'crooked', -[θam] 'you (sg.) (object of verb)', [sčɨɬáyəθəl] 'upper lip', [lálə¢'ə] 'one (person)', [t'át'əɬm̥] (BJ has [a·]) 'flea', [yáswə]

'perhaps; I don't know', [sčowát] ~ [sčəwát] 'know how to, good at'.

1.2.19. The Chilliwack dialect of Halkomelem has three degrees of phonemic pitched stress: /ˊ/ primary or high-pitch stress, /ˋ/ secondary or mid-pitch stress, and (unmarked) low-pitch unstressed.

/ˊ/ has several allophones, conditioned by length (in the syllable in question) and by stress (on the other syllables within the word):

/ˊ/ ⟶ [ˊ^{6}], loud stress with high and level pitch which seems to be about the musical interval of a sixth above the unstressed low pitch. This allophone occurs only on short vowels immediately preceding a weakened word boundary[4]; the short vowel is always the end of a monosyllable (demonstratives and particles which otherwise occur unstressed, the only words which can occur unstressed). The environment can be stated as over the vowel in ǂ(C)CV(ǂ), where (ǂ) stands for weakened word boundary and (C) is an optional consonant.

/ˆ/ ⟶ [ˆ], loud stress with high falling pitch

---

4. Weakened word boundary, (ǂ), is characterized by a very faint pause or no pause at all; it usually follows vowel allophones [I], [U] and [ɨ], which cannot otherwise occur word-finally. For example, [tɪ́^{6}(ǂ)] and [tI(ǂ)] 'the (present, visible, masculine or unmarked sex)' frequently precede nouns beginning with [s]-, the nominalizing prefix; [I] occurs in the environment t__s but not in the environment t__ǂ; if we consider the weak phonetic nature of (ǂ), then [tɪ́^{6}(ǂ)s] and [tI(ǂ)s] become explainable.

which starts about the musical interval of a fifth above unstressed low pitch and falls to low pitch. This allophone occurs on long vowels in word-final syllables, and in free variation with [ˊ] (see below) on the last long vowel in a word in non-final syllables.

/ˊ/ ⟶ [ˊ], loud stress with high level pitch varying between about a fifth and a fourth above low pitch; this allophone occurs elsewhere (wherever [ˊ^{6}] and [ˆ] do not). [ˊ] can occur more than once within a word. [ˊ] has its pitch a fourth above low pitch when following [ˊ^{6}]; however, usually the downstepping[5] is so strong that /ˊ/ ⟶ /ˋ/ ([ˋ^{3}] after [ˊ^{6}])(see Morphophonemics).

Examples of /ˊ/ include: [liǂtɪ́^{6}(ǂ)sqʼə̀p] 'at the gathering', [lɛǂʔɛlɛ́ɸɛǂɛɸ́^{6}(ǂ)sɨə̀·li] 'Where is the woman?', [tɪ́^{6}(ǂ)laplə̀s] 'the board', [lɪ́·ǂtɛtɛ́ɪ·lǂtɸ́^{6}(ǂ)tə̀mʊ̀xʷ] 'Is the land cleared?', [tm̥tə́mǂkʼʷə́sǂlɸ́^{6}(ǂ)θi·t] 'When did you make it?'; [kʷə̂·y] 'bluejay', [sqəmə̂·] '(female) breast; milk', [sɪ́·si] 'be afraid, scared', [yə̂·t] 'to vomit', [spə̂·θ] 'black bear', [xə̂·ysəm] 'ant', [pɪ́·kʷɪ̀l] 'barbecue sticks, split roasting sticks (for cooking salmon)', [ɸʼɬə̂·mɨt] ~ [ɸʼɬə́·mɨt] 'hear s-th', [ʔə̂·yɪ̀lʊxʷ] (BJ) ~ [ʔə́·yɨlexʷ] (AC) 'alive'; [yɪ̀l·ɪ́s] ~ [yɪ́l·ə́s] 'tooth, teeth', [sqʼə́m·ə́l] 'canoe paddle', plus numerous examples already cited of words with single [ˊ].

---

5. See the articles listed on the following page

for a discussion of downstepping and tonal systems: William E. Welmers: "Tonemics, Morphotonemics, and Tonal Morphemes," in General Linguistics, vol. 4, no.1, pp. 1-9, University of Kentucky (1959), and the following: J.M. Stewart: "The Typology of the Twi Tone System" (pp. 1-27), Paul Schachter: "Some Comments on J.M. Stewart's 'The Typology of the Twi Tone System'" (pp. 28-42), J.M. Stewart: "Reply" (pp. 43-48), and William E. Welmers: "A Further Note on the Typology of Tonal Structures" (pp. 49-67), all in Bulletin of the Institute of African Studies, vol. 1, no. 1 (1965).

1.2.20. /ˋ/ has no complex allophony; it is level mid pitch (about a third above unstressed low pitch) with loudness ranging from moderate to loud. It is transcribed phonetically [ˋ]. More than one [ˋ] can appear within a word, and /ˋ/ can be flanked by /ˊ/, /ˇ/ or unstressed syllables. ES reports some words with /ˋ/ as the only stress while JH does not; I find words with only /ˋ/ stress in sentences where morphophonemic downstepping has changed the stress from its usual citation form /ˊ/. But I have also found a few words with /ˋ/ as the only stress in citation forms. ES gives the following words with /ˋ/ stress only: /t'à·xʷ/ 'white fir', /kʷèmlèxʷ/ 'root', /spìù/ 'ice', /təm·èxʷ/ 'earth', /sc'ì·m/ 'berry', /χè·m/ 'cry', /mèqɛ/ 'snow', /seləyè/ '"lay" spirit power', /sχʷatì·xʸ/ 'helldiver', and /xʸà·ysəm/ 'ant'.

JH has only /t'áχʷ/ 'white fir' and /xéysəm/ 'ant' among these words. My recordings of these words are: /kʷémléxʷ/ 'root', /spí·w/ 'ice', /tém·'ɛ̀xʷ/ ~ /tèm·èxʷ/ 'earth', /sθ'í·m/ ~ /sθ'ì·m/ 'berry', /χé·m/ ~ /χè·m/ 'cry, weep', /méqɛ/ (AC) ~ /mé·qɛ/ (BJ) 'snow (on the ground)', /s?éliyɛ/ '(ordinary) dream, vision (seen by an average person)', /sχʷatíxʸ/ (BJ) 'helldiver, grebe', /xʸé·ysəm/ 'ant'.

While my recordings only confirm (partially) two of the ES words with /ˋ/ stress, I have a few examples myself stressed only with /ˋ/: /sc'èl·èxʷ/ 'eddy', /qʷəqʷèyèls/ 'orange color' ~ /qʷiqʷéyels/ 'orange (fruit)(and color?)',

/θ'ɘwɛ́·lí/(BJ) ~ /θ'ɘwɛ̀·lɨ̀/(AC) 'Soowahlie (place name)', /wɛ̀y·èlès/ ~ /wɛ́y·ə́lə́s/ ~ /wɛ́yələs/ 'tomorrow', /q^{W}èl·ès/ (prompted, AC) ~ /q^{W}él·és/ (BJ), ES /q^{W}él·és/, JH /q^{W}él·es/ 'whale', and /q^{W}æ·l/ 'speak, talk'.

Another difference between the present grammar and ES and JH is our frequent disagreement with stress patterns involving /ˋ/. ES might have ´` on one word which JH cites as `´ and I have as ´´ ; another example might show ES ´`, JH ´`, BG ´´, or ES ´´, JH `´, BG ´`. It seems likely that at least some of these differences are idiolectal or free variation.

Examples of /ˋ/ besides those already cited, include: [mə́smIsà·lɨ̀] 'calf', [ʔí·ʔɛx^{W}ì·l] 'small, little', [tθ'èx^{W}x̂íl·ə́m] 'wash one's feet', [ɬà·q'^{W}ɨθáx̂Is] 'he slapped me', [ʔá·θàlèm] 'I was called', [pí·wətàlèmčæ] 'you folks will get frozen'.

Unmarked low unstressed syllables have a pitch level of one, relative to [ˋ] (^{3}), [´] (^{4,5}) and [´^{6}] (^{6}). Many examples have already been given.

1.2.21. Some minimal pairs:

1.) [kʷâ·l] 'to hide'

[qʷâ·l] 'mosquito'

[qâ·l] 'to steal'

[qʼâ·l] 'believing'

[qʷæ·l] 'to speak'

2.) [pʼóḱʷ] 'float, come to the surface'

[pʼóqʼ] 'white'

3.) [tʼóqʼʷ] 'it broke (of rope)'

[tʼóḱʷ] 'get muddy' (ə ~ U)

4.) [kʷáəs] 'demonstr. + you (sg.)'

[kʼʷáəs] 'burned (of a person)'

5.) [kʷə] 'the (near, invisible)'

[kʼʷə] 'the (far/invisible)'

[qʼə] 'but'

[qə] 'and'

[xʷó] 'get somewhere, arrive'

[θə] 'the (near, visible, female)'

[tθʼə] 'to, at (in "at a dance")'

[ɬʼə] 'by (instrumental preposition used with passive)'

[tə] 'the (present, visible)'

[mə] 'evidently'

[wə] 'if; when'

[lə] '3rd person syntactic past marker'

6.) [móqʼʷ] 'to burst'

[móḱʼʷ] 'all'

[móḱʷ] 'stout'

[móqʼ] 'filled with food'

[mâ·qʷ] 'bird'

[wóqʼʷ] 'drowned, drift face down'

7.) [qʼʷól] 'cooked; ripened'

[qól] 'bad'

[kʷəl] 'my (near, invisible)'

[kʼʷəl] 'my (far, invisible)'

8.) [xʷáə] 'turn into', 'hungry'

[qʷáə] 'get a hole'

[qʼáə] 'or'

[kʷáə] 'your (sg.) (near, invisible)'

[kʼʷáə] 'your (sg.) (far, invisible)'

9.) [t'á(·)t'əɬm̥] 'jumping flea'

[tθ'á(·)tθ'əɬm̥] 'chilled'

10.) [spɑ̂·θ] 'black bear'

[sp'ɑ̂·tθ'] 'Indian currant'

11.) [t'ɛ́t] 'taste; try'

[tɛ́t] ~ [tɑ̂·t] 'mother (speaker's own)'

[tθ'ɛ́t] 'chew s-th'

[θɑ̂·t] 'dark(ness)'

12.) [ƛ'í] 'difficult'

[lí] 'be there; to, at'

13.) [ƛ'íɣ́It] 'we're difficult'

[ƛ'í·ɣ́'It] 'sneak up to s-o'

[ƛí·ɣ́'It] 'cut s-th'

14.) [sχ́ól·ə] 'leg, foot'

[sχ́ílə] 'penis' (BJ)

15.) [xʷə?î·t] 'what is it?'

[χʷə?î·t] 'wedge'

16.) [?ɛ́·wə] 'seagull' (BJ)

[hɛ́·wə] 'to hunt'

[χɛ́·wəq] 'wild carrot, carrot'

17.) [?í·ɣ́Il] 'I'm here'

[?í·ɣ́'Il] 'lazy'

18.) [míχɛ́'Il] 'chickadee'

[míχɛ́Il] 'louse'

19.) [t'ɛ̂·yχ] 'jealous'

[t'ɛ̂·yəq] 'angry'

20.) [lí] 'be there; to, at'

[lí·] 'interrogative'

[lɛ́] ~ [lɛ] 'go'

[lə] '3rd person syntactic past marker'

[lá] 'this'

21.) [lúɬ] 'already, 3rd person subject' (< //lə-wəɬ//)

[ləɬ] 'go (do s-th)!'

22.) [q'ʷól] 'cooked; ripened'

[q'ʷô·l] 'ear'

[q'ʷəlq'ʷəl] 'overripe'

[qʷú·lqʷəl] 'all talking'

23.) [tóxʷ] 'mid-, half-'

[tû·xʷ] 'nine'

24.) [?á·pl̥] 'ten'

[?ɛ́·pl̥] 'maggot' (BJ)

25.) [?ímIχ] 'walk'

[?í·mIχ] 'walking'

26.) [q'ʷəyílIχ] 'dance'

[q'ʷəyílIχ] 'dancing'

27.) [?íyIs] 'female friend, pet name for a girl friend'

[?éyIs] 'fun, pleasant'

28.) [ʔə́y] 'be good'

[ʔə̂·y] 'keep going'

29.) [k'ʷəlô·ws] 'his skin, her skin, its hide'

[p'əlyû·ws] 'bark (of tree)'

30.) [q'â·w] 'howling'

[q'áwə] '(walking) cane'

31.) [ɬəxʷə́ɬčəɬ] 'spits'

[ɬə́xʷəɬčəɬ] 'spitting'

32.) [k'ʷÚɬaməɬɬ] 'I see you'

[k'ʷÚɬà·məɬ] 'you were seen'

CHAPTER 2. MORPHOPHONEMICS

2.0. Introduction. Since morphophonemics is the prediction of the alternations of phonemes from their phonemic and morphemic environments, it seems appropriate to begin this chapter with phonotactics, which describes and predicts phoneme distributions and clusters from the phonemic environment.

2.1. Phonotactics. There are no clusters of vowels and no vowel-initial words in Chilliwack Halkomelem. All vowel phonemes can occur medially and finally in a word. All consonant phonemes can occur initially and intervocalically, and all but /h/ can occur finally (though /ʔ/ is so far attested finally only in one word, /ʔáʕʔ/ 'bowel movement' which could well be phonologically deviant). Borrowed phonemes /k/ and /kʷ/ are omitted in the present treatment of phonotactics because their distribution depends on the phonotactics of the language from which they are taken.

Consonant clusters of two and three members occur initially, medially, and finally; four-consonant clusters occur only medially and finally. DM had an idiolect which tolerated many more initial consonant clusters than the speech of AC. Thus Harris (1966) has phonotactics which differ from mine in this regard. The present treatment is based mainly on the speech of AC but includes all material I have from DM, BJ,

NP, CT, etc.

Consonant clusters (initial, medial, or final), so far attested, do not begin with glottal phonemes /ʔ, h/ nor with /p'/. I suspect the absence of /p'/ is accidental and that it may be found beginning consonant clusters in words not yet elicited. Initial consonant clusters cannot begin with sonorants (/m, l, y, w/) or glottals (/ʔ, h/), and final consonant clusters cannot end with sonorants or glottals. Other features common to clusters in more than one position will be summarized at the end of this section (2.1.).

#CC. In initial position /s/ is attested before all consonants but /s/. Only a few geminates occur initially (re-articulated): /q'q'/(DM) and /cc/([ʤč]). There is only one case of an initial glottalized consonant followed by its plain equivalent (/c'c/[ʤ'č]) (DM), with no case of the reverse. Spirants /s/ and /x^w/ are the only initial consonants that can precede glottal consonants (/ʔ/ and /h/). Also no cases were found of an initial consonant followed by its labialized version or vice versa. Few consonants are found before glottalized consonants: /s/ or /x^w/ precedes /k'/, /c/ precedes /θ'/, /θ, s, c'/ precede /k'^{w}/, /s, c, c', θ, θ', š, x^y, q'/ precede /q'/, and /s, t', c', š/ precede /q'^{w}/. Except for /t'/ and /q'/, C_1 is either a spirant or an affricate when C_2 is glottal-

ized. Only /s/ precedes glottalized consonants other than /ƛ', θ', k'^{W}, q', q'^{W}/. C_2 is most often /s/, /ɬ/ or /q'/, and it can be a sonorant or a glottal as well as anything else (a stop, spirant or affricate). ["Most often" here means appearing in more different clusters than other consonants.] C_1 is most often /s/ and next most often /c, ɬ, x^{W}/ or /c'/; other consonants are less frequent as C_1. Other than the patterns mentioned so far, there don't seem to be any patterns operating to limit the combinations of consonants in initial two-consonant clusters.

#CCC. The initial three-consonant clusters attested (all across morpheme boundaries) are: /s(ts, t', $t'\underset{\cdot}{x}$, $k^{W}t$, $k'^{W}x^{y}$, $q^{W}m$, $q'\underset{\cdot}{x}$, $\theta\underset{\cdot}{x}$, ɬq')/(AC) and /stq/(DM), $/sq^{W}q^{W}$, sθq/(CT); $/sx^{W}$(?, θ, m, l, w)/(AC) and $/sx^{W}$(t, θ', c, q^{W}, q', h)/(DM), $/sx^{W}$(ɬ, ƛ')/(CT). C_1 must be /s/. C_2 is often $/x^{W}$/ but can also be a number of other spirants and stops. C_2 is not a sonorant, labial, glottal or sibilant; there are also no examples of $/x^{y}$, $\underset{\cdot}{x}$, $\underset{\cdot}{x}^{W}$/ as C_2; the other gaps seem accidental (no /θ', ƛ', q/ or $/q'^{W}$/ as C_2). C_3 can be anything that C_2 is not (sonorant, labial, glottal, sibilant, $/x^{y}$, $\underset{\cdot}{x}$/ and probably $/\underset{\cdot}{x}^{W}$/, and /θ'/ and /q/ as well. In addition C_3 can also be /t, q', q^{W}, θ/. DM even has an /h/ as C_3 in #CCC. The principle seems to be for C_1 to be /s/ and C_2 and C_3 to be mem-

bers of nearly mutually exclusive sets and as dissimilar to each other as possible. There is also an avoidance of glottalized consonants in C_1 position and of glottals, labials and /y/ in C_1 or C_2.

-CC-. Medial two-consonant clusters do not begin with /p', ?, h/ but begin with all others and can end with any consonant. Sonorants (/m, l, w, y/) can occur before any consonant, and /s/ and /ɬ/ can occur before the next largest number of consonants (13 and 12 respectively). All or most consonants can occur before /t, c, l/, and many can occur before /θ, q/ and /s/ (14, 13, and 11 respectively). Where C_2 is a glottal, C_1 can be /s/ or /m/; it also can be /l/ or /c/ if the glottal C_2 is /?/. C_2 can also be a sonorant, among other things. Length /·/ also appears as C_2 after sonorants and /s, θ, t, q/. Whenever a medial geminate might be produced by affixation, a rule converts the second member to length /·/; this rule only operates intervocalically. When C_2 is glottalized, C_1 is a spirant, sonorant, or, rarely, a stop (/p, k^w, q'^w/). There are two cases of a glottalized consonant followed by its plain version, /c'c/ and /q'q/(CT) (as in /ɬéc'ces/ 'cut one's hand' and /sɬéq'qəl/ 'way upriver' (CT)). There are no cases of the reverse, a plain consonant followed by its glottalized version. There is one case of a labialized consonant being followed

by its plain version, /$q^{W}q$/ (as in /$x^{W}əq^{W}qɛ́·yləm$/ 'stick something down one's throat'). There are no cases of the reverse unless one considers /x^{y}/ the plain version of /x^{W}/ (/$x^{y}ɬx^{y}x^{W}əlɛ̀wə$/ 'fish air bladder' SP, HP).

-CCC-. Medial three-consonant clusters almost all occur over morpheme boundaries. Those attested so far are: /l(s(t,θ,c,l,x^{y}), q(t,c,l), x^{y}(c,t), x^{W}(c,ɬ), θ(t,·), tɬ, c'θ); y(s(t,θ,c), t(x^{y},ɬ), q^{W}t, x^{W}t, l(t,$\underset{\cdot}{x}$), $\underset{\cdot}{x}$(θ,t), ɬθ); x^{W}(sɬ,st,sx^{W}), m(st,tɬ,sc), w(tx^{W}, q't,θc), t(sθ,st,ɬq^{W}), ɬ(st,cx^{W}), p(sc,ɬ$\underset{\cdot}{x}$), x^{y}(st,sθ), s(tw,tx^{W}), k'^{W}tɬ/ and /qst/(DM) and /k^{W}st/(CT). The pattern here is that C_1 can be a sonorant (/m,l,y,w/), stop (/p,t,k^{W},k'^{W},q/) or spirant (/s,ɬ,x^{y},x^{W}/) but most often is /l/ or /y/. C_2 is most often /s/ or /t/ but also /θ,ɬ,x^{y},x^{W},$\underset{\cdot}{x}$,c,c',q,q',q^{W},l/(stops, spirants, or affricates or /l/). C_3 is most often /t,c,θ,ɬ,x^{y},l/ (similar to the most frequent set for C_2 in -CC-) and occasionally is /x^{W},$\underset{\cdot}{x}$,q^{W},w/. C_1 does not include affricates, glottals, glottalized consonants (except /k'^{W}/), /$\underset{\cdot}{x}$/ or /$\underset{\cdot}{x}^{W}$/. C_2 does not include labials, glottals, most glottalized consonants (only /c'/ and /q'/ appear) or /y/. C_3 does not include glottals, glottalized consonants, labials (except /w/) or /y/. The avoidance of glottals and glottalized consonants seems to hold for all three positions, C_1, C_2, and C_3.

The avoidance of labials and /y/ seems to hold for C_2 and C_3.

-CCCC-. Only two four-consonant clusters have been found so far, /yx^{w}tc/ (/c'ɛ́·yx^{w}tcəl/ 'I dry something', /c'ɛ́·yx^{w}tcəx^{w}/ 'you dry something', etc.) and /tstx^{w}/ (/θɛ́tstx^{w}əs/ 'he/she/it/they said to him/her/it/them'). Each cluster occurs across morpheme boundaries. These clusters follow the same patterns of occurrence and avoidance for C_1, C_2, and C_3 as above for medial three-consonant clusters. C_4 appears to follow the C_3 pattern of -CCC-.

CC#: Final two-consonant clusters attested so far do not begin or end with /p', t', ?, h/, and do not end with sonorants. Probably as a result of chance these clusters also do not begin with /c', x̣, x̣^{w}/ and do not end with /k^{w}, q'/. Sonorants, especially /l/ and /y/, are most frequent as C_1, while /s/ and /t/, then /ɬ/ and /x^{w}/ are most frequent as C_2. Where C_2 is a consonant other than the four most frequent ones, C_1 is almost always a sonorant. There are no cases of a glottalized or labialized consonant being followed by its plain version word finally. And there are no cases of the reverse, a plain consonant being followed by its glottalized or labialized version. When C_2 is glottalized, C_1 must be either a sonorant or (in one case) /x^{w}/. There are no final re-articulated

gominates, and C_2 can never be length.

CCC#. Final three-member consonant clusters attested (most across morpheme boundaries) are: /l(st,x^yt,qs,x^ws), w(tx^w,q't), y(x^wt,lt,θt,łp), x^y(ts, tł), $q^w\underset{\bullet}{x}^wt, p\underset{\bullet}{x}$t, cx^wł, łcx^w/. These fit into the pattern for final two-consonant clusters in that C_1 is usually a sonorant and C_3 fits the C_2 pattern for CC#, most often /t, s, ł/ or /x^w/. C_2 has fewer restrictions than C_3 but includes /t, s, ł, x^w/ (as in C_2 for CC#) as well as /l, θ, c, x^y, q, q', $\underset{\bullet}{x}$, $\underset{\bullet}{x}^w$/. So in final three-consonant clusters C_1 resembles C_1 of two-member clusters, C_2 resembles an expanded C_2 of two-member clusters, and C_3 resembles more closely the C_2 of two-member clusters. There are no examples of a glottal, a glottalized consonant, or /$\underset{\bullet}{x}$/ or /$\underset{\bullet}{x}^w$/ as C_1. There are no examples of a labial, glottal, glottalized consonant (except /q'/) or /y/ as C_2. And there are no examples of glottals, glottalized consonants, labials or /y/ as C_3. There is an avoidance of glottals and glottalized consonants in all three positions (C_1, C_2, and C_3), and there is an avoidance of labials and /y/ in C_2 and C_3.

CCCC#. Only one final four-consonant cluster has been found so far, /wtx^ws/. It comes from the combination of two suffixes, {-éwtx^w} 'building, room' and {-s} 'third person possessive pronoun' as in

/cɛɬtelέwtx^{w}s/ 'his (her, their) smokehouse, his fish-smoking building', /cɛhɛyəɬέwtx^{w}s/ 'his (her, their) church', /lɛmέwtx^{w}s/ 'his (her, their) pub or bar', /x^{w}əlməx^{w}έwtx^{w}s/ 'his (her, their) Indian house', and a number of other examples that could be constructed. This cluster fits the pattern for CCC#, in that C_1 is a sonorant, C_2 is /t/ (as found most often in triple clusters), C_3 is /x^{w}/. C_4 fits the pattern for C_3 in final triple clusters since it is /s/. Here too there is an avoidance of glottals and glottalized consonants in all positions and an avoidance of labials and /y/ in the last three positions (C_2, C_3, and C_4).

Summary of the features common to consonant clusters in more than one position. Two- and three-consonant clusters occur initially, medially, and finally; four-consonant clusters occur only medially and finally. No cluster yet attested begins with glottals or /p'/. Initial clusters do not begin and final clusters do not end with sonorants or glottals. Geminates occur only before vowels. Initially, geminates are re-articulated (only two cases occur); medially, C_2 of a geminate is replaced by length (this is a morphophonemic rule); there are also some cases of C_2 being length for historical reasons, with no synchronic affixation being involved; neither length nor geminates can occur word-finally. No clusters are attested with a

glottalized or labialized consonant following its plain counterpart; a glottalized consonant preceding its plain counterpart is rare initially (only /c'c/) and medially (only /c'c/ and /q'q/) and not found finally. A labialized consonant preceding its plain counterpart is rare medially (only /q^{w}q/) and not found initially or finally. In two-consonant clusters C_2 can be a glottal or sonorant initially or medially but not finally. In medial and final three- and four-consonant clusters there is an avoidance of glottals and glottalized consonants in all positions and of labials and /y/ in all positions but C_1. In initial three-consonant clusters there is an avoidance of glottalized consonants in C_1 and of glottals in C_1 or C_2. In three-consonant clusters C_3 has roughly the same patterns of preference and avoidance as does C_2 in two-consonant clusters (initially: nearly all consonants occur; medially: most often /t, c, Θ, l/; finally: most often /t, s, ɬ, x^{w}/). In four-consonant clusters C_3 fits within the patterns of preference of C_2 in three-consonant clusters (medially: /t/ most often; finally: /x^{w}/ among most frequent). In four-consonant clusters C_4 fits within the patterns of preference of C_3 in three-consonant clusters (medially: /c/ most often; finally: /s/ among the only five possible).

Finally, this section on consonant clusters should be concluded with a disclaimer. Statements about non-occurrence, although based on an extensive corpus, may need adjustment after an extensive dictionary has been compiled and surveyed for clusters. Until that point is reached new clusters will still be turning up (and in fact are). This is quite understandable when one realizes there are 27 consonant phonemes, 702 possible CC clusters and 19,656 possible CCC clusters, each in three positions (initial, medial, and final).

2.2. Syllabic Canon and Roots. Given the possibilities of consonant clusters, a one-syllable word has the shape #(s)(C)CV(·)(C)(C)(C)(s)#. A two-syllable word has the following shape: #(s)(C)CV(·)C(C)(C)(C)V(·)(C)(C)(C)(s)#. Longer-syllable words can be predicted by adding C(C)(C)(C)V(·) after one of the optional length phonemes for each additional syllable. Syllables can be divided thus:

...CV(·)-CV...
...CVC-CV...
...CVCC-CV... or ...CVC-CCV...
...CVCCC-CV... or ...CVCC-CCV...

There is no clear limit to the number of syllables allowed within a word, however, the longest found so far has nine syllables: /ʔelʔéliyəmeθaméceləc/ 'I'll dream about you'.

Stress occurs impartially in open (vowel-final) or closed (consonant-final) syllables. And stress can occur on any syllable (first, second, third, etc., even seventh or eighth) counting from the front or from the end. The statements made about stress in the last two sentences apply also to vowel length and vowel phonemes of all qualities. The only qualifications appear to be the following: words with more than two successive long-voweled syllables are quite rare, words with more than two successive high-pitch stressed syll-

ables are quite rare, words with more than three successive mid-pitch stressed syllables are quite rare, and words with more than four successive unstressed syllables are quite rare. Words are most often stressed on the first or second syllable or on the last, second from last or third from last syllable. Long polysyllabic words are always inflected ones; where both root and inflection are polysyllabic there is a tendency for each to retain its own stress pattern (usually the stress pattern it has in combination with monosyllabic root or affix), but more will be said about this in 2.3.

Root shapes are most often CVC (averaging 53.1°/o of the words in a large sample of words), then CVCVC (averaging 19.9°/o), then CVCV (averaging 8.3°/o), CVCC (7°/o), CVCCVC (2.8°/o), CVCVCV (2.5°/o), CV (1.9°/o or a little higher) and CVCVCVC (1.8°/o). Remaining types were each found in less than .7°/o of the words: CVCVCC, CCVC, CVCCV, CVCCVCV, CVCVCCV, CCVCVC, CVCVCVCV, CCVCVCCVC, CCVCC. Some of these rarely found types will probably be eliminated as work proceeds on a dictionary ard some of these words and types yeild to derivational analysis.

It should also be mentioned that different percentages of root shapes are found if the body of words is limited in different ways, but the relative order

of the root shapes stays about the same. Thus a study of reduplicated words and their unreduplicated versions had CVC in 70°/o of the words, CVCVC in 13°/o, CVCV in 10°/o, and CVCC in about 5°/o (other shapes under 2°/o); a study of all the examples of ablaut showed CVC in 50.6°/o of the words, CVCVC in 17.6°/o, CVCV in 6.7°/o, and CVCC in 7.4°/o (other shapes under 4°/o); a study of all names of flora and fauna showed CVC roots in 38.6°/o of the words, CVCVC in 29.0°/o, CVCV in 8.3°/o, CVCC in 8.6°/o, and other shapes under 6°/o. I believe the averages of these differences, quoted at the beginning of the last paragraph, are representative of the language. The average for CV might be higher because a number of demonstratives have CV root shapes, and demonstratives were the only word class largely absent from the three sets of words studied.

2.3. Vowel, Length, and Stress Alternations.

2.3.0. Introduction. One of the consequences of the development of length in the upriver dialects of Halkomelem is the increase in the number of types of ablaut. This increase is due to the fact that simple vowels can now alternate with long vowels as well as with other simple vowels; long vowels can also alternate with each other. Since ablaut is affected by stress (for example, long vowels cannot appear unstressed) and alternations of stress often serve the same functions as ablaut (for example, aspect and derivation), it seems best to treat ablaut and stress together in this section. Most stress rules precede the ablaut rules.

2.3.1. Stress Assignment in Affixing. In the rules to follow, S represents an unstressed syllable, S̀ a mid-stressed syllable, and Ś a high-stressed syllable.

.1. Before an unstressed or mid-stressed suffix (-S, -SS, -SSS, -S̀, -S̀S̀) the stress pattern of the stem (root plus derivational affixes if any) remains unchanged, except in cases of ə1 → íy / ___-ə̓p where stress is attracted to the /iy/. Prefixes and infixes, unstressed or mid-stressed, do not alter the stress pattern of the stem.

.2. Prefixes and infixes when high-stressed attract

the stress of the root (i.e. the root becomes unstressed); however, in a few cases root stress is retained when high stress becomes mid stress on long root vowels.

.3. Ś → S / ___-Ś..., -SŚ(S)
→ Ś / ___-SSŚ

.4. SŚ → SS / ___-SŚ(S), -SŚŚ
→ SS predominately, with some SŚ and S̀S / ___-Ś(S)
→ SS predominately, with some S̀S and SS / ___-ŚŚ

.5. SŚ → SS / ___-Ś(SS)
→ SŚ predominately, with some SS / ___-SŚ, -SŚ
→ SŚ / ___-ŚŚ

.6. ŚŚ → SS / ___-Ś (one example)
→ ŚŚ / ___-ŚŚ, -SŚS

.7. ŚSS → SSS predominately, with some S̀SS / ___-Ś
→ SŚS predominately, with some SSS / ___-SŚ

.8. SŚS → SSS predominately, with some SSS / ___-Ś(S)
→ SŚS / ___-SŚ

.9. ŚS̀S → SSS / ___-Ś

.10. ŚŚS → SSS / ___-SŚ

.11. SŚSS → SSSS / ___-SŚ
→ SŚSS / ____-Ś

.12. When suffixes are added after stressed suffixes, they do not modify the preceding stem stress pattern:

.13. No examples were found of stressed affixes attached to stems of the following shapes: S, SS, SSS, SSŚ, SŚS, ŚŚS, ŚŚŚ. Cases of unstressed suffixes are attested

after some of these stems (for example, S-S), but, as stated, unstressed suffixes do not alter the stress pattern of the stem. No examples were found of single suffixes of the following shapes: -SSS, -SSS, -SSS, or suffixes of greater than three syllables.

2.3.2. Types of Ablaut, Direction of Change, Conditioning of Change. Given the eleven varieties of root vowels, /i·, i, ɛ·, ɛ, ə, a·, a, u·, u, o·, o/, there are 110 possible varieties of vowel change. So far only 31 types have been attested:

i → i·	cont., pl.	ɛ· → a	cont., deriv.
i → ɛ	deriv.	ɛ· → a·	deriv.
i → ɛ·	cont., pl.	ɛ· → u·	pl. cont., deriv.
i → ə	cont., pl., deriv.	ə → i	cont., deriv., recip. cont.
i → a	cont., pl.	ə → i·	cont., pl., deriv.
i → a·	deriv.	ə → ɛ	cont., pl., deriv.
i· → ɛ·	cont., pl., deriv.	ə → ɛy	cont., pl.
i· → ə	deriv.	ə → ɛ·	cont., pl., deriv.
ɛ → i·	cont.	ə → a·	cont., deriv.
ɛ → ɛ·	cont.	a → ɛ·	cont.
ɛ → ə	cont., pl., deriv.	a → ə	deriv.
ɛy → ə	deriv.	a → o	deriv.
ɛ → a	cont., deriv.	a· → ɛ	cont.
ɛ → a·	cont., deriv.	a· → ə	deriv.
ɛ· → i·	cont.	o → i	cont., deriv.
ɛ· → ə	cont., pl., deriv.		

The direction of ablaut vowel change is from base-form vowel to derived- or inflected-form vowel. In cases of derivation where only derived forms are attested, it is sometimes difficult to be sure of the base form. In cases of number and aspect, the singular and non-continuative largely provide the base forms, since the plural and continuative forms are the marked forms, inflected with affixes when they are not formed with ablaut or stress shifting alone. In many cases, nominalized forms seem to contain a continuative element of meaning; in these cases the non-continuative verb form provides the base form.

Ablaut is used to signify 'continuative' (53 examples), 'plural' (12 examples), and, most frequently of all, figures in word derivation (over 148 examples). It is found both within roots and within affixes. It can even co-occur with reduplication or plural infixes within the word. In cases of word derivation it is sometimes conditioned (set in motion) by specific suffixes. It is also sometimes conditioned by stress alternation, and it sometimes causes stress alternation. With this background, some further stress rules can be given with examples, as well as some rules for vowel deletion and length deletion.

2.3.3. Stress Alternation, Vowel and Length Deletion, Continuatives.

2.3.3.1. $V\cdot \rightarrow V / \_\_R_1$ (length after vowel is dropped before reduplication type one). In the following examples, forms to the left of the colon show the base form; forms to the right show the results of the rule. All forms are phonemic unless noted.

1. sí·lə 'grandparent': sísələ 'granny'
2. spí·w 'ice': spípow 'frozen'
3. łí·c'ət 'cut s-th': słíłəc'əls 'a saw'
4. x^{y}í·pət 'carve s-th': x^{y}íx^{y}əpəls 'a plane'
5. ck^{w}í·m 'red': ck^{w}ík^{w}əməl 'near red'
6. lé·c'əwtx^{w}əm 'visit': léləc'əwtx^{w}əm 'visiting'
7. mé·yt 'help s-o': məmíyət 'helping s-o'
8. té·y 'to canoe-race': tétəy 'canoe racing'
9. t'é·l 'go out of sight (of the sun or a person, etc.)': st'ét'əl 'shade (of a tree, etc.)'
10. łé·w 'run away': łéłəw 'running away'
11. łé·q'ətəs 's-o lays s-th (on s-th)': łéłəq'lém 'it was laying on s-th'
12. x^{y}á·k'^{w}əm 'bathe': x^{y}áx^{y}ək'^{w}əm 'bathing'
13. tá·q'^{w}əm 'to cough': tátəq'^{w}əm 'coughing'
14. q'á·y 'dead': q'áq'əy 'sick, dying'
15. pá·yt 'bend s-th': spápiy 'crooked, bent'
16. tá·l 'go down to the river', stá·lo 'river': státəlo 'creek'

17. tá·lθət 'wonder': tatí·lθət (//ta·-tə-l-í·l-θət//) 'wondering', tatí·lt 'learn, understand (s-th)', tatəl(·)á·məth 'understand(ing)'

18. pá·t 'blow': spápətəs 'Katz riverbank (placename meaning (wind) blowing on the face (of the bank))'

2.3.3.2. #SŚ... → #SS...́ 'continuative'

(S is syllable as in 2.3.1). Examples:

19. łəx^{W}ɔ́łcɛ 'spit': łɔ́x^{W}əłcɛ 'spitting'

20. k'^{W}əx^{y}ɛ́·t 'count s-th': k'^{W}ɛ́x^{y}təs 'he's counting s-th'

21. c'ɛtɛ́·m 'crawl': c'ɛ́təm 'crawling'

22. ƛ'əwɔ́ls '(dog) barks': ƛ'ɛ́wəls 'barking'

23. c'əƛ'ɔ́m 'jump': c'ɛ́·ƛ'əm 'jumping'

24. ʔəmɔ́t 'sit down': ʔá·(ʔə)məth 'sitting down'

25. łɛlqí 'soak, rehydrate': łɛ́lqi 'soaking'

26. ƛ'əlɛ́x^{W} 'stopped; at home': ƛ'ɛ́ləx^{W} 'stop(ping)'

27. θ'əχ^{W}át 'wash s-th', θ'əχ^{W}á·səm 'wash one's face', θ'ə̀χ^{W}x^{y}ɔ́lɔ́m 'wash one's feet', θ'əχ^{W}ɛ́·cəsəm 'wash one's (your?) hands': θ'ɔ́χ^{W}əsəm 'washing one's face', θ'ɔ́χ^{W}əlwətəm 'washing one's clothes', sx^{W}θ'ɔ́χ^{W}əsəm 'wash basin, something to wash one's face in'

28. θq'ɔ́t 'spear a fish': θɛ́·q'əl 'spearing a fish'

29. ptɛ́·məth 'ask s-o': pɔ́tməth 'asking s-o'

30. cà·lɔ́χ^{W}əm 'bleed': cɛ́·l(ə)χ^{W}əm 'bleeding' (χ^{W} ~ x^{W})

31. líyɔ́m 'laugh': lɛ́·yəm 'laughing', slíyəm 'a laugh'

but beside this there is also the competing sets, léyəm 'laugh' with léyləyəm 'laughing', and líyləyəm 'laughing'

32. csέθὰ·m 'you were told' (< //cəs-ét//): cósətəm 'being told'

33. θiyɔ́ɬcət 'make s-th for s-o': θέyəɬcət 'making s-th for s-o'

34. x^{W}əθtéləm 'get cloudy': sx^{W}ʔéθtəl 'clouds'

35. sk^{W}iyɔ́χθəts 'what he did': sk^{W}é·yχtəm 'doings, things to be doing'

36. ɬətq^{W}é·ls 'boil': ɬá·tq^{W}əm 'is boiling, (being boiled)'

2.3.3.3. #SŚ → #SŚ 'continuative', and SŚ → SŚ derivational before {-təl} 'device' and sporadically before some other suffixes. Examples:

37. ƛ'éx^{Y}təm 'diarrhea': ƛ'x^{Y}étəm 'continuing diarrhea'

38. k^{W}ésuyəl 'throw out a drift net': k^{W}sé·yəl 'drift-netting down the river'

39. sq^{W}ɔ́lx^{Y}əm 'dry snow that can drift': sq^{W}əlx^{Y}ámə 'dry snow drifting in'

40. //ɬə-χέyl 'legs', -wəɬ 'canoe', -təl 'device'//: ɬəχəlwɔ́ɬtəl 'thwarts, crosspieces in a canoe'

41. ƛ'ɔ́lx^{Y}əl 'spring salmon (generic)': ƛ'əlx^{Y}ɔ́ltəl 'spring salmon net', ƛ'lx^{Y}élɔ́wɔ́ɬ 'jack spring (salmon) with black nose'

42. //yəm 'wide strip', -é·wəs 'paddle', -təl//: yəméwéstəl 'wide cedar root strips for baskets'

43. //t'á·l 'shade, disappear behind', -əs 'face', -təl//: t'aléstəl 'blinds, window shades, blinders'

44. ʔəpáləs 'tenth moon': ʔəpáléstəl 'July, tenth moon' (the Upper Stalo new year begins in October)

45. //-él(ə)qs// 'nose, on the nose': sx^{w}əq'^{w}eléqstəl 'nose-ring'

46. t'élq'^{w}əm 'warm': t'əléq'^{w}təl 'Indian name of Old Jack (lit. 'something that would be warm')'

47. x^{w}élməx^{w} 'Indian': x^{w}əlméx^{w}qəl 'Indian language', sx^{w}əlméx^{w}əɬ 'in the Indian way'

48. sqéyəχ 'mink (boaster)': sqɛyéχəyɛ 'pet name of Mink (little boaster)'

49. téməɬ 'red ochre, red paint': təméɬépsəm 'large red-headed woodpecker' (lit. 'red paint on back of head or neck')

2.3.3.4. $C_1VC_2 \rightarrow C_1C_2$ /#(C-)__-Ś...

This rule is sometimes optional in slow speech but approaches the obligatory in more rapid speech. Examples:

50. sθ'á·m 'bone': sθ'míwél 'core, pith, seed, nut, center of rock, etc.'

51. c'k'^{w}éx^{y} 'number': k'^{w}x^{y}é·m 'count', k'^{w}x^{y}ét 'count s-th'

52. ɬf·x^{W} 'three': ɬx^{W}ɛ́·lə 'three people', ɬx^{W}ɛ́·ɬ 'three times', ɬx^{W}ɛ́·ɬp 'three trees', ɬəx^{W}əlsx^{y}ɛ́ 'thirty'

53. ɬəq'ɛ́t ~ ɬq'ɛ́t 'wide', ɬəq'ɛ́cəs ~ ɬq'ɛ́cəs 'five' (lit. 'wide hand'), ɬəq'əcəlsx^{y}ɛ́ 'fifty': ɬq'ɛ́cɛ́lə 'five people', ɬq'ɛ́csɛ́·ɬp 'five trees', ɬq'ɛ́csɛ́wtx^{W} 'five houses', ɬq'ɛ́csówəɬ 'five canoes', ɬq'ɛ́csá·ls 'five fruit, five round things (rocks, balls, etc.)', ɬq'ɛ́csɔ́lwət 'five garments', ɬq'ɛ́csówəs 'five canoe paddles', ɬq'ɛ́csɛ́yiws 'five pants'

54. st'ɔ́χ 'fork (in a tree, a river, etc.)': t'χɔ́m 'six' and all its derivative or inflected forms

55. sƛ'ɔ́p 'deep': (s)ƛ'pí·wəl 'shirt, bra'

56. t'á·q'^{W}təm 'Saturday': t'q'^{W}á·t 'cut in half, split (of rope)'

57. sx^{y}f·x^{y}əc' 'woods': x^{y}c'f·ləm ~ x^{y}əc'f·ləm 'go through the woods'

58. c'k'^{W}ɔ́χ^{y} 'twenty': c'əkʼ^{W}x^{y}élə 'twenty people'

59. q^{W}ɔ́ɬ 'spill, tip over (of canoe)': q^{W}ɬɛ́·y 'driftwood' (lit. tipped over wood and bark)

60. θq'ɔ́t 'spear a fish'

61. θɔ́χ^{W} 'disappear': θχ^{W}á·təs 's-o concealed s-th'

62. x^{y}fx^{y}əc'əm 'stinking': x^{y}c'f·mθət 'smell oneself repeatedly stink, bad smell (of spoiled meat)'

63. cɔ́sətəm 'being told': csɛ́θà·m 'you were told'

64. c'ɬ·səm 'grow, grow up': c'sɬ·mtəs 's-o raised s-o, s-o let s-o grow up'

65. θ'ɔ́χ^{w} 'wash': θ'χ^{w}á·səm ~ θ'əχ^{w}á·səm 'wash one's face'

66. χɔ́ɬ 'hurt, ache': χɬɔ́m ~ χəɬɔ́m 'tired'

67. k'^{w}á·q^{w}ət 'hit s-o with club or stick-like object', k'^{w}á·q^{w}cəs 'red huckleberry picked by clubbing on the hand', k'^{w}á·q^{w}ləctəl 'axe' (Chehalis dialect): (s)k'^{w}q^{w}ɔ́m 'hatchet', k'^{w}q^{w}ɔ́ləc 'hit in the rump (with a stick)', k'^{w}q^{w}á·ləs 'hit in the eye(lid)', k'^{w}q^{w}ɔ́ləq^{w}t 'hit s-o in the head', k'^{w}q^{w}ɛ́·lɬ·yɛ 'hit on the ear', k'^{w}q^{w}ɬ·ləs 'hit on the chest'

68. ɬɬc'ət 'cut s-th, cut s-o': ɬc'ɔ́lqsəl 'cut the tip of the nose', ɬc'á·yθəl 'cut on the mouth'

69. c'ɔ́q'^{w} 'poke': c'q'^{w}ɔ́ɬp 'spruce tree'

70. c'ɔ́məɬ 'bite into s-th': c'mx^{y}á·yθəl 'chin, jaw'

71. steqtɛ́·l 'door': tqɛ́t 'close s-th'

2.3.3.5. $C_1VC_2 \rightarrow C_1C_2$ / V(C)___-Ś...

Examples are less common of this rule than of 2.3.3.4.

72. sc'ə̀l·ə̀x^{w} 'eddy': sc'əlx^{w}ɛ́yəq^{w} (ɛ ~ ɬ) 'Chilliwack'

73. sáχ^{w}əl 'grass': səsχ^{w}ɛ́yəl 'short grass'

74. sk^{w}ətɛ́x^{w} 'inside': k^{w}ətx^{w}ɬ·ləm 'come inside', sk^{w}ətx^{w}á·wəɬ t'á·mɛ́l 'carved post inside longhouse'

75. x^{y}əlá·k'^{w} 'be round', x^{y}əlɔ́k'^{w}tɬɛ 'roll s-th up': x^{y}əlk'^{w}á·ls 'round (fruit)'

76. łowíθ'ə 'naked' (< ł-owə 'no', -íθ'ə 'clothes'): łowθ'ém 'to undress'

77. cá·k^{w} 'far away, distant': cack^{w}á·ləs 'goatsbeard plant (Aruncus sylvester)'

2.3.3.6. $C_1VC_2 \rightarrow C_1C_2$ / S-___S...

This rule applies after high-stressed prefixes, of which the most common are diminutive reduplication R_4- and continuative prefix hé- ~ hó- (see 2.3.3.7 for more examples than are given here). Examples:

78. θəqé·t 'tree': θí·θqət 'little tree'

79. ƛ'əcés 'island': ƛ'íƛ'cəs 'little island'

80. sƛ'éləqəm 'Slalakum, supernatural creature': sƛ'í·ƛ'ləqəm 'little Slalakum'

81. x^{y}íx^{y}x^{w}əlè·wə 'fish air bladder'

82. χá·cɛ 'lake': χáχcɛ 'pond, small lake'

83. p'ép'χ^{w}əm 'quiet, shy'

84. léc'ə 'one': lálc'ə ~ láləc'ə 'one person'

85. k'^{w}əx^{y}ét 'count s-th': k'^{w}éx^{y}təs 'he's counting something'

86. //x^{w}ə- 'come', ʔí· 'here', -l 'on purpose', -əx^{w} '3rd person object', -əs '3rd person subject'//: x^{w}əʔí·lx^{w}əs 's-o brought s-th'

87. ləχéywɛ 'spear fish by torchlight': hélχɛywɛ 'spearing fish by torchlight'

88. wóq'^{w} 'drown, float downstream': háwq'^{w} 'floating downstream'

2.3.3.7. hé- 'continuative; plural' has predictable allomorphy before a limited set of roots.

hé- → hé- / ___y, l in certain roots

→ hé- / ___m, w in certain roots.

This morpheme cannot be used with most roots to express 'continuative' as can reduplication $-R_1-$ (see examples like yíyəq 'snowing', lélɛc'ɛ̀wtx^{w}əm 'visiting', mɛmíyət 'helping s-o' and wíwəqɛs 'yawning'). {hé-}, like the stress-shifting rules also used for 'continuative; plural' (2.3.3.2 and 2.3.3.3), can only be used with certain roots. {hé-} is limited to the examples shown here, so far elicited.

89. yéq^w 'burn': héyq^w - héyəq^w 'burning, fire'

90. yé·t 'to vomit': héyət 'vomiting', héyətélmél 'nauseated'

91. yéθət 'talk about s-o': hé(·)yθət 'talking about s-o'

92. yéθəst 'tell it': hé(·)yθəst 'telling it'

93. lép'əx^y 'eat': hélp'əx^y 'eating'

87. as above

94. léc'ə 'one', lélɛc'ə 'one person; alone': hɛlc'əlí(y) 'by themselves'

95. méq'ət 'to swallow': hémq'ət 'swallowing'

96. wəc'éƛ' 'fall, drop (intransitive)': héwc'əƛ' 'falling'

88. as above

92a. yá·t 'warn s-o': hé·yá·t 'warning s-o'

92b. yéq'es 'file (abbrasively)': héyq'es 'filing'

92c. yáθət 'back up': héyθət 'backing up'

94a. léqəm 'dive': hélqəm 'diving'

94b. lék^{w} 'broken (of bone or stick)': hélk^{w} 'pocket knife; being broken'

94c. ləχéywɛ 'to torchlight, spear fish from canoe by torchlight, lantern or firelight, pitlamp for fish': hélχɛywɛ 'torchlighting, spearing fish by torchlight, etc.'

95a. méx^{y} 'take it off': héməx^{y} 'taking it off (a button for example)'

96a. wəθ'ét 'tease s-o': həwθ'ét 'teasing s-o'

96b. wəc'é· 'get to the summit of a mountain': həwc'é· 'getting to the summit of a mountain'

96c. woq'^{w}éyləm 'drift downstream': héwq'^{w}ələm 'drifting downstream'

2.3.3.8. $C_1 \varepsilon y C_3 + R_1 \rightarrow C_1 \varepsilon y C_1 \ni C_3$ where C_1 is always post-velar. Examples:

97. q'éysət 'tie s-th': q'éyq'əsət 'tying s-th'

98. q'éyq'xèt 'he was contradicting s-o', q'εyq'xátəl 'they were contradicting each other'

99. x^Wéyləq^W or x^Wé·ylәq^W 'bird' (Chehalis dialect): x^Wéyx^{W}ələq^W 'small bird' (Chehalis dialect)

100. xéyp'ət 'scratch s-o or s-th': xéyxəp'í·ləp 'rake' (lit. 'scratching the ground')

101. q'éyq'əlstəlèq 'deceive'

102. xéymət 'grab s-th or s-o': xéyxəməls 'burdock'

103. q'éyxəl 'get black': q'éyq'əxəl 'getting black'

104. q'εyq'əlc'iyásəm spəhé(·)ls 'whirlwind'

105. xéyxəc'əm 'itching', xεyxəc'émθət 'real itching' (Tait dialect)

2.3.3.9. {-áməә} 'you singular object of verb' and {-álə} 'you plural object of verb' have similar stress shifts in the same environment: before {-cəl} 'I subject' and before {-cət} 'we subject'. Thus,

{-áməә} → -amə́ / ___-cəl, -cət

{-álə} → -alə́ / ___-cəl, -cət.

Examples will be found plentifully in the chapter on pronouns (k'^{W}əclamécəl 'I see you (sg.)', etc.).

2.3.3.10. {-əm} 'passive' → -ə̀m in the environment before {-ə̀t} 'negative or impossibility marker on passive'. Examples:

ʔəwə́tɛ sk^{W}ə́yəχtə̀mə̀t 'nothing could be done', ʔəwə́tɛ k^{W}ə́s k^{W}ə́tə́χ^{W}ə̀mə̀t 'nobody was inside', sk'^{W}ə́y k'^{W}ə́s mə́ytə̀mə̀t 'he/she/it/they (3rd person) can't be helped', sk'^{W}ə́y k'^{W}ə́s k'^{W}ə́clə̀mə̀t 'he, etc. can't be seen', sk'^{W}ə́y k'^{W}ə́s q^{W}ə́lstə̀mə̀t 'he, etc. can't be spoken to'. More examples can be found in the chapter on pronouns.

2.3.3.11. Sporadically stress is shifted onto the syllable before a subject or possessive pronoun. This seems more common before {-cət} 'we, our' than before other pronouns. I have not been able to find a way to predict when it will take place. Some examples are: sq^{W}ə̀ləwə́lcət 'our thought, we think', ʔɛ̓ɬtə́lstə́χ^{W}cət 'we feed him', tə lə́lə́mcət 'our house', t'ə́·ɬə́mcəl 'I sing', t'ə́·ɬə́mcəχ^{W} 'you sing', t'ə́·ɬə́mcət 'we sing', t'ə́·ɬə́mcɛp 'you (pl.) sing', t'ə́·ɬə́mɬɛ 'sing!'. It could be that sociolinguistic factors or features of emphasis or citation are involved here.

2.3.3.12. ə (within R_1) → i / ___y

This rule may be related to rule 2.4.1, q.v. Examples:

t'ə́(·)yəq' 'angry (once)': t'ə́t'iyəq' 'angry (continuous)'

mə́·yt - mə́yt 'help s-o': məmíyət 'helping s-o'

líyə́m 'laugh': líliyəm 'laughing'

pə́·yt 'bend s-th': spə́piy 'bent, crooked'

ə'iyk^{W}ə́(·)stəl 'wink': ə'iə'iyk^{W}ə́stəl 'winking',

θ'ɬθ'iyk^{w}asθéx^{y}əs 'he's winking at me'

2.3.3.13. θ (within R_1) → o / ___w

Examples:

spí·w 'ice': spípow 'frozen'

cé·cow 'beach, shore'

slílowyɛ 'seagull' (Chehalis dialect)

téwəl 'become light': stétow 'light, illumination'

łé·w 'run away': łéłow 'running away'

2.3.4. Ablaut. This section will begin with examples of each type of ablaut and will conclude with the analysis and discussion. As in the previous section, examples to the left of a colon show the base form or base vowel, and examples to the right of the colon show the results of the rule, the ablaut vowel. All examples are in phonemic transcription unless hyphenated (morphophonemic) to show affixation or enclosed in double slashes (morphophonemic) or unless enclosed in violin brackets, { }, to show morphemes.

i → i·

ʔíməx^{y} 'walk'[1]: ʔí·məx^{y} 'walking'

siyáləx^{w}ə 'old person': sí·yáləx^{w}ə 'old people'

sciwtéɬ 'son- or daughter-in-law': scí·wətéɬ 'children-in-law'

siyé·m 'person of high rank, chief': sí·yé·m 'high people, chiefs'

ʔítət 'sleep, go to sleep': ʔí·tət 'sleeping, asleep'

i → ɛ

p'íθ'ət 'squeeze s-th': p'éθ'ət 'sew s-th', p'éθ'təl 'needle'

yíq 'to fall (of snow)': q'əlsiyéqəm 'snowdrift'

---

1. A gloss like 'walk' is ambiguous in English; the word could be a noun or a verb. When the Halkomelem form is a verb the gloss will be given as 'walk' or 'to walk', although a verb with 3rd person subject is usually implied. When the Halkomelem form is a noun the gloss will be given as 'a walk'.

i → ɛ·

θíyt 'make s-th': θɛ́·yt 'making s-th'

θiyɔ́ɬcət 'make s-th for s-o': θɛ́·yəɬcət 'making s-th for s-o'

sk'^{W}fɬo 'in-law (parent-, child-, sibling-)': sk'^{W}ɛ́·ɬo ~ sk'^{W}éləɬo 'in-laws'

líyɔ́m 'laugh': lɛ́·yəm 'laughing' (note alternates lɛyɔ́m ~ lɛ́yəm 'laugh' and líləyəm ~ léyləyəm 'laughing')

sk^{W}iyɔ́χθəts 'what he did', sk^{W}íyəχtəm 'to be done': sk^{W}ɛ́·yχtəm 'doings, things to be doing'

i → ə

q'^{W}əyílex^{y} 'dance': q'^{W}əyɔ́l·əx^{y} 'dancing'

sq^{W}íq^{W}əmɛy 'puppy': sq^{W}ɔ́q^{W}əmɛy 'puppies'

síq'^{W}əm 'peel cedar bark': sə̀q'^{W}əmí·ws 'cedar bark skirt'

mí ~ ʔəmí 'come': mɔ́stəx^{W} 'bring s-th, give me s-th' (< mí + -sT 'causative' + -əx^{W} '3rd person obj.')

yíq 'to fall (of snow)': yəqəlsx^{y}ɛ́·y 'first snow'

ɬílθət 'bail it (water)': ɬéltəl 'a bailer'

ʔíχ^{W}ət 'sweep s-th': ʔéχ^{W}təl 'broom'

χ^{W}iχ^{W}iyɛ́m 'telling stories': sχ^{W}əχ^{W}iyɛ́m 'story'

i → a

θiyəq^{W}ɛ́·ls 'dig' (θíy 'make', q^{W}ɛ́· 'hole', -ɛ́·ls 'intransitive'): θáyəq^{W}əls 'digging'

p'íθ'ət 'squeeze s-th': p'áθ'əs 'basketry cradle,

baby basket' (< p'íθ' + -əs 'face')

swíwələs 'adolescent boy (10-15 yrs.)': swáwələs 'adolescent boys (10-15 yrs.)'

i· → ɛ·

sx^{w}əmlí·k^{w} 'parent's sibling': sx^{w}əmlé·lək^{w} 'parent's siblings'

c'í·x^{w}təs 's-o dries s-th': c'é·x^{w}təs 's-o is drying s-th' or,

c'í·yx^{w}təs 's-o dries s-th': c'é·yx^{w}təs 's-o is drying s-th'

łí·c'ət 'cut s-th': łé·c'təl 'knife', łè·c'təlélé 'knife-handle'

i· → ə

scí·ł 'first born', cícəł 'above, high': scəłá·yθəl 'upper lip'

łəqlí·səm 'to button', luł słəqlí·s 'it's buttoned': łəqlástəl 'a button'

łí·k^{w} 'hook, catch on hook': łék^{w}təl 'fish hook', łék^{w}x^{y}əl 'to trip' (hook the foot)

səlí·c' ~ səlíc' 'full': ləc'ét 'fill s-th up', lə léc' 'it's filled'

sx^{y}í·x^{y}əc' 'woods': x^{y}əc'í·ləm 'go through the woods'

łí·x^{w} 'three': łèx^{w}əlsx^{y}é 'thirty', łəx^{w}əlsx^{y}á·s 'thirty days'

x^{y}í·pət 'peel bark or root of tree': x^{y}əpá·lst 'peel fruit, vegetable or vegetable root' (-á·ls 'fruit')

łí·c'ət 'cut s-th': lə́c'cəs 'cut one's hand'

ε ⟶ i·

ʔέłtəl 'eat a meal': ʔí·łtəl 'eating a meal'

lέləm 'house': lí·ləm 'little house, cabin'

ε ⟶ ə

słέliy ~ słέlíy 'woman, female': słəliyá·lł 'girl child, young female'

ƛ'əlέx^W 'stopped; at home, (stop, action completed)': ƛ'ə́ləx^W 'stop, (stopping, action not completed)'

c'έx^{W}əłε 'shut up!': sk'^{W}έy k'^{W}əs c'əx^{W}əlá·yθəls 'he can't shut up' (he or any third person)

sk'^{W}έc 'eyesight', k'^{W}έcət 'look at s-th': k'^{W}ə́cləx^W 'see s-o or s-th', sk'^{W}əcá·stəl 'window, mirror' (lit. 'device to look at or see a face'), k'^{W}ə́cəwí·cəm 'look back'

q'έq'ət'əm 'sweet flavor': q'ət'əmέ·yəłp 'balsam tree' (lit. 'sweet bark tree' because of sweet sap)

mέqε 'fallen snow': məqá·s 'fallen snow season, moon of fallen snow, December'

x̣əq'έt 'a bluff (cliff)': sx̣əq'x̣ə́q'ət 'a little bluff'

ƛ'əcέs 'big island': ƛ'íƛ'cəs 'small island'

csέθà·m 'you were told': cə́sətəm 'being told'

possibly suffixes like: -έt ~ -ət '3rd person object', -έlə ~ -ələ 'people', -lέc ~ -ləc 'rump, bottom', -íθ'ὲ ~ -íθ'ə 'clothing', -έp ~ -əp 'ground, dirt' (see 2.3.6. for alternative explanation).

ɛy → ə

q'éysət 'tie s-th', q'éyq'əsət 'tying s-th',
sx^{w}q'éyq'əsəcəl 'netting shuttle (for making nets)';
q'ésq'əs(ə)cəl 'spider' ('the tier, net-maker'),
q'əsí·ltəl or q'əsíyəltəl '(woven) tumpline'

sχéyχə ~ sχé·χə 'sacred', sχɛχəsyúwəs 'bluejay, the sacred fortune-teller': sχəχəɬét 'Sunday'

χéyp'ət 'scratch s-o or s-th': sχəp'í·cəl 'chipmunk' (lit: 'striped back'), sχíχəp' 'stripes, marked line' (belongs here if R$_{4}$- 'diminutive' is here)

χé(·)ylt 'write s-th', sχé·yltəls 'footprints, tracks', χɛylχéliyá·səm 'it is written (in the sky)': χéltəl 'writing instrument, pencil, pen', sχəlé·ls 'writing'

ɛ → a

q'éyq'χèt 'he was contradicting s-o': q'ɛyq'χátəl 'they were contradicting each other'

q^{w}éyəl 'gone yellow': q^{w}áq^{w}ɛyəl 'getting yellow', q^{w}iq^{w}áyəls 'orange, orange (the fruit)'

t'épiθət 'it's dead (of a tree)', st'épi θəqé·t 'dead and broken tree': t'ápiθət 'it's going dead (of a tree)'

yéyətəl 'made friends', siyéyə 'friend': yáyətəl 'making friends'

χéƛ' 'rough, turbulent (of wind or water)': χáƛ'θət 'windy'

ɛ → a·

χɛ́yʌ̓ 'be cold', χɛyʌ̓'é1θ 'grizzly bear'; sχá·ʌ̓'θət 'brave, cranky, aggressive, ready to fight'

k'^{w}écət 'look at s-th'; k'^{w}á·k'^{w}əcət ~ k'^{w}ák'^{w}əcət 'looking at s-th' (2.3.3.1 optional here)

swéqəθ 'husband'; swá·wəqəθ ~ swáwəqəθ 'married woman ('having a husband')' (2.3.3.1 optional)

χ^{w}é·lé·łp 'willow (tree or bush)'; χ^{w}á·χ^{w}lé·łp 'a small or lone willow tree; Yale'

ɛ· → i·

k^{w}é·l 'hide oneself'; k^{w}ək^{w}í·l 'hiding' (with R$_{5}$-)

ɛ· → ə

θiyəq^{w}é·ls 'dig'; θáyəq^{w}əls 'digging'

c'ɛtɛ́·m 'crawl'; c'ɛ́təm 'crawling'

θé·t 'darkness'; θətí·l 'go dark, be dark'

lé·c' 'be different'; ləc'ó·mex^{w} 'different people', səléləc' 'two different things'

θəqé·t 'tree'; θí·θqət 'little tree', θəqθéqət 'forest, thicket'

ʌ̓'é·qt 'long, be long'; ʌ̓'əqtá·mθə' 'tall (of people)'

łəq'é·cəs 'five'; łəq'əclé·ł ~ łəq'écəs?é·ł 'five times', łəq'əcəlsx^{y}é 'fifty', łəq'əcəlsx^{y}á·s 'fifty days'

təqé·cɛ 'eight'; tèqəcəlsx^{y}é 'eighty'

qé·l 'steal'; qélqəl 'thief'

q^{w}è·l 'talk'; sq^{w}élq^{w}əl 'talking (noun)', q^{w}əlá·yθətəl

'musical instrument' (lit: 'talking lips device'), q^{w}əlq^{w}əlέ·yθəl 'talks too much, gabby, gossipy' (lit. 'repeatedly talking lips or jaw'), q^{w}élsθàm 'you are talked to', q^{w}élstəx^{w}əs 's-o spoke to s-o', q^{w}əlayθf·ləm '(birds, etc.) making music, moon of March'

q^{w}ɬέ·y (< //q^{w}əɬ-έ·y//) 'driftwood': q^{w}éq^{w}əɬiy (< //q^{w}éɬ-R_1-əy//) 'lots of little pieces of driftwood'

ptέ·məɬ 'ask s-o', piptέ·məɬ 'asking s-o': spét·əm 'asking (noun)', also a competing form pétməɬ 'asking s-o'

ε· → a

q^{w}è·l 'talk': q^{w}áq^{w}əl 'talking', q^{w}áq^{w}əlsθà·m 'you are being talked to'

χέ·m or χè·m 'cry, weep': χamá·θ'iyɛ 'name of youngest sister of Mt. Cheam ("cries because she can't see the Fraser River so lots of creeks run together there")'

k^{w}έ·t 'let s-o or s-th go', k^{w}έ·θáx^{y}əs 's-o let me go' shows root k^{w}έ· + -T '3rd person object': k^{w}álθəx^{w}əs 's-o dropped s-th'

ε· → a·

χέ·m or χè·m 'cry, weep', χɛhέ·məɬ 'cried for it': χəhé·məθət 'cry for oneself'

ƛ'έ·qt 'long, be long': x^{w}ƛ'á·qtəs 'long face, morose'

ʔisé·lə 'two': ʔisá·ləs 'two dollars'

łəq'é·cəs 'five': łəq'á·cəs 'five dollars'

təqé·cɛ 'eight': t(ə)qá·cá·s 'eight dollars'

ɛ· → u·

q^{w}è·l 'talk': q^{w}ú·lq^{w}əl ~ q^{w}ó·lq^{w}əltəl 'talking together, all talking'

łé·w 'run away': łú·wməθ 'run away from s-o'

ə → i

sq'ép 'a gathering': sq'əq'íp 'gathered'

q^{w}éq^{w}əléc 'to gossip': q^{w}íq^{w}əléc 'two of them gossiping, gossiping together'

téś 'get up to, come near': stətís 'near s-th, be near', stətisθéx^{y} 'near me'

sélsəl ~ sélsəltəl 'wool spindle, spinner': sílcəptəl 'firedrill' (-cəp 'firewood')

ə → i·

ʔəwá·ləm 'play': ʔí·wáləm ~ ʔí·wá·ləm 'playing'

ʔéx^{y}əl 'to paddle': ʔí·x^{y}əl 'paddling'

θ'ép'ayəq^{w} 'great great grandparent or -child': θ'əlí·p'ayəq^{w} ~ θ'əθ'í·p'ayəq^{w} 'great great grandparents or -children'

ʔé·x^{w}əstəs 's-o is giving gifts to s-o': ʔé·x^{w}í·təl 'they're sharing' (-təl 'reciprocal')

ə → ɛ

p'ék^{w} 'float, come to the surface': p'ɛp'ék^{w} 'floating'

θéq'əm 'drip': θéq'əm 'dripping'

ƛ'əwéls 'bark (of dog)': ƛ'éwəls 'barking' (beside these are alternative forms, ƛ'éwəls 'bark' and ƛ'éwƛ'əwəls 'barking' with iterative reduplication)

k'^{w}əx^{y}ét 'count s-th', k'^{w}x^{y}é·m 'count', c'k'^{w}éx^{y} 'number': k'^{w}éx^{y}təs 's-o is counting s-th'

k^{w}əléx^{y}t 'shoot s-th': sɛk^{w}əléx^{y} 'gun, arrow'

θéqələm 'to wait for fish with a dip net': θqéləm 'a waiting dip net', sθqéləm 'place where one waits with dip net for fish'

χék'^{w} 'get narrow, get wedged in': sχəχék'^{w} 'canyon (narrow, walled in with rock)'

q'éləχθà·m 'you are not known or recognized': q'élχ 'unfamiliar'

célq 'fall': célq 'falling'

χét'ə 'said to s-o': χət'éstəx^{w}əs 'they told him, s-o told s-o'

ƛ'élx^{y}əl 'spring salmon (generic)': ƛ'əlx^{y}élówéɬ 'jack spring salmon (small adult) with black nose'

ə → ɛy

q'əmás 'to dip-net': q'éyq'əmas 'dip-netting'

sχéle 'leg, foot': sχɛχéylə 'legs', ɬəχéylέx^{y} 'stand up'

qəp'á·s 'face down': qèyqəp'əyá·ɬə 'lay on one's stomach'

ə → ɛ·

sélƛ'ə 'older, oldest (of children)', sélƛ'ètəl 'older

sibling': sé·ʔ'ètəl 'older siblings, older cousins'

c'əʔ'ém ~ c'íʔ'əm 'jump': c'é·ʔ'əm 'jumping', c'éc'əʔ'-
-í·m 'jumping up and down, jumping along, jumping repeatedly'

x^{W}ámx^{y}ələm 'run, race': x^{W}əmx^{y}é·ləm 'running, racing'

θq'ót 'spear a fish': θé·q'əl 'spearing (a fish)'

q'élmət 'believe s-o': q'é·l 'believing'

q^{W}ól ~ q^{W}ál 'boil, cook': łətq^{W}é·ls 'to boil'

e → a·

héq^{W}ləx^{W} 'smell (with nose)': há·q^{W}ləx^{W} 'smelling', há·q^{W}ət 'smell s-th purposely'

q^{W}ól 'boil', łətq^{W}é·ls 'boil': sq^{W}á·ls 'pot', q^{W}á·ls (in one citation) 'boiling', łá·tq^{W}əm 'is boiling, being boiled'

pək'^{W}ém 'be dusty': sp'á·lk'^{W}əm 'dust'

p'éq' 'white, be white', p'əq'élqəl 'mountain goat' (probably 'white nose'): sp'á·q'əs 'bald eagle' ('white face')

ʔá·pəl 'ten': ʔəpá·ləs 'ten dollars', ʔəpá·léstəl ~ ʔəpáléstəl 'tenth moon, July'

ʔəmét 'sit down': ʔá·mət ~ ʔáʔəmət 'sitting down'

x^{y}á·k'^{W}əm 'bathe', x^{y}áx^{y}ək'^{W}əm 'bathing': x^{y}íx^{y}k'^{W}à·m 'swimming' (x^{y}í- is diminutive reduplication R$_{4}$-)

ʔíyəs 'amusement, having fun' (< ʔéy 'good', -əs 'face'): ʔiyá·sθət 'a whole bunch having fun'

sq^{w}élx^{y}əm 'dry snow that can drift' (cp. also sq^{w}étx^{y}əm 'fog'): sq^{w}əlx^{y}á·mə 'dry snow drifting in or coming in'

méqsəl 'nose', łc'élqsəl 'cut tip of one's nose': sméstá·qsəl 'snot', słaq^{w}əá·qsəl má·q^{w} 'wild turkey (lit. 'snot-hanging-down-nose bird')

sélsəl(təl) 'spindle for wool': sá·ləs 'get drunk, get dizzy' (lit. 'spinning face')

x^{y}əlék^{w}tłɛ 'roll s-th up!', x^{y}əlk^{w}á·ls 'round (of fruit, etc.)': x^{y}əlá·k^{w} 'be round'

t'éləsθax^{y}łɛ 'sit beside me!': st'elá·stəl 'sitting side by side'

x^{w}ém 'hurry': x^{w}á·mx^{y}ələm 'run' (lit. 'hurry foot')

k'^{w}éscəs 'burned hand', k'^{w}és- 'scald, burn': k'^{w}á·k'^{w}əs 'hot'

a → ɛ·

ʔáx^{w}əstəs 's-o gives s-o a gift': ʔé·x^{w}əstəs 's-o is giving gifts to s-o', ʔé·x^{w}í·təl 'they're sharing'

a → o

χ^{w}áq'^{w}ət 'pole a canoe', χ^{w}áχ^{w}eq'^{w}ət 'poling a canoe': sχ^{w}óq'^{w}təl 'a canoe pole'

a· → ɛ

s?á·wθ 'be in a hurry': s?éwθ 'hurrying'

a· → ə

má·q^{w} 'bird': mí(·)meq^{w} 'little bird'

x^{y}á·k'^{w}əm 'bathe': x^{y}íx^{y}ək'^{w}am ~ x^{y}ix^{y}k'^{w}á·m 'swimming'

sθ'á·m 'bone': sθ'əmí(·)wəl 'core, pith, seed, nut, center (of rock or anything)' (lit. 'bone inside'), sθ'əməlé·χəl 'elbow' (lit. 'arm bone'), θ'əmí·wə́cx^{y}əl 'lower leg' (lit. 'bone in (back?) of leg')

q^{w}á·m 'moss': q^{w}əmcá·ls 'cranberry', mą́·q^{w}əm 'swamp, marsh; Indian tea plant'

?á·pəl 'ten': ?əpé·lə 'ten people', ?əpá·ləs 'ten dollars', ?əpá·lə́stəl 'tenth moon, July'

θ'á·k^{w}s 'seven': θ'ə̀k^{w}səlsx^{y}é ~ θ'ə̀k^{w}əcəlsx^{y}é 'seventy', θ'ək^{w}səlsx^{y}á·s 'seventy days', θ'ək^{w}sé·lə 'seven people', θ'ək^{w}sé‡ 'seven times'

χəʔá·θəl 'four': χəθəlsx^{y}é 'forty'

x^{w}á·mx^{y}eləm 'run': x^{w}əmx^{y}é·ləm 'running'

qá· 'water', qá·qə ~ qáqə 'drink', qəqá· 'high water', qá·łcɛ 'juicy': sqəʔá·ls 'juicy fruit', qəʔá·ləs 'tear (lit. eye water)', qəmá· 'suckle; breast; milk'

stá·lo(w) or stá·ləw 'river', tá·l 'go down to the river', státəlo(w) or státələw 'creek, stream': təltələwé·m 'lots of little streams (like on a hill after a rain)', təltí·t or təltíyt 'upriver dialect, (specifically) Tait dialect'

sá·χ^{w}əl 'tall grass, hay': səsχ^{w}éyəl 'short grass'

t'á·k'^{w} 'home, go home': t'ə́k'^{w}stəx^{w}əs 'they took him

home, s-o takes s-o home'

yá·k'^{W}ət 'break s-th, crumple s-th': yék'^{W}leχ^{W} 'broke s-th by accident'

θ'əχ^{W}á·səm 'wash one's face': θ'éχ^{W}əsəm 'washing one's face', sxθ'éχ^{W}əsəm 'wash basin, s-th to wash one's face in'

sq^{W}á·mθ' 'lump': q^{W}émx^{W}cəs 'lump on hand, lump of wrist', q^{W}émx^{W}x^{y}əl 'lump of ankle', q^{W}əmq^{W}əmx^{W}cəs 'all the knuckles and joints on the hand' (Chehalis dialect)

sá·ləs 'get drunk, get dizzy': sélés 'getting drunk, getting dizzy'

tá·lθət 'wonder', tatí·lθət 'wondering', tatí·lt 'learn, understand', tətlá·mət 'understand': tətlá·mət 'understand', tél·əx^{W}əs 'he understands it, he finds it out'

possibly suffixes like: -á·s ~ -əs 'face', -á·s ~ -əs 'moon, cyclic period', -á·yθəl ~ -əyθəl 'lip, jaw', -á·məθ' ~ -əməθ' 'height', -á·lɬ ~ -əɬ 'young', -lá·mət ~ -ləmət 'oneself (reflexive)', and -á·məx^{y} ~ -əməx^{y} 'appearance, -looking'

o → i

mók'^{W} ~ mék'^{W} 'all, everything, everybody', mok'^{W}á·t 'take it all': səmík'^{W} 'all of them (of people)'

χ^{W}oχ^{W}iyém 'tell some stories': χ^{W}iχ^{W}iyém 'telling stories'

The examples above are all the examples found of ablaut to date. A number of approaches were tried searching for a phonological, morphological, or semantic way to predict ablaut without listing roots. (Let us call a stem by the vowel which will change with ablaut: θíy-t 'make s-th' would be an "i-stem"; and let us call varieties of ablaut by the resulting vowel, shown after a capital A: thus "Aé·" can be read as "é· ablaut". θíy-t for example is an i-stem with 'continuative' Aé·; another way of putting it is, θíy-t has i → é·; thus θíy-t becomes θé·y-t 'making s-th'.)

One can see the influence of phonological rules given in preceding sections (particularly that of stress rules upon ɛ → ə, ɛ· → ə, ə → ɛ, ə → ɛ·). But given the stress pattern and phonological descriptions of roots, one still cannot predict more than a few cases of ablaut. Even roots which have quite similar shapes can take different ablauts. For example, among i-stems: θíy-t 'make s-th', θiy-éɬc-ət 'make s-th for s-o', and θiyə-q^{w}é·-(ə)ls 'dig' (lit. 'make a hole' since q^{w}é· means 'get a hole, be a hole') become θé·y-t 'making s-th', θé·y-əɬc-ət 'making s-th for s-o', and θéyə-q^{w}ə-ls 'digging'; also compare p'íθ'-ət 'squeeze s-th', p'éθ'-ət 'sew s-th', and p'áθ'-əs 'basketry cradle' (lit. 'squeezes the face'), all

from the same root.

Among ɛ-stems we have łə-χéyl-əx^{y} 'stand', χéyl-t 'write s-th', χéƛ' 'turbulent (of wind or water)', χéyƛ' 'be cold', compared with łə-χé·yl-əx^{y} 'standing', s-χél-təl 'a writing instrument', χáƛ'-θət 'windy', and s-χá·yƛ'-θət 'crəŋky, aggressive, brave', respectively.

Among ɛ·-stems there are ƛ'é·qt 'long' and q^{w}è·l 'talk, speak' which compare with ƛ'əqt-á·məθ' 'tall', x^{w}-ƛ'á·qt-əs 'long face; morose', q^{w}él-st-əx^{w} 'speak to s-o', q^{w}áq^{w}əl-st-əx^{w} 'speaking to s-o' (-q^{w}ə- is infixed reduplication), and q^{w}ú·l-q^{w}əl 'talking together, all talking' (Aú·, final -q^{w}əl is suffixed reduplication).

Among ə-stems contrast ʔəwá·l-əm 'play', ʔəmə́t 'sit down, sit up', q'éləχ-t 'not know s-o, not recognize s-o', q'él-m-ət 'believe s-o', q'əm-á(·)s 'to dip-net', k^{w}əl-ét 'hold s-th (in one's hands)', q^{w}éls 'to boil' with ʔí·wá·l-əm 'playing', ʔá·məl ~ ʔáʔəməl 'sitting down, sitting up', q'élχ 'unfamiliar', q'é·l 'believing', q'éyq'əm-à(·)s 'dip-netting', k^{w}é·lé·m 'hold or contain s-th' (relevant only if < k^{w}əl- 'hold in hand' + -é·m or if < k^{w}əl- 'hold' + -é·lé 'container', but not if < k^{w}- (stem formative) + -é·lé 'container'), and q^{w}á·ls 'boiling'. This last set shows similar members of pairs of roots taking Aí· and

Aá·, Aé and Aé·, and Aéy, Aé· and Aá·; all but one example had the same ablaut function, 'continuative'. These sets dispose of the notion that, given the stem vowel which ablauts and given its adjacent consonants, one can predict the type of ablaut a stem may take. Rules like i → i·/ C_a___C_b

→ ɛ / C_d___C_e

→ ɛ·/ C_c___C_f

→ ə / C_g___C_h

etc. cannot be written for these ablaut types. Neither can rules dependant only on the consonantal environment, like V → i·/ C_a___C_b

→ ɛ / C_c___C_d

→ ə / C_g___C_h

etc., as will be seen in the next paragraphs.

Another method of phonological prediction tried began with arranging all the examples by ablaut type (regardless of stem vowel). Thus all examples of Aí· were compared with each other, then all examples of Aí, Aé, Aéy, Aé·, Aə, Aá, Aá·, Aú·, and Aó. This did not reveal complete predictability of ablaut types, but it did reveal some things about ablaut types. The first thing noticed was that all types of ablaut, except Aə, appear to either attract high stress to the changed vowel or to retain the high stress of the original vowel or to occur in conjunction with a rule which

shifts high stress onto the position of the ablaut vowel (as often does 2.3.3.2). All resulting ablaut vowels are thus stressed except //ə//. From now on, stress will not be written on ablaut types. With Aə, 19 out of about 100 examples had a stressed ə́, but 15 of these were monosyllabic roots with suffixes which are stress-repellant (never found with stress). The remaining four cases cannot be surely explained as yet: q'^{W}əyíl-əx^{y} 'to dance': q'^{W}əyə́l-əx^{y} 'dancing'; ɬəqlí·s-əm 'to button': ɬəqlə́s-təl 'a button'; sq^{W}íq^{W}əmɛy 'puppy': sq^{W}ə́q^{W}əmɛy 'puppies'; sə́·l-əs 'get drunk, get dizzy': sə́l-ə́s 'getting drunk, getting dizzy'.[2]

The second thing noticed from arrangement by ablaut types was that one cannot predict ablaut type just from the consonantal environment. There are many consonantal environments which enclose a variety of ablaut types. For example, ?___m has Ai· and Aa·,

---

2. sq^{W}íq^{W}əmɛy comes from s- 'nominal', C$_{1}$í- 'diminutive' reduplication, -q^{W}əmə́y 'dog', and q'^{W}əyíl-əx^{y} may come from q'^{W}ə́yɣ 'to shake', -í·l 'go, come', -əx^{y} 'standing'. It is possible that these stressed affixes must retain stress even if ablauted. The case of sə́l-ə́s may be a simple mistranscription for səl-ə́s (though the stressed version of -əs 'face' is usually -ə́·s)(root sə́·l is itself derivationally ablauted from səl 'to spin').

k^w___l has Ai·, Aɛ·, and Aa, q^w___q^w has Ai, Aə, and Aa, p'___θ' has Aɛ and Aa·, θ___q' has Aɛ and Aɛ·, q___l has Aɛ and Aə, q'___l has Aɛ and Aɛ·, q'___q' has Aɛy and Aə, ɬ___c' has Aɛ· and Aə, q^w___l has Aɛ·, Aə, Aa·, and Au·, l___s, ƛ'___qt, q'___c, and q___c each have Aə and Aa·, and sw___w has Aa and Aa·. Prediction is still impossible if we consider adjacent syllables in the search for environmental patterns.

The third thing noticed from arrangement by ablaut types is the relative frequency of each ablaut type. 50 percent of the over 200 examples are Aə, about 15 percent are Aa·, about ten percent are Aɛ·, from seven to five percent are Aɛ, Aa, and Ai·, and less than four percent are Ai, Aɛy, Au·, and Ao. In suffixes true ablaut is not common, but wherever there is allomorphy involving vowels, schwa is one of the vowels and a stressed vowel (not a schwa) is usually the other.

The only way in which some predictability of ablaut type is achieved is by considering the stem vowel and the ablaut function. No predictability is achieved from considering ablaut function alone because 'continuative' is signified by all ablaut types but Ao, 'plural' by all but Ai, Aa·, Au·, and Ao, and derivation by all but Aɛy; these gaps are only in the least common ablaut types and most likely are accidental.

Some predictabilty of ablaut type can be achieved by looking at the stem vowel which gets changed. The following ablaut types are attested with the following stem vowel types:

i-stem: Ai·, Aɛ, Aɛ·, Aə, Aa, Aa·

i·-stem: Aɛ·, Aə

ɛ-stem: Ai·, Aɛ·, Aə, Aa, Aa·

ɛy-stem: Aə

ɛ·-stem: Ai·, Aə, Aa, Aa·, Au·

ə-stem: Ai, Ai·, Aɛ, Aɛy, Aɛ·, Aa·

a-stem: Aɛ·, Aə, Ao

a·-stem: Aɛ, Aə

o-stem: Ai

Unfortunately there doesn't seem to be any systematic patterning at work behind the above sets. Some ablaut types however are limited to specific functions:

derivation	continuative	plural
i→ ɛ,ə,a·	i→ i·,ɛ·,ə,a	i→ i·,ɛ·,ə,a
i·→ ɛ·,ə	i·→ ɛ·	i·→ ɛ·
ɛ→ ə,a,a·	ɛ→ i·,ə,a,a·	ɛ→ ə
ɛy→ ə		
ɛ·→ ə,a,a·,u·	ɛ·→ i·,ə,a,u·	ɛ·→ ə
ə→ i,i·,ɛ,ɛ·,a·	ə→ i,i·,ɛ,ɛy,ɛ·,a·	ə→ i·,ɛ,ɛy,ɛ·
a→ ə,o	a→ ɛ·	
a·→ ə	a·→ ɛ,ə	
o→ i	o→ i	

There is nothing particularly systematic about the above limitations. However the tables do allow statements to be made like:

a.) When an i-stem has derivational ablaut it will be Aɛ, Aə, or Aa·,

b.) When an i·-stem has continuative or plural ablaut it will be Aɛ·,

c.) When an o-stem has ablaut it will be Ai, and

d.) Plurals of stems in ɛy, a, a·, or o are formed only by means other than ablaut (i.e., reduplication or infixing -əl-).

There are, finally, a few lexical suffixes which trigger specific types of ablaut. These suffixes are not the only causes of these types of ablaut, but do account for a fair number of cases.

1. ɛ(·)→ á· / ___...-əs 'dollars, money'

2. ɛ·→ á· / ___C$^{-y(x,\#)}$...-(ə)θət 'for oneself'

3. some (ə,ɛ·,i)→ á· / ___...-á·s ~ -əs 'face'

4. some ɛ→ á· / ___...-á·s ~ -es 'moon, cyclic period'

(It is quite probable that the suffixes in 1, 3, and 4 are actually a single suffix, 'round things'.)

5. unrounded vowel → ə / ___...-əlsx^{y}ɛ́ 'times ten'

6. vowel → ə / ___...-á·yθəl 'lip, jaw', -f·ləs 'chest'

7. ɛ(·)(y)→ ə / ___...-f·l 'go, come'

8. some vowels → ə / ___...-təl 'device'

The "..." means anything intervening except word bound-

ary. The changes shown apply to all vowels of the correct shape, anywhere in the stem preceding the suffix. For example, /təqé·cɛ/ 'eight' → /təqəcəlsxʸɛ́/ 'eighty' and /təqá·cá·s/ 'eight dollars'. More examples of each suffix will be found in the chapter on lexical suffixes.

2.3.5. Vowel Combination and Metathesis.

2.3.5.1. There are some cases of insertion of glottal stop or glottal spirant to prevent vowel mergers. {-á·lɬ} 'young' and {-é·lɛ́} 'container of' have both ʔ and h insertion in rules to be found in 2.3.6. {-əlәp} 'second person plural possessive' has ʔ inserted after a preceding vowel; for example, tɛ kʷəšúʔəlәp 'you folks's pig' and tɛ šúkʷəʔəlәp 'you folks's sugar'. Other examples of ʔ-insertion occur between vowel-final morphemes and vowel-initial suffixes {-é·ləws} 'leaf', {-é·ltəl} 'medicine', {-í·ləs} 'chest', {-éləqʷ} 'head', {-á·ls} 'fruit, round object', {-á·ləs} 'eye', {-íwɛ́t} 'rump', {-íwəl} 'insides, inside', and unique cases of {-é·wtxʷ} 'house, building' and {-élə} 'people' (which normally have vowel merger). The examples found are (in phonemic transcription): c'akʼʷəʔé·ləws 'skunk cabbage leaf', xʷəqʼʷəlәʔé·ltəl 'hangover medicine', ɵ'əlәʔé·ltəl 'heart medicine, juniper', sc'ɛʔí·ləs 'Chehalis', sqəʔéləqʷ 'soft spot on a baby's head' (Tait dialect), sqəʔé·ls 'soft spot on a baby's head'

(Chilliwack dialect), sqə?ɛ́·ls 'juicy fruit' (homophonous), qə?ɛ́·ləs 'tear' (qɛ́· 'water', qɛ́yqə 'soft'), st'alə?ɛ́·ləstəl 'eyeglasses', lɛmɛ́?íwɛ́t 'kick in the rump' (lɛmɛ́t 'kick s-o'), sq^{W}ɛ?í·wəl 'hollow', x^{W}ə?í·wəl 'generous, kind-hearted', tɛ̀lə?ɛ́·wtx^{W} 'bank' (tɛ́lə 'money, dollars'), and təqɛ́cɛ?ɛ́lə ~ təqɛ́cɛ́·lə 'eight people'. Apparently ?-insertion is morpheme-dependant and takes place across morpheme boundary. Very few examples have been found of ?-insertion within a morpheme: x^{W}ɛθtɛ́ləm 'get cloudy': sx^{W}?ɛ́θtəl 'clouds' is one example. Such insertion is apparently derivational and has nothing to do with preventing vowel mergers.

2.3.5.2. Whenever insertion of ? or h does not occur, two adjacent vowels combine or merge according to the following rules:

$V\cdot_1 + V(\cdot)_2 \rightarrow V\cdot_1$

$V_1 + V\cdot_2 \rightarrow V\cdot_2$

$V_1 + V_2 \rightarrow V_2$

Examples:

sx^{W}í· + -əlɛ́·χəl: sx^{W}(?)í·lɛ́·χəl 'armpit' ~ 'right arm'

qá· + -ɛ́łcɛ: qá·łcɛ 'juicy'

s-tə?ɛ́· + -í·wəl ~ -əwəl: stə?ɛ́·wəl 'think, thought'

x^{W}θá· + -əq^{W}: x^{W}θá·q^{W} 'big head'

s(x^{W})θí· + -əqəl: s(x^{W})θí·qəl 'loud (voice)'

s-q^{W}ə-q^{W}ɛ́· + -əls: sq^{W}əq^{W}ɛ́·ls 'a borer'

s-q^{w}é· + -ɛ́p ~ -əp: sq^{w}é·p 'mountain lake on the south-east side of Mt. Cheam' (lit. 'hole in the ground')

?isɛ́·(lə) + -é·łp: ?isɛ́·łp 'two trees'

θiy(ə) + q^{w}ɛ· + -é·ls: θiyəq^{w}é·ls 'dig'

s-q^{w}é· + -é·lɛ́: sq^{w}é·lɛ 'area around base of Little Mountain where there's an Indian graveyard'

t'é·qɛ ~ t'é·qə + -é·łp: t'éqè·łp 'salal plant'

?əlílə + -é·łp: ?əlílè·łp 'salmonberry plant'

cəlq-á·mə + -é·łp: cəlqá·mé·łp 'blackcap bush'

lɛ́c'ə + -é·x^{w}: ləc^{ɔ}é·x^{w} 'once'

sí·lə, méłə, sísələ, səlsí·lə + -è·ł: (respectively) sí·lè·ł 'late grandfather', méłè·ł 'late child', sísəlè·ł 'late grandmother', səlsí·lè·ł 'late grandparents'

mé·qɛ + -á·s: məqá·s 'moon of fallen snow, December' (this derivation includes Aə)

lɛ́c'ə + -é·wəs: 'one canoe paddle'

ł-ɛ́wə + -íθ'ɛ ~ -íθ'ə: łowíθ'ɛ ~ łowíθ'ə 'naked'

θ'ələ́ɛcɛ ('name of elder Wealick brother') + -iyɛ ('diminutive') + -təl: θ'ələ́ciyɛtəl 'name of Richard Malloway Sr.'

-əlsx^{y}ɛ́ + -é́lə: -əlsx^{y}é́lə as in łəx^{w}əlsx^{y}é́lə 'thirty people', and also as in 40, 50, 60, 70, 80, and 90 people.

lɛ́c'ə + -əs: lɛ́c'əs 'one dollar', s-lɛ́c'əs '1:00'

?isé·lə + -əs: ?isé·ləs '2:00', (+Aa·) ?isá·ləs 'two dollars'

2.3.5.3. Remaining forms showing vowel and stress alternations can be described by metathesis or by three rules for each one (two kinds of ablaut and one stress shift). The metathesis explanation seems simpler:

/ʔiyá·təl/ 'fight': /ʔá·ytəl/ 'fighting'

/k^{w}ésuyəl/ 'throw out a drift net': /k^{w}sé·yəl/ 'drift-netting down the river'

/ƛ'éx^{y}təm/ 'diarrhea': /ƛ'x^{y}étəm/ 'continuing diarrhea'

/k'^{w}əx^{y}é·t ~ k'^{w}x^{y}é·t/ 'count s-th': /k'^{w}éx^{y}təs/ 'counting s-th'

/t'élq'^{w}əm/ 'warm (glow of fire), lukewarm':

/t'əlélq'^{w}təl/ 's-th warm, Indian name of Old Jack'

2.3.6. Suffix Allomorphy Involving Vowel Alternations. In proceding from semantics to phonetics, these rules follow the numeral allomorphy rules (see chapter on numbers) and precede the stress rules (as they assign stress to the suffixes).

1. //-élə// 'people'

→ -ələ / yéys, t'χém___

→ -ə / χəθél___

→ -élə / _ _ _ (elsewhere)

2. //-əɬp// 'tree, plant'

→ -é·ɬp / ɬx^{w}, ɬq'écəs___

→ -é·ɬp / V___

→ -éɬp / #C(C)___

→ -əɬp / _ _ _

3. //-é·wtx^{w}// 'house, building'

→ -əwtx^{w} / CV́·C___

→ -é·wtx^{w} / _ _ _

4. //-ləc// 'rump, bottom'

→ -léc / sq'ép, q^{w}éq^{w}ə(l), ƛ'ép, łéq',
st'éχ, c'és___

→ -éləc / ƛ'élqt, (s)ƛ'ép', sł, θíy, k'^{w}əq^{w},
k'^{w}és, spé·θ, čékəl___

→ -ələc / ʔá·k^{w}, x^{w}ák'^{w}, sx^{w}ʔéθ, yéq, θéy,
θ'q'ém, χəq'ét, slék(')^{w}___

→ -(ə)léc / θ'(əc)___x^{y}əl

→ -ləc / sθ'ém, k'^{w}á·q^{w}, swék', θ'éməx^{w},
sq'éw, sk'^{w}í·, (s)c'é, léθ'i,
q'é, sk^{w}é, łiłəltél___ (i.e. _ _ _)

(In the last line the preceding morphemes could each end in /l/, as they are not independantly attested.)

5. //-á·s// 'face' shows dissimilation

→ -əs / (á·, é, í, éy)C, éy___

→ -á·s / əC, iy, #CC___

6. //-é·s// 'cyclic period, moon'

→ -əs / V́C___

→ -á·s / əC, V___

7. //-é(l)qsəl// 'nose, point'

→ -əqs / sqéw, pχ^{w}íy, yéq^{w}, sʔél,
sx^{w}éq'^{w}əl___

→ -əlqs / łíłk'^{w}___

continued

//-ə́(l)qsəl// → -əqsəl / qəláθ, tə́mk^{w}, x̣ɛ́yp', pəpəx̣^{w}íy___

→ -ə́qsəl / m, təl·___

→ -ə́lqsəl / ɬə́c', c'ə́px̣___

→ -qsəl / sθ'ə́m, sq^{w}əlq^{w}ə́l, s?ɛ́l, V___

8. //-í·wəl// 'insides, inside'

→ -əwəl / sq^{w}ɛ́l___

→ -í·wəl / _ _ _

9. //-á·yθəl// 'lip, jaw'

→ -əyθəl / ___-í·l

→ -á·yθə / ___-təl

→ -á·yθəl / _ _ _

10. //-(l)ɛ́·lwəs// 'stomache'

→ -(l)ə́lwəs / qə́l___

→ -(l)ɛ́·lwəs / x̣ə́ɬ___

11. //-əlɛ́·x̣əl// 'arm'

→ -yɛ́·x̣əl / sk'^{w}ə́l___

→ -ələ́x̣əl / #q'___

→ -əlɛ́·x̣əl / _ _ _

12. //-á·məθ'// 'height'

→ -á·θ' / x̣ɛ́·m-Aa___

→ -əməθ' / c'í·ƛ'___

→ -á·məθ' / ƛ'əqt___ (i.e. _ _ _)

possibly related to or → -ɛ́·məc' / ?isɛ́lə, ?iy___

13. //-ə́wəs// 'canoe paddle'

→ -əwəs / ?əpɛ́l___

→ -ɛ́·wəs / Cl, V___

→ -ə́(·)wəs / _ _ _

14. //-qəl// 'language'

→ -qéyl / ___-əm

→ -qəl / _ _ _

15. //-á·lɬ// 'young'

→ -ʔá·lɬ / $C^{-l,y}V$___

→ -há·lɬ / (l,y)ə___

→ -əɬ / stɛ́·x^{w}, sƛ'ƒƛ'əq___

→ -á·lɬ / C___ (i.e. _ _ _)

16. //-ɛ́·lɛ́// 'container of, receptacle for'

→ -əlɛ / x^{w}ƒyəq^{w}___

→ -élɛ́ / θ'és, χéləw___

→ -ʔɛ́·lɛ́ / $C^{-l,y}V$___

→ -hɛ́·lɛ́ / (l,y)ə___

→ -ɛ̀·lɛ̀ / V́C((C)VC)___

→ -ɛ́·lɛ́ / _ _ _

17. //-V́·wəɬ// 'vessel, container'

→ -ɔ́·wəɬ / c'éq'^{w}___

→ -ɛ́·wəɬ / c'ƒc'əm, x^{y}___

possibly → -á·wəɬ / sk^{w}ətɛ́x^{w}___

→ -wəɬ / _ _ _

18. //-əq// 'male'

→ -ɛ́·q / #θ___

→ -əq / _ _ _

19. //-ƒθ'ɛ̀// 'clothing'

→ -θ'ɛ́ / ɬówə___-ɛ́·m

→ -ƒθ'ɛ̀ ~ -ƒθ'ə / _ _ _

20. //-ép// 'ground, dirt'

→ -ép / sθíy, sq'éx___

→ -íp / sq^{w}él, ƛ'és___

→ -əp / V́·(C)___

→ -ép / V́C, VC___ (i.e. _ _ _)

21. //-lá·məṯ// 'oneself (reflexive)'

→ -ləməṯ / ɬistél)___

→ -lá·məṯ / _ _ _

22. //-é·y// 'bark and wood'

→ -éy ~ -íy / sləw___

→ -əy ~ -iy / V́C(V)C___

→ -é·y / _ _ _

23. //-è·ɬ// 'deceased'

→ -éyɬ / swélm___ (< s-wélém + Aə deriv.)

→ -è·ɬ / V___ (i.e. _ _ _)

possibly related to //-(ə)ɬ// 'past'

24. //-təl// 'device, instrument for'

→ -tél·l / stəq, possibly p'íp'ək^{w}___

→ -təl / _ _ _

25. //-í·ls// 'tool, device'

→ -əl / lá·θ, sɬəc'í·m___

→ -í·ls / θ'éx^{w}, sx^{y}á·x^{w}, yéq^{w}əqs, x^{w}ə?íq'^{w}əw___

→ -əls / _ _ _

26. //-é·m// 'strength' shows dissimilation

→ -é·m / CéC___

→ -ém / CéC___

27. //-á·mǝx^{y}// 'appearance, -looking'

$$\rightarrow \text{-}\text{ǝ}\text{m}\text{ǝ}\text{x}^{y} \;/\; \acute{\text{C}}\text{V}\cdot\text{C}\_\_$$

$$\rightarrow \text{-á·m}\text{ǝ}\text{x}^{y} \;/\; \_\_\_$$

28. //-é·ls// 'intransitive' → -ǝls only under 'continuative' ablaut. //-x^{y}ǝl// 'foot, leg' → -x^{y}él only under 'continuative' or derivational ablaut. //-ǝx^{y}// 'upright, standing, erect' → -éx^{y} and -áx^{y} only under 'continuative' or derivational ablaut.

See the chapter on lexical suffixes for examples of all the above thirty suffixes.

The above rules show all the lexical suffixes with independent vowel alternations which have come to light so far and most inflectional ones with such vowel alternations. In each case one allomorph has a stressed vowel (í·, é·, é, á·, or á) and another allomorph replaces it with a schwa in that position (usually unstressed). As a result of the above rules and the stress rules in 2.3.1, the stressed allomorphs occur after an unstressed syllable or after a word-initial consonant or consonant cluster; the unstressed allomorphs occur after a stressed syllable. The stress of the preceding syllable cannot be used to predict complementary distribution of all the lexical suffixes above without recasting the stress rules in 2.3.1 and adding many more (ad hoc) rules to predict the stressed allomorphs of each root. And one is still left with a

healthy number of suffix rules to predict the allomorphs of suffixes which have more than one stressed or more than one unstressed allomorph.

A few more sets of allomorphic rules have been omitted from this chapter (for example those for numeral roots and for pronoun affixes) because they can be presented more clearly in conjunction with the chapters showing their morphological systems.

2.4. Consonant Alternations and Combinations.

One of the most interesting consonant alternations is l → y. Since this change involves a vowel and stress shift as well, it can be characterized as

1. //əl// → íy / ___-əɬp

Some examples of this (in phonemic transcription) are:

méc'əl 'black haw berry' → mɛc'íyəɬp 'black hawthorn tree'

ƛ'íkʼʷəl 'pea, bean, Kinnickinnick berry' → ƛ'ikʼʷíyəɬp 'pea or bean vine, Kinnickinnick or Indian tobacco plant'

θ'ɔ́stəl 'metal nail' → θ'əstíyəɬp 'poplar tree' (so called because it resembles an upright nail)

θ'q'ʷí·wəl 'open sores inside legs or rump, hemorrhoids' → θ'q'ʷí·wíyəɬp 'swamp gooseberry' (used for medicine for open sores and hemorrhoids)

*θ'ɔ́·lθ'əl (unattested but clearly reduplicated) → θ'ɔ́·lθ'íyəɬp 'tall Oregon grape bush'

*θ'éχ^{w}əl (unattested but θ'éχ^{w} 'wash' + -əl 'intransitive' probably occurs) → θ'əχ^{w}ɬyəɬp 'red osier dogwood' (used as a purgative to wash out impurities or worms in one's system)

2. //əl// → ∅ / ___-í·l 'come, go'. As in the last rule (2.4.1), the change applies to any morphophonemic sequence of //əl// (with one exception, qəlqəlí·l 'destroy, break (and throw away)'). Some examples:

sqéməl 'pit house' + -í·l → sqəmí·l ~ sqəmì·l 'inside a pit house'

q'ɛ 'together' + -x^{y}əl 'foot' + -í·l 'go, come' + -T 'third person object' → q'ɛx^{y}í·lt 'go with, come with, be partner with s-o' (cp. s-q'á·-x^{y}əl 'partner')

qəl 'bad' + -əyθəl 'lips, jaw' + -í·l 'go, come' + -əm 'medio-passive' → qələyθí·ləm ~ qəliyθí·ləm 'say bad words, swear, curse'

q^{w}əl 'talk' + -á·yθəɬ 'lips, jaw' + -í·l + -əm → q^{w}əlayθí·ləm 'making music; March (when birds begin making music)'

3. //T// → θ / ___-áx^{y} 'lst person singular object, me', -áme '2nd person singular object, you'

→ t / _ _ _.

This morphophoneme appears in several very common verbal inflections: //-T ~ -əT ~ -éT// 'do purposely' and //-sT// 'causative, cause to do s-th'. I have used

the symbol T following Wayne Suttles[2]. For examples of this morphophoneme see the pronoun chapter.

4. //θ'// sporadically appears as /c'/ instead of /θ'/. For example, 'skunk' /sθ'ópəq/ ~ /sc'ópəq/, 'medium-sized woodpecker with red under wing (red-shafted flicker)' /θ'í·q/ can probably be equated to 'small red-headed woodpecker (red-breasted sapsucker?)' /c'í·q/, 'osprey, fishhawk' /θ'óx^{w}θ'əx^{w}/ ~ /c'óx^{w}c'əx^{w}/, and 'swamp gooseberry' /θ'q'^{w}í·wíyəłp/ ~ /c'q'^{w}í·wíyəłp/. When questioned on this alternation, native speakers seem to regard /θ'/ as more basic and pronunciations of /c'/ as idiolectal or dialectal variation, lenis pronunciation (perhaps sociolinguistically inferior) or error. It is unclear whether this variation is restricted to certain morphemes or can occur with any morpheme containing //θ'// if the sociolinguistic conditions are right.

5. Glottalization and deglottalization have a derivational function in a few sets of examples but are too unsystematic to be given the status of a morphophonemic rule. Examples:

p → p' as in s-ƛ'əp 'deep, down', ƛ'əp-í·l 'go down, descend' beside s-ƛ'əp'-ól·əc 'tail', ƛ'əp'-ól·əc-əm 'wagging its tail'; also sq'óp 'together, a gathering' beside sq'əp'á·lθətel 'kneel

2. Wayne Suttles: Unpublished grammatical notes on Musqueam Halkomelem for Anthropology 407, Winter 1969, Portland State University, Portland, Oregon.

θ → θ' as in θéχ^{W} 'disappear', θəχ^{W}-á·t-əs 's-o concealed s-th' beside θ'éχ^{W} 'burn out, go down (of sun, moon, fire)' (unless the later is a semantic extension of θ'éχ^{W} 'wash')

k^{W} → k'^{W} as in k^{W}íx^{y}-ət 'name s-o or s-th' beside k'^{W}əx^{y}-ét 'count s-o or s-th'; also p'ék^{W} 'float, come to the surface' beside pək'^{W}-ém 'be dusty' or s-pá·lk'^{W}-əm 'dust' (this would show p' → p deglottalization as well)

q → q' as in qá·-m 'dip or get water' beside q'əm-á·s 'to dip-net'

p' → p as in s-p'élx^{W}-əm 'lungs' beside s-pəx^{W}ə(l)-ɬé·l-əm 'breathe air out from lungs, sigh'

θ' → θ as in θ'é·lə 'heart' beside θéθəl-məθ 'admire, wish for s-o or s-th'

q' → q as in c̓-q'éyχ 'black', q'éyχ-əl 'turn black' beside qéyχ-əs 'blind', qéyqɛyχəlà· 'shadow'; also səq' 'split in half' beside səq-í·ws or səq-éyiws 'pants' (-í·ws 'covering')

6. Labialization is used derivationally also but is not common.

q' → q'^{W} as in c̓-q'éyχ 'black' beside q'^{W}éyχ^{W}-əs ~ k'^{W}íyχ^{W}-əs 'negro' ('black face' ~ 'brown face'), c̓-k'^{W}íyχ^{W} 'brown?', c̓-q'^{W}íχ^{W} 'gray?', c̓-q'^{W}íq'^{W}əχ^{W}--əl 'brownish-black' (-əl '-ish')

q' → k'^{W} and χ → χ^{W} may be illustrated in the above as well.

7. Backing and fronting are used derivationally too:

$k^W \rightarrow q^W$ as in cá·k^W 'be far off, distant' beside cá·ləq^W 'backwoods'; also t'ə́k^W 'get muddy' beside θ'əq^W-ə́ɬcɛ 'mudpuddle, dirty pond' (-ə́ɬcɛ is 'unclear liquid')

$k'^W \rightarrow q'^W$ as in k'^{W}ʃ· or k'^{W}ʃy 'climb' beside təm-q'^{W}ʃy-l-əs 'time when (everything) comes up, springtime'

Examples of $q' \rightarrow k'^W$ fronting can be seen in 2.4.6.

8. There are a few examples of affrication as a derivational process:

$t' \rightarrow θ'$ as in t'ə́k^W 'get muddy', t'ə́k^{W}t'ək^W 'muddy' beside θ'əq^W-ə́ɬcɛ 'mudpuddle, dirty pond'; also t'əq'^{W}-á·t 'cut s-th in half' beside θ'iq'^{W}-ə́lcəp 'split (fire)wood, chop wood' (-ə́lcəp or -cəp means 'firewood')(this example is not applicable if θ'iq'^{W}ə́lcəp < θ'ʃq'^{W}-ət 'punch or hit s-o or s-th').

9. Some consonant cluster simplification occurs, especially with sonorants and sibilants. Several rules can be observed:

.1. Sonorant$_a \rightarrow$ Ø in free variation with length after sonorant$_a$. Examples: tə́l 'understand' + -l 'purposely' + -əx^W '3rd person object', -əs '3rd person subject' $\rightarrow$ tə́l·əx^{W}əs 's-o understands s-th'; tə́l 'understand' + -lá·məθ 'by oneself' $\rightarrow$ təlá·məθ ~ təl·á·məθ

'understand'; q^{w}áq^{w}əl 'talking' + -Aə- derivational ablaut + -lɛ́c 'rump, bottom' → q^{w}ə́q^{w}əlɛ́c 'to gossip'; łə- (meaning unclear) + q'ə́l 'believe' + -l 'purposely' + -əx^{w} '3rd person object' → łəq'ə́l·əx^{w} ~ łə́q'əl·əx^{w} ~ łə́q'ələx^{w} 'know s-th'.

.2. s → Ø / s___. Examples: all third person possessives of stems ending in s as in músməs 'cow' + -s '3rd person possessive' → músməs 'his cow, her cow, their cow'; stá·ləs 'wife' + -s → stá·ləs 'his wife'; etc.

.3. (c, t) + s → c / ___C, #

Examples: θə́t 'to say' + -sT 'causative' + -əx^{w} '3rd person object' + -əs '3rd person subject' → θə́ctəx^{w}əs 's-o told s-o'; qələ́t 'again, another' (root shape unclear, stem includes -ə́T '3rd person object') + -s (probably) '3rd person subject' + -cɛ 'future' → qələ́ccɛ [qələ́ǽčɛ] 'do it over, try it again'; ʔá·k^{w}ələc 'back (of body)' + -s '3rd person possessive' → ʔá·k^{w}əlɛc 'his back' along with other examples of c-final noun stems suffixed with -s.

.4. T → Ø / ___c in one example found to date: łəq'ə́·t 'be wide' + -cəs 'hand' → łəq'ə́·cəs 'five'. I mention that this is of limited occurence (unlike 2.4.9.1 through 2.4.9.3) since there are a number of cases of T → t / ___-cɛ 'future' (there, /t/ is aspirated due to phonemic rules).

2.4.10. A number of allomorphic rules involve consonant alternations, but they are so morpheme-dependent that they are best listed in the lexicon. A sample of these might include:

1. {-x^{y}əl} 'foot, leg' → -x^{y}ə / ___-(ə)T
2. {-qəl} 'language' → -qə / ___-(ə)T
3. {ƛ'éqt} 'long' → ƛ'élqt / ___-élec, -élə
4. {q'éməl} 'paddle' → q'əmé·w / ___-əɬp
   (cp. s-q'éməl 'canoe paddle')
5. {c'əm} 'bite' → c'émx^{y} / ___-á·yθəl
6. {há·y} 'finish' → há· / ___-á·yθəl
7. {?éy} 'be good' → ?íy / ___-derivational suffix

2.5. Reduplication.

2.5.0. Types of Reduplication. Reduplication occurs prefixed, suffixed, and infixed. One of the infixed types is extremely productive. Some types of reduplication are stress attracting; others are always unstressed but occur in predictable locations in regard to stress. The range of meanings conveyed by reduplication also shows some patterning, sometimes predictable by word class, sometimes by semantic domain, sometimes unpredictable.

Reduplication will be considered here as defined solely on a phonological basis: all examples are considered in which at least a consonant of the root word was duplicated in an adjacent syllable. As a result, the examples include (besides productive types of reduplication) a number of non-productive types and a number of examples in which no clear meaning has been isolated for the reduplication (through lack of an unreduplicated form). The latter examples may be crystallized forms in which there was originally a verb plus continuative or noun plus diminutive or the like, which has since lost its literal meaning and its unreduplicated counterpart. This process can be seen taking place in at least one example ('Scotch thistle'). In addition to including such examples, the selection process may have also included forms whose apparent

reduplication is the result of historical merger or derivational affixation as yet undetected.

Examples will be quoted in morphophonemic transcription with affixes segmented. Ten types of reduplication (R) have been classified on the basis of shape and position regarding the root. Each type is given a subscript number and hyphenated to indicate whether prefixed, infixed, or suffixed. The consonant reduplicated is numbered in the description of each type to correspond with the position of the consonants in the root. Thus $-R_1-$ is the first type of reduplication, an infix with the shape $-C_1ə-$, where C_1 is the first consonant of the unaffixed root and ə is the phonème or morphophoneme ə. (Wherever a phoneme is not covered by a morphophonemic or allomorphic rule it can be transcribed morphophonemically by the phonemic symbol and called a morphophoneme on the morphophonemic level.) Since reduplication is defined in terms of roots, it may be helpful here to note that a root is a morpheme with lexical meaning, which has been stripped of all affixes.

2.5.1. $-R_1-$ infixes $-C_1ə-$ after the first vowel of the root (prefixes, such as s-, x^w- or $təx^w-$, of course are not part of the root). The infix is unstressed and follows a high-stressed syllable. $-R_1-$ encompasses the following meanings: 'continuative', 'diminutive', 'pet name', 'verbal adjective'

and 'comparative'. This type of reduplication is very productive; over 150 examples have been obtained without even trying. Here are some examples showing the unreduplicated form to the left of the colon and the reduplicated form to the right. Examples without a colon will be reduplicated forms for which I have not yet found corresponding unreduplicated forms.

x^{y}á·k'^{w}-əm 'bathe': x^{y}áx^{y}ək'^{w}-əm 'bathing'

yíq 'fall (of snow)': yíyəq 'falling (of snow)'

k^{w}ɨ(·)m-əl 'get red': k^{w}ík^{w}əm-əl 'getting red'

t'ɨ·l-əm 'sing': t'ɨt'əl-əm 'singing'

s-t'ɨ·l-əm 'song': s-t'ɨt'əl-əm-s 'his singing'

p'éθ' 'sew': p'ép'əθ' 'sewing'

mát'əs 'point, aim': mámət'əs 'pointing'

q^{w}è·l 'talk': q^{w}áq^{w}əl 'talking' (also has Aa)

q'éyx̣-əl 'gone black': q'éyq'əx̣-əl 'getting black'
(see 2.3.3.8 for this and similar forms)

s-pàləq^{w}-íθ'ɛ 'ghost, dead body': s-pàpələq^{w}-íθ'ɛ 'screech owl; little ghost'

q'é·mi 'adolescent girl': q'éq'əmi 'little girl (4 years old or so)'

s-tá·lo(w) 'river': s-tátəlo(w) 'creek'

x̣á·cɛ 'lake': x̣á(·)x̣cɛ 'little lake'

s-tɨ·θ 'skinny': s-títəθ-əl 'puny'

sí·le 'grandparent': sísələ 'granny (pet name)'

té·l 'mother': tétəl 'Mom (pet name)'

mɛ́·l 'father': méməl 'Dad (pet name)'

s-c'á·meq^{w} 'great grandparent; great grandchild': s-c'ác'əməq^{w} 'great grandparent or great grandchild (pet name for both)'

s-pí·w 'ice' (cp. pí(·)w-ət 'freeze s-th'): s-pípəw 'frozen'

θ'á·ɬ-əm sq'áq'əy 'a cold (lit. chill sickness)': θ'áθ'əɬ-əm 'chilled, being chilled'

ƛ'éɬ-əm 'salt': ƛ'éƛ'əɬ-əm 'salty'

k'^{w}és 'get burned': k'^{w}á(·)k'^{w}əs 'hot'

t'ét'əθ'-əm 'fermenting, sour (of apples, half-ripe fruit)' (~ t'ét'əc'-əm)

sésəχ-əm 'bitter (of rancid peanuts, medicines, roots, cascara bark, etc.)'

q'éq'ət'-əm 'sweet-tasting'

c'éc'əs-əm 'tasty, good-tasting (of meat, nuts, etc. but not a sweet taste)'

s-cí·ɬ 'first born', s-cəɬ-á·yθəl 'upper lip': cicəɬ 'high, top, above'

s-θí·-əqəl 'loud voice (lit. big throat)': θíθə 'bigger, larger', θiθə-héləq 'getting bigger'

c'éc'əl 'very'

In nouns and verbal adjectives there often seems to be a 'continuative' -R_1- (no longer translated as such) in examples of crystallized reduplication. For example: yéq'-əT 'fell a tree': s-yéyəq' 'a log'

sk^{w}úk^{w}əlstə̀ləq 'teacher' (probably < sk^{w}ú·l 'school')

ɬí·c'-əT 'cut s-th': s(-)x^{w}-ɬíɬəc'-əls 'a saw'

x^{y}íp-əT 'carve s-th': s-x^{y}íx^{y}əp 'a planer'

pí(·)w-əT 'freeze s-th': pípəwəls 'freezing cold'

sx^{y}éx^{y}əm 'shallow water'

s-qɛ́m 'quieter water, died down a little': sqɛ́qəm 'calm water, quiet water'

t'ɛ́·l 'go out of sight (of sun, person, etc.)':
st'ɛ́t'əl 'shade (of a tree, etc.)'

χɛ́χəl 'frost'

θ'ɛ́θ'əl 'crystal'

p'ɛ́p'χ^{w}-əm 'shy, quiet'

q'ɛ́q'əƛ' 'fit(s), convulsion(s)'

t'ɛ́t'əɬəm 'flea'

θá·θəl 'mouth'

cɛ́cəw 'beach, shore'

s-θɛ́θəyəl ~ s-θɛ́θiyəl 'blood'

A dozen or so examples have the high stress shifted away from the syllable before the reduplication, due to a high stressed suffix. This is predictable from rules which have already been given. Some examples: s- 'nominal' + ɬáɬək'^{w} 'flying' + -í·wəl 'inside(s)' → sɬaɬək'^{w}í·wəl 'surprised, stupified'; cá·k^{w} 'be far away, be distant' + -R$_{1}$- 'continuative'? + -á·ləs 'eyes' → cack^{w}á·ləs 'goatsbeard plant' (since its white blooms can be seen from a great distance);

mè·θ'əl-qɛ́yl-əm 'lie, prevaricate' + $-R_1-$ 'continuative' → mèməθ'əlqɛ́yləm 'lying'; łəwq-í·m 'medium-sized gray swamp blueberries' + $-R_1-$ 'diminutive' → łèłəwqí·m 'small gray swamp blueberries'.

2.5.2. $-R_2$ suffixes $-C_1əC_2$ after C_2 of the root. This suffix is unstressed and follows a high-stressed syllable. The semantic area covered is a sort of 'inherent continuative' (so continuative that it extends the meaning of the root), 'inherent plural', perhaps a few examples of plain 'continuative' and 'plural', and a number of examples of flora and fauna in which the reduplication is petrified or crystallized and its meaning is not clear. As in other types of reduplication the stress pattern is sometimes changed because of high-stressed suffixes (added here after the reduplication). In some of these cases, where stress is shifted and where the root vowel is ə, it is difficult to tell whether the example has $-R_2$ or R_3-.

$-R_2$ is a less productive type of reduplication, so all the examples found to date have been included in what follows:

$q^Wè·l$ 'talk': $s-q^W\acute{ə}lq^Wəl$ 'language, talk', $q^W\acute{ə}lq^Wəl$ 'rowdy', $s-q^Wəlq^Wəl-\acute{ɛ}·wtx^W$ 'language room' (modern coinage), $q^Wəlq^Wəl-\acute{ɛ}·yəəl$ 'talkative, talks too much' ("rowdy mouth"), $q^W\acute{ú}·lq^Wəl$ ~ $q^W\acute{ó}·lq^Wəltəl$ 'they were all talking, talking together'

ləq'ə́·lq'əl 'travel', ləq'ə́·ləq'əl 'travelling'

lúɬ q'^{W}ə̀l 'become ripe, get ripe': lúɬ q'^{W}ə̀lq'^{W}ə̀l 'gone overripe'

s-ʔə́cʔəc 'stuttering (noun)', ʔə́cʔəc 'stuttering (verb)' (as AC explained it there is no non-continuative form because "you can't stutter just once")

c'ə́q'^{W} 'poke': c'əq'^{W}c'əq'^{W}-t-ə́x^{y}-əs 'it's poking you'

q'^{W}əyíləx^{y} 'to dance': q'^{W}əyq'^{W}əyíləx^{y} 'a dancer'

qə́l 'be bad': qəlqəl-í·l 'break and destroy s-th'

mə́lməl 'blunder, make a mistake', məlməl-á·yθəl 'blunder in speaking'

root səl- 'spin': sə́ləl ~ sə́ləltəl 'wool spindle'

cə́wcəw 'away from the shore, toward the river' (becomes [čə́Uwčə́Uw] as result of phonemic rules)

q'ə́yχ-əl 'get black, go black': qə́yqɛyχəlà (which can also be interpreted qə́yqəyχəlà) 'shadow', qɛyqɛyχələ́səm 'ray of sun between clouds'

ƛ'ə́wəls 'bark': ƛ'ə́wƛ'əwəls 'barking (of dog(s))'

χə́ləq't 'open one's eyes': χə́lχələq't 'lightning, (Thunderbird) opening his eyes'

tə́y 'to canoe-race': ʔistə́ytəyəl 'a group of canoes travelling upstream (moving camp to fish or dry fish)' (could also be derived from root tíyt 'up-river')

χɛylχələm-á·s 'fleecy wave clouds'

s-ɬə́m-x^{y}əl ~ ɬə́m-təl ~ s-ɬə́mɬəm 'dew' (cp. ɬə́m-əx^{W} 'to

rain')

yéq'-əT 'to fell a tree', s-yéyəq' 'a log': s-yéq'(ə)yəq' 'a lot of logs'

θ'éχ^{W} 'wash': θ'éχ^{W}θ'eχ^{W} 'fishhawk, osprey'

mék^{W}mək^{W} 'bumblebee' (CT)(possibly < mék^{W} 'stout, strong')

wéθwəθ ~ wíθ-iyɛ 'snipe'

s-k^{W}éθ'k^{W}əθ' ~ s-k^{W}éθ' 'willow grouse'

q'éys-əT 'tie s-th': q'ésq'əs(ə)cəl 'spider (the weaver or net-maker)' (cp. also sx^{W}-q'éyq'əsəcəl 'netting shuttle, a shuttle for making nets')

q'éwq'əwə 'Kawkawa Lake', q'əwq'əw-əléɛ 'name of a male loon', q'əwq'əw-əlá·t 'name of female loon'

θ'éχθ'eχ 'stinging nettle'

χémχəm 'mushroom'

s-q'éɬq'əɬ 'muskrat'

músməs 'cow' (fits pattern though < Chinook jargon)

təw-élə 'sloping floor': təwtəw-élə 'name of a mountain near Yale' may fit here too.

2.5.3. R_3- prefixes C_1əC$_2$- to C_1 of the root. This prefix is unstressed and immediately precedes a high-stressed syllable (except with the word for 'dog'). As in -R_1- and -R_2 high stress is sometimes shifted to a high stressed suffix. The meaning is 'plural' in all but two or three cases (once 'diminutive', once 'eldest', and in four cases crystallized without a non-reduplicated counterpart attested). All examples found are

cited here:

sí·lə 'grandparent': səlsí·lə 'grandparents'

ʔí·məθ 'grandchild': ʔəmʔí·məθ 'grandchildren'

s-ɬé·li(y) 'woman (16 yrs. or older)': sɬəlɬé·li(y) 'women (16 yrs. or older)'

ʔéləx^{y} 'sibling': ʔəlʔé·ləx^{y} 'siblings'

sx^{w}-ʔéləx^{y} 'husband's sister, (possibly also woman's brother's wife)': sx^{w}-ʔəlʔé·ləx^{y} 'husband's sisters'

s-tá·ləs 'wife': stəltá·ləs 'wives'

s-x^{w}əmθiyé·ɬ (possibly -è·ɬ) 'deceased uncle, aunt or grandmother, or someone else deceased who is responsible for ego directly or indirectly': sx^{w}əmx^{w}əmθiyéɬ 'deceased uncles, aunts or grandmothers, or others deceased who were responsible for ego directly or indirectly'

s-mé·lt 'rock, mountain': smələmé·lt 'rocks, mountains'

θəqé·t 'tree': θəqθéqət 'trees'

s-q^{w}əmé·y 'dog': sq^{w}əmq^{w}əmé·y 'dogs'

t'é·lów 'arm': t'əlt'é·lów 'both arms'

θámél 'eyebrow': θəmθámél 'both eyebrows'

q^{w}ilós ~ q^{w}ɛylós 'hair on body': sq^{w}əlq^{w}éylos 'body hairs', sq^{w}əlq^{w}él-qsəl 'hair(s) in nose', q^{w}əlq^{w}él-x^{y}əl 'tufted leg hair on horse (like on a Clydesdale)'

s-q'əlq'élp-əq^{w} 'curly hair'

sx^{w}-ʔíle 'cheek': sx^{w}ʔəlʔíle 'both cheeks'

q^{w}ə́mx^{w}-cəs 'wrist bone, lump of wrist': (Chehalis dialect) q^{w}əmq^{w}ə́mcəs 'hand and finger joints (collectively)', (Chehalis) q^{w}əmq^{w}ə́m-x^{y}əl 'foot and toe joints (collectively)'

q^{w}á·mθ' 'lump': q^{w}əmq^{w}á·mθ' 'lots of anthills'

t(ə)q-ə́T 'close s-th (door, etc.)': steqtə́q 'jampile, logjam'

p'élq'-əm 'sparkling, glinting': p'əlp'èlq'əm-é·ləws 'poplar (lit. sparkling leaves)' (-é·ləws 'leaf')

c'ə́q'^{w} 'poke': c'əq'^{w}c'ə́q'^{w} 'thorn' also 'Scotch thistle'

st'əlt'əléχəl 'a square' (-əléχəl 'arm')

c'ƛ'ə́m 'jump': ƛ'əmƛ'ə́m-x^{y}əl 'grasshopper' (probably a back-formation)

s-tá·ləw 'river': təltələwé·m 'lots of little streams (like run down a hill after a rain)'

s-χélé 'leg': sxəlxélə-s tə s-yá·q(')^{w}əm 'shafts of light (lit. legs of the sun)'

yél·əs 'tooth': yəlyəlísəm 'many icicles', syəlyəlísəm 'icicle' (this gloss and the ə may be in error)

k^{w}əlqéylém 'cave': k^{w}əlk^{w}əlqéylém 'caves' (probably has -qéyl 'throat and mouth')

s-χəq'χéq'ət 'a little bluff'

(Tait dialect) łəχ^{w}łéχ^{w} 'choke cherry' (cp. łəx^{w}-é łcə ?

'to spit', -ɬcɛ 'unclear liquid')

lɛ́p'əx^{y} 'eat': ləp'lɛ́p'əx^{y} 'eat it all'

lɛ́k^{w}-x^{y}əl 'break a leg': ləkʷlɛ́kʷət 'break s-th into small pieces (like kindling)'

yəq^{w} 'burn': yəqʷyɛ́qʷ 'burned up', s-yəqʷyɛ́qʷ 'something which burned up', yəqʷyəqʷ-ɛ́·ws 'name of village now Yakweakwioose Reservation (lit. repeatedly burnt out covering (either houses or grass))'

səq'-ɛ́T 'split s-th': səq'sɛ́q'ət ~ sɛ́q'ət 'splitting them up, chopping them up'

s-məɬmɛ́ɬq^{w} 'rough (of wood)'

χɛ́ym-əl ~ χɛ́m-əl 'grab': χəmχɛ́məls ~ χəmχɛ́yməls 'hawk, chickenhawk' (grabs things)

s-c'á·məq^{w} 'great grandparent, great grandchild' (probably has -əq^{w} 'head' in metaphorical sense): sc'əmc'á·məqʷ 'eldest great grandchild'

ʔəlʔɛ́liyɛ 'dream, dreaming' (AC)

θ'ɛ́·yɛ ~ c'ɛ́·yɛ 'in-law after death of connecting relative': c'əyc'ɛ́·yɛ 'in-laws after death of connecting relative'

2.5.4. R_4- prefixes C_1ɛ́- to C_1 of the root and has the meaning 'diminutive'. It attracts the high stress of the word in all cases but those with high-stressed suffixes and five other examples. With some examples it is also hard to tell root vowel i + -R_1-

from root vowel ə + R_4-. Another feature which may be related to R_4- (or to the fact that R_4- is high stressed) is frequent ablaut of root vowel after R_4- is prefixed. Following are the examples found to date of R_4-:

sqəwźəθ 'big rabbit, rabbit': sqíqəwèθ 'small rabbit'

sk^{W}ól 'waterfall': sk^{W}ík^{W}əl 'small waterfall'

sk'^{W}əlyéχəl 'bat': sk'^{W}ík'^{W}əlyèχəl 'young bat'

θəqé·t 'tree': θíθəqət 'little tree' (~ θíθqət)

pəhamó·ɬ 'bullfrog, big pretty-colored frog': pípəhà·m 'frog'

x^{y}á·k'^{W}-əm 'bathe': x^{y}íx^{y}ək'^{W}am 'swimming'

s-yəq^{W}-í·l 'lamp, lantern': yíyəq^{W}í·l 'small light, candle'

ʔɛx^{W}í·l 'small': ʔíʔɛx^{W}ì·l 'smaller'

má·q^{W} 'bird': mí·məq^{W} 'small bird'

sq^{W}əmέy 'dog': sq^{W}íq^{W}əmɛy 'puppy'

sx^{W}á·x^{W}əʾ 'crazy, insane': sx^{W}ix^{W}á·x^{W}əʾ 'stupid, not all there'

q^{W}έy-əl 'gone yellow': q^{W}iq^{W}áy-əls 'orange (color and fruit)'

smíməyèθ 'butterfly', smíməχèθ 'caterpillar'

ʔəlílɛ ~ ʔəlílə 'salmonberry' (cp. lí·lɛ-cəs 'little berry basket (tied around waist, used first then dumped into big berry basket)', this Tait dialect form means "salmonberries in hand")

swíwə 'eulachon, candlefish'

st'éχ 'fork (in tree, stream, etc.)': st'ít'əχ-əyɛ
'Ruby Creek (lit. 'little fork')', st'it'χ-áyəq
'fork in roots or tree', t'it'χ-á·yəq 'crutch'
possibly q^{W}íq^{W}i 'copper'
(Chehalis dialect) sk^{y}íkʲək^{y} 'chickadee' (k^{y} endearing)
sqé·q 'younger sibling': k^{y}ék^{y} ~ k^{y}ik^{y}ék^{y} 'little
sister, darling or dear (mother to little girl)'
wík'^{y}ɛ ~ wiwík'^{y}ɛ 'darling or dear (mother to boy)'
x^{y}éwəq 'wild carrot': x^{y}íx^{y}əwíyəq 'little carrots'
mémələhá·lɬ 'bird's egg' (< mémələ 'children' < mélə
'child'): smìmələhalɬé·lé 'little bird's nest'
ɬél-təl 'a bailer': ɬìɬəltéləc 'island in front of
Union Bar (only cut off from land during high
water time)' (lit. little bailer at bottom)
səqí(·)ws 'pants': sisəqíws 'short pants, little pants'
héwt 'rat': hihéwt 'small rat' (cp. hɛhəléwt 'a few
little rats')
x^{W}íx^{W}ək'^{W} 'mountain blueberry resembling sχ^{W}éx^{y}ix^{y}əq
but sweeter'
sp'é·θ' 'red-flowering currant, Indian currant':
spípəhè·θ' 'speckled trout or landlocked salmon
(which is said to hatch from Indian currant ber-
ries which drop into the water)'
c̓q'éyχ 'black': c̓q'^{W}íq'^{W}əχ^{W}-əl 'brownish-black'
t'ít'ələ 'fawn'
ƛ'ép 'deep, below, under': ƛ'íƛ'əp-l-èylws 'man's

underpants', ƛ'iƛ'əp-l-ə́lwət 'man's underclothes'

x^yəc'-í·l-əm 'go through the woods': sx^yíx^yəc' 'small bush, woods'

x^yí$x^y x^w$ələ̀·wə̀ 'fish air bladder'

q^wíq^wəɬ 'mountain ash' (possibly < q^wə́ɬ 'spill out')

θ'ə́$x̣^w$-mət ~ θ'íθ'ə$x̣^w$-mət 'compassion, pity'

sƛ'íƛ'əqəɬ 'child (generic)'

swíwələs 'adolescent boy'

sk^wík^wəx^yəl 'baby sockeye'

possibly sísəm 'feel creepy, fear s-th behind': sí·si 'be afraid, nervous'

2.5.5. R_5- prefixes C_1ə- to C_1 of the root, remains unstressed, and precedes the high-stressed syllable. Its meaning is 'continuative', 'inherent continuative', 'plural' and 'diminutive' and 'distributive'. The examples found are as follows:

x^wí 'wake': x^wəx^wí 'waking', s-x^wəx^wí 'awakened'

x̣ə́yl-t 'write s-th, draw s-th': x̣əx̣ə́ylt 'writing, drawing'

k'^wí(y) 'climb': k'^wək'^wí 'climbing'

k^wí(·)m-əl 'get red': k^wəlk^wíməl-əs-əm 'blushing, one's face is red' (-əl- infix unclear)

x^wə́ 'starve, be hungry': x^wəx^wə́ 'starving'

t'ə́mə́l 'chip', t'ə́mə́ls 'chop with axe': t'ət'ə́məls 'chopping; a chisel'

qəmá· 'suckle': qəqəmá· 'suckling'

kʷɛ́·l 'to hide': kʷəkʷí·l 'hiding'

c'ɬɛ́·məθ 'hear (s-th)': c'əc'ɬɛ́·məθ 'hearing'

téś 'approach, get near': stətís '(be) near, close'

qʷɛ́ 'get a hole': s-qʷəqʷɛ́ 'a hole'

s-q'ɛ́p 'a gathering': sq'əq'íp 'gathered' (with Ai)

t'ət'á·sθət 'walk quietly, creep', t'ət'ɛ́sθət 'walking along quietly, creeping along', t'ət'ɛ́sxʸələm 'creeping (more than one)'

pəqʷ-át 'break s-th': spəpíqʷ 'broken'

méləc'-məT-á·yθəl 'mixed up in speaking': məmíləc' 'mixed up'

sθ'əθ'íkʷ 'sores'

sχʷélə 'leg, foot': sχʷəχʷéylə 'legs, feet'

q'əq'ɛ́y 'guts, intestines'

s-c'á·m-əqʷ 'great grandparent, great grandchild', s-c'əlá·məqʷ (-əl- 'plural' infix) ~ sc'əc'əlá·məqʷ 'great grandparents, great grandchildren'

spá·l 'crow': spəpəlál 'bunch of small crows' < spəlál 'small crow'

sχʷəyɛ́·m 'myth' (from Elmendorf + Suttles 1960): sχʷəχʷəyém 'story, fable'

χʷəχʷɛ́·yə 'big fly, blowfly', χʷəχʷiyɛ́·yə ~ χʷiχʷiyɛ́·yə 'housefly' (glosses may be exchanged in error)

xʷəxʷíyɛ 'worm in salmonberries'

χə?á·θəl 'four': χəχə?á·θəl 'four to each' (AC says this may be Nooksack; no other distributives among

the numerals):

q^{w}əq^{w}ɛ́·l 'small float for nets (made from singed cedar)'

2.5.6. -R_6- infixes -əC_2- before V_1 (root vowel). It is unstressed and occurs before a high-stressed syllable. It seems to have two meanings, 'diminutive' and 'plural', but like the remaining types of reduplication it is very rare. The few examples found are given here.

spé·l 'crow': spəlá(·)l 'small crow'

χ^{w}əχ^{w}ɛ́·yə 'large fly' (already with R_5-):

χ^{w}əχ^{w}iyɛ́·yə 'housefly, small fly' (R_5-χ^{w}R_6ɛ́·yə)

(iy < //əy//)

s-c'iyáyə (< //s-c'eyáye// < //s-c'R_6áyə//) 'twins'

səlɛ́·c' 'different': səlɛ́ləc' 'two different things'

(the latter form could have plural infix -əl- instead of -R_6-)

2.5.7. R_7- prefixes C_1ɛ́- to C_1 of the root. It attracts the high stress of the root except when a high-stressed suffix causes stress shifting. It has 'plural', 'diminutive' and 'emphatic' meanings in the few examples found so far:

méləl 'child (kinterm), offspring': mémələ ~ mɛ́·mələ

'children (kinterm)'

təx^{w}-méləm 'stepchild': təx^{w}-méməlem ~ təx^{w}-mɛ́·məlem

'stepchildren'

mə̀məlehá·ɬɬ 'bird egg' (-há·ɬɬ 'young')

yilɛ́w 'after': yɛ́yilɛw 'a little after'

ʔɛ́lθɛ ~ ʔɛ́lθə 'I, me, it's me, I'm the one who':
ʔɛ́ʔɛlθɛ 'I, me, it's me, I'm the one who (all emphatic uses)'

possibly ɬɛ́ɬɛ́·l 'in the back, inside'

2.5.8. R_8- prefixes C_1ɛ- to C_1 of the root, remains unstressed, and precedes the high-stress syllable. It is rare. It means 'continuative' in one example, 'plural' in another, and is crystallized in an animal name in the third. The examples found:

p'ɛ́k^W 'float, come to the surface': p'ɛp'ɛ́k^W 'floating' (notice Aɛ in addition)

s-tí·wəl 'sibling's child': stɛtí·wəl 'sibling's children'

cɛcí·qəl 'martin (possibly mink)'

2.5.9. -R_9- infixes -C_1é(·)- after the root vowel V_1. This infix attracts the high stress of the word. Its meaning is 'continuative' in process of crystallizing, or 'continuative' and 'verbal adjective'. Only three examples have been found:

c'íx'-əm 'jump': c'ic'éx'əm 'jumping' (other speakers than AC have other ways of forming this continuative)

s-θék'^{W} ~ θék'^{W} 'straight', θək'^{W}-éT 'pull s-th':
s-θəθé·k'^{W} 'stretched, straight, pulled tight'

χék'^{W} 'get narrow, wedged in': s-χəχék'^{W} 'canyon

(narrow, walled in with rock)'

These last two examples could also be accounted for by ablaut plus R_5-:

2.5.10. R_{10}- prefixes C_1á- to C_1 of the root and attracts the high stress of the root. It is a numeral classifier for 'person' with the number 'one' and may appear crystallized in two other examples:

lə́c'ə 'one': lá́ləc'ə 'one person'

q'ə?í·ləm 'ancient, wise': possibly syilá́ləm 'year'

possibly s-ɬá́ɬa 'brown thrush'

2.5.11. Residual cases. Less than two dozen cases of apparent reduplication remain as residue. Some of these are not reduplication at all, but roots which begin and end with the same consonant:

x^w- 'big' + tít 'upstream' + -í·m 'repeatedly' →
x^wtití·m 'eddy water'

q'ə́lq'-əT 'answer s-o, reply to s-o', q'ə́lq'-ə́yls 'answer, write a letter' (-ə́yls 'intransitive')

x^wəx^w- 'sudden' + -í·l 'come, go' + -əx^y 'standing' →
x^wəx^{w}í·ləx^y 'get up with sudden motion'; also, with s- 'nominal' and -á·s 'face', sx^{w}əx^{w}á·s 'thunder, Thunderbird'

x^w-pap-á·s 'hair all over the face'

?i?ayám 'walk slowly' is perhaps more a case of a petrified phrase, ?i ?áy 'keep on' (response to a story-teller) + ?á·yəm 'slow, late'.

s-x^{w}əmlí·k^{w} 'parent's sibling': sx^{w}əmlé·ləkw 'parent's siblings' is a case of Aε· + 'plural' infix -le-. The remaining cases do seem to have reduplication; they will be given with possible analyses:

ʔəmí·məl ~ ʔəmə́məl 'a small bit' may have ʔə- prefix + R_4- 'diminutive' + root məl; or ʔə- + root mí·l + -R_1-.

s-θéθqi 'sweet green shoots of thimbleberry, salmonberry, fireweed, etc.' may have -R_1- crystallized.

s-wə́x^{y}ix^{y}əq 'low small gray mountain blueberry' either has a stressed prefix + R_4- or crystallized -R_6- 'diminutive'.

qá· 'water': təm- 'time' + qəqá· 'high water' → təmqəqá· 'high water time; June' and s- 'nominal' + qəqá· 'high water' + -qəl 'head' → sqəqá·qəl 'a clear pond' both show qəqá· which is not otherwise attested. qəqá· probably features R_5- with 'plural', 'inherent continuative' or 'continuative' meanings.

s-k'^{w}ak'^{w}q$\acute{\varepsilon}$(·)q 'robin' could be analyzed as -R_1- + root k'^{w}áq + -$\acute{\varepsilon}$(·)q (unattested) or as new types of reduplication.

q'ayíyəc 'elk' may have crystallized -R_1- (with prefix), R_4-, R_5- or -R_6- (the last two would require stress shifting as well and are less likely).

k'$^{w}\acute{\varepsilon}$·t'əl 'mouse': k·^{w}əlák'^{w}t'əl 'a few mice' seems to

show Aa + -əl- 'plural' infix + 'diminutive' $-R_1-$.

cəyíyəx̌ 'big gray lizard' may have a prefix and $-R_1-$.

ʔélel ~ ʔélʔel 'magpie' may show $-R_6-$.

məkʷ-ɛ́·məl-xʸəl 'big toe (lit. stout member of foot):

kʷəmkʷɛ́·məlxʸəl 'little toes' shows 'diminutive' by getting rid of the mə of məkʷ 'stout, strong' and 'plural' by R_3-.

tɔ́tɛθ 'vein, veins' is uncertain in form, gloss and type of reduplication.

Finally, four cases seem to fit $-R_1-$ except in their stress patterns:

mɛ́·y-T 'help s-o': mɛ̀mɛ́y-əT 'helping s-o'

míməqʷ 'little bird': mamələ́·yləqʷ 'flock of little birds' (the a may be reflective of mɛ́·qʷ 'bird')

sqəwɛ́θ '(large) rabbit', sqíqəwɛ̀θ 'small rabbit':

sqʷɛ̀qʷəwɛ́θ 'bunch of rabbits', and

xʸixʸq'à·m 'mouth open'.

The second and third forms seem to be modifications of already-reduplicated words.

2.5.12. Allomorphy of Reduplication.

The following tables show the range of meanings of each type of reduplication and the range of types which express each meaning.

$-R_1-$ ($-C_1$ə$-$ after V_1) 'continuative', 'diminutive', 'pet name', 'verbal adjective', 'comparative', crystallized in flora and fauna

$-R_2$ ($-C_1$əC_2) 'continuative', 'inherent continuative', 'plural', 'inherent plural', crystallized in flora and fauna

R_3- (C_1əC_2-) 'plural' in almost every case, once 'diminutive', once 'eldest', four times crystallized in flora and other domains

R_4- (C_1í$-$) 'diminutive'

R_5- (C_1ə$-$) 'continuative', 'inherent continuative', 'plural', 'distributive', 'diminutive'

$-R_6-$ ($-$əC_2 before V_1) 'diminutive', 'plural'

R_7- (C_1é$-$) 'plural', 'diminutive', 'emphatic', and crystallized in one dubious example

R_8- (C_1ɛ$-$) 'continuative', 'plural', crystallized in fauna

$-R_9-$ ($-C_1$ɛ́(·)$-$ after V_1) 'continuative', possibly 'verbal adjective'

$R_{10}-$ (C_1á$-$) classifier 'person', crystallized in two words (one fauna)

'continuative' R_1, R_2, R_5, R_8, R_9

'inherent continuative' R_2, R_5

'plural' R_2, R_3, R_5, R_6, R_7, R_8

'inherent plural' R_2

'diminutive' R_1, R_3, R_4, R_5, R_6, R_7

'pet name' R_1

'verbal adjective' R_1, (R_9)

'comparative' R_1

crystallized in flora + fauna R_1, R_2, R_3, R_7, R_8, R_{10}

'eldest' R_3

'distributive' R_5

'emphatic' R_7

'person' classifier R_{10}

Allomorphs of a single morpheme must be semantically identical or similar --allosemes-- and must be in complementary distribution predictable on the basis of phonemic or morphemic environments or both. Of the 13 meanings for reduplication shown above, the meanings connected in the following by plusses are similar enough to be allosemes of a single morpheme:

Sememe

/'continuative'/ 1.'continuative' + 'inherent continutive' + 'verbal adjective'

/'plural'/ 2.'plural' + 'inherent plural' + 'distributive'

/'diminutive'/ 3.'diminutive' + 'pet name'

/'augmentive'/ 4.'comparative' + 'eldest' + 'emphatic'

/'person classifier'/ 5.'person classifier'

Where reduplication is crystallized in names for flora and fauna, I believe the original meaning of the reduplication probably fit within 1., 2., or 3.

Further, as will be demonstrated in the morphosememic chapter, /'continuative'/ and /'plural'/ (1. and 2.) are morphosememically related, closely enough to form a single morphosememe, //'continuative/plural'//.

It appears from the last two paragraphs that R_1 is three homophonous morphemes, R_2 is two morphemes, and so forth, as seen in the next chart (sememes are numbered as in tae last chart):

1.	R_1	R_2			R_5			R_8	R_9	R_{10}?	/'cont.'/
2.		R_2	R_3		R_5	R_6	R_7	R_8			/'pl.'/
3.	R_1		R_3	R_4	R_5	R_6	R_7			R_{10}	/'dim.'/
4.	R_1		R_3				R_7				/'aug.'/
5.										R_{10}	/'person classif.'/

(Abbreviations only to fit glosses in chart.)

Considering each type of reduplication to be phonemically similar enough to each other type to be prospective allomorphs, it remains to see if we can predict any allomorph relationships on the basis of phonemic or morphemic environments.

The lists, already given, of examples of each type (leaving R_1 with the elsewhere environment) are predictive on the level of morphemic environment (as a last resort). But perhaps the phonemic environment can be helpful. C_1 and C_2 of the root show no correlation with reduplication type but root vowel V_1 does.

A noticeable feature of roots taking $-R_1-$ is that so few of them have ə as V_1. Out of over 150 examples only nine have ə as V_1:

1. q'əmá·s 'to dip net': q'éyq'əmas 'dip-netting'
2. θ'éx̣ 'burn out (of fire, sun, moon)': θ'éθ'ex̣ 'burning out'
3. ləx^{w}- 'always' + p'éq' 'white' + $-R_1-$ 'inherent continuative' + -əs 'face' → ləx^{w}p'ép'əq'əs 'name of mountain on northwest side of Fraser R. between Hope and Yale'
4. s-léx̣-cəs 'finger': sléləx̣cəs 'all the fingers'
5. s-léx̣-x^{y}əl 'toe': sléləx̣x^{y}əl 'all the toes'
6. q^{w}əɬé·y 'driftwood': q^{w}éq^{w}əɬəy ~ q^{w}éɬq^{w}əɬəy 'lots of little pieces of driftwood'
7. sqíqəwèθ 'little rabbit' or sqəwéθ '(big) rabbit':

sq^{w}ə́q^{w}ewéθ 'bunch of rabbits'

8. x̌éx̌əl 'frost'

9. łəwqíʻm 'medium-size gray mountain blueberry':

łə́łəwqíʻm 'small gray mountain blueberry'

We can even dispose of some of these: 1. changes its vowel ə → ɛy by rule 2.3.3.8; 2. stress pattern may be θ'əθ'éx̌ (pointing to R_5- instead); 4. and 5. are just as plausibly analyzed as having -ləˑ- infix 'plural' (as in a number of other words) instead of -R_1-; 6. has Aə and stress shifting anyway besides the fact that q^{w}éq^{w}əłəy could be an error for q^{w}éłq^{w}əłəy (-R_2 or R_3-) which is also attested; 7. has labialization and could have Aə of diminutive R_4- vowel (in sqíqəwéθ); 9. could also be written as ło(w)qíʻm: łə-ło(w)qíʻm with R_5- 'diminutive'. Only 3. and 8., with crystallized reduplication, are left with -R_1- of a ə root (out of over 150 examples).

R_5- also has surprisingly few roots with ə. Nine examples out of 25 have ə as V_1, but six of these have ablauted the ə to i (perhaps a motivation for this ablaut), while the seventh ablauts the ə to ɛy. This leaves only two examples (8. and 9. below) with ə.

1. téś 'approach, get near': stətís 'be near'

2. sq'ép 'a gathering': sq'əq'íp 'gathered'

3. pəq^{w}-át 'break s-th': spəpíq^{w} 'broken'

4. méləcˀ-məT-áˑyθəl 'mixed up in speaking': məmíləcˀ

'mixed up'

5. x̌^{W}əx̌^{W}é·yə 'big fly': x̌^{W}əx̌^{W}iyé·yə 'housefly'

6. sx̌^{W}əyé·m 'myth': sx̌^{W}əx̌^{W}iyém 'story, fable, tale'

7. sx̌éłə 'leg, foot': sx̌əx̌éyłə 'legs, feet'

8. qəmá· 'suckle': qəqəmá· 'suckling'

9. t'émél̓s 'chop with axe': t'ət'éməls 'chopping; a chisel'

On the other hand, -R_2 appears with roots that have ə as V_1 86 percent of the time. Four derivations of q^{W}è·l 'talk' have Aə, and both ƛ'éwəls 'bark': ƛ'éwƛ'əwəls 'barking' and q'éys-əT 'tie s-th': q'ésq'əs(ə)cəl 'spider' also have Aə. This leaves ləq'é·lq'əl 'travel', qéyqɛyx̌əlà 'shadow', syéq'(ə)yəq' 'lots of logs', x̌ɛylx̌ələmá·s 'fleecy wave clouds', and ʔistéytəyəl 'group of canoes going upstream' (possibly not -R_2 but tíyt 'upstream' may be root).

R_3 and R_4 have roots with any vowel as V_1; examples are so sparse for the other types, it is hard to tell for them, but all have at least some examples with ə and some with non-ə vowels as V_1.

It seems that R_2 and R_1 could be allomorphs of one 'continuative' morpheme, or R_2 and R_5 could be allomorphs of 'continuative' and 'plural' morphemes; these allomorphs would be in complementary distribution depending on V_1 being ə or not ə, with a few morpheme-dependent rules to cover exceptions.

$R_{1/2}$ 'continuative' → R_1 /(q'əmás), (ɵ'ɔ́x), p'ɔ́q'___
→ R_2 / V_1 = ə ___
→ R_1 / V_1 ≠ ə ___ (i.e. _ _ _)

or

$R_{2/5}$ 'continuative' and 'plural'
→ R_5 / qəmá·, t'ɔ́méls ___
→ R_2 / V_1 = ə ___
→ R_5 / V_1 ≠ ə ___ (i.e. _ _ _)

Approaching reduplication from the semantic direction there is more predictability. From the tables at the beginning of this section it can be seen that 'pet name', 'verbal adjective' and 'comparative' are expressed by R_1 and no other type, 'eldest' (dubiously) by R_3 and no other type, 'distributive' by R_5 only, 'emphatic' by R_7 only, and 'person classifier' by R_{10} only. In addition, R_1 conspicuously lacks the meaning 'plural' among the things it expresses, R_3 is almost exclusively 'plural', and R_4 is exclusively 'diminutive'. The semantic and sememic patterns in all this will be considered in more detail in the chapters on sememics and morphosememics.

2.5.13. Relationship of Reduplication to Ablaut. There are a number of similarities between reduplication and ablaut in Chilliwack and Upriver Halkomelem: the fact that both reduplication and ablaut cover 'continuative' and 'plural' (see the chapter on morphosememics),

the fact that several types of reduplication and all types of ablaut involve infixing, and the fact that several types of reduplication (like ablaut) involve adding vowels different from the root vowel or irrespective of the root vowel. These similarities in shape and meaning made it plausible to check into the possibility that reduplication and ablaut are allomorphs of a 'continuative' or a 'plural' morpheme.

Upon examination this possibility of allomorphy seems remote, for two reasons. One reason is the presence of examples with ablaut and reduplication simultaneously. The other reason is the presence of phonologically similar roots, one of which takes 'continuative' ablaut, the other of which takes 'continuative' reduplication; pairs of phonologically similar roots were also found in which one member has 'plural' ablaut and the other has 'plural' reduplication. Examples:

1. $q^{W}\acute{e}\cdot l$ 'talk': $q^{W}\acute{a}q^{W}$əl 'talking' has Aa and R_1 both 'continuative'
2. $q^{W}\acute{\varepsilon}y$əl 'turn yellow': $q^{W}\acute{a}q^{W}$əyəl 'turning yellow' has both Aa and R_1 'continuative'
3. $k'^{W}\acute{a}s$-· 'burned, scalded': $k'^{W}\acute{a}\cdot k'^{W}$əs '(be) hot' has both Aa· derivational and R_1 'verbal adjective'
4. $k^{W}\acute{i}m$-əl 'get red': $k^{W}\acute{i}k^{W}$əməl 'getting red' beside $\acute{i}m$-ex^{y} 'walk': $\acute{i}\cdot mex^{y}$ 'walking'

5. lí́yə́m 'laugh': lə́·yəm 'laughing' beside alternatives lə́yəm 'laugh': lə́yləyəm or lí́ləyəm 'laughing'

6. stí·wəl 'neice or nephew': stətí·wəl 'nephews, neices' beside sciwtə́ɬ 'child-in-law': scí·wətə́ɬ 'children-in-law'

possibly 7. sθə́k'^{w} 'straight': sθəθə́k'^{w} '(being) straight, stretched, pulled tight' beside θə́q'əm 'drip': θə́q'əm 'dripping'.

The most fruitful area for study of the relationship between ablaut and reduplication seems to be sememic and morphosememic. The relationship will be dealt with further in those chapters.

CHAPTER 3. OUTLINE OF MORPHOLOGY

The morphology will be dealt with in chapters four through ten. These chapters will cover derivation and inflection of the Chilliwack and Upriver Halkomelem word classes: personal pronouns, verbs, particles, nominals, demonstratives, and numerals. Chapter five on lexical affix sets will deal further with derivation, as will the chapter on morphosememics. The morphological chapters will include some information on allomorphy which belongs in morphophonemics (as mentioned in chapter two) and some information that belongs in morphosememics.

The ten sets of personal pronouns include subject affixes (preposed or suffixed), object affixes (suffixed), possessive affixes (some suffixed to previous word, some to the thing possessed, some to both), a different set of subject suffixes used with verbs prefixed with {we-} 'when; if' and with verbs preceded by negative verb {ʔə́wə} 'not to be', a different set of object suffixes for the 'passive voice', and five sets of independent word personal pronouns: verbal ('it's me' for example), nominal (like 'he' and 'her' in 'he hit her'), reduplicated emphatic ('it's me' is the only member), emphatic possessive ('ours, our own' for example), and independent object of prepositional verb. Interrogative pronouns belong rather in the

discussion of verbs (for example 'who (is it)?' and 'what (is it)?' are verbs). Subordination is shown through nominalizing the first word of the sentence or clause and then using possessive pronoun affixes to indicate the subordinated subject ('your seeing us is our want' → 'we want you to see us'). Thus subordination will be discussed under personal pronouns. There are also several affixes which are attached to personal pronouns to inflect personal pronouns (tɛ-,ƛ'ɛ-, R_7-, -ə̀t). And there are two reflexive suffixes which can be added to verbs, {-lá·məθ} 'oneself' and {-(ə)θət} 'for oneself, for itself'.

Verbs are affixed with lexical and derivation affixes before being affixed with personal pronouns and future tense (if applicable). There are several intransitive suffixes ({-ɛ́·ls} and {-əl} are the most common). There are three main transitivizing suffixes. They do more than just transitivize; their function is more indicating control of the action. The three suffixes are {-(ə)T} 'do purposely', {-l} 'do accidentally, happen to do, manage to do', and {-sT} 'causative, cause s-o to do, make s-o do'. {-məT} is another transitivizing suffix. After the transitivizers come object pronoun suffixes (including passive), then non-passive subject pronoun affixes, then future tense. Active voice is unmarked. Verbs are inflected

for two aspects: continuative and non-continuative. Non-continuative is unmarked; continuative is marked by ablaut or reduplication or in some cases by a prefix {hé- ~ hə́-}. Verbs are sometimes inflected for plural object by reduplication R_3- and sometimes for 'diminutive', 'verbal adjective' and 'comparative' by reduplication of various types. Verbs can also be prefixed with {wə-} 'when; if' and then they take a new, abbreviated set of subject pronouns. Verbs are sometimes suffixed with {-ə} 'interrogative' before the subject suffix is added. However, the predominant interrogative is verb root {lí} which can be inflected for pronoun subject in the usual way. Other suffixes which can be considered inflections are the two reflexive suffixes mentioned above, and {-təl} 'reciprocal' and {-f•m} 'repeatedly'. English adjectives, prepositions, adverbs, and even the negative are translated into Halkomelem as verbs and are so inflected. Probably a majority of nouns have verb roots at their base and are nominalized verbs roots with {s-} 'nominalizer'.

Nominals are derived by ablaut and lexical and derivational affixes, rarely by crystallized 'plural' or 'continuative' reduplication. The nominalizer par excellence is the {s-} prefix. This prefix is sometimes preposed (suffixed to the preceding word, usually to {k'^{w}} or {k^{w}}) to nominalize subordinate

clauses or sentences. Another mark of nominals is a preceding demonstrative article {tə, θə, k^{w}θə, k^{w}ə, k'^{w}ə}, etc. Nominals can also be simple underived nouns. Nominals can be inflected for plural (most are not) by ablaut, reduplication or the {-əl- ~ -lə-} infix. Nominals can also be inflected for 'diminutive', 'pet name', and 'eldest' by reduplication. They can be inflected of course for 'possessive' by the possessive pronouns, and such inflection would follow any other nominal inflection done.

Particles are a small catch-all class of uninflectable words (conjunctions and modals (usually unstressed), interjections (which can be stressed) and perhaps some unstressed adverbials). There are other unstressed words (such as many demonstratives) which do not belong in this class. Particles, to give a sample, include: qə 'and, but, or', qɛs 'and', su 'so, then', qə(w) __-ə 'until', combinations of qə and ƛ'á with su; t'wə 'must', c'ɛ ~ θ'ɛ 'it is said, they say', k^{w}ɛ́ 'anyway', ?iyá·ləm 'can, could', yáswə 'maybe, perhaps'; qélémə́x^{y} 'oh my goodness!', ?é·cələ 'gee!, good grief!', lə́w 'say!, hello'; and perhaps adverbials like wəɬ 'already' and x^{w}əl 'yet, still'. Others are listed in the chapter.

Halkomelem demonstratives exist in several sets. Some, often two words, serve as typical demonstratives ('this', 'that', etc.); some serve as demonstrative verbs ('be here', 'be there') which are the Halkomelem equivalent of adverbs; some serve as obligatory demonstrative articles which must appear with each nominal or nominalized phrase or sentence. The latter set of demonstratives consists largely of unstressed roots, which have a shape $C_1(C_2)(ə)$. These roots are inflected with possessive pronouns to show possession of the following nominal. When the following nominal is a nominalized phrase or sentence, the possessive pronoun indicates the subject of the phrase or sentence and must be followed by an -s nominalizer (for example, sk'^{w}ɛ́(·)y 'it is impossible', k'^{w} 'abstract demonstrative', -əl 'my', -s 'nominalizer', k'^{w}ɛ́c 'see', -l 'happen to', -ex^{w} '3rd person object' → sk'^{w}ɛ́y k'^{w}əls k'^{w}ɛ́clex^{w} 'I can't see (him, her, it, them)'). The demonstrative-article roots express 'presence/presence not specified', 'nearness' or 'distance', 'visibility' or 'invisibility/abstractness', and 'masculine/gender not specified' or 'feminine sex gender'. For example, {tə} is 'the (present/presence not specified, visible, masculine/gender not specified)'. Some of these roots (like {tə}) are single portmanteau morphemes, and some contain two morphemes. But every time a nominal is used

one must choose a demonstrative root expressing the degrees of nearness and visibility and the gender. 'Generic' vs. 'specific' may also be involved. When used before names, demonstratives are not translated. When the 'gender not specified' or the 'abstract' demonstrative root is used, it can be translated 'the'.

Numerals are based on the decimal system with traces of a quaternary influence in the stems under 'eleven' that can be derived. The major inflection for numerals is a set of 15 or so lexical suffixes. These suffixes could also be called numeral classifiers but for the fact that almost all of them appear with some non-numeral roots as well. The suffixes express things like 'o'clock', 'day of the week', 'times ten', 'people', 'times', 'trees', 'dollars', 'canoes', 'canoe paddles', 'houses', 'garments', and 'piles of things'. Some can be applied to numbers beyond 'ten', some stop at 'ten', 'nine', 'five' or 'two'. There are no ordinals, and only one sporadic distributive has been found ('four to each'). Numbers by tens are made by suffixing {-əlsx^{y}ɛ́} 'times ten' to roots 'three' through 'nine'. Other numbers over ten are made up additively: 'eleven' is 'ten' + 'and' + 'the' + 'one', i.e., {ʔɛ́·pəl qɛs tə lɛ́c'ə}; 'ninety-nine' is {tùx^{w}əlsx^{y}ɛ́ qɛs tə tú·x^{w}}. 'Twenty' {c'k'^{w}əx^{y} - c'k'^{w}ɛ́yx^{y}} may have {k'^{w}ɛ́x^{y}} 'count' as its root.

{léc'əwəc} 'one hundred' has root {léc'} 'be different' while 'two hundred' is merely 'two' + 'one hundred'. The other hundreds are formed on the same model. 'One thousand' is {ʔá·pəl k^{W}s léc'əwəc} ("ten hundred"), with the function of {k^{W}s} unclear.

The chapter on lexical affix sets will present examples of the lexical affixes along with some morphological and semantic analysis. The discussion of semantics, sememics, and morphosememics involved will be largely reserved for chapters twelve and thirteen. Lexical affixes in Upriver Halkomelem are very productive, very concrete semantically, and very interesting. For example, one set of suffixes covers body parts, and its suffixes are distinct in many cases from the independent words for the same body parts; body part suffixes are sometimes extended semantically to metaphorical uses, and they are widely used with verbs as well. Other lexical affixes do not form as coherent a set as do body part suffixes.

CHAPTER 4. PERSONAL PRONOUNS

4.0. There are two reflexive suffixes and ten sets of personal pronouns in Chilliwack Halkomelem: independent pronouns (three sets), emphatic independent pronoun, subject pronouns, object pronouns (which follow the transitive control suffixes: purposive, accidental, and causative), possessive pronouns (two sets: affixed and independent (emphatic)), subject pronouns with {wə-} 'if; when' and with auxiliary verbs after negative verb {ʔéwə} 'not to be', and object pronouns in the passive voice.

Subordination will be dealt with in a section on the use of possessive pronouns as verb subjects for: 'can', 'can't', 'want', 'think, feel emotionally', infinitives, verbs after question words, and verbs following and dependent on the first verb in a sentence.

4.1. Independent pronouns, set one. This set has a verbal function. Each member of the set can be translated in four ways, as in the first person singular member {ʔélθɛ} 'it's me, I did, I'm the one that ___, I'm the one to ___'; to get the translation of the second person singular, {léwə}, substitute 'you', 'you', and 'you're' for 'me', 'I', and 'I'm' (respectively) from {ʔélθɛ}. Translations of the other members can be obtained in the same way. This is mentioned because later citations of pronouns from this set will sometimes

avoid the long cumbersome gloss by using 'etc.' within the gloss. The variation in this set is all free variation between phonemic citations. Person is abbreviated '1', '2', '3' and number 'sg.' and 'pl.'

1 sg. {ʔélθɛ} /ʔélθɛ/ ~ /ʔélθə/ 'it's me, I did, I'm the one that ___, I'm the one to ___'

2 sg. {léwə} /léwə/ ~ /lúwə/ 'it's you, you did, you're the one that ___, you're the one to ___'

3 sg. {ƛ'á } /ƛ'á/ 'it's him, it's her, that's it, that's ___; he did, she did, it did; he's the one that ___, she's the one that ___, it's the one that ___, that's the one that ___; he's the one to ___, she's the one to ___, it's the one to ___, that's the one to ___'[1]

1 pl. {łlíməł} 'it's us, we did, we're the ones that ___, we're the ones to ___'

2 pl. {łwéləp} 'it's you folks, you folks did, you're the ones that ___, you're the ones to ___'

3 pl. {ƛ'á·ləm} /ƛ'á·ləm/ ~ /ƛ'áləm/ 'it's them, they did, they're the ones that ___, they're the ones to ___'

These words are used all by themselves to answer questions like, 'Who's there?', 'Who made this?', or

---

1. This gloss could be abbreviated 'it's (him, her, it), that's ___, (he, she, it) did, (he's, she's, it's, that's) the one (that, to) ___'.

'Who wants to go?'. They are also used in sentences like: ɬwéləp-cɛ lém. 'It will be you folks that go.' (the speaker may be dividing a group), and lə sƛ'í·-s k'^{W}ə-s ?élθə-s k'^{W}ə́c-l-əx^{W}. 'He wants me to see it.', and lə s-tə?é·-wəl tú-ƛ'à k'^{W}ə-s ?élθə-s-cɛ lém. 'He thinks I'm the one to go.', ƛ'á-cɛ (tə) Bill k'^{W}ə mɛy-T-ámə wə-x^{W}ə?í·-s. 'It will be Bill that helps you when he gets here.', and ƛ'á ?é mé·l. 'That's your father.'

4.2. Independent emphatic pronoun. For more emphasis {?é?ɛlθɛ} //R$_{7}$-?élθɛ// (/?é?ɛlθɛ/ ~ /?é?ɛlθə/) can be used in place of {?élθɛ} with the same meaning plus a little emphasis. This might be shown by the following exchange: "Who's there?"

"It's me." (?élθɛ)

"Really?"

"It's me!" (?é?ɛlθɛ)

4.3. Independent pronouns, set two. This set has a nominal function, as we can tell from the demonstrative article prefixes (tɛ-, tú-, and θú-) and the use and position of these pronouns in sentences (following the verb). This set is more common than 4.1 and 4.2 and is derived from those sets by prefixing tɛ- or, in the case of {ƛ'á } and {ƛ'á·ləm}, by prefixing tú- 'male/gender unspecified' or θú- 'female'. This produces the following set:

(note that this set has the same free variation and in verbal contexts the same system of glosses as the sets in 4.1 and 4.2)

1 sg. {tɛʔélθɛ} 'I, me', {tɛʔéʔɛlθɛ} 'I, me'

2 sg. {tɛlέwə} 'you (sg.)'

3 sg. male {túƛ'à } 'he, him'

3 sg. female {θúƛ'à } 'she, her'

3 sg. gender unspecified {túƛ'à } 'it'

1 pl. {tɛɬlímθɬ} 'we, us'

2 pl. {tɛɬwέləp} 'you folks, you (pl.)'

3 pl. male {túƛ'à·ləm} 'they (male), them (male)'

3 pl. female {θúƛ'à·ləm} 'they (female), them (female)'

3 pl. gender unspecified {yuƛ'á·ləm} or {yúƛ'à·ləm} 'they, them'

3 pl. gender unspecified but speaker knows them {ʔέ·ɬtəl} 'they, them'

The third person members of this set are especially frequent since the third person subject and object suffixes on verbs do not distinguish number or gender and since normal declarative word order is verb subject object. Some examples follow:

lέm θúƛ'à 'she goes' and lέm túƛ'à· 'he goes'

(By itself lέm means 'he goes, she goes, it goes, they go'. When talking about something without gender or when it's not important to state the sex or one is not sure, {túƛ'à } can mean 'it'.)

Third person pronouns from this set can also be used to clarify the object of a verb. Since k'^{W}ɛ́c-ət-əs means '(3rd person) looked at (3rd person)', the sentence k'^{W}ɛ́c-ət-əs tə swíyəqə means 'He, she, it, they, they (male), they (female) looked at the man.' (A lone nominal after a verb with 3rd person subject and 3rd person object is taken as the object.) To make it clear that a female is the subject ('she looked ...') you add the pronoun {θúẋ'à } in the subject slot (before swíyəqə). Halkomelem can even specify in the pronoun that the man looked at several females; this is done only with great awkwardness in English.

k'^{W}ɛ́c-ət-əs tə swíyəqə θúẋ'à·ləm. 'The man looked at them (female).'

If the man was not supposed to look at other women the following sentence might be next:

q'^{W}áq'^{W}-ət-əs θə stá·ləs-s túẋ'à . 'His wife hits him.'

	VERB	SUBJECT	OBJECT
'he, she, it, they'	hit	him', her', it', them'	'female', 'wife', 'his'	'him'

Further, the sex and number of both subject and object can be given with these pronouns.

k'^{W}ɛ́c-ət-əs túẋ'à θúẋ'à . 'He looked at her.'

	VERB	SUBJECT	OBJECT
'he, she, it, they'	looked at	him', her', it', them'	'he'	'her'

In addition to the uses above, the pronouns of this set can be used to emphasize the subject. They follow the verb directly in such examples.

lém-cɛp tɛɬwéləp. 'You folks go.'

lém-cɛp alone means 'you folks go'. Notice that in these cases there is also a subject pronoun (here -cɛp) attached to the verb as part of the verb word. So the set 4.3 pronoun is not really needed unless the speaker wants to emphasize the subject or clarify the third person subject or object.

4.4. Subject pronouns attached to verbs. This set is used largely with the first verb in a sentence. The third person pronoun differs in three ways. (Let Vi stand for intransitive verb and Vt for transitive verb.)

With Vi	With Vt	Before verb	Translation
-cəl [ɕIl]	-cəl	cəl	'I'
-cəx^{w} [čUx^{w}]	-cəx^{w}	cəx^{w}	'you (sg.)'
nothing added	-əs	ləˑ	'he,she,it,they'
-cət [ɕIt^{h}]	-cət	cət	'we'
-cɛp [čæp^{h}]	-cɛp	cɛp	'you folks'

Some examples will help make these clear:

lémcəl 'I go'	mɛyθəmɕcəl 'I help you'	cəl lém 'I went'
lémcəx^{w} 'you go'	mɛyθéx^{y}cəx^{w} 'you help me'	cəx^{w} lém 'you went'
lém 'he, she, it goes, they go'	mɛyθéx^{y}əs 'he, she, it helps me, they help me'	ləˑ lém 'he, she, it, they went'

lém<u>cɛp</u>	mɛyθáx^{y}<u>cɛp</u>	<u>cɛp</u> lém
'you folks go'	'you folks help me'	'you folks went'

Notice that putting the pronoun as a separate word in front of the verb tends to give the verb a past meaning (cəl lém 'I went'). Less often the same combination is translated in the present however (cəl lém 'I go'). The surest way of phrasing past tense keeps the subject pronoun before the main verb but suffixes it to an initial {ʔí·ɬ} 'past tense' auxiliary. Thus, ʔí·ɬcəl lém or ʔí·ɬ cəl lém both mean 'I went'. (ʔí·ɬ may < ʔí· 'be here' + -ɬ 'past').

4.5. Object pronouns attached to active verbs. These pronouns are attached to the verb after transitive control suffixes and before subject pronoun suffixes. As with 4.4, the third person affix has several alternates depending on what it follows.

After {-(ə)T} 'do purposely'	After {-l} 'do accidentally, manage to do, happen to do' or after {-sT} 'cause to do, make s-o do'	Translation
-áx^{y}	-áx^{y}	'me'
-ámə	-ámə	'you (sg.)'
nothing added	-ɛx^{w}	'him, her, it, them'
-álx^{w}	-álx^{w}	'us'
-álə	-álə	'you folks'

It is important to note that these object pronouns only occur after one of the three: {-(ə)T} 'do purposely', {-l} 'do accidentally, happen to do, manage

to do', or {-sT} 'causative, cause to do, make s-o do'. These meanings are often not directly translated but are contained in the meaning of the verb itself. For examples, see below. //T// → θ / ___-áx^{y} 'me', -áme 'you' (as seen in 2.4.3). As a result the combinations come out as:

	purposely	accidentally	causative
'me'	-θáx^{y}	-láx^{y}	-sθáx^{y}
'you'	-θáme	-láme	-sθáme
'him, her, it, them'	-t	-lax^{w}	-stax^{w}
'us'	-tálx^{w}	-lálx^{w}	-stálx^{w}
'you folks'	-tálə	-lálə	-stálə

Some examples will show these in action:

mɛyθáx^{y}cəx^{w} 'you help me'	k'^{w}əcláx^{y}əs 'he sees me'	ʔimax^{y}sθáx^{y}əs 'he makes me walk'
mɛyθamécəl 'I help you'	k'^{w}əcamécət 'we see you'	ʔimax^{y}sθamécəl 'I make you walk'
méytəs 'he helps him'	k'^{w}əcléx^{w}cɛp 'you folks see him'	ʔimax^{y}stéx^{w}cəl 'I make him walk'
mɛytálx^{w}cəx^{w} 'you help us'	k'^{w}əclálx^{w}əs 'he sees us'	ʔimax^{y}stálx^{w}əs 'he makes us walk'
mɛytalécət 'we help you folks'	k'^{w}əclalécəl 'I see you folks'	ʔimax^{y}stalécəl 'I make you folks walk'

'He' or 'him' here stands for third person. Notice rule 2.3.3.9 operating here to shift stresses.

Examples of each type of verb control suffix will illustrate the types and meanings involved:

Purposely	Accidentally	Causative
k'^{w}ə́cotəs 'he looked at him'	k'^{w}ə́cləx^{w}əs 'he sees him'	ʔí·wəsθàx^{y}əs 'he taught me'
q'^{w}əq^{w}əθáx^{y}əs 'he hit me intentionally'	q'^{w}əq^{w}láx^{y}əs 'he hit me accidentally, unintentionally'	ʔiməx^{y}səməsə́cəl 'I make you walk'
ɬíc'ət 'cut s-th'	ɬə́c'làx^{y}əs 'he cut me accidentally'	χət'əsθáx^{y}əs 'he argued with me, maintained to me'
píx^{w}əθàx^{y}əs 'he brushes me off'	sí·siləməcəl 'I scare you'	ləʔəmə́stəx^{w}əs 'she took him, brought him'
k^{w}ə́·tálx^{w}əs 'he lets us go'	hə́q^{w}làx^{y}əs 'it smelled me'	ʔə́ystəx^{w}əs 'he likes her'
t'íləməθàx^{y}əs 'he sings it for me'	lícx^{w} sɬə́q'əl·àx^{y} 'do you know me?'	qə́lstəx^{w}cəl 'I don't like it'
χəθ'ə́θàx^{y} 'push me'	lícx^{w} pə́təlàx^{y} 'do you recognize me?'	ʔax^{w}əstálx^{w}əs 'he gives it to us'
ʔəlʔə́liyəməθaməcəlcɛ 'I'll be dreaming of you'	lícx^{w} tə́l·àx^{y} 'do you understand me?'	
(ʔə́·y 'keep on going')	ʔə́·yələx^{w} 'he's alive'	ʔə́·ystəx^{w}əs 'they're chasing them, etc.'

Note the instances of //l-l-áx^{y}// → /l·àx^{y}/ according to morphophonemic rules.

A peculiarity of Halkomelem is that the combination of 3rd person subject (he, she, it, they) with 2nd person object (you, you folks) does not occur. So -θáməs, -táləs, -láməs, -láləs, -sθáməs, -stáləs do not occur. A different set of endings (passive) or a different combination of words using pronouns from 4.1-4.3

must be used to express meanings like 'he hit you', 'they saw you folks' or 'she brought you'. For example, the combination, ƛ'ácɛ θúƛ'à méyθàmè. 'It will be her that helps you.' can be used instead of the passive.

4.6. Possessive pronoun suffixes. The interesting thing about this set is that not all of the suffixes are attached in the same place.

Attached: to word before	to thing owned	
{-əl} -əl ~ -l		'my'
{-é} -é ~ -ʔé		'your (one person's)'
	{-s}	'his, her, its, their'
	{-cət}	'our'
{-é} -é ~ -ʔé	{-ələp}	'your, you folks''

When what precedes the thing owned is a word ending in a consonant or a vowel other than ə (ƛ'é , lí, ʔí(·), and lís are especially common), then allomorph -l or -ʔé is attached for 'my', 'your' and 'you folks''; when what precedes the thing owned is a word ending in ə allomorphs -əl and -é are attached. Notice also that the 2nd person plural possessive requires two morphemes, the 2nd person {-é} and the pluralizer {-ələp}. Examples:

təl mé·l 'my father', ƛ'él méle 'that's my child'

θé tɛ́·l 'your mother', tɛ́ mɛ́·l 'your father'

tə mɛ́·ls 'his/her/its/their father'

tə mɛ́·lcət 'our father'

tɛ́ mɛ́·ləlap 'you folks' father, your (pl.) father'

Since the word preceding a nominal is usually a demonstrative article (tə, θə, sə, k^{W}sə, k^{W}θə, or k'^{W}ə), possessive pronoun suffixes are usually attached to them. The suffixed pronouns are the ordinary way of showing possession. For example:

ʔax^{W}əsθáx^{y}əs təl mé·l tə sq^{W}əméys. 'My father gave me his dog.'

4.7. Independent possessive pronouns. These are constructed by using the morpheme {swé} 'own (?)' as a noun stem and inflecting it with the previous set of possessive pronoun suffixes. Thus:

(ə)l swé	'mine, my own'
ʔé swé	'yours, your own (sg.)'
swés	'his, hers, its, their, his own, her own, its own, their own'
swécət ~ s?á‡	'ours, our own'
ʔé swé?əlép	'you folks', you folks' own, yours (pl.), your own'

Examples:

ƛ'á‡ swé 'that's mine', (ə)l swé mémələ 'my own children'

ʔé swécɛ 'it will be yours'

ƛ'á swés 'that's his/hers/its/theirs'

ƛ'á swécət 'that's ours', ƛ'á s?á‡ 'that's ours'

ƛ'á ʔé swé?əlép 'that's yours (you folks')'

Apparently swécət and s?á‡ are in free variation. The independent set has more emphasis in meaning than the suffixed set of possessives and can also occur

alone as a complete answer to a question or preceded only by {ʔ'á }. Thus an answer to, təwét sqʷəméy? 'Whose dog?' might be, (ə)l swé. 'Mine.' or, ʔ'ál swé. 'That's mine., He's mine., etc.' The emphatic use is shown in the following: ?í·wəstálxʷəs tə s?áɬ mé·l. 'Our (own) father taught us.', and, ʔ'á swécət mé·l k'ʷəs ?í·wəstálxʷəs. 'It's our father that teaches us.'

4.8. Subordination using possessive pronouns.

This special use of pronouns of set 6 occurs in examples like:

a. sk'ʷéy k'ʷ-əl-s k'ʷéclexʷ. 'I can't see it.'
sk'ʷéy k'ʷ-é-s k'ʷéclexʷ. 'You can't see it.'
sk'ʷéy k'ʷə-s k'ʷéclexʷ-s. 'He/She/It/They can't see it.'
sk'ʷéy k'ʷə-s k'ʷéclexʷ-cət. 'We can't see it.'
sk'ʷéy k'ʷ-é-s k'ʷéclexʷ-əlep. 'You folks can't see it.'
(Often k'ʷə-s instead of k'ʷ-é-s in the 2nd person pl. since -əlep alone shows 'you folks'.)

b. sk'ʷéy k'ʷə-s k'ʷəclamé-cət. 'We can't see you.'

c. sk'ʷéy k'ʷ-é-s lém-əlep. 'You folks can't go.'

d. sk'ʷéy-ə k'ʷ-əl-s k'ʷéclexʷ? 'Can't I see it?'

e. lúw ?iyáləm k'ʷ-əl-s k'ʷeclexʷ. 'I can see it.'

f. ?í·ɬ ?iyáləm k'ʷ-əl-s ?éɬtəl. 'I could have eaten.'

g. lúw ?iyáləm k'ʷ-əl-s lém. 'I can go.'

h. lí ?iyáləm k'ʷ-əl-s lém? 'Can I go?'

i. ?éwə lís ?é sʌ'íy-əlep. 'You folks don't want it.'

j. wə-lís-l sʌ'í 'if I want it'

k. ʔəwés lís-l sƛ'ɬ 'if I don't want it'

l. ʔɬ·ɬcəx^{W} sθɬ·qəl k'^{W}-é-s ʔɬ·ɬ léyəm. 'You were laughing loudly.'

m. ʔówə lís-l sƛ'ɬ k'^{W}-é-s líyém. 'I don't want you to laugh.'

n. x^{W}əʔɬ·t-ʔé-s ʔówəɬ q^{W}élsθàx^{y}? 'Why don't you speak to me?'

o. sƛ'ɬ-cət k'^{W}-é-s k'^{W}éclàlx^{W}. 'We want you to see us.'

p. ʔówə lís-l sq^{W}éləwəl k'^{W}-é-s lém. 'I don't think you should go.'

q. təmtém k'^{W}-é-s lé θíyt? 'When did you make it?'

r. lə sƛ'ɬ-s k'^{W}-əl-s k'^{W}écləx^{W} θə stáləs-s k'^{W}ə-s θíyəq^{W}-t-s tə sé·q. 'He wanted me to see his wife digging fern roots.'

The problem is only that the translations given here are not strict translations, word for word. Strict translations of these sentences are too awkward in English but show the Halkomelem way of thinking about them more clearly. Thus the first example could perhaps be translated 'It is impossible my happening to see it.' ('I can't see it.'):

sk'^{W}éy	k'^{W} -əl -s	k'^{W}éc -l	-əx^{W}.		
it is impossible	the my noun	see happen to	it (obj.)		

This construction is the standard way of translating 'can't' (that is, using s'^{W}éy + k'^{W} + possessive pronoun suffix + -s nominalizer + verb without subject affix).

Notice the -s after the pronoun in all the examples.

This -s makes the verb which comes after it into a nominal. To show this change in an English translation is very awkward: we must use 'my sight of it' or 'my seeing it'. Once the verb is nominalized it can be possessed and have a possessive pronoun. It also needs an article, as discussed above. However, with these verbs made into nominals, the only article allowed is k'^{W}ə 'abstract demonstrative' (I have not found examples like *sk'^{W}ə́y təls k'^{W}ə́cləx^{W}). As we shall see in the chapter on nouns, an s- is frequently attached to verbs elsewhere to form nouns (thus t'í·ləm 'to sing' becomes s-t'í·ləm 'song'). That may have been the case here too, but most of the time with this special use of pronouns, the /s/ is pronounced at the end of the pronoun.

The other examples in a. work like the first example, as do b., c., and d. For example, d. is more literally 'Is it impossible, my seeing it?' (or considering the verb subject object word order, 'Is my seeing it impossible?'). Examples e. through h. use ʔiyə́ləm 'it is alright, possible', so that f. could be translated more closely by 'My eating was alright.' This is apparently the standard way of expressing 'can'. As a result, both 'can' and 'can't' require this type of construction.

Examples i., j., k., m., o., and r. show that 'want' usually requires the possessive construction too.

For example, m. could be translated 'Your laugh is not my want.' and thence 'I don't want you to laugh.' Notice the two possessives in this one. When English uses an infinitive ('to' followed by a verb), Halkomelem usually uses the possessive pronouns as here. The person shown as possessor is the person who would actually be doing the action. Thus 'I don't want you to laugh.' is thought of as 'Your laugh is not my want.' Example r. also shows this:

lə	s-	ƛ'í	-s	k'^{W}	-əl	-s
	past	noun	want	his	the abstract	my noun
3rd person						
.....his want was					.....my.....	

k'^{W}əc	-l	-əx^{W}	θə	s-	tɬ'·ləs	-s	k'^{W}ə	-s
see	happen to	her	the female present	noun	wife	his	the abstract	noun
happening to see her			.....his wife.....				.....	

θíyəq^{W}	-t	-s	tə	sé·q.
dig	it (obj.)	her unspec. gender	the pres.	bracken fern root.
her digging it			.the	bracken fern root.

'He wanted me to see his wife digging bracken fern roots.'

The special use of possessive pronouns of set 6 also occurs after question words as in example n., 'Why is it, your not speech to me?' and example q., 'When is it, your past making it (action not continuing, -ing to show nominalization only)?'. And this use also occurs with every verb dependent on the first verb and following it in the sentence. Thus example l., 'You were loud, your

past laughing.', example p., 'It is not my thought, your going.', and others. It can be seen then, in summary, that the suffixed possessive pronouns of set 6 are used as verb subjects for: 'can', 'can't', 'want', infinitives, verbs after question words, and verbs following and dependent on the first verb in a sentence. All are very common, and there may be other uses as well.

4.9. Subject pronouns with we- 'if; when', and with verbs after negative verb ʔə́wə 'not to be'.

		After auxiliary verb ending in /i/	
'I'	-ə́l	-l	in lí̓l or ʔí̓l
'you (one person)'	-əx^{W}	-x^{W}	lí̓x^{W} ʔí̓x^{W}
'he, she, it, they'	-əs	-s	lí̓s ʔí̓s
'we'	-ət	-t	lí̓t ʔí̓t
'you folks'	-ələp ~ -ə́p	-p	lí̓p ʔí̓p

It appears that this set of pronouns is used when there is doubt, uncertainty, or negation (something has not happened). Some examples will show how they are used.

wə-lə́m-ə̀l 'if/when I go'

wə-lə́m-əx^{W} 'if/when you go'

wə-lə́m-əs 'if/when he/she/etc. goes'

wə-lə́m-ət 'if/when we go'

wə-lə́m-ələp 'if/when you folks go'

ʔə́wəcəp lə́m-ə́p q'ə́·θət. 'You folks don't go mix with them.'

yá·swə wə-lém-èl. 'I might go., I don't know if I could go.'

yá·swə wə-sk'^{W}éy-əs k'^{W}-əl-s lém. 'I don't know if it's impossible for me to go.'

ʔéwəcəl lém-èl. 'I don't/won't go.'

ʔéwəcəx^{W} lém-əx^{W}. 'You don't/won't go.'

ʔéwə (k'^{W}-s) lém-əs. 'He/She/It doesn't/won't go., They don't/won't go.'

ʔéwəcət lém-ət. 'We don't/won't go.'

ʔéwəcɛp lém-ələp. 'You folks don't/won't go.'

ʔéwəcəl sc'əlέx^{W}əm-él. 'I'm not a spirit dancer.' (cp. alternate below)

ʔéwəcəx^{W} sc'əlέx^{W}əm-əx^{W}. 'You're not a spirit dancer.'

ʔéwə sc'əlέx^{W}əm-əs. 'He/She is not a spirit dancer., They're not spirit dancers.'

ʔéwəcət sc'əlέx^{W}əm-ət. 'We are not spirit dancers.'

ʔéwəcɛp sc'əlέx^{W}əm-ép. 'You folks are not spirit dancers.'

ʔəwé±cəl sƛ'íƛ'əqə±-él. 'I wasn't a child.' (less common)

ʔəwé±cəl lí·l sƛ'íƛ'əqə±. 'I wasn't a child.' (more common)

ʔéwəcəl lí·l sc'əlέx^{W}əm. 'I'm not a spirit dancer.'

cəx^{W} méyθéx^{y} k'^{W}əls ʔéwə(cəl) líyəm-él. 'You helped me not to laugh.'

cəx^{W} mɛytélx^{W} k'^{W}s ʔéwəct líyəm-ət. 'You helped us not to laugh.'

cəl méyt k'^{W}əs ʔéwəs líyém-és. 'I helped him not to laugh.'

cəl méytələ k'^{W}s ʔéwəp liyém-əlép. 'I helped you folks

not to laugh.'

sk'^{W}éy k'^{W}əs mɛytálx^{W}s wəlémət sóq'tàlè. 'He can't help us find you folks.'

ʔśwə sƛ'ís k'^{W}əs mɛytálx^{W}s wəlémət sóq'tàlè. 'He won't or doesn't want to help us find you folks.'

yéθəs-cəx^{W} tə swíyəqə wə-ʔəmé-st-əx^{W}-əs θə stá·ləs-s. 'You ask the man to bring his wife.'

wə-təmxéyƛ'-əs 'when it is winter, in wintertime'

lícx^{W} sɬéq'əl·əx^{W} wə-lém-əs-cɛ? 'Do you know if he'll go?'

(Occasionally the ə is dropped from -cəx^{W}, -cət, -əs and a few other suffixes; see stress rules.)

Examples with auxiliary verb lí ~ lí·:

ʔśwəcəl líl ƛ'ílsθàmè. 'I don't like you.'

ʔśwəcx^{W} líx^{W} ƛ'ílsθàx^{y}. 'You don't like me.'

ʔśwə lís ƛ'ílsθàx^{y}əs. 'He/She/etc. doesn't like me.'

ʔśwəcət lí·t ƛ'ílstàlè. 'We don't like you.'

ʔśwəcɛp líp ƛ'ílsθàx^{y}. 'You folks don't like me.'

ʔśwə lís l sƛ'í. 'I don't want it.'

wə-lís l sƛ'í 'if/when I want it'

ʔśwəcɛp lí·p q^{W}élstàlx^{W}. 'You folks didn't speak to us.'

ʔśwə lís yéθəsθèlèm. 'I wasn't told.'

ʔəwé lís yéθəstàlèm? 'Weren't you folks told?'

ʔśwəcəl lí·l lém. 'I didn't go.'

ʔśwəct lí·t lém. 'We didn't go.'

ʔśwəct lí·t sté·x^{W}eɬ. 'We're not children.'

ʔəwés lís sƛ'ícət 'if we don't want it'

lə sq^{W}éləwəl k^{W}səs ?éwəs lís ?iyá·ləm k'^{W}əls lém.
'He thinks it's not alright for me to go.,
He thinks I shouldn't go.'

Examples with auxiliary verb ?í ~ ?í·:

x^{W}əwécəl ?í·l x^{W}é siyá·ləx^{W}ə. 'I'm not old yet., I haven't become old yet.'

x^{W}əwécx^{W} ?íx^{W} x^{W}é siyá·ləx^{W}ə. 'You're not old yet., etc.'

x^{W}əwé ?ís x^{W}é siyá·ləx^{W}ə. 'He's not old yet., etc.'

x^{W}əwéct ?í·t x^{W}é siyá·ləx^{W}ə. 'Wé're not old yet., etc.'

x^{W}əwécɛp ?í·p x^{W}é siyá·ləx^{W}ə. 'You folks aren't old yet., etc.'

stém tə ?íx^{W} k^{W}əlé·t? 'What is it you're holding?'

stém tə ?íx^{W} θé·yt? 'What are you making?'

?əwéɬcəl ?íl sƛ'íƛ'əqəɬ. 'I wasn't a child.'

stém k'^{W}ə ?íx^{W} k'^{W}ə sí·siməɬ? 'What are you afraid of?'

təwét k'^{W}ə ?íx^{W} θéyəɬcət té swéltəl? 'Who are you making your fishnet for?'

x^{W}əwécx^{W} ?í·x^{W} q'ə?íləm. 'You're not ancient yet.'

x^{W}əwécx^{W} ?í·x^{W} tatəlá·məɬ. 'You don't understand yet.'

4.10. Object pronouns in the passive. These are used when the person involved in an action is not doing the action but having it done to him. And the person doing the action is never stated in the verb itself. As with the object pronouns in 4.5, the object pronouns here must follow the transitive control suffixes {-(ə)T} 'do purposely', {-l} 'do accidentally, happen to do, manage to do', or {-sT} 'causative, cause to do, make s-o do'.

The passive object pronouns are:

-ɛ̀lə̀m 'I'

-à·m 'you (one person)'

-əm 'he, she, it, they'

-álx^{w}əs 'we'

-àlə̀m 'you folks'

There is actually no passive for 'we', so the -álx^{w}əs from set 5 serves instead, literally 'he/she/it/they (did s-th to) us'.

The Halkomelem passive is translated as in English examples such as 'I am told', 'we were sent' and 'you'll be seen'. But it is also translated often with an impersonal third person subject. Thus ʔá·θà·m 'you are called, you were called' can also be translated, 'he called you, they called you'. This is expecially true when 'you' or 'you folks' is the object since they never occur with a third person subject in set 5. So passive forms often substitute. A final translation of the passive is a sort of middle voice when in third person; this is found most often in the verbal adjectives, but also elsewhere.

Examples with {-(ə)T} 'do purposely':

ʔá·θɛ̀lə̀m 'I was called'

ʔá·θà·m 'you were called'

ʔá·təm 'he/she/it was called, they were called'

ʔá·tàlx^{w}əs 'we were called'

ʔé·tàlèm 'you folks were called'

lə méyθèlèm 'I was helped'

lə méyθà·m 'you were helped'

lə méytəm 'he, etc. was helped'

lə mɛytálx^{w}əs 'we were helped'

lə méytàlèm 'you folks were helped'

pí·wəθèlèm 'I'm frozen'

pí·wəθà·mcɛ 'you'll get frozen'

pí·wətàləmcɛ 'you folks will get frozen'

k'^{w}əx^{y}é·θèlèm 'I'm counted'

lə k'^{w}əx^{y}é·θà·m 'you're counted, he counted you'

lə x^{y}á·k'^{w}əθèlèm 'I was bathed'

lə ɬí·c'əθèlèm 'he cut me, I was cut'

k'^{w}ík'^{w}əx^{y}ətəm 'he, etc. is named'

Examples with {-l} 'do accidentally, etc.':

k'^{w}ə́clèlèm 'I was seen'

k'^{w}ə́clà·m 'you were seen, he saw you'

k'^{w}ə́cləm 'he, etc. was seen'

k'^{w}əcláłx^{w}əs 'we were seen'

k'^{w}ə́clàlèm 'you folks were seen, he/they saw you folks'

ɬə́c'là·mcɛ 'you'll get cut'

hí·ləm 'it fell'

k'^{w}əclà·mcɛ tə spé·θ 'the bear will see you'

Examples with {-sT} 'causative, make s-o do, etc.':

sk^{w}ətéx^{w}stəm 'they were brought inside'

ʔáx^{w}estəm 'he was given s-th'

x̌ét'əsθà·m 'you were told'

ʔéysθèlèm 'I was liked'

ʔéysθà·m 'you were liked'

ʔéystəm 'he, etc. was liked'

ʔéystàlx^{w}əs 'we were liked'

ʔéystàlèm 'you folks were liked'

ʔéwə lís yéθəsθèlèm 'I wasn't told'

ʔéwə lís yéθəsθà·m 'you weren't told'

ʔéwə lís yéθəstəm 'he, etc. wasn't told'

ʔéwə lís yéθəstàlèm 'you folks weren't told'

When a passive is the first verb after a negative or sk'^{w}éy k'^{w}əs ('impossible' or 'can't') add {-ət} to the end of the passive object pronoun. Thus:

with -T	with -l	with -sT	
-θèlèm-ət	-lèlèm-ət	-sθèlèm-ət	'I'
-θàm-ət	-là·m-ət	-sθàm-ət	'you (one person)'
-tèm-ət	-lèm-ət	-stèm-ət	'he, she, it, they'
-tàlèm-ət	-làlèm-ət	-stàlèm-ət	'you folks'
(-álx^{w}əs isn't a true passive so -ət is not added)			'we'

Examples:

sk'^{w}éy k'^{w}əs méyθèlèmət 'I can't be helped'

sk'^{w}éy k'^{w}əs méyθàmət 'you can't be helped'

sk'^{w}éy k'^{w}əs méytèmət 'he/she/it/they can't be helped'

sk'^{w}éy k'^{w}əs méytàlèmət 'you folks can't be helped'

sk'^{W}éy k'^{W}əs mɛytálx^{W}əs 'we can't be helped, they can't help us'

sk'^{W}éy k'^{W}əs k'^{W}óclèlèmèt 'I can't be seen'

sk'^{W}éy k'^{W}əs k'^{W}óclà·mèt 'you can't be seen'

sk'^{W}éy k'^{W}əs k'^{W}óclèmèt 'he, etc. can't be seen'

sk'^{W}éy k'^{W}əs k'^{W}əclálx^{W}əs 'we can't be seen, they can't see us'

sk'^{W}éy k'^{W}əs k'^{W}óclèlèmèt 'you folks can't be seen'

sk'^{W}éy k'^{W}əs q^{W}élsθèlèmèt 'I can't be spoken to'

sk'^{W}éy k'^{W}əs q^{W}élsθèàmèt 'you can't be spoken to'

sk'^{W}éy k'^{W}əs q^{W}élstèmèt 'he, etc. can't be spoken to'

sk'^{W}éy k'^{W}əs q^{W}əlstálx^{W}əs 'we can't be spoken to, they can't speak to us'

sk'^{W}éy k'^{W}əs q^{W}élstàlèmèt 'you folks can't be spoken to'

ʔəwɔ́tɛ sk^{W}íyəχtèmèt. 'Nothing could be done.'

ʔəwɔ́tɛ k^{W}s k^{W}ətéx^{W}əmət. 'Nothing was inside.'

ʔəwɔ́tɛɬ sɬəq'éləmət tə sk^{W}íx^{y}s. 'Nobody knows his name.'

Wiyɛ́θ k^{W}s wəcésətémət k^{W}s léms x^{y}á·k'^{W}əm. 'He was always told to go bathe.' (may show -èt required by {wə-} 'when; if')

sk'^{W}éy k'^{W}əs x^{W}lélɛ́·ms túɬ'à k^{W}s ləs χɛ́χəwətèmèt wəléməs θ'χ^{W}á·səm. 'He wouldn't listen to being warned not to go wash his face.'

4.11. {ƛ'(ə)-} 'independent object of prepositional verb'. {ƛ'- ~ ƛ'ə- ~ ƛ'ɛ-} is prefixed to independent proncuns of set 4.1 and 4.2 but only to the first or second person pronouns. This produces the following set:

/ƛ'ə?élθə/ [f] /ƛ'ɛ?é?ɛlθɛ/ ~ (Cheh.)/ƛ'é?ɛlθɛ/ 'me'

/ƛ'əlέwə/ [f] /ƛ'lέwə/ 'you'

(/túƛ'à/ 'him', /θúƛ'à/ 'her', /yuƛ'éləm/ 'them',etc.)

/ƛ'ɛɬlíməɬ/ [f] /ƛ'əɬlíməɬ/ 'us'

/ƛ'ɛɬwéləp/ ~ (Cheh.) /ƛ'ɛɬléwəp/ 'you folks'

This set is used after verbs translated as prepositions in English; the pronouns are the objects of the prepositional verbs. Thus:

stətís ƛ'ɛ?é?ɛlθɛ 'near me'

stətís ƛ'lέwə 'near you'

stətís ƛ'əɬlíməɬ 'near us'

stətís ƛ'ɛɬwéləp 'near you folks'

stətís yiθé 'near them (those people)'

stətís tə t'ámel 'near the wall'

micx^{w} stətís ƛ'ɛ?é?ɛlθɛ 'come near me!, you come close to me'

lə wélx^{y}əs tə sq'émél stətís ƛ'ə?élθə. 'He threw the paddle near me.'

lə χəθ'étəs tə sq'émél təlí ƛ'ə?élθə. 'He pushed the paddle away from me.'

(lálec'ə təlí təɬlímeɬ 'one of us (one person from us)' may be a contrasting case if not mistranscribed.)

This set however is relatively infrequent; AC gave only the seven examples above with {ƛ'(ə)-}. Besides these examples, AC also gave the more common alternatives stətísθàxʸ 'near me', stətísθàmə 'near you', etc., which add the {-T} transitivizer ('do purposely to something') and the object pronouns (set 4.5).

It seems that the {ƛ'(ə)-} forms are merely an alternative way (less common than 4.5) of expressing pronoun objects of prepositional verbs. The {ƛ'(ə)-} is prefixed to sets 4.1 and 4.2 to form 4.11, like the demonstrative article /tə/ ~ /tɛ/ is prefixed to 4.1 and 4.2 to form set 4.3. {ƛ'(ə)-} even has the allomorph ƛ'ɛ- parallel to the tɛ- in 4.3. Set 4.11 is replaced by demonstrative article + noun whenever a noun is the object of the prepositional verb (stətís tə t'ámel 'near the wall', stətís tə χácɛ 'near the lake', etc.).

Work with EB from Chehalis, B.C. and other speakers of Chilliwack, Chehalis and Tait dialects confirmed AC's examples and showed the {ƛ'(ə)-} construction with a few more prepositional verbs: təlí 'from, away from' (usually in the form /tlí/[t̥lí]), xʷəlé ~ xʷəlém

'from, (coming) from', sq'á '(together) with', ʔá '(along) with'. For example:

k^{w}útəs t(ə)lí ƛ'é?ɛlθɛ 'he took it from me'

k^{w}útəs t(ə)lí ƛ'lέwə 'he took it from you'

k^{w}útəs t(ə)lí ƛ'ɛɬlíməɬ 'he took it from us'

k^{w}útəs t(ə)lí túƛ'à 'he took it from him'

ʔáx^{w}əstcəx^{w} x^{w}əlé(m) ƛ'é?ɛlθɛ 'you give it to him from me, give it to him from me!' (sic)

ʔáx^{w}əstcəx^{w} θúƛ'à x^{w}əlé(m) ƛ'(ə)lέwə 'you give it to her from you, give it to her from you!' (sic)

(EB translates x^{w}əlé(m) as 'from' here, but it is really 'toward', here best translated '(intended) for'.)

mís sq'á ƛ'é?ɛlθɛ 'he came with me' (beside this is the equivalent sq'əq'áməθàx^{y} 'together with me')

məɬ yə sq'á ƛ'é?ɛlθɛ 'come along with me!'

ʔístəx^{w}cəx^{w} ʔá ƛ'é?ɛlθɛ (in more rapid speech: ʔístəx^{w}cx^{w}à ƛ'é?ɛlθɛ) '(you) leave it here with me(!)'

The benefactive, {-əɬc}, is another inflection that relates to pronouns, but it precedes the control suffixes and is best considered in the chapter on verbs.

4.12. Derivation of personal pronouns.

The following page has a chart comparing the forms of the personal pronoun sets.

	Indep. verbal	Indep. emph.	Indep. nom.	Obj. prep. verb	Subj.	Obj.	Poss. 4.6 Subord.	Poss. emph.	Subord. neg./dubit.	Subj. aux	Pass. obj.
	4.1	4.2	4.3	4.11	4.4	4.5	4.8	4.7	4.9a	4.9b	4.10
sg 1	ʔɛ́ɬθɛ	ʔɛ́ʔɛɬθɛ	tɛ-	ƛ'ɛ- ~ ƛ'(ə)-	-cəl	-ɑ́x^{y}	-əl	əl swɛ́	-ɛ́l	-l	-ɛ̀ɬəm
2	ɬɑ́wə		tɛ-	ƛ'(ə)-	-cəx^{w}	-ɑ́mə	-ɛ́	ʔɛ swɛ́	-əx^{w}	-x^{w}	-ɑ̀·m
3m	ƛ'ɑ́		tú-	tú-	Ø~-əs ~ɬə	Ø~-əx^{w}	-s	swɛ́s	-əs	-s	-əm
3f	ƛ'ɑ́		θú-	θú-	ditto	ditto	ditto	ditto	ditto	ditto	ditto
3un	ƛ'ɑ́		tú-	tú-	ditto	ditto	ditto	ditto	ditto	ditto	ditto
pl 1	ƛɬíməƛ		tɛ-	ƛ'ɛ- ~ ƛ'(ə)-	-cət	-ɑ́lx^{w}	-cət	swɛ́cət ~ sʔɑ́ƛ	-ət	-t	(-ɑ́lx^{w}əs)
2	ƛwɛ́ləp		tɛ-	ƛ'ɛ-	-cɛp	-ɑ́lə	-ɛ -ələp	ʔɛ swɛ́ʔələ́p	-ələp ~ -ɛ́p	-p	-ɑ̀ɬəm
3m	ƛ'ɑ́·ləm		tu-	tu-	Ø~-əs ~ɬə	Ø~-əx^{w}	-s	swɛ́s	-əs	-s	-əm
3f	ƛ'ɑ́·ləm		θu-	θu-	ditto	ditto	ditto	ditto	ditto	ditto	ditto
3un	ƛ'ɑ́·ləm		yu-	yu-	ditto	ditto	ditto	ditto	ditto	ditto	ditto
3ku			ʔɛ́·ƛtəl								

prefixed to sets 4.1 and 4.2

prefixed to sets 4.1 and 4.2

animate

(3un means "third person gender unspecified")

(3ku means "third person known to speaker but gender unspecified")

(animate means "used with animate nominals only")

There are clear similarities between sets of personal pronouns in Halkomelem. These similarities are synchronic derivation to the extent that the native speakers go through a process mentally of building one set or set member from another. They are diachronic derivation to the extent they are not built by the speaker but accepted as already made. Without making immediate judgements as to which type of derivation is involved, the following similarities can be seen:

4.12.1. Independent group.

Set 4.2 derives from 4.1 by reduplication R_7-.

Set 4.3 derives from 4.1 and 4.2 by prefixing tɛ- to first and second person forms, tu- to third person forms for masculine or unspecified gender, θu- to third person forms for feminine gender and yu- to third person plural forms for plural unspecified gender. The form {ʔɛ·ɬtəl} for 'third person plural familiar to speaker, gender unspecified' has a root of unclear origin; it probably has -təl 'reciprocal' to indicate the speaker knows them and vice versa.

Set 4.11 derives from 4.1 and 4.2 by prefixing ƛ'ɛ- ~ ƛ'(ə)- to first and second person forms. The third person forms are taken from 4.3.

Notice the initial laterals in each member of

4.1: sg. 1 or 2 (-)l-

pl. 1 or 2 ɬ-

3rd person ƛ'-

If these laterals represent or once represented a morpheme, it is difficult to establish. They do seem to show membership in the set.

Notice also in 4.1 (and derived 4.3 and 4.11) the pluralizing infix {-l- ~ -əl- ~ -lə-} in all plural forms:

1 pl. ɬ-l-íməɬ

2 pl. ɬ-w-él-əp

3 pl. ƛ'-á·-lə-m.

The Chehalis dialect has 2 pl. {ɬléwəp} which may derive through metathesis from {ɬwéləp} by analogy with 2 sg. {léwə} and the ɬl- in 1 pl. {ɬlíməɬ}, or the reverse may be true with {ɬléwəp} < ɬ- set prefix + léwə '2 sg.' + -p '2 pl.' as in 4.9b, leaving the Chilliwack form ɬwéləp derived by metathesis from the older Chehalis form (by analogy with -əlap in 4.6 or 4.9a).

Finally notice some similarities between 4.1 {ʔélθɛ} and other 1 sg. forms: 4.9 -él ~ -l, 4.10 -èlèm, 4.6, 4.7 and 4.8 -el, and 4.4 -cəl.

4.12.2. Subject group.

Set 4.9b has the consonantal roots from which

4.4, 4.6, 4.7, 4.8 and 4.9a all ultimately derive.

Set 4.9a may either derive from 4.9b or vice versa. Within 4.9a, the ɛ- in 1 sg. {-ɛ́l} possibly was influenced by 4.1 {ʔɛ́l̲əɛ}. The ɛ- in 2 pl. {-ɛ́p} possibly shows influence of the second person -ɛ́ in 4.6, 4.7, and 4.8. The əl- in 2 pl. {-əlәp} may be the plural infix {-əl-} seen above and also used with nouns.

Set 4.4 derives from 4.9a minus ɛ in 1 sg. and using ɛ from 2 pl. alternate -ɛp. In addition, non-third person forms all have a {c-} prefix which could be either a) 'active mood' (neither passive, negative, dubitative, nor subordinate), b) 'participant in the conversation', or c) 'non-third person'. The third person {Ø} is perhaps an innovation in line with a language universal dealing with the frequency of Ø as a marker of 3rd person subject.

Set 4.6 (and so 4.8) derives from 4.9a minus 1 sg. ɛ, plus extending ɛ 2 pl. to ɛ 2 sg. and 2 pl. and marking pl. with 4.9a 2 pl. {-əlәp}.

Set 4.7 derives from 4.6 using swɛ́ (meaning unknown unless 'emphatic', probably also has s- nominalizer) as noun root.

Set 4.1 2 pl. {ɬwɛ́lәp} may derive from 4.9a -əlәp plus a root w- and set prefix ɬ-. 2 sg. w could relate

to 4.9b -x^w; the 2 sg. w may then have influenced or spread to 2 pl. w in {ɬwélep}. These are merely possible lines of development or influence.

4.12.3. Object group.

Set 4.5 purposely has little resemblance to sets in the two preceding groups because it must be quite distinct to function; the only similarity seems to be that 4.4 and 4.5 both have a third person {-Ø}.

Set 4.10 derives from set 4.5 by addition of -(ə)m and pitch shift to ` on all suffix vowels except in third person. The derivation is as follows:

4.10 2 sg. -à·m < 4.5 2 sg. -áme + `-m (> -àmèm > -àmm > -à·m)

4.10 3rd person -əm < 4.5 3rd person -Ø + -əm

4.10 1 pl. -álx^{w}əs is overtly 4.5 1 pl. -álx^w plus 3rd person subject -əs from 4.4

4.10 2 pl. -àlèm < 4.5 2 pl. -éle + `-m

4.10 1 sg. -èlèm has `-əm applied possibly to 1 sg. root -él from 4.9a; it therefore seems derived from a root outside of set 4.5.

4.13. Distribution of personal pronoun affixes (what they can be attached to).

Personal pronoun sets 4.1, 4.2, 4.3, 4.7, and 4.11 are not affixes and so cannot be affixed to any other Halkomelem word class.

Set 4.4 can be suffixed to set 4.5 pronouns, to verbs, to particles which have auxiliary verb features (i.e. {me_1} 'come to pass, come to happen', {lɛ} 'inceptive, go'), to nominals (which then lose any preceding demonstrative article and function as stative verbs, as in //x^wə́lmə́x^w-cəl// 'I am an Indian'), to numerals with person classifiers (//yə́yələ-cət// 'we are two people, there are two of us'), and possibly (but unattested) to verbal demonstratives.

Set 4.5 can only be suffixed to transitive verbs.

Set 4.6 can be suffixed to nominals, to demonstratives and probably to classified numerals.

Set 4.8 can be suffixed to set 4.5 pronouns, to nominals, to demonstratives; in third person and in plural set 4.8 members can be suffixed to verbs, and in second person and first person singular set 4.8 members can be suffixed to interrogative verbs.

Set 4.9a can be suffixed to set 4.5 pronouns, to verbs, to nominals (which lose preceding article to function as stative verbs), probably to inflected or classified numerals, and possibly to verbal demonstratives.

Set 4.9b can be suffixed only to auxiliary verbs {ʔɪ(•)} and {lɪ(•)} as described in 4.9.

Set 4.10 can be suffixed only to transitive verbs

as a passive but as a middle voice can be suffixed also to intransitive verbs.

CHAPTER 5. LEXICAL AFFIXES

5.0. Lexical affixing is widespread and very productive in Upper Stalo dialects of Halkomelem and is the principal means of word derivation. Most of the lexical affixes in these dialects are suffixes--over a hundred lexical suffixes have been found so far. In contrast, there are only a handful of lexical prefixes (only 13 have turned up to date) and no lexical infixes (reduplication is inflectional in meaning and function, and ablaut types which are derivational do not add recurring lexical meanings). New affixes are still coming to light, so the sets given here are probably an incomplete collection.

In the sections following, first the lexical prefixes will be given with examples, then the lexical suffixes with examples. Lexical suffixes can be subdivided in several ways: a locative set which refers to parts of the body (somatic suffixes), a set which can be used with numerals (where it has the function of numeral classifiers, although half of its members can also be used with nouns and verbs), other lexical suffixes, and marginal cases.

It is pointless to divide lexical affixes into those that can be added to nominals, those that can be added to verbs, etc. because most can be added to

several different syntactic or semantic classes. It is also not very productive to divide lexical affixes into sets which nominalize, which verbalize, or the like because most often these affixes do not change the word class of the stem; only a few examples have been found of lexical affixes nominalizing, etc. (for example, lex^{w}s- 'a person that always (X)es, a person that's always (X)ing'; téy 'to canoe-race' + -owəɬ 'canoe' > téyowəɬ 'a canoe for racing, a race canoe'; cák^{w} 'be distant' + R_1 'continuative' + -á·les 'in the eye' > cack^{w}á·les 'goatsbeard plant' ("plant being distant in the eye" because one can see its whitish blooms from a great distance).

Allomorphy involving these affixes is discussed in Chapter 2, section 2.3.6.

5.1. Lexical prefixes:

lex^{w}- 'always'
lex^{w}s- 'person that always'
c- ~ c'- 'be the color'
təl- 'from'
we- 'get to (?)'
x^{w}e- 'go, come'
x^{w}- 'pertaining to the head'
sex^{w}- '-in-law'
tex^{w}- 'mid-, step-'
tla- 'this'
təm- 'time, season'
ye- 'travelling by'
ɬ- 'using a long object?, lacking?'

lex^{w}- 'always' and lex^{w}s- 'a person that always (Xes), a person that's always (Xing)'. The /s/ in the

second prefix can probably be equated with the {s-} nominalizer; however, a human semantic component is added with lǝxʷs- which prompts its separate listing here. Both prefixes seem to be attached only to intransitive verb roots.

Examples: lǝxʷ-ʔéy 'generous, always good', lǝxʷ-qél-wǝł 'cranky, crabby, dirty-minded' (root qél 'bad; dirty'), lǝxʷ-mélq-ǝwǝł 'forgetful; passed out (if drunk)', lǝxʷ-sƛ'ép 'always deep', lǝxʷ-słém 'always choking on liquid' (Chehalis dialect also has lǝxʷ-sxʷłém 'choking on liquid', where sxʷ- apparently has no more nominalizing force than s- in słém or sƛ'ép; sƛ'ép 'deep' and sxʷƛ'ép 'deep' are independently attested as adjectival verbs).

lǝxʷs-hé·wɛ 'a person that always hunts', lǝxʷs-t'í·lǝm 'a person that always sings', lǝxʷs-ʔí·mǝt 'a person that's always lazy', lǝxʷs-ʔí·c'ǝl 'a person that's always temporarily lazy', lǝxʷs-xʷiyéθǝqǝl 'a gossip', //lǝxʷs-sí·si//(/lǝxʷsí·si/) 'a person who is always scared, coward', lǝxʷs-qʼʷǝyílέxʸ 'a person that always dances, someone who likes to dance'. The łǝq- in łǝq-qʷéqʷǝl 'speaker, master of ceremonies' may be a new prefix or merely misheard or misspoken for lǝxʷ-.

c- ~ c'- 'be the color' (c'- seems to be an allomorph used before glottalized consonants). This

prefix is unrelated to the c- which derives verbs. Words for color changes ('get red', etc.) drop the c- and add -əl - -í·l 'get, go, come'.

Examples: c'-q'éyx̣ 'black, be black', c-q^{w}éy 'green, yellow, be yellow or green', c-méθ' (sometimes c'-méθ') 'blue, be blue', c-k^{w}f·m 'red, be red', c-k^{w}f·m-eq^{w} 'red-head(ed)', c'-meθ'-á·les 'blue eyes', c'-k'^{w}fyx̣^{w} 'be brown (?), brown (?)', c-k^{w}fk^{w}əm-əl(-f·wel) 'reddish-brown, be reddish-brown', c-x^{w}fk'^{w} 'gray, be gray', c'-q'^{w}fq'^{w}ex̣^{w}-əl 'brownish-black, be brownish-black' (-əl is '-ish' in this word and in 'reddish-brown'), c-téwél 'bright-colored' (téwel 'bright, light'). (Note that not all colors have this prefix: p'éq' 'white, be white', q^{w}iq^{w}éyels 'orange, be orange; an orange', sx̌'fx̌'esel 'dark gray, dark color').

təl- 'from'. Examples: təl-tíyt 'from upriver', təl-łá·s '(from) downriver', təl-łəłá·s 'warm wind (from downriver)', təl-?elécɛ - təl·écɛ 'from where?' (?ɛlécɛ - ?elécɛ - lécɛ 'where?'), təlí 'from' (prepositional verb < root lí 'be there' demonstrative).

wə- 'get to (?)'. A questionable prefix found in wəc'é· 'get to the top or summit of a mountain' (< c'é· 'top, on top') and possibly in wəc'éx̌' 'fall, drop' (root may be related to that in c'x̌'ém 'jump').

x^{w}ə- 'go, come'. Examples: x^{w}ə-?éy-əm 'clear

(of river water)' (root ʔéy 'good'), x^{w}ə-híwəl 'go upstream' (ʔəhíw 'upstream'), x^{w}ə-wq'^{w}-éyl-ém 'go downstream' (wóq'^{w} 'drift downstream; drown'), x^{w}-tiyt-í·m 'eddy water' (go + upstream + repeatedly), x^{w}(ə)-cé·l 'where is someone going?' (cá·l-t 'follow behind someone'), x^{w}(ə)-cák^{w}əl 'where is s-o headed?'.

x^{w}- '(pertaining to the head or its parts)'; mainly used sporadically with body part suffixes of the head -əs 'on the face', -əq^{w} 'on top of the head', -á·θəl 'on the mouth', perhaps -əqəl 'of the throat' and -é·lí·yɛ 'of the ear'.

Examples: x^{w}-θ-á·q^{w} 'big head', x^{w}-θ-á·s 'big face', x^{w}-θ-á·θəl 'big mouth' (all with root θ 'big'), x^{w}-ƛ'á·qt-əs 'long face, morose', x^{w}-pap-á·s 'hair all over the face', (x^{w}-)mékʷ-əθ-t 'kiss s-o' (x^{w}- optional), (x^{w}-)mékʷ-əθəl 'kiss s-o on the lips (mouth)' (mékʷ 'stout' is root), x^{w}-líyém-és 'smile' (líyém 'laugh'), s-x^{w}-ʔáθəs-cəs 'palm of hand' (s-ʔáθəs 'face'), s-x^{w}-ʔáθəs-x^{y}əl 'sole of foot', x^{w}-t'éx^{w}-əs-cəs 'hollow of the hand' (x^{w}- '(head)' + t'éx^{w} 'going downriver' + -əs 'on the face', -cəs 'of the hand'), x^{w}-t'éx^{w}-əs-x^{y}əl 'arch of the foot', x^{w}-mélk'^{w}-əs 'get hit in the face by s-th falling', x^{w}-lɛlé· 'listen hard' and x^{w}-lɛlé·-m 'listen' (l may be root, -ɛlé· may be related to somatic suffix -é·lí·yɛ 'in the ear'), possibly s-x^{w}-θí·-qəl

'loud voice' (root θí· 'big' + -əqəl 'in the throat'), possibly s-x^{w}-ʔí·le 'side of head' ~ 'cheek' (root meaning unknown).

səx^{w}- '-in-law' may well be an error for təx^{w}-; it has been found only in səx^{w}-sí·le 'grandparent-in-law'.

təx^{w}- 'mid-, step-': təx^{w}méle(m) 'stepchild', təx^{w}-méməle 'step-children', təx^{w}-məlé-m 'adopt a child', təx^{w}-swé·yəl ~ téx^{w}-swèyèl 'noon, mid-day', téx^{w}-slè·t 'midnight'. (There is a remote chance that téx^{w}θəɬ 'tongue' may belong in this set; this would be an alternate analysis to the one given later in this chapter with lexical suffix -éx^{w}θəɬ 'on the tongue'.)

tla- 'this' (possibly a preposed demonstrative instead of a prefix): tlawéyél ~ tláwèyèl 'today', tlaqé·ys 'now', tla x^{w}əlé·lt 'tonight' (maybe tla-).

təm- 'time, season' (not thought to be borrowed from English): təm-q'^{w}fles 'springtime' (time for things to come up), təm-k'^{w}ék'^{w}əs 'summer' (hot time), təm-hilálx^{w} 'fall, autumn' (time for leaves to fall, see híl-əm 'to fall, tumble down'), təm-χéyk' 'winter' (cold time), təm-pá·k'^{w} 'moon of October, time for Chehalis River spring salmon', təm-k'í·q'-əs 'moon of February, time one gets stuck or trapped (in pithouse

by the snow)', təm-t'əlém-ces 'moon of February, time things stick on the hand (with cold)', təm-k^{w}fk^{w}əx^{y}əl 'moon of April, time for baby sockeye salmon', təm-ʔəlíle 'moon of May, time of salmonberries', təm-t'ém̓x^{w} 'moon of June, gooseberry time', təm-qaqá· 'moon of June, high-water time', təm-q^{w}é·l 'moon of July, mosquito time', təm-θéqi 'moon of August, sockeye time', təm-k'^{w}á·ləx^{w} 'moon of September, dog salmon time', təm-té·m 'when?'.

yə- 'travelling by ...': yə-lá·ɬ 'travelling by canoe, (nowadays also by car, boat or train)', yə-ʔí·məx^{y} 'travelling by foot' (sometimes also yi?í·məx^{y}), yə-c'əc'é· 'travelling by horse', yə-x^{w}é-wq'^{w}eləm 'travelling by going downriver', yə-x̱^{w}éx̱^{w}əq'^{w}ət 'poling along (in calm water), travelling by poling a canoe'.

ɬ- has a meaning which is hard to isolate; most examples seem to involve 'using a long object' and a few others seem to involve 'without, lacking'. Examples: ɬ-p'á·ƛ'əm 'smoke a pipe' (p'á·ƛ'əm 'to smoke'), ɬ-x̱éyl-éx^{y} 'stand (on one's legs)' (using long object + legs + upright), ɬ-x̱éyl-ép-təl 'floor' (standing or using legs + dirt/ground + device), ɬ-séq' 'half, be half, half-breed' (< səq'-ét 'split it, crack it'), ɬé-mx^{y}c'əl-təl 'fine-toothed comb, de-lousing comb' (using long object + louse (méx^{y}c'əl) + device);

ɬ-qá·-lə (Cheh.) ~ c-qá·-lə (Chill.) '(be) thirsty' (root qá· 'water'), ɬ-ow-fθ'ɛ 'naked' (possibly 'without' + 'no' + 'clothes')(more likely is a root like ɬow or ɬəw, not yet attested); ɬ-q'él-lex^{w} 'know it' (< q'é·l 'believe').

5.2. Lexical suffixes.

5.2.1. Somatic suffixes.

Below are the lexical suffixes found so far which refer to body parts (somatic suffixes). They are present in many of the words of the domain of anatomy, even in many of the independent words equivalent to the suffixes. They are also quite productive outside of anatomical words, sometimes also having a figurative meaning. At the present it is unclear whether the anatomical lexical suffixes developed historically from the independent words which have equivalent meaning or vice versa. It is important to note here that the Upper Stalo somatic suffixes are usually locative in nature, best translated by 'on or in the (body part)' everywhere except in body part words where they are best translated as partitive, 'of the (body part)' and in body function words where they are best translated by '(body part)' (usually subject of the verb root they are attached to). Further treatment of the somatic suffixes will be found in the sememic and morpho-

sememic chapters. Allomorphy has been dealt with in the morphophonemics but allomorphs are relisted here for reference.

-f·ws, -ews 'on the body, on the skin, on the covering'

-eq^{w}, -(e)leq^{w}, -fq^{w}, -á·q^{w} 'on top of the head, on the hair, (head of a river; head of descendants)'

-qel 'in the head, (at head or source of a river; the inside head = inlet of river; head of an island)'

-élέqel 'in the head'

-élmél 'in the mind'

-weɬ, -wíɬ 'in the mind, -minded, disposition'

-á·les 'on the eye(s), in the eye(s), (on the eyelids)'

-á·s, -es 'on the face, (face of the hand or foot; face of a mountain; face of a basket; opened surface of a salmon; bow of a canoe or boat; probably 'face of the moon' is source of -es 'cyclic periods')'

-é·lí·yɛ 'on the ear, in the ear'

-é(l)qsel, -e(l)qs 'on the nose, in the nose, point or end of a long object (pole, tree, knife, candle, land), (nose of geographic features such as an island, a mountain)

-á·θel, -(e)θel 'on the mouth, in the mouth'

-á·yθel, -eyéθel, -eyθ(íl) 'on the lip, on the jaw, in speech, (in music)'

-ól•es, -elís 'on the teeth'

-óx^{w}θeɬ 'on the tongue'

-epsem 'on the back of the head and back of the neck, (a neck of land)'

-ɬeɬ, -ɬél 'on the front of the neck'

-eqel 'in the throat, (throat of a cliff or mountain; language; voice)'

-f•les 'on the chest, in the chest'

-elέχel 'on the arm, in the arm, (arm of multiple blowing = thunder wind; arm of a bat; possibly related to -éχel 'side (of a house, a square, or a river)')'

-ces 'on the hand or finger, in the hand or finger, (limb of a tree)

-ewíc 'on the back (of a person), in the back (of a person), (the back of a foot = the top of a foot; backward)'

-í•cel 'on the back'

-ówéχ 'on the ribs, (slats)'

-é•lwes, -élwes 'on the stomach, in the stomach, (courage: 'cowardly' < 'bad in the stomach' and 'brave' < 'good in the stomach')'

-(e)yá•ɬe 'on the stomach or ventral surface of body'

-é•q, -eq 'on the genitals, on the penis or male'

-(e)lec, -léc 'on the rump, on the bottom (of anything),

(animal dung; stern of a canoe or boat)'

-ɬ•wəl, -ɬwəl, -əwəl, -əwɬ•l 'in the rump or anus, on the inside, (inside parts; core; inside the head; inside a plant or fruit or canoe, etc.)' (-ɬ•wəl, -ɬwəl refer mainly to the anus or inside of the rump, and -əwəl, -əwɬ•l refer mainly to the more general inside of anything; the two sets do not seem to separate into two morphemes easily because there is also overlapping in the meanings)

-x^{y}əl, -x^{y}ɛ́•l 'on the foot or leg, in the foot or leg, (tail of fish; leg of other animate creatures, rays of light)'

-ɛ́•mə́l 'member or part (of the body)'

(?) -ə́tməl 'fin'

-ɛ́lqəl, -ə́lqəl 'wool, (feather)'

Examples:

-ɬ•ws: łq'-ɬ•ws 'half the body', sləx^{w}-ɬ•ws '(living) body', k'^{w}s-ɬ•ws 'singe hairs off skin', qət-ɬ•ws-əm 'take a sweatbath (water one's body)', q'^{w}əm-ɬ•ws 'plucked (of a bird)', q'^{w}əm-ə́ws-t 'pluck it (of a bird)', sə̀q'^{w}əm-ɬ•ws 'cedar bark skirt' (< sɬq'^{w}əm 'peel cedar bark'), səq-ɬ•ws ~ sq-ɬ•ws 'pants' (səq- may be 'penis' or 'male'), sləw-ɬ•ws '(woman's) dress' (probably < 'opening' + 'covering'), p'əly-ɬ•ws 'bark of tree', yəq^{w}yəq^{w}-ɬ•ws 'Yakweakwioose (a village

near Sardis); covering (of grass) burnt out repeatedly', s-bə́y-əws 'spirit dancing costume' (probably 'final covering' < hə́y 'finish').

-(əl)əq^{w}: k'^{w}q^{w}-ə́ləq^{w}-t 'hit s-o on top of the head (with a club or stick-like object)', yəθ-ə́ləq^{w} 'pointed head', s-q^{w}ə́t-ələq^{w} 'crown of head', s-t'ə́m-ləq^{w} 'scalp, top of head', χə́ym-ləq^{w}-t 'grab s-o by the hair', c-k^{w}ə́·m-əq^{w} 'red-headed, red hair', yə́·s-əq^{w} 'hat', cə́ɬ-əq^{w} 'bushy and uncombed hair' ("high hair"), ƛ'x^{w}-ə́q^{w}-təl 'kerchief' (cover + on top of head + device), ɬə́c'-əq^{w}-əm 'get one's hair cut', x^{w}-θ-ə́·q^{w} 'big head', θə́θ-əq^{w} 'big heads', s-c'ə́·m-əq^{w} ~ s-θ'ə́·m-əq^{w} 'great grandparent/-child', ʔə́k^{w}iy-əq^{w} 'great great grandparent/-child', θ'ə́p'əy-əq^{w} 'great great great grandparent/-child', tə́miy-əq^{w} 'great great great great grandparent/-child'.

-qəl: s-x^{w}ə́ƛ'-qəl 'pillow (rolled bullrush mat)' (nominal + rolled + for the head), mə́'-qəl 'hair' (probably 'comes out of' + 'in the head'), s-mə́θ'-qəl 'brain' (nominal + blue + in the head), s-χə́cɛ-qəl 'Chilliwack Lake' (lake + at the head (of the river)), s-q'ə́w-qəl 'Seabird Island' (turn in river + at the head (a head-shaped mountain or head of the slough or head of the island)), s-k^{w}ətə́x^{w}-qəl 'inlet' (the inside + in the head), (Tait) cə́ɬqəl ~ (Chill.) cəɬqə́yl 'palate, roof of mouth and inside upper lip'.

-élέqəl: χəɬ-élέqəl 'headache', təs-élέqəl 'bump one's head', smelt-élέqəl 'kidneys' (probably < smélt 'stone', "stone in its head").

-élmél: télmél 'the mind', hέyət-élmél 'nauseated' (vomiting + in the mind), t'ək'^{W}-élmél 'homesick' (go home + in the mind).

-wəɬ: ləx^{W}-qél-wəɬ 'cranky, crabby, dirty-minded' (always + bad; dirty + -minded), x^{W}ə-ʔέy-wəɬ 'kind, generous' (become + good + -minded, in disposition), x^{W}-qél-wəɬ 'stingy', s-qəl-wíɬ-məT 'hate s-o'.

-á·les: qəʔ-á·les 'tear' (qəʔ < qá· 'water'), k'^{W}q^{W}-á·les 'hit on the eye(lid)(with a stick-like object)', st'əlmex^{W}-á·les 'eye medicine', q'əyχ-á·les 'pupil of eye, black of the eye', s-k'^{W}əc-á·s-təl-á·les 'eyeglasses' (sk'^{W}ecá·stəl 'window, mirror'), c-məθ'--á·les 'blue eyes'.

-á·s: θ'əχ^{W}-á·s-əm 'wash one's face', θ'q'^{W}-á·s 'punched in the face', x^{W}-θ-á·s 'big face', χέy-p'-əs 'scraped on the face', s-k'^{W}əc-á·s-təl 'window, mirror' (nominal + see + face + device), qέyt-əs 'headband', qέyχ-əs 'blind', ʔíy-əs 'fun, having fun' (good + in the face), x^{W}-t'έχ^{W}-əs-x^{y}əl 'arch of the foot' (pertaining to head + go downriver + on the face + of the foot)(references to head and face because the sole of the foot < pertaining to head + face + of the foot),

x^{w}-t'éx^{w}-əs-cəs 'hollow of the hand', s-tiyt-é·s 'Promontory Mountain' (upriver + face), s-x̌él-əs 'basket design' (nominal + mark, design + on face), s-łíc'-əs (Chill.) ~ sx^{w}-łíc'-əs (Cheh.) 'scored wind-dried salmon' (nominal + cut + on face), x̌^{w}íq'^{w}-əs-t 'hang s-o', łq'é·t-əs 'wide face'.

-é·lí·yɛ: k'^{w}q^{w}-é·lí·yɛ 'hit on the ear with a stick-like object or club', s-łəlłəl-p'-é·lí·yɛ 'sloppy or flabby ears', sq^{w}əlq^{w}əl-é·lí·yɛ 'hair in the ears', t'ɛmx^{y}-é·lí·yɛ 'braid hair (over the ears or side of head)'.

-(ə)(l)qs(əl): łc'-élqsəl 'cut on the tip of the nose', méqsəl 'nose', łí·łk'^{w}-əlqs 'hook-nose (of people and also the name of a mountain near Agassiz)', x̌éy-p'-əqsəl 'scraped on the nose', s-x^{w}əq'^{w}-əléqs-təl 'nose ring', sθ'ém-qsəl 'bridge of nose', smété-qsəl or smét-éqsəl 'snot', s?él-qsəl or s?é-lqsəl 'point of nose, point of land', s?él-əqs or s?-él(ə)qs 'point of a knife', témk^{w}-əqsəl 'blunt (of poles)', yèq^{w}-əqs-í·ls--cəl 'I'm lighting the light (candle, lantern, etc.)' (burn + point + go,come or device + I (subject)), x^{y}ép-qs-t 'sharpen a point', ?éx̌-qs-t 'strike it (of a match)' (scratch + on the point + 3rd person object).

-é·θəl: x^{w}-θ-é·θəl 'big mouth', θé·θəl 'mouth', q'^{w}iq:^{w}əm-é·θəl 'fishing with hook + line, trout-fishing',

s-qép'-à·θəl 'flying squirrel' (nominal + cover + on the mouth--so-called because of stories the animal will land against one's mouth when one is walking at night in the woods and smother one), $sq^{w}iq^{w}ey$-á·θel 'jack-rabbit, big older rabbit' (also see 'harelip' below).

-á·yθel: c'əm-x^{y}-á·yθel 'jaw' (bite + object + jaw, lip), s-cəɬ-á·yθel 'upper lip', s-ƛ'ep-á·yθel 'lower lip', ɬc'-á·yθel 'cut on the lip or jaw', q^{w}il-eyéθel 'beard, mustache', k'^{w}es-á·yθel 'burned on the lip(s)', məlməl-á·yθel 'blunder in speaking', məlq-əl-eyθél-əm 'forget in speaking, forget one's words', méləc'-məθ-á·yθel 'mixed up in speaking', sqəʔíy-əqəl-á·yθel 'not fluent in speaking' (not know + language + in the lips), há·yθel 'finish eating' (blend of há·y and -á·yθel), q^{w}əl-ayθí·l-əm or q^{w}əl-ayθ-í·l-əm 'making music', q^{w}əl-áyθə-təl (or //q^{w}ə́·l-á·yθəl-tél//) 'musical instrument' (l → ø before -təl), qɛyqəwáθel-á·yθel 'harelip, cleft palate'.

-él·əs: yél·és 'tooth, teeth', sɬəq^{w}-él·əs 'gums' (flesh + in the teeth), χɛχəlc'-elís-əm 'grinding one's teeth'.

-éx^{w}θəɬ: téx^{w}θəɬ 'tongue', s-χə́m-əl-éx^{w}θəɬ 'wild tiger lily' (nominal + crying +ʔ + on the tongue--this is a description of the flower's petals--tears on the tongue or crying on the tongue).

-ɛ́psəm: tɛ́psəm 'back of head and back of neck', təmɛ́ɬ-ɛ́psəm 'red-headed woodpecker' (red ochre, Indian paint fungus + on back of head and neck), ƛ'ɛ́qt-əpsəm 'long neck', q^{w}ə?íq^{w}-əpsəm 'scrawny neck, thin neck', θəh-ɛ́psəm 'big neck', lək^{w}-ɛ́psəm 'break one's neck'.

-ɬəɬ: sq^{w}əl-ɬəɬ 'front of neck', sx^{w}əh-á·mɛ́l-ɬəɬ 'adam's apple', p'iθ'-ɬɛ́l-t 'choke s-o' (squeeze + front of neck + purposely (+ 3rd person object)).

-əqəl: c'í·yx^{w}-əqəl 'dry in the throat', k'^{w}ɛ́s-əqəl 'burned in the mouth and throat', smɛ́lq^{w} ~ smɛ́lq^{w}-əqəl 'uvula', s-θí·-qəl (//s-θí·-əqəl//) 'loud (voice)' (big + in throat), x^{w}iyɛ́θ-əqəl 'interpret, repeat what is said', x^{w}ɛ́yθ-əqəl 'interpreting', x^{w}íyθ-əqə-θàx^{y} 'interpret for me' (l ⟶ Ø here before //T//), x^{w}ətíy-ɛ́qəl 'to answer, reply, answer back' (compare x^{w}tíy-cəs 'fight back'), x^{w}tɛ́l-qə-θɛ́x^{y} 'repeat after me', x^{w}əlmɛ́x^{w}-qəl 'Indian language', x^{w}əlíɬəm-qəl 'white man's language, English', cɛ́lməl-qəl 'Chinese language', s-x^{w}-mɛ́θ'əl-qəl 'liar' and mɛ́θ'əl-qɛ́yl-əm 'to tell a lie' (root seems to be mɛ́θ'əl 'be proud'); the last five examples may show suffix -qəl 'language' possibly from -qəl 'in the head' instead of from -əqəl 'in the throat', but in 'loud' we see loss of the first /ə/ and in 'interpret' and 'answer' we see the -əqəl suffix referring to

'language'. Further figurative extensions of -əqəl can be seen in k'^{W}íy-əqəl 'climb a hill or mountain' (if this is not -qəl 'in the head' used figuratively) and (s)q'^{W}əl-ɓ́qəl 'cliff, vertical rock face'.

-f·ləs: k'^{W}q^{W}-f·ləs 'hit on the chest (with a stick-like object)', s?f·ləs '(human) chest', t'k^{W}-f·lɓ́s 'choke on food', t'ɓ́k^{W}-əles 'choking on food' (t'ɓ́k^{W} 'mired'), (s)t'ɬ-f·lɓ́s-təl 'collarbone' (t' ~ ƛ')(t'ɬ ~ t'ɓ́ɬ '(go) across, span'), q^{W}əmθ'-f·ləs 'big breasts; name of Mt. Ogilby near Hope' (< q^{W}ɓ́·mθ' 'large lump'), sɬəq^{W}-f·ləs 'breast' (sɬíq^{W} 'flesh').

-əlɓ́χəl: k'^{W}q^{W}-əlɓ́χəl 'hit on the arm (with a stick-like object)', sx^{W}-?i-lɓ́χəl 'armpit', s-θ'əm-x^{W}-əlɓ́χəl 'elbow' (bone + ? + in arm), ɬəc'-əlɓ́χəl 'cut one's arm', lək^{W}-əlɓ́χəl 'break an arm', sk'^{W}əly-ɓ́χəl or sk'^{W}-əlyɓ́χəl 'bat', p'íp'əθ'-əlɓ́χəl 'bat' (squeezing + arm), s-patpət-əlɓ́χəl 'thunder-wind (wind that precedes a thunderstorm)' (thunder is thought of as a bird--the thunderbird, sx^{W}əx^{W}ɓ́·s--and the wind may be analyzed as 'nominal' + 'repeated blowing' (< pɓ́·t 'blow' + iterative reduplication) + 'arm'). This suffix may be related to -ɓ́χəl 'end or side of a house (inside or outside)'.

-cəs: k'^{W}ɓ́s-cəs 'burned on the hand or fingers', ləc'-cəs 'cut on the hand', θ'əχ^{W}ɓ́·-cəs-əm 'wash one's

hands', s-lé́χ-ces 'finger', q'^{W}χ^{W}él-ces 'fingernails', q^{W}ém-x^{W}-ces 'wrist bone (lump of hand)', ƛ'í·q'-(ə)ces 'one's hand jammed or stuck', sθ'íƛ^{W}ə-ces 'left hand, left-handed', lí·lə-ces 'little berry basket attached to waist (it holds what the hand picks and when full is dumped into a large berry basket on one's back)' (< ?elí·lə 'salmonberries'; the words are sometimes pronounced lí·ləces and ?elí·ləs), χpé·y-ces 'cedar limb', Siyém-ces 'proper name of the youngest Wealick brother in a legend; now the name of Frank Malloway' (said to mean 'chiefly hand' or 'rich hand').

-əwíc: k'^{W}q^{W}-əwíc 'hit on the back (with stick-like object)', χək'^{W}-áləs-əwíc ~ χək'^{W}-áləs 'backbone', ləkʷ-əwíc 'break the spine or back; have a hunchback', k'^{W}əc-əwíc-əm (Tait dialect) 'look back'.

-í·cəl: sχəp'-í·cəl 'chipmunk' (scratch or scrape + on back), s-χəχəp'-í·cəl 'chipmunk with multiple stripes on his back', sq^{W}ém-ècəl 'hunchback, lump on the back' (< s-q^{W}é·m 'lump'), possibly cƛ-ícəl-x^{y}əl 'top of the foot' (upper + back + foot) and q'éw-əcəl 'dorsal fin (long fin on back of fish)'.

-ówéχ: lówéχ 'ribs', θ'ówéχ 'cedar slat basket', θ'ówχ-iyə 'name of cannibal ogress who caught children in a cedar slat basket'.

-é·lwəs: χəƛ-é·lwəs '(have a) stomach-ache',

θ'q'^{W}-é·lwes-t-əm 'he was punched in the stomach', qəl-élwes 'cowardly, afraid to try', ?iy-é·lwes 'brave' (good + in the stomach), possibly łéχ^{W}-elàw 'ruptured belly button'(root may be łəχ^{W} 'spit out').

-(ə)yé·łə: qəyqəp'-(ə)yé·łə 'lay on one's stomach' (the only example so far of this suffix; the root is qəp' 'cover', the gloss should probably be continuative).

-əq: q^{W}éyl-əq 'pubic hair', θ-é·q 'big penis', ?iyés-əq 'dear male friend' (compare ?iyés 'dear female friend').

-(ə)ləc: k'^{W}q^{W}-éləc 'hit on the rump (with club or stick)', s-k'^{W}fy-ləc 'lame; to limp' (nominal + climb + rump), łəq'-léc 'hip, hind leg' (wide + of rump), ?é·q^{W}-eləc (é· ~ é ~ ó) 'back' (comes out above + rump), k'^{W}əs-éləc 'burned on the rump', sł-éləc 'rump' (may be //s-łél-ləc// with root meaning 'folded over' as in s-łél-p' 'sloppy' (probably 'nominal' + 'folded over' + 'on itself')), s-ƛ'əp'-élec 'tail', (deep + in rump), s-c'é(·)-ləc-təl 'chair, bench' (nominal + on top of + rump (subject) + device > 'device the rump is on top of'), yéq-elec-əm 'change one's seat, change one's chair' (change + rump + one's (middle voice)), sx^{W}-?éθ-eləc 'bottom of anything', ƛ'əp-léc 'bottom of creek', s-q'əp-léc 'bush bunched

up tight at bottom, thick crowded tight underbrush', sk^{w}-élec (or sk^{w}é(l)-lec) 'coiled bottom of basket before the sides are on', spè·θ-élec 'bear dung', cèkəl-élec 'chicken dung', θ'émex^{w}-lɛc 'tail of Seabird Island'.

-í·wəl: c'iyx^{w}-í·wəl 'constipated, dry in the rump', χɛχ̣ək'^{w}-í·wəl 'constipated, wedged tight in the rump', t'ək^{w}-í·wəl 'constipated, mired in the rump', (s)c'ep(χ̣)-í·wəl 'dirty asshole', sq'ɛyχ̣-í·wəl 'black asshole', θ'q'^{w}-í·wəl 'open sores in rump, hemmorhoids', st'elmex^{w}-íwəl 'love medicine (medicine for genitals)', sc'əlx^{w}-íwəl 'insides (all the organs inside an animate being)', méθ'əɬ-q-ìwèl 'woodtick' (pus + closable container + inside), t'əm-əwí·l-t 'chop the inside of it out', x^{y}ep-əwí·l-t 'plane it out inside', sθ'əm-íwél 'core, pith, seed, nut, center (of rock or anything)', sq^{w}ɛ-ʔí·wəl 'hollow' (hole + on inside), sq^{w}ə-h-í·wəl 'tunnel, hole, hollow', (s)ƛ'(ə)p-í·wəl 'shirt, undershirt, bra' (below or deep + on inside), sim-íwél 'strong feelings or mad all the time but won't fight' (scary or bad or evil + on insides), ɬək'^{w}-í·wəl 'be surprised' (fly + on insides), x^{w}əy-í·wəl 'happy, happy inside', sq^{w}él-əwəl 'thoughts, feelings' (talk or speech + on insides).

-x^{y}əl: ɬék'^{w}-x^{y}əl 'trip, stumble'(hook + on foot),

θ'ə̓χ^{w}-x^{y}él-ém 'wash one's feet', s-léχ-x^{y}əl 'toe', s-x^{y}éc'-x^{y}əl 'splinter or sliver in foot', ɬéc'-x^{y}əl 'cut on the foot', q^{w}ém-x^{w}-x^{y}əl 'ankle' (lump of foot), sθ'ém-x^{y}əl 'shin' (bone in leg), sq'əp-áləq^{w}-təl-x^{y}əl 'kneecap', lək^{w}-x^{y}é·l 'broke a leg', q^{w}ɬí·y-x^{y}əl 'shoe(s)' (driftwood + on foot), θəlíwé-x^{y}əl ~ cəlíwé-x^{y}əl 'snowshoe(s)', lé-x^{y}əl 'fishing platform (for still-dipnetting)', x^{w}á·m-x^{y}əl-əm 'run', x^{w}əm-x^{y}é·l-əm 'running' (some speakers of Tait and Chehalis dialects say the glosses are reversed on the last two words)(root χ^{w}ém 'hurry, be fast' undergoes derivational fronting of the χ^{w} to x^{w}), sq^{w}əlq^{w}él-x^{y}əl 'tuft(s) of hair on a horse's legs', sχép-x^{y}əl 'fish tail', ƛ'əmƛ'ém-x^{y}əl 'grasshopper' (repeatedly jumping foot or leg), pít-x^{y}əl 'salamander', ƛ'élχ-x^{y}əl 'spring salmon (generic)' (spotted + foot), s-ɬém-x^{y}əl ~ ɬém-təl ~ s-ɬémɬəm 'dew' (respectively, 'rain or moisture on the foot', 'rain device', and 'repeated or plural rain or moisture'), sq'á-x^{y}əl 'partner' (together + in foot), sθəqəl-x^{y}él-ém 'rainbow' (see also sχəlχéləs tə syá·q^{w}əm 'visible beams or rays of light', literally "legs of the sun").

-á·mél: mək^{w}-á·mél-x^{y}əl 'big toe' (stout + member + of foot), mək^{w}-á·mél-ces 'thumb', (Tait dialect) mɛ́t'əs-əmél 'pointing finger, first finger',

s-x^{w}əh-ámél-łəł 'adam's apple' (upstream(?) + member + of front of neck).

-ɬtməl: q'ɬtməl 'fin, neck fin', θ'ɬtməl 'belly fin'.

-élqəl: mətú·-?élqəl ~ mətú·lqəl 'sheep wool' (ləmətú· ~ mətú· 'sheep'), sq^{w}(ə)mé·y-ɛlqəl 'dog wool', p'q'-élqəl 'mountain goat' (white + wool), sƛ'p'-élqəl 'long feathers' (deep + (derivational glottalization as in 'tail') + wool).

5.2.2. Numeral classifier affixes.

So far 20 lexical affixes have been found which can be added to numerals. The chapter on numerals will cover them in more depth and will cover the extensive numeral allomorphy involved. These affixes are listed here because over half of them can also be affixed to roots which are not numerals. Eight of them can also be affixed to the numerical interrogative verb, k'^{w}f·l 'how many?'. With numerals they seem to function in the same manner as numeral classifiers in other languages; some must be and the rest can be affixed to numeral roots in order to count certain nouns; nouns with identical lexical meaning to the classifier suffix cannot occur within the same syntactic phrase with it, but nouns with more specific reference than the classifier suffix can occur within

the same syntactic phrase with the suffix.

Numeral classifier affixes were apparently used more extensively in pre-contact times or even 70 years ago than they are now. Only the oldest, most fluent speakers remember many of them and use them obligatorily. The range of numbers they can be used with also varies with the affix. In the following table the numeral classifier affixes are listed with range of affixability (those with greatest range are listed first), affixability to k'^{w}ƒ·l, affixability to non-numeral roots, and whether they are obligatory or optional. For allomorphy of the affixes see the chapters on morphophonemics and numerals. A brief set of examples follows the table.

-əs 'dollars': with 1-99, k'^{w}ƒ·l, non-numerals, obligatory

-ɛ́le 'people': with 3-99, k'^{w}ƒ·l, obligatory, but exact count often replaced by qə́χ 'many' over 49

s- -s 'o'clock': with 1-12, k'^{w}ƒ·l, obligatory, related to s- -s '-th day of the week', probably deriving from s- nominalizer + -es 'cyclic period' rather than a circumfix

-ə́wes 'canoe paddles, paddlers': with 1-11 (the largest race canoe has 11 paddlers), k'^{w}ƒ·l, non-numerals, optional?

-έɬ 'times': with 1 (allomorph -έx^W) and 3-10, k'^Wí·l, obligatory

-íq^W 'fish (heads)' (apparently fish are counted by the head)(this suffix has dissimilatory allomorph -əq^W after íC(C) where C = consonant): with 2-9, non-numerals (as somatic suffix -əq^W 'on top of the head'), optional?

-əlsx^yέ 'times ten, -ty': with 3-9 (yeilding 30-90), non-numerals (one example), obligatory

-əɬp 'trees': with 1-5, k'^Wí·l, non-numerals, obligatory for single owner

-má·t 'piles': with 1-5, obligatory

s- -s '-th day of the week': with 2-5, obligatory

-ólwət 'garments': with 2-5, non-numerals, optional?

-έ·wtx^W 'houses': with 2-5, k'^Wí·l (-tx^W allomorph), non-numerals, obligatory for single owner

-ówəɬ 'canoes': only with 5 so far, k'^Wí·l, non-numerals, optional?

-έyiws 'pants' (possibly < -έy 'bark' + -í·ws 'on the body, covering'): only with 5 so far, non-numerals, optional

-á·ls 'spherical objects, fruit': only with 5 so far, non-numerals, optional?

-əqəl 'containers': only with 5 so far, (possibly related to -əqəl 'in the throat'), obligatory?

-á·lɬ 'young': only with 5 so far, non-numerals, optional

-é·ltəx^{w} 'wives': only with 2 so far, possibly related to -é·wtx^{w} ~ -ltx^{w} ~ -tx^{w} 'house(s)'

-émec' (probably ~ -émeθ') 'upright, poles': only with 2 sc far, non-numerals, obligatory

-ewəc (gloss uncertain): used as formative only in lé́c'-ewec '(one) hundred', may be related to -ewíc 'in the back' since the root of 'hundred' is lé́c' '(be) different' and 100 is different at its back from the tens by an extra zero at the back.

Exemples: (?isé·le 'two', ɬeq'é́cəs ~ ɬq'é·cəs 'five', teqé́cɛ 'eight'; in the examples to follow numerals are not spelled out (to save space), and the forms involving the root for 'five' ɬq'é·cəs usually have this form in variation with /ɬq'é·cs/) ɬq'á·c-əs '5 dollars', teqá·cé·-s '8 dollars', ɬq'é·c-éle '5 people', s-ɬq'é·c-əs or s-ɬq'é·cəs-s '5 o'clock', s-teqé·cɛ-s '8 o'clock', ɬq'é́cəs-ó·wes '5 canoe paddles, 5 paddlers', ɬq'é́cəs-é́ɬ '5 times', ɬq'ɛcəs-fq^{w} '5 fish', ɬéq'ɛc-əlsx^{y}é́ '50', ɬq'ɛcəs-é́ɬp '5 trees (belonging to one person)', ɬq'é́cəs-má·t '5 piles', s-ɬeq'é́c-əs or s-ɬeq'é́cəs-s 'Friday', ɬq'é́cəs-élwet '5 garments', ɬq'é́cəs-é·wtx^{w} '5 houses or buildings (belonging to one person)', ɬq'ɛcəs-óweɬ '5 canoes (belonging to one person)' (compare ɬq'é́cəs slé́x^{w}eɬ '5 canoes (belonging to different people)'),

łq'ɛcəs-éyiws '5 (pairs of) pants', łq'ɛcəs-á·ls '5 fruit, 5 spherical things (5 rocks, 5 balls, etc.)', łq'éc-əqəl '5 containers (like baskets, etc.)', łq'écəs-(?)á·lɬ '5 young', ?isl-é·ltex^{w} 'man with two wives', ?isél-émɛc' 'two poles standing upright', léc'-əwɛc 'one hundred, hundred'.

5.2.3. Other lexical suffixes (arranged alphabetically by gloss).

-é·y (~ -əy ~ -iy) 'bark and wood': p(ə)q^{w}-é·y 'rotten wood' (péq^{w} 'split, broken, busted', páq^{w}-θət 'get mouldy, decayed'), p(ə)q^{w}-é·y-θət 'wood decays', q^{w}ɬ-é·y 'driftwood' (q^{w}əɬ 'fall in water, tip over in canoe'), χ(ə)p-é·y 'red cedar wood', slewíy 'inner cedar bark' (root ləw- 'inside or into an opening'), łq'^{w}-é·y 'cedar bark skirt (or peeled bark)' (łeq'^{w}-á·t 'peel any bark'), slé·y 'Douglas fir bark', lé·y-əɬp 'Douglas fir tree', c's-é·y 'fir log or wood', θ'é·χ-əy 'bleached grass for basketry designs' (θ'é·χ-ət 'scald it'), q'əθ'əm-é·y-əɬp 'balsam, larch' (q'éq'əθ'əm 'sweet-tasting' shows root; the tree has sweet sap on outside of bark), sék'^{w}əm-iy 'birch', q^{w}éq^{w}əɬ-iy 'lots of little pieces of driftwood'.

-á·me 'berry': celq-á·me 'blackcap berry' (célq 'fall off, drop'), k^{w}x^{w}-á·me-ls 'mountain black huckleberry (Vaccinium membranaceum)'.

-é(·)wtx^{w}, -əwtx^{w}, -(é)ltx^{w}, -(əl)tx^{w} 'building, house': x^{w}əlməx^{w}-éwtx^{w} 'smokehouse, longhouse' (lit. Indian house), ʔɛƛ'qəl-é·wtx^{w} 'outhouse, bathroom' (outside + house), lém-é·wtx^{w} 'bar, pub, liquor store' (lém 'liquor' < English "rum"), céɬtəl-éwtx^{w} 'smoke-house, dried fish house' (dried fish + house), ʔílt̓əx^{w}-éwtx^{w} 'plank house' (plank + house), cɛhéyəɬ-éwtx^{w} 'church building' (prayer + house), téłə-ʔéwtx^{w} 'bank' (téłə 'money' < English "dollar"), sil-éwtx^{w} 'tent' (síl 'cloth' < Chinook/English "sail"), sləx^{w}əɬ-é·wtx^{w} 'canoe shed', siyáɬ-é·wtx^{w} 'woodshed', sak'^{w}əm-éwtx^{w} 'bark house', q'^{w}əýílə́x^{y}-éwtx^{w} 'dance hall', smíɬɛ-ʔéwtx^{w} 'spirit dancing house', wé·c-éwtx^{w} 'out-house (for solid waste)', mə́k'^{w}əm-éwtx^{w} 'second-hand store' (mə́k'^{w}əm 'use second-hand'), ʔítət-é·wtx^{w} 'hotel, bedroom', spəpíl-éwtx^{w} 'root cellar (covered with earth, separate from house, kept potatoes, apples, etc.)', θí·y-éwtx^{w}-əm 'build a house' (make + house + middle voice), lé·c'-əwtx^{w} 'next-door, different house', lé·c'-əwtx^{w}-əm 'visit', cɬ-éltx^{w} 'upper portion of pit house or any house', s?í·ltəx^{w} 'cedar planks on roof or side of house', Swelím-eltx^{w} '(Indian name of Ed Leon Sr. of Chehalis)', qiq'-éwtx^{w} 'jail', + see 5.2.2.

-ə́(·)weɬ 'canoe', -(v́·)weɬ 'vessel, container': q'əχ^{w}-ə́·weɬ 'war canoe, largest canoe', téy-oweɬ

'racing canoe', pot-ówəɬ 'row-boat', x^{y}ix^{y}əp-ówəɬ 'planing a canoe', qəp'-ás-owəɬ 'canoe turned upside down (on land)', t'ók^{w}-owəɬ (k^{w} - q^{w}) '"corking a canoe", caulking a canoe', ɬóq-owəɬ 'patching a canoe', tx^{w}-ówəɬ 'tow a canoe (through rough water)', x^{w}ok'^{w}-ówəɬ 'drag a canoe', ʔiləm-ówəɬ 'carry a canoe on shoulders', ʔól-wóɬ 'middle of a canoe (on inside), middle paddler(s)', ɬəx-əl-wóɬ-təl 'cross-piece in canoe, thwart'; c'əq'^{w}-ó·wəɬ 'weave a cedar root basket' (c'óq'^{w} 'poke, pierce'), sɬóq'-owəɬ 'lower back' (wide part? + canoe), q^{w}əɬ(l)y-ówəɬ (ó - ú) 'carved wooden spoon' (compare q^{w}əɬ(l)íy-x^{y}əl 'shoe'), x^{y}éwəɬ 'vulva, vagina'.

-áɬ 'canoe': yək'^{w}-áɬ-əm '"breaking one's canoe", last spirit dance of the season' (yók'^{w}-ət 'break s-th up'), compare ʔá·ɬ 'be aboard (a canoe)'.

-íɬ 'child, young, baby' (see also -á·lɬ 'young', may be case of l-y alternation if //-óyɬ//): x^{y}aɬəm-íɬ 'baby-sitter' (x^{y}áɬ-məƛ 'take care of s-o'), s-k'^{w}əm-íɬ-əm 'adopted child' (k'^{w}óm 'raise (a child)').

-iyá·s 'in a circle': q'ɛyq'əlc'-iyás-əm spəhé·ls 'whirlwind' (spəhé·ls 'wind'), sisəlc'-iyás-əm 'turn around in a circle' (probably < sísəl- 'spinning', -əlc' 'around, over, turning', -iyá·s 'in a circle', -əm 'middle voice'), x̌éylx̌él-iyá·s-əm 'it is written (in the sky)(as striped clouds)'.

-fθ'è, -fθ'ə 'clothes': k'^{W}əq^{W}-él-fθ'è (ə ~ o) 'Coqualeetza (a place in present-day Sardis, B.C.)' (club + ? + clothes; at least two different stories account for the origin of this placename from 'club' + 'clothes'), (AC) łəw-fθ'ə ~ (DM) łəw-fθ'è 'naked', łəw-θ'é-m 'to undress', ?fθ'əm 'get dressed', s-?fθ'əm 'clothes, clothing', spaləq^{W}-fθ'è 'corpse, ghost' (probably clothing of the spirit), s-qəl(-)á·l-fθ'ɛ 'west wind' (possibly 'dirties' + 'clothes'). See also the suffix for 'garment'.

-é·lé, -élé, -əlɛ 'container for, receptacle for': (over 30 examples have been found, including the following:) sx^{W}-héyq^{W}-ɛlɛ 'firepit' (container for burning), s-x^{W}əƛ'-qəl-é·lé 'pillow case' (container for pillow, pillow < rolled thing under head), sqəlx^{W}-é·lé 'throat, gullet' (greedy + container), s-x^{W}iym-élé 'store' (nominal + sell + container for), sx^{W}lém-élé 'bottle' (sx^{W}lém 'medicine man' or sx^{W}-lém 'something going'), sx^{W}-méls-hé·lé 'fishing basket, bait basket' (nominal + bait + container for), łè·c'-təl-élé 'knife handle' (cutting + device + container for), s-p'àƛ'əm-élé '(tobacco) pipe' (smoke + container for), s-p'əƛ'əm-é·lé-təl 'smokehole', smok'^{W}ə-?é·lé 'graveyard' (smók'^{W}ɛ 'grave'), spatəl-élé 'mast' (spát-(t)əl 'sail'), sc'ɛx^{y}t-élé 'knothole' (branch + container for),

sχ^{w}é·ye-hè·lè 'Squia-a-ala (Chilliwack Indian Reserve #7, a village in pre-contact times)' (χ^{w}é·y 'many people perished together'), səχ^{w}e-ʔélé 'bladder' (urine + container for), k'^{w}él(·)ɛ 'stomach', χelw-élɛ 'horn rings for dip nets' (χélew 'spoon').

-eqel 'container': ʔiʔɛx^{w}íl-eqel (Tait and Cheh. have ʔɛʔɛx^{w}íl-eqel) 'small container', mímel-eqel 'small container' (ʔemímel 'a little bit'), méməl-eqel 'small containers' (e-ablaut plural of /i/ in diminutive reduplication is regular), t'il-éqel 'salmon after spawning when its eggs are loose' (? lonely + container).

-á·s, -es 'cyclic period, moon, season': (probably related to -á·s ~ -es 'face') peláq-es 'torch moon (in January), (time to spear fish by torchlight)' (peláqel 'torch'), təm-ƛ'í·q-es 'moon (when one) gets jammed in (from snow)(in February)' (time + jammed in or stuck in a trap + moon or cyclic period), welók'-es 'little frog moon (in March)', łemt(')éles 'spring showers moon (in April)' (if not -es then -á·les 'in the eyes'), ʔepál-és-tel 'tenth moon (in July)', meq-á·s 'fallen snow moon (in December)' (mé·qɛ 'fallen snow'), sk'^{w}ex^{y}-á·s 'moon, month' (k'^{w}ex^{y}- 'count'), wé·yél-és 'tomorrow' (wé·yel 'come daylight'), ʔim-ex^{y}-á·s-em 'go for a walk' (walk in a circle with-

out destination), ɬak'^{w}əm(-)á·l(-)əs 'when the first fall storm comes' (ɬá·k'^{w} 'to fly', -á·ləs 'in the eyes' may be the suffix here instead of -əs).

-á·lk^{w}ɬ 'spirit dancer': χɛws-á·lk^{w}ɬ 'new spirit dancer' (χéws 'new').

-əɬét 'day of the week': sχəχə-ɬét 'Sunday' (sacred + day of the week), yilé·w-əɬèt 'Monday' (passed or after + day of the week).

-è·ɬ 'deceased' (or perhaps merely the past tense suffix attached to nominals): sí·lè·ɬ 'late grandparent, deceased grandparent' (sí·lə 'grandparent'), mə́l-è·ɬ 'late or deceased child' (méle 'child'), sí·səl-è·ɬ 'late grandmother' (sí·sələ used by AC for grandmother), səlsí·l-è·ɬ 'late grandparents' (səlsí·lə 'grandparents'), sx^{w}əmθiy-è·ɬ 'deceased uncle/aunt/grandparent/someone responsible for you directly or indirectly', sx^{w}əmx^{w}əmθiy-é·ɬ 'deceased uncles/aunts/ etc.', s-məstiy-éɬ 'sibling of deceased parent' (məstíy-ex^{w} 'person'), swəlm-éyɬ 'child of a dead sibling' (< (s)wélém 'orphan'); compare -əɬ in lé·t-əɬ 'morning' (< s-lé·t 'night' + 'past'), x^{w}əlélt-əɬ 'last night' (x^{w}ə-lélt 'evening' < root lé·t 'night'), wə-ɬí·θ-əɬ 'a long time ago' (< ɬí·θ 'a long time'), and -ɬ past tense on verbs.

-təl 'device, implement, thing used for' (over 90 examples found to date, a few of which follow): ʔéχʷ-təl 'broom' (ʔíχʷ-ət 'sweep it'), χél-təl 'pen, pencil, writing instrument' (χéyl-t 'write s-th'), łɛ́·c'-təl 'knife' (łí·c'-ət 'cut s-th or s-o', łɛc'- 'cut'), s-k'ʷíy-təl 'ladder (native notched pole or any modern kind)' (k'ʷíy 'climb'), s(xʷ)-c'é·-ləc-təl 'chair, bench' (nom. + on top, astride + rump + device), s-χʷóq'ʷ-təl 'canoe pole' (χʷáq'ʷ-ət 'pole it (of a canoe)'), sí·-təl 'basket (generic)', q'əlɛ́c'-eqʷ-təl 'umbrella' and q'alɛ́c'-təl 'square dressing room of blankets for sχʷáyχʷɛy dancers' (q'əlɛ́c' 'rainshelter, *protection'), sxʷ-yém-təl 'belt, sling, strap' (nom. + wide strip + device), sθéqi-təl 'sockeye net', kʷóxʷəθ-təl 'coho net', ƛ'élχχʷəl-təl 'spring salmon net', s-wél-təl 'net, web', θ'és-təl '(metal) nail' and θ'əs-élɛ-təl 'arrow pouch, quiver' (θ'ís-ət 'nail it', -élɛ ~ -é·lɛ 'container'), sxʷ-θ'é·ɬ-təl 'fine cedar root strips for baskets' (root unknown), sxʷ-t'éɬ-təl 'bridge made of big log, big bridge' (sxʷ-t'éɬ 'bridge made of small log') and (s-)t'ɬ-flés-təl 'collarbone' (root probably means 'span, go across'), mét'əs-təl 'first finger, pointer finger' (point, aim + device), séχʷɛ-təl (ɛ ~ ə) ~ səχʷə-ʔé·lé 'bladder' (séχʷə (ə ~ ɛ) 'urine'), s-mélè-təl 'womb, uterus'

(mélè ~ méle ~ méle 'child (kinterm)'), θ'éχ-təl (θ' ~ c') 'rattlesnake', s-q^{w}él-təl 'word, language' (q^{w}è·l 'talk, speak'), sp'aʎ'əm-é·lé-təl 'smokehole' (smoke + container + device). This suffix sometimes conditions the dropping of the last l in the preceding suffixes -á·yθəl 'in the lips', -x^{y}əl 'in the foot, leg', -əléχəl 'in the arm', maybe others: q^{w}əl-á·yθə-təl 'musical instrument', łéχ-x^{y}ə-təl 'rug', and q'əp-eléχ-təl 'armband'.

-əls 'device, tool, thing for, person for' (used mostly with continuative forms of the verb; possibly related to -é·ls ~ -əls 'intransitivizer'): (s-)łíłəc'-əls ~ sx^{w}-łíłəc'-əls 'a saw' (łíc'-ət 'cut it'), x^{y}íx^{y}əp-əls 'a plane (the tool)' (x^{y}í·p-ət 'carve s-th, plane it'), t'ət'ém-əls 'a chisel' (t'əm- 'chip or chop with sharp tool'), s-t'ət'ém-əls 'adze, (prob.) D-adze', sq^{w}əq^{w}é·ls 'a borer (to make holes)' (sq^{w}əq^{w}é· 'hole' + -əls), qíqəq'-əls 'policeman' (qíq' 'apprehend'), híyəq^{w}-əls (i ~ ε) 'one who burns at a burning ceremony' (híyəq^{w} ~ héyəq^{w} 'burning'), sc'á·q'^{w}-əls 'fork' (c'ə́q'^{w} 'poke, spear, pierce'), sx^{w}-θ'émq-əls 'scissors', s-wé·ls 'scramble-giving, scramble' (compare wé·l-x^{y} 'throw upwards' and s-wél-təl 'net').

-í·ls 'device, tool' (perhaps questionable): s-x^{y}á·x^{w}í·ls 'a borer or auger' (x^{y}á·l-t 'to bore'),

yèqʷ-əqs-í·ls-cəl 'I'm lighting the light' (burn + pointed object, nose + device? + I (subj.)), only 2 exx.

-iyɛ 'diminutive': ʔiyə́s-iyɛ or tá?-iyɛ 'darling, dear (mother to little girl)' (ʔiyə́s 'dear female friend', tá? 'dear mother'), sqɛyə́χ-iyɛ 'pet name of Mink; a little bragger or boaster' (sqɛyə́χ 'Mink'), wíθ-iyɛ ~ wə́θwəθ 'snipe', t'ə́m-iyɛ 'little winter wren', t'ə́m-iyɛ 'hermaphrodite baby' (homophonous with 'wren'), q'ayə́ƛ'-iyɛ 'snail', sθ'ə́m-iyɛ 'small (landlocked) coho salmon' (said to hatch from berry that drops in lake, thus < sθ'í·m 'berry' + -iyɛ 'diminutive'), possibly hó·l-iyɛ (o· ~ u) 'humpback salmon' and swət-íyə́ (t ~ t') 'porcupine' and siyə́miyɛm (CT)(ə́ ~ AC's ś here) 'pregnant' (possibly siyə́m 'leader, chief' + -iyɛ 'little' + -ɛm 'carry, use'), st'íf'əχ-eyɛ 'Ruby Creek (near Seabird Island)' (st'ə́χ 'fork in s-th'), χam-á·θ'-iyɛ 'youngest sister of Mt. Cheam' (χὲ·m 'weep, cry' + -á·məθ' 'standing, height' + -iyɛ; so-called because lots of creeks run together from her because she cries since she can't see the Fraser River), sláχ-iyɛ 'Indian name of Celia Thomas', xʷəmíc-iyɛ 'Indian name of Lucy, mother or other close relative of Celia Thomas', swalə́s-iyɛ 'Indian name of Al Gutierrez and his great grandfather Bill Swalə́siyɛ', səɬém-íyɛ 'Indian name of Jeanne McIntire (of Seabird)'.

-éyə 'diminutive' (related to -iyɛ); sisəm-éyə 'bee' (compare sí(·)sem 'feel creepy, fear s-th behind'), s(-)x^{y}-á·yɛ 'co-wife, female rival of wife' (s- nominalizer + x^{y}- 'genitals' + -á·yɛ 'little'), s-x^{y}-ayé·-s(-)əq 'ex-wife's husband, wife's ex-husband, male rival of husband' (-əq or perhaps here -seq 'male').

-í·lép, -éylép, -ələp, -ép, -íp, -ép 'dirt, ground' (allomorphy seems to be -éylép and -ép after postvelars, the other allomorphs elsewhere, -í·ləp after CV́CV̆C, other stressed allomorphs after CV̆C (monosyllabic unstressed roots), -ələp after a stressed syllable; but two of the 16 examples don't fit this pattern): ləq'-éylép 'level ground' (lə́q' 'level'), ƛ'x̌^{w}-éylép 'hard ground' (ƛ'éx̌^{w} 'hard'), łəx̌-éylép-təl 'floor' (this is an alternate analysis to that given in lexical prefixes under the prefix ł-; cp. łəx̌-owéł-təl 'thwarts, of a canoe', łéx̌-x^{y}ə-təl 'rug' and łəx̌-éyl-éx^{y} 'stand up'; it seems there is a root łéx̌ ~ łəx̌, not clearly attested yet semantically or as a verb; -éyl in 'stand up' may be related to -í·l 'come, go'; the other suffixes are clear as already explained), syíc'əm-ílép 'sand bar' (syíc'əm 'sand'), sqátem-íləp 'hill' (root meaning unclear), təwélə(-)h-í·ləp 'sloping ground' (təwélə 'sloping'), x̌éyx̌əp'-í·ləp 'a rake' (éy ~ í)(x̌éy-p'-ət 'scratch or scrape s-th and leave a mark'),

θáyx^{w}-í·lep-t-əs 'he was softening the ground' (this was done to some places to insure a good growth of wild vegetables)(θáyq^{w}əls 'digging'), c'əsə́m-əlep 'weeds' (c'ísəm 'grow', thus 'weeds' are 'growing dirt'), sx^{w}-ƛ'éx^{y}-əlep 'a plow' (ƛ'éx^{y} 'rip or break apart'), s-q^{w}əl-íp '(black) beard moss, black moss bread' (nom. + boil + dirt; this moss is cooked underground and becomes a sweet licorice-tasting loaf), ƛ'ɛs-íp 'licorice fern' (roots are edible and grow in dirt-like accumulations on the bark of maple trees; root meaning unclear), s-q'əχ-ép 'stump (of tree)' (root meaning not clear), sq^{w}ɛ́·p (//s-q^{w}ɛ́·-(ɛ́)p//) '"hole with water at (foot of?) Mt. Cheam on the side away from the Fraser River," lake or waterhole on Mt. Cheam' (s-q^{w}ɛ́· 'hole'), sθíy-ép - sθiy-ép 'loincloth' (nom. + θíy 'make'? + 'dirt'), s-qəl-ép or s-qə́l-ép 'garbage' (qə́l 'bad, dirty').

-əwí·ls 'dishes': θ'əχ^{w}-(ə)wí·ls 'wash dishes' (θ'éχ^{w} 'wash'), sx^{w}-θ'aχ^{w}-əwí·ls (a probably sic for ə) 'sink, dishpan', x^{w}ə-ʔíq'^{w}-əwí·ls 'drying dishes' (ʔíq'^{w}-əs-əm 'wipe one's face').

-áθ 'edge': ʔiy-áθ 'sharp(-edged)' (ʔiy is an unstressed allomorph of ʔéy 'good'), qəl-áθ 'dull (-edged)', qəl-áθ-əqsəl 'blunt (of a point or pole)', səml-áθ-əl 'riverbank' (səml(-)él-iyəl 'a set net, a

stationary net', míl-iyəl 'to set a net'), s-məq'-áθ 'extra food which guests can take home' (which may be mistranscribed) may belong here (méq' 'be filled or stuffed with food').

-əlcəp 'firewood': θ'iq'^{w}-élcəp 'split (fire)wood' (θ'fq'^{w}-ət 'punch s-o or s-th'), yéq^{w}-əlcəp 'make a fire, burn wood' (yéq^{w} 'burn'), sí·lcəp-təl (DM) 'a firedrill' (root səl- 'spin'), q'^{w}é·y-cəp 'cinders, real fine powdery ashes (light, soft, dust-like)' (q'^{w}é·y-t 'burning pitch onto a canoe').

-əlsx^{y}é 'ten times, -ty; first time' (see numeral classifier affixes for all examples except the following): yíq-əlsx^{y}é-y 'first snow of winter' (yíq 'to fall (of snow)').

-élέqəp, -éləqəp 'fragrance, smell, odor': ʔɛy-éləqəp 'good smell', qél-əqəp 'bad smell', səlcím-élέqəp 'how does it smell?' (səlcím 'how is it?, how?'), qəlqéyl-élέqəp 'turn bad in smell' (qəlqéyl 'turn bad'), sim-élέqəp ~ sim-éləqəp 'bad stink' (root unknown unless sím as ín sísem 'feel creepy, fear s-th behind').

-á·ls 'fruit, spherical': s-qəʔ-á·ls 'juicy fruit' (qá· 'water'), x^{y}əlk'^{w}-á·ls 'spherical' (x^{y}əlá·k'^{w} 'round' , x^{y}əlék'^{w}-t 'roll s-th up'), x^{y}əp-á·ls-t 'peel fruit or vegetable or vegetable root' (x^{y}í·p-ət

'peel bark or tree root, peel it (of bark or root)'), k'^{w}aq^{w}-iy-á·ls 'lacrosse' (club + bark + spherical), c'í·c'q^{w}əl-à·l(s) 'grass shinny' (root uncertain), c'q-á·ls 'Hope, B.C.' (the Fraser River turns in a circle around the site; however this etymology may be dubious), also see this suffix as numeral classifier affix.

-əlwət 'garment, clothing': θ'éχ^{w}-əlwət-əm 'wash(ing) one's clothes' (θ'éχ^{w} 'wash'), sx^{w}-θ'éχ^{w}--əlwət-əm 'washtub, washing machine', s-x^{w}átq^{w}-əlwət-əm 'washboard' (root meaning unclear), ƛ'íƛ'əp-l-ðlwèt 'men's underclothes' (diminutive R-, ƛ'ép 'deep, under-', probably -lə- 'plural'), yéq-əlwét-əm 'change clothes' (yéq 'change', -əm 'middle voice'), also appears as a numeral classifier affix and may appear as a woman's personal name suffix, both q.v.

-í·l, -əl 'go, come, get (become)' (conditions preceding -əl → ø, see morphophonemics): x^{y}əc'-í·l-əm '(go) through the woods' (s-x^{y}í·x^{y}əc' 'woods'), k^{w}ətx^{w}-í·l-əm 'come inside, go inside' (s-k^{w}ətéx^{w} 'inside (a house)'), ƛ'p-í·l 'descend' (ƛ'ép 'down, deep'), q'ɛ-x^{y}-í·l-t (//q'á·-x^{y}əl-í·l-T//) 'go with, come with, or be partner with s-o' (s-q'á·-x^{y}əl 'partner', s-q'əq'á· 'together with'), sqəm-í·l 'inside a pit house' (sqém̓él 'pit house'), θət-í·l 'gone dark' (θé·t 'darkness'),

k^{w}ə́·m-əl 'go red, get red' (c-k^{w}ə́·m 'red'), q^{w}ɛ́·y-əl 'go yellow (or green), get yellow' (c-q^{w}ɛ́·y 'yellow, green'), p'əq'-ɛ́yl (or p'əq'-ə́·l) 'go white, get white' (p'ə́q' 'white'), q'ɛ́yɣ-əl 'go black, get black' (c'-q'ɛ́yɣ 'black'), məθ'-ə́·l 'go blue, get blue' (c-məθ' 'blue'), məθ'-ə́·l-t 'make it blue; dye it, color it (any color)', ləw-ə́·l-əm 'go into an opening', ʔiy-ə́·l-əm 'clear up, turn fine' (ʔɛ́y 'good'), s-yəq^{w}-ə́·l 'lamp, lantern' and yíyəq^{w}-ə́·l 'small light, candle' (things that go burning), q'əs-ə́·l-təl 'tumpline' (q'ɛ́ys-ət 'tie s-th', thus a device that goes tied), possibly qəl-iyθ-ə́·l-əm 'say bad words, swear, curse' and q^{w}əl-ayθ-ə́·l-əm 'making music; March moon' (qə́l 'bad', q^{w}ə́·l ~ q^{w}əl- 'talk, speak', -ə́·yθəl 'in the lips or jaw', -əm 'middle voice').

-məl 'location around a house': ʔɛx^{y}ələ́s-məl 'in front (of a house)', cəlk^{w}-ɛ́ɣəl-məl 'behind or back of a house', s?ə́ƛ'q-məl 'outside (of a house)', cə́ɬ-məl 'on top of a house', s?ɛlə́c ~ (s-)?ɛlə́c-məl 'bottom of a tree (trunk) or house (foundation)' (all examples occur without the -məl and correspondingly lack the meaning '(of a house)'.

-ɛ́ɣəl, -əɣəl 'end of a house (inside or outside)' (maybe related to somatic suffix -əlɛ́ɣəl 'on the arm'): s-tiyt-ɛ́ɣəl 'upper (upriver) end of house (inside or out)',

(tíyt 'upriver'), s-əwq'^{w}-éχəl 'lower (downriver) end of house (inside or out)' (wóq'^{w} 'drift downriver, drown'), cucuw-éχəl 'front end of house (inside or out)' (cúcuw 'away from shore, towards the middle of the river, in front'), s-cəlk^{w}-éχəl 'back end of house (inside or out)' (possibly cá·ləkʷ (k^{w} ~ q^{w}) 'toward the woods, away from the river, in the backwoods'), cəlk^{w}-éχəl-məl 'behind or back of a house', q'əl-éχəl 'fence' (root meaning unknown), s-t'əlt'əl-éχəl 'a square' (root meaning unknown), sélc'-əχəl 'to circle around the outside of a house' (sélc' 'go around in a circle').

-lə 'need, lack': c-qá·-lə 'thirsty' (Chehalis: ɬ-qá·-lə)(c- and ɬ- verb formatives, qá· 'water')(this seems to be the only example, but it is a clear one).

-é·lews 'leaf, leaves': p'əlp'èlq'əm-é·lews 'poplar; sparkling leaves' (p'élq'əm 'sparkling'), x^{w}əs-é·lews 'fallen leaves' (x^{w}ís-ət 'shake leaves or fruit off a tree or bush'), c'ak'^{w}ə-ʔé·lews 'skunk cabbage leaf or leaves' (c'ák'^{w}ə 'skunk cabbage'), q'əmó·w-əɬp-é·lews 'maple tree leaf' (q'əmó·w-əɬp 'maple tree'), cəwó·w-əɬp-é·lews 'cottonwood leaf or leaves' (cəwó·w--əɬp 'cottonwood tree'), pipəham-é·lews 'plantain' píphà·m 'frog', the plant is always called "frog leaf", neaver translated "plantain").

-ółə 'leg' (related to -x^{y}əl 'leg, foot', somatic suffix): ƛ'ɛlqt-ółə 'deer' (ƛ'ɛ́qt 'long', -l- infix 'plural', -ółə 'leg'), s-x^{y}-ółə 'penis' (s- nom. + x^{y} 'genital' + -ółə 'leg').

-əɬcɛ 'unclear liquid' (gloss approximate): ɬəx̣^{w}-ółcɛ '(to) spit' and ɬóx̣-əɬcɛ 'spitting' and s-ɬóx̣^{w}-əɬcɛ 'spit, saliva' (ɬ(ə)x̣^{w}-á·t '(to) spit'), ə'əq^{w}-ółcɛ 'mudpuddle, dirty pond'(root meaning unclear), qá·-ɬcɛ 'juicy' (qá· 'water'), s-wí·ɬcɛ 'Cultus Lake' (root meaning + shape unclear).

-á·məx^{y}, -əməx^{y} '-looking, appearing': ʔiy-á·məx^{y} 'good-looking, handsome, beautiful' (ʔéy 'good'), qəl-á·məx^{y} ~ qəl-əɬ-á·məx^{y} 'ugly' (some say qələɬá·məx^{y} means 'clumsy' instead)(qól 'bad'), ʔɛly-á·məx^{y} '(plural/all) good-looking' (-l- infix 'plural'), təʔ-á·məx^{y} '(to) look like, resemble' (s-tɛʔé ~ s-təʔé 'be like, be similar to')(Chehalis + Tait have st'ɛt'-á·məx^{y} 'look like, resemble' and root st'é 'be like, be similar to'), selcí·m-əməx^{y} 'how does it look?, what does it look like?, what color is it?' (selcí·m 'how is it?').

-ɬ '(material for)': s-yéq^{w}-ɬ-ȅlȅ 'firepit, fireplace' and s-yəq^{w}-ɬ-é·ltəl 'tinder, material used to start fire (fine dried cedar bark)' (yéq^{w} 'burn', -ȅlȅ 'container', -é·ltəl 'medicine'), possibly mamíyə-ɬ-təl 'helper' (méy-t 'help s-o', məmíyə-t 'helping s-o',

-təl 'reciprocal').

-é·ltəl 'medicine': x^{w}əq'^{w}əle-ʔé·ltəl 'hangover medicine' (probably x^{w}əq'^{w}éle 'scouring rush, horsetail fern'), θ'əl-ʔé·ltəl 'heart medicine; juniper' (θ'éle 'heart'), and syəq^{w}ɬé·ltəl 'tinder' as seen in the last suffix set.

-elá·t 'female name' (this and the next three suffixes probably show -é·t, -át 'female name'): q'ewq'ew--elá·t 'name of a female loon in a story' (compare q'ewq'ew-eléce 'name of the male loon in a story', and q'éwq'ewe 'Kawkawa Lake'), qəwéstəlàt 'kind of deer (probably female)', c'símtəlat 'name of one of Mt. Cheam's sisters, now a name of Celia Thomas'(c'sím-t 'grów s-th'), siyém-təlat 'Indian name of Teresa Michell' (siyém 'leader, chief'), θ'tístəlat 'Indian name of Mary Andrew (Susan Peter's deceased sister, wife of David Andrew of American Bar)', k^{w}elέx^{y}-təlat 'Indian name of Mabel Peters' (< k^{w}əlx^{y}ámé 'fine snow that drifts in windows or doors'). All examples but the first probably are better analyzed with -təl (gloss uncertain here) + -á(·)t or -at 'female name'.

-eɬát 'female name': x^{w}áyɬat 'Indian name of Amy Cooper's mother's mother', ʔálm-eɬát ~ ʔálmə-ɬà·t 'Indian name of Amy Cooper's father's mother and of Amy's granny Laurencetto's oldest twin', k^{w}ax^{w}iɬát

'Indian name of Miss Susanna Jim from Katz, grandmother of Mrs. Duncan (Dorothy) Wealick'.

-əmat 'female name': xʷiyél-əmat 'Indian name of Tillie Guttierrez', siyém-át 'Indian name of Susan Peters', siyá·m-át 'Indian name of Philomena Kelly', c'ekʷɨ́l-əmat 'Indian name of Mary (of Tzeachten, wife of Casimir of Chehalis, great grandmother of Nancy Phillips of Chehalis)'.

-əwat 'female name': ʔáy-əwat 'baby sister of Mt. Cheam; also Indian name of Amy Cooper'.

-əlwət 'female name' (probably = -əlwət 'garment, clothes'): ʔaláxʷ-əlwət 'sister of Mt. Cheam', t'əlíxʷ-əlwət 'Indian name of Isabel (Mrs. Jimmy Church); Indian name of Darlene Guttierrez', q'ʷatás-əlwət 'Indian name of Mary Anne (of Chehalis); Indian name now of Jennie Peters (daughter of Nancy Phillips)', pəláq'ʷ-əlwət 'Indian name of Annie, wife of Charlie Siyaməlélǝxʷ'.

-əlécɛ 'male name': q'əwq'əw-əlécɛ 'male loon in a story', t'ixʷ-əlécɛ 'Indian name of Chief Albert Louie's father', θ'-əlécɛ 'Indian name of second oldest Wealick brother', θ'-əléc-iyətəl 'Indian name of Richard Malloway Sr. (of Sardis)', lɛ̌χ-əlécɛ 'Indian name of Jimmie Swíwəlɛs'.

-iyətəl 'male name': ʔaláxʷ-iyətəl 'male name ver-

sion of ʔaléxʷ-əlwət', χəmáθ'-iyətəl 'male version of Indian name χaməθ'-iyɛ', sɛlέq'-ayətəl 'Indian name of David (Matilda David's husband)', θ'əlέc-iyətəl 'Indian name of Richard Malloway Sr. (prominent chief in Sardis)'.

-əlέlexʷ, -əlèlèχʷ 'male name'; siyam-əlέlexʷ 'Indian name of Charlie Siyamələlexʷ , (said to mean) head of the house, superior of the house', ɬá·kʼʷ-əlèlèχʷ 'Indian name of Dan Milo's great grandfather' (ɬá·kʼʷ '(to) fly', the man was said to have arrived one day in the village by flying there).

-éylém, -flém 'male name'; yeχʷ-éylém 'Indian name of the 3rd from oldest original Wealick brother' (yéχʷ 'untied'), qɛyp-flém 'Indian name of August Billie'.

-θət 'male name' (probably = -θət 'verbalizer' or -θət '-self, reflexive'); há·yʌ'-θət 'Indian name of Peter Williams of Chehalis (died about 1921, great grandfather of Tillie Phillips)', siyáləwə-θət 'Indian name of Roy Point from Scowkale'.

-ələq 'male name' (probably = -ələq 'one who, a ___-er'); χέyt-ələq 'Indian name of an old man from Kilgard (a strong warrior and Indian dancer, in a battle he once punched through a man's chest)' (χéylέχ 'war, fight war', χέy-t-əm 'growl (of a person)').

-(fm)əltxʷ 'male name' (possibly means 'house' or

'wives'): swəlím-eltx^{w} 'Indian name of Ed Leon Sr. (of Chehalis, B.C.)' (cp. suffixes for 'house').

-é·yəl, -iyəl 'net', -ú·yəl 'trap, net': mí̓l-iyəl 'set a net', səmlél-iyəl 'a set net, stationary net' (cp. səml-áθ(-)əl 'riverbank'), məs-íyəl-təl 'anchor (probably for nets)', q^{w}s-é·yəl 'throw a net out' (q^{w}és 'fall overboard, fall in the water'), q^{w}s-é·w-iyəl 'set a net and drift with it' (the -é·w may mean 'on top of itself', see 5.2.4), q^{w}és-əl-iyəl 'drifting a net in different places' (-əl- probably 'plural'), q^{w}əs-ú·yəl 'drop net into water' (gloss perhaps doubtful), ʔis-téyt-iyəl 'group of canoes travelling upstream (moving to fish drying camp)' (tíyt 'upriver'), pəθ-ú·yəl 'bear trap' (s-pé·θ 'bear'), k'^{w}ec-ú·yəl 'check a trap or net (for animal or fish [or bird])'.

-əm '(nominalizer)': k'^{w}q^{w}-óm 'small hatchet, small axe' (k'^{w}á·q^{w}-ət 'club s-th or s-o, hit s-th (or s-o) with stick-like object'), c-q^{w}é·y-əm 'lemon extract' (color + yellow + whatever -əm means), c'-q'éyx̣-əm 'vanilla extract' (color + black + ?), q'éy(ə)x̣-əm 'whirlpool' ('black' + -əm), s-yəlyəlís-əm 'icicle' and yəlyəlís-əm 'many icicles' (yélés and -elís 'tooth, teeth'), q'əls-yéq-əm 'snowdrift' (twisting + snow + ?), qɛyqɛyx̣-əlá-s-əm 'ray of sun from between clouds' (qɛ́yqɛyx̣-əlá 'shadow' + unclear suffixes), possibly

x^{w}éyləm 'rope, thread, string' and a few others.

-p' 'on itself, within itself' and -q' 'on s-th else, within s-th else' (these two suffixes are discussed together because two pairs of words show their difference in meaning): q'əlq'él-p' 'tangled on itself (for ex. a net in the water)', q'əlq'él-q' 'tangled on s-th else, snagged (as a net on a log or branch)', q'əlq'él-q'-t 'coil it', s-q'əl-é·w 'coiled (of a snake)' (-é·w and -í·w '(on top of itself)', see below), q'ɛlq'əl-p'-í·w 'inchworm' (-í·w is preferred to the version with -í·ws 'on the body' given as an example under the later somatic suffix), s-q'əlq'él-p'-əq^{w} 'curly hair', χéy-p'-ət 'scratch it (and leave a mark), scrape it, claw it', χéy-q'-ət 'scratch it (to itch it)', χéy-m-ət 'grab it', s-łəl-p'-á·yθəl 'sloppy lips, flabby lips' and s-łəl-łəl-p'-é-lí·yɛ 'sloppy ears' (compare s-łél-lec 'rump, buttocks' (/słél·ec/) which must mean something like '(fold(ed) at the bottom)' while s-łəl-p' means something like '(folded on itself)').

-éləq 'one who, -er': ʔí·wəs-éləq 'a guide' (ʔí·wəs-t 'guide s-o, teach s-o, show s-o'), łɛłəw-éləq 'a healer, an Indian doctor or medicine man at work' (łéłəw 'working or curing (of an Indian doctor on a patient)', sk^{w}uk^{w}əl(-)st-éləq 'school teacher' (sk^{w}ú·l 'school'), perhaps sləc'-éləq 'spouse's sibling's spouse' ~ 'step-

sibling' (lɛ́c' ~ ləc'- 'different').

-ɛ́· 'overly': k'ʷəs-ɛ́· 'overheated' (k'ʷɛ́·k'ʷəs 'hot', k'ʷəs- 'get burned'), səl-ɛ́· 'tight' (sɛ́·l- ~ səl- 'spin').

-ó·wəs, -ówəs, -ɛ́·wəs 'canoe paddle': xʸəc'-ó·wəs 'store canoe paddles away' (xʸəc'-ót 'store s-th away'), xʸəc'-ó·wəs-təl 'January moon, time to store canoe paddles away', pot-ówəs 'oar' (pót < English boat), xʷɛl-xʸ-ówəs 'lift a paddle (while paddling)' (xʷɛ́l-xʸ 'lift s-th'), c'əlc'əl-ówəs-əm ~ c'ɛ́lc'əl-cəs 'repeatedly switching sides in paddling' (R 'plural' + c'əl- 'switch' + -ówəs 'paddle' + -əm '(middle voice), one's own', or plural + switch + in the hand), yəm-ɛ́wɛ́s-təl 'wide cedar root strips for baskets' (yəm- 'wide strip'), and see also under numeral classifier affixes (this suffix is so used) and numerals.

-ɛ́yiws 'pants' (probably < -ɛ́·y 'bark' + -í·ws 'covering'): s(ə)q-í·ws or sq-ɛ́yiws 'pants' and siseq-í·ws or siseq-ɛ́yiws 'short pants', ƛ'íƛ'əp-l-ɛ̀·yìws 'man's underpants' (ƛ'ɛ́p 'down, deep, under-', 'diminutive' prefixed reduplication, -l- possibly 'plural'), łasəm-ɛ́yiws 'pants sliding down' (łɛ́s-əm 'slide down (of clothes)'), and see numeral classifier affixes.

-ɛ́·məl 'part, member, nick-' (related to somatic suffix -ɛ́·mɛ́l 'part, member'): kʷəkʷxʸ-ɛ́·məl 'nickname'

(s-k^{w}íx^{y} 'a name', thus 'nickname' < 'a part name').

-mǝx^{w} 'people': lǝc'-ó··mǝx^{w} 'different people' (used for different tribes or nationalities)(lé·c' 'be different'), x^{w}él-mǝx^{w} 'Indian' (x^{w}el 'just, only'), s?á·l-mǝx^{w} 'water babies, water pygmies', possibly st'él-mǝx^{w} 'medicine' (root meaning unclear), cí·t-mǝx^{w} 'big horned owl', and syíwlmíx^{w}-cǝs 'rattle used at spirit dance by some dancers' (s-yíw-ǝl 'spirit song, spirit power').

-tɛɬ 'person': ?owé-tɛɬ 'nobody' (only example).

-é(·)yɬ, -é(·)ɬ, -éɬ 'place to lay or rest or sleep': θiy-é·ɬ-em 'make a bed or place to sleep or lay or rest' (θíy 'make, fix'), cǝw-éɬ-ǝm 'spawning' (cé́cew 'beach'?), ƛ'x^{w}-é·yɬ-ǝm 'sit on eggs' (ƛ'ǝx^{w} 'cover over'), s-qǝl-é·ɬ 'diaper' (qél 'bad; dirty', used as euphemism for 'dung, feces').

-ǝlǝcé·ls, -ǝlǝsè·ls 'plants, grass': ɬéc'-ǝlǝcé·ls '(to) cut hay' (ɬíc' '(to) cut'), ɬé·lt-ǝlǝcé·ls 'spraying water on the garden' (ɬá·lt '(to) spray', ɬélt-ǝs-t 'splash/spray/flip s-o with water in the face'), Chwk. s-páp$ǝ$x^{w}-ǝlsè·ls, Tait: sx^{w}-páp$ǝ$x^{w}-ǝlsè·ls 'spray-gun (for plants)' (páx^{w}-ǝt 'blow on a patient (done by Indian doctor)').

-émǝc', -émǝθ', -á·mǝθ', -ǝmǝθ' 'pole, stature, upright, standing, height'(c' from idiolects which

usually replace θ' with c' in most words (EL, TM)): ?isél-émec' 'two poles standing up' (quoted in section on numeral classifier affixes)(?isé·le 'two'), x^{y}əlk'^{w}-émeθ' 'round (of a pole)' (x^{y}əlk'^{w}-á·ls 'spherical'), s-qəw-é·meθ' 'side of tree first warmed (by sun)' (root means 'warmed'), s-χé·lc'-əmeθ' 'grown twisted (of a tree)' (s- participial, χé·lc' 'twist'), ?ɛy-é·meθ' ~ ?ɛy-é·mec' 'good figure, good shape; straight (of stick), smooth (of wood, etc.)', ƛ'əqt-á·meθ' 'tall (of a person)' (ƛ'é·qt 'long'), c'í·ƛ'-əmeθ' 'short person' (c'í·c'əƛ' 'short'), χam-á·θ'-iyɛ 'baby sister of Mt. Cheam' (see under -iyɛ above), and possibly c'éléléθ'-x^{y}əl 'short-legged runt' (insulting) (root form unclear unless c'é· 'on top of, astride').

-í·m 'repeatedly': c'éc'əƛ'-í·m 'jumping up and down, jumping along' (c'é·ƛ'əm 'jumping'), tètí·m 'hollering more than once' (té·m 'holler, yell'), sx^{w}-tɛtí·m 'telephone', t'éc'-eχəl-í·m 'mistake in splitting roots (for basketry) by making them uneven' (t'éc' 'split stick for stretching salmon to dry'), x^{w}-tiyt-í·m 'eddy water (where one sets nets)' (tíyt 'upriver'), x^{w}əlk'^{w}-í·m 'an eddy' (x^{w}élk'^{w} 'to eddy'), s-ləc'-í·m-él 'a comb' may belong here as may s-ƛ'əqt--í·m(s) 'length' (ƛ'é·qt 'long') and x^{y}c'-í·m-θət '(smell oneself) always smell bad' (x^{y}íx^{y}əc'-əm 'stink-

ing').

-áyɛq 'trunk or root?': st'it'ɣ-áyɛq 'fork in a tree or root of a tree' (s-t'éɣ 'fork (in anything)') (only example).

-á·lwəɬ 'side, -ward' (related to ?í·lwəɬ 'side'): s-ƛ'əp-á·lwəɬ 'below, underneath' (s-ƛ'ép 'deep, etc.'), s-cəɬ(-)s-á·lwəɬ 'over s-th' (cícəɬ 'above, high'), s-k^{w}ətx^{w}-á·lwəɬ (t'á·mél) 'carved post inside longhouse' (DM)(possibly 'inside wall' as t'á·mél is 'wall'), sləʔ-á·lwəɬ 'on the other side' (sləʔ-áθəl 'across', sləʔ-á·ləs 'facing away, watchful', but ɬəʔé 'go via, go through somewhere (en route)' suggests the root /l/ may be mistranscribed for ɬ in the preceding three words), sɬəq'-á·lwəɬ 'one side of body (between arm and hip)' (ɬəq'-é·t 'wide'), also compare: s-ʔɛy-í·ws ʔí·lwəɬ 'right side of the body' and s-θ'íkʷə ʔí·lwəɬ 'left side of the body'.

-é·m, -ém 'strength': ʔɛy-ém 'strong' (ʔéy 'good'), qəl-é·m 'weak' (qél 'bad'), ɣɬ-ém 'tired' (ɣéɬ '(to) hurt, ache').

-tɛ 'thing' (related to demonstrative article tə): ʔowé-tɛ ~ wé-tɛ 'nothing' (ʔówə ~ ʔéwə '(be) no, not') (only example).

-əɬp, -é·ɬp 'tree, plant' (see morphophonemics for rule predicting -é·ɬp allomorph)(see numeral classi-

fier affix section for the suffix in that function) (very productive, over 50 examples found so far): χé(·)yθ'-əɬp 'alder tree' (χé(·)yθ' 'unripe'), qʷə?á·p-əɬp '(crab)apple tree' (qʷə?áp '(crab)apple'), sk'ʷó·lməxʷ-əɬp 'blackberry vine (or bush)' (sk'ʷó·l-məxʷ 'blackberry')(if a plant has fruit, the -əɬp can be dropped to obtain the word for the fruit), cəlqá·m-é·ɬp 'blackcap bush' (cəlq-á·mə 'blackcap'), mɛc'íy-əɬp 'black hawthorn tree' (méc'əl 'black haw berry'), χpé(·)y-əɬp 'red cedar tree' (χpé·y 'red cedar bark and wood'), qé·lq-əɬp 'wild rose bush' (qé·lq 'rose hip'), cəwó·w-əɬp 'cottonwood tree', t'é·c'-əɬp 'pink spirea' (used for t'é·c' 'crosspieces for drying fish'), c'q'ʷ-əɬp 'spruce tree' (c'éq'ʷ 'poke, pierce, stab'), ?elíl-è·ɬp 'salmonberry plant' (?elílə 'salmon-berry'), θ'əstíy-əɬp 'poplar tree' (θ'és-təl 'metal nail'), s-θ-é·ɬp 'big tree' (θ or θí- 'big').

-é·lc', -əlc' 'twist, turn around': χélc'-t 'turn or twist s-o or s-th', χ-élc'-θət 'turn oneself over or around', s-χ-é·lc' 'turned around; turned the wrong way', s-χ-é·lc'-əməθ' 'grown twisted', s-t'ɛmxʸ-é·lc' 'a braid' (t'émáxʸ 'to braid'), q'ɛyq'-əlc'-iyás-əm spəhé·ls 'whirlwind', siselc'-iyás-əm 'turn around in a circle' (sísel- 'spinning' (síl 'spin' + R) + -əlc' 'twist or turn around' + -iyás 'in a circle' + -əm

'middle voice (by or for itself)').

-ɔ́x^{y} 'upright, erect': ʔím-ɔx^{y} 'walk' (ʔí(·)m-ɔt 'step on s-th', thus 'walk' < 'step upright'), ɬɔχ-ɔ́yl-ɔ́x^{y} 'stand up' (ɬɔχ- unclear root seen in 'rug', etc., above + -í·l 'go, come, get' + -ɔ́x^{y} 'upright'), x^{w}ɔx^{w}-íl-ɔ́x^{y} 'get up with quick motion' (x^{w}ɔx^{w}- 'sudden' (as in s-x^{w}ɔx^{w}-á·s 'thunderbird, thunder' i.e. 'sudden face') + -í·l 'go, come, get' + -ɔ́x^{y}), q'^{w}ɔy-íl-ɔ́x^{y} 'dance' (root uncertain unless related to q^{w}iyχ- 'shake'), k^{w}ɔ́l-ɔ́x^{y}-t 'shoot s-th' (k^{w}ɔl- 'hold in hand'), wɛ́·l-x^{y} 'throw upward' (s-wɛ́·ls 'a scramble, scramble-giving (gifts are thrown upward towards a crowd and they scramble for a piece)'), t'ɛ́m-ɔ́x^{y} '(to) braid' (root unclear).

-ɛ́, -ɛ́m 'using a ___': q'ɔw-ɛ́ ~ q'ɔw-ɛ́m 'using a cane, walk with a cane' and s-q'ɔw-ɛ́ 'person with a cane' (q'ɔ́we 'cane, staff'), tɔx^{w}-mɔl-ɛ́m-cɔl ~ s-mɔl-ɛ́m--cɔl 'I adopt a child' (tɔx^{w}-mɛ́lɔ 'step-child'), and ɵ'ɛ́yɛ́·m 'marry a sibling of deceased spouse' (ɵ'ɛ́yɛ· 'sibling of deceased spouse'.

-ɛ́·lɛq, -ɔlɛq 'waves': ɵiɵɔh-ɛ́·lɛq 'waves are getting bigger' (ɵíɵɔ 'bigger', -h epenthetic), Seabird Island dialect: smɛ́·y-ɔlɛq 'wave' (root meaning unclear), x^{y}ɔt-ɛ́lɔ́q(ɔ)-tɔl 'sinker line' (x^{y}ɛ́·t 'a sinker, lead weight, lead'), sƛ'ɔp-ɛ́·lɛq 'underskirt, underslip' (i.e. 'under-waves').

-əɬ 'according to the ways of the, in the way of the': s-x^{w}əlmə́x^{w}-əɬ 'according to the ways of the Indian, in the way of the Indian, in the Indian way', s-x^{w}əlítəm-əɬ 'in the white man's way, according to the ways of the white man'. (Only examples so far).

-(ʔ)á·yɬɛ '(wooden?)': mimələ-ʔ-á·yɬɛ 'doll' (mímələ 'baby, tiny child' (< R_4- 'diminutive' + méle 'child'); -á·yɬɛ may be related to s-yá·ɬ 'firewood, wood', s-yá·yɬ 'little firewood, little stick of wood', and s-yéyəɬ 'gambling stick (in slehal)'). (Only example).

-á·lɬ, -ʔá·lɬ (-ʔ epenthetic after vowel) 'young': swi(yə)qə-ʔ-á·lɬ 'boy' (3-4 yrs.), siwí(yə)qə-ʔ-á·lɬ 'boys' (< swí(yə)qə 'man, male'), sɬəliy-á·lɬ 'girl child' and sɬəlɬliy-á·lɬ 'little girls' (< sɬé·li(y) 'woman, female'), mèmələ-h-á·lɬ 'bird egg' (mémələ 'children (kinterm)'), s-mimələ-h-á·lɬ-é·lé 'nest of a little bird', stiqiw-á·lɬ 'colt, baby horse', mísməs-à·lɬ 'calf', tépəɬ-élɬ 'board for stretching small hides (squirrel, etc.)' ('prop it up' (tpáɬ-t).

-əɬ 'young' (obviously related to -á·lɬ and -íɬ 'baby, child, young'): s-ɬ'íɬ'əq-əɬ 'child' (R_4- 'diminutive', root meaning unclear), s-té·x^{w}-əɬ 'children' (root meaning unclear)(this suppletive pair are age terms not kinterms).

5.2.4. Marginal cases.

-q '(closable container)': qp'é·-q-ət 'cover it

with a lid, close it (of a box, etc.)' (qəp'é-ləc-təl 'a cover or lid', qəp'-á·yθ-θà·m 'you get covered on the mouth'), x^{w}-mé·-q-ət 'open it (box, bottle, closable container)' (x^{w}-mé·-x^{y} 'open it (door, gate, anything)'), məθ'ət-q-í·wəl 'woodtick' (pus + inside container + on the insides).

-ámət 'costume': s-ləw-ámət 'entire costume of a dancer (spirit dancer--old or new, sx^{w}áyx^{w}ɛy dancer, etc.) from head to toe' (s-ləw-íy 'inner cedar bark' may be root)(this is only example).

-əl '-ish' (this semantic element may be signaled by reduplication in the examples ; then -əl would have to be 'verbal' or < -í·l 'go'): c-q'^{w}íq'^{w}əx(^{w})-əl 'brownish-black' (c-k'^{w}íyəx^{w} 'brown', c-q'é$y$$x$ 'black'), s-q'íq'əx-əl 'getting blackish', qɛyqɛyx-əl-á 'shadow' (c-q'é$y$$x$ 'black' ?), s-q^{w}áq^{w}iy-əl 'yellowish' (q^{w}áy-əl 'get yellow, be yellow' has -əl < -í·l 'go, come, get' and Aa (a-ablaut) from c-q^{w}é·y 'color yellow'), stítsθ-əl 'puny' (stí·θ 'thin, skinny').

-á·l 'just, (exactly)' (related to ?ál 'just, (exactly)'): ?iy-á·l-əm 'okay, right, correct, alright' (?iy- is bound form of ?éy 'good').

-é·lx^{w} '(leaves)': təm-hil-é·lx^{w} 'autumn, fall' (hí·l-əm '(to) fall (tumbling)').

-é·w '(on top of itself)': s-q'əl-é·w 'coiled (of

snakə)' and s-q'əlq'əl-é·w 'coiling (of a snake)(ready to strike)' (cp. q'əlq'él-q'-t 'coil it', q'əlq'él-q' 'tangled on s-th else', and q'əlq'él-p' 'tangled on itself'), q'ɛlq'əl-p'-í·w 'inchworm', q^{w}s-é·w-iyəl 'set a net and drift with it'.

-ét 'one out of': mək'^{w}-ét 'somebody' (mék'^{w} 'anybody').

-əθ '(stripes?)': s-k^{w}ím-əθ 'little roundmouthed sucker-fish (many have red stripes)' (c-k^{w}í·m 'red color'), s-χé·m-əθ 'cottonwood sap' (~ c'ic'əm-é·wəɬ) (χè·m 'crying').

One-fourth of all the lexical suffixes found in this chapter begin with əl, ɛ(·)l or a(·)l, including: -élέqəl, -élmél, -á·ləs, -é·lí·yɛ, -(ə)(l)qs(əl), -él·əs (~ -elís), -elέχəl, -é·lwəs ~ -élwəs, -(ə)ləc, -élqəl ~ -əlqəl, -əlsx^{y}é, -əlwət, -é·ltex^{w}, -(ɛ)ltx^{w} ~ -(əl)tx^{w} (~ -é·wtx^{w}), -á·lk^{w}ɬ, -ələp ~ -í·ləp (etc.) ~ -ép (etc.), -(əl)cəp, -élέqəp, -é·ləws, -é·ltəl, -elá·t, -elécɛ, -elélex^{w}, -əleq ('male name' and 'one who ___'), -ələcé·ls, -á·lwəɬ, -é·lc' ~ -əlc', -é·ləq ~ -ələq, and -á·lɬ. Some of the initial vowel + l elements show signs of being optional. It seems like the vowel + l may have been a grammatical marker of some kind whose meaning can no longer be recovered.

CHAPTER 6. VERBS

6.0. Introduction.

6.0.1. Verb versus nominal. Halkomelem word classes have already been contrasted and defined to some extent in Chapter 3. But since some Salish languages have been described as having shadowy if not non-existant borderlines between verbs and nouns or nominals, it seems appropriate here to contrast further the Upriver Halkomelem verbs and nominals. The traditional semantic criteria can be used, i.e., words for people, animals, things are nominals, while words for doing things, being something or things happening are verbs. Thus x^{w}ólmex^{w} 'Indian', mémelə 'children', Méli 'Mary', sqəlé·w 'beaver', músməs 'cow', lélem 'house' and swéyəl 'day' are nominals; lém 'go, going, go to, going to', ?iwáləm 'playing', xè·m 'weep(ing), cry(ing)', ?élθɛ 'it's me', ?éy 'be good', stetís 'be near', p'əq'éyl 'get white, turn white', and θ'áθ'eɬəm 'getting chilled, being chilled' are verbs. Semantic criteria can be used because the distinction is semantic in part and because words are classed into the same word classes (N or V) by morphological and syntactic criteria as well.

Morphologically, some affixes can be added only to derive or inflect nominals, and some can be added

only to derive or inflect verbs. Thus if a word has one of these affixes it can be classed as a nominal or a verb. For example, words with the following affixes added last in their derivational or inflectional histories are nominals: s- 'nominalizer' (except where used with R to derive participial verbs), sx^{w}- 'nominalizer', -təl 'device, tool', -əɬp 'plant, tree', -ə́·ləws 'leaf', -(ʔ)ə́·lɬ 'young', -ə́·t 'female name', -ələ́cɛ 'male name', -R$_{1}$- 'pet name', -s '3rd person possessive pronoun'; words with the following affixes added last are verbs: subject or object pronoun affixes, wə- 'when; if', transitivizers (including control suffixes), intransitivizers, continuatives R, A and hɛ- ~ hə-, -təl 'reciprocal', reflexives -lə́·məɬ and -(ə)θəɬ, -cɛ 'future', -əɬc 'benefactive'. These are not exhaustive lists.

Syntactically, a nominal (unless used vocatively) is always preceded by a demonstrative article; the article (and in some persons the nominal) can be inflected for possession. However, a verb or verb phrase must first be nominalized to be treated thus. Verbs on the other hand can be inflected with subject and object pronouns and many other inflectional suffixes; nominals cannot be inflected with any of these strictly verbal suffixes. (Subject pronoun suffixes can be suf-

fixed to nominals but only to animate nominals, and when this is done the nominal becomes a verb: x^{W}élmex^{W} 'Indian', x^{W}élmex^{W}cəl 'I am an Indian'; the -cəl converts x^{W}émex^{W} to a verb, 'be an Indian'.) Thirdly, in the simple declarative sentence (or phrase) with both nominal and verb, the verb precedes the nominal. For example: lém tə músmes. 'The cow is going.'

			is going	the	cow
			V	N	

k'^{W}éc	-l	-ex^{W}	-cəl	tə	χ^{W}ex^{W}éye.	'I see a fly.'
see	happen	it	I	the	fly	
------	to	--V--	obj.	--	subj.	
				N		

qéχ	tə	q^{W}é·l	stətís	tɛ?	célex^{y}.	'There are many mosquitoes near your hand.'
are	the	mosquito	near	your	hand	
many						
V		N	V		N	

lép'	-ex^{y}	-əs	tə	-l	méle	tə	s-	k'^{W}é·lmex^{W}.
eat	them	he	the	my	child	the	(nom.)	blackberry
	obj.	subj.						
	V			N		N		

'My child eats the blackberries.'

This order even obtains in some questions:

lí-cx^{W}	k'^{W}éc	-l	-ex^{W}	θə	Súsəl	lí	tə x^{y}éɬ.
do you	see	happen to	her obj.	the (f.)	Susan	in	the path
V	V			N	V		N

'Do you see Susan in the path?'

6.0.2. Transitive versus intransitive. Within the verb word class in Halkomelem there is a very dis-

tinct division into transitive verbs (Vt) and intransitive verbs (Vi). All verbs without an overt transitive suffix are intransitive verbs. Many intransitive verbs are also overtly marked by an intransitive suffix. Unlike English (where transitivity and intransitivity are largely shown only by syntax and where many verbs can be either Vt or Vi depending on syntax), Halkomelem has only a tiny handful of verbs that can be either Vt or Vi without changing suffixes. Further differing from English, Halkomelem treats the following as intransitive verbs: adjectives (including participles), noun-statives (translated bə̓ 'be' + noun), adverbs, interrogatives, some sets of personal pronouns, some demonstratives, and most verbs with lexical object affixes. Each of these types will be dealt with in a separate section in this chapter.

Lexical affixes sometimes have a nominalizing effect (tə́y 'to canoe-race' + -owəł 'canoe' → tə́yowəł 'a race canoe', cə́kʷ 'be distant, far' + R_1 + -á·ləs 'in the eye' → cackʷá·ləs 'goatsbeard plant (whose blooms can be seen from far away)'), but more often they do not change the word class of the stem (kʼʷaqʷ 'hit with stick-like object' + -á·ləs 'in the eye' → kʼʷqʷá·ləs 'hit in the eye with a stick-like object', kʼʷəs 'burned (of skin)' + -á·yθəl 'on the lip or jaw'

→ k'^{W}əsá·yəəl 'burned on the lips'). An interesting paradox is the fact that lexical affixes often provide verbs with semantic objects (hit eye with stick) but do not make verbs transitive syntactically. One cannot say *k'^{W}q^{W}á·les tə qélém or *k'^{W}q^{W}á·les tə Bill (where tə qélém is 'the eye'); in fact k'^{W}q^{W}á·les cannot take a syntactic object of any kind unless it is first transitivized (k'^{W}q^{W}á·les-T-əs túx̌'à tə Bill 'he hit Bill in the eye with a stick'). The fact that it can be transitivized (and must be to take an object) shows that the lexical affix is morphologically intransitive. Many lexical affixes can be attached to nominals as well as to verbs (qá· 'water' + -á·les 'in the eye' → qə?á·les 'tear', s- 'nominalizer' + ceɬ 'above, high' + -á·yəəl 'lip, chin' → sceɬá·yəəl 'upper lip').

6.0.3. Types of verbs, roots, and stems. A root is what remains when all derivational and inflectional affixes have been removed from a word. A stem is what remains when only the inflectional affixes have been removed. Verbs can be classified according to the word class of the root (root type), according to the type or combination of types of its derivational affixes (stem type), and according to the syntactic and semantic function of the verb (verb type).

As seen in 6.0.2, the verb types include:

1. Vt (sub-grouped by which transitivizer they have), 2. plain Vi (sub-grouped by the lack of or type of intransitivizer they have), 3. adjectival Vi, 4. prepositional Vi, 5. adverbial Vi, 6. interrogative Vi, 7. personal pronoun Vi, 8. demonstrative Vi, and 9. auxiliary Vi. These nine verb types will be discussed in 6.1 and following.

Root types. Verb roots without derivational affixes are plentiful. These include most types of intransitive verbs, for example: yéqʷ 'burn', ʔá·ɬ 'get aboard', t'éyəq' 'be angry', hí·kʷ 'be big', ʔówə - ʔówə 'be not, not be', yəwé·l '(be) first', qé·ys 'lately, recently', lí 'at, to, in', telí 'from; than', ʔəlécɛ 'where (is it)?', kʼʷí·l 'how many (are they)?', selcí·m 'how (is it)?', ʔélθə 'it's me', léwə 'it's you' (ʔélθə and léwə are actually personal pronouns with Vi qualities), ʔí· 'be here', lí· 'be there', lí(·) and ʔí(·) auxiliaries.

Verb roots with derivational affixes come from all word classes except the particles. A number of verb roots are only attested with one derivational affix and never without a derivational affix; for these the word class of the root is unclear sometimes, unless the affix is attached only to predictable word classes or never changes the word class. More frequently verb

roots are attested in other derivational environments or as stems themselves. Most of the time these roots are shown to be verbs; less often they are nominals; a handful each are demonstratives or personal pronouns, and one is an attested numeral (it can be assumed that the other numerals can function the same way). Some examples follow.

Verbs as verb roots: cíɬ- 'high' (as in cíɬ-əq^{w} '(high hair), bushy and uncombed hair') + -R_1- → cícəɬ 'be above, be high', c'ə́q'^{w} 'poke, pierce' + -ó·wəɬ 'canoe, vessel, (basket)' → c'əq'^{w}ó·wəɬ 'weave a fine cedar root basket', pá·y- 'bend' + -T 'purposeful control transitivizer' + Ø '3rd person object' → pá·yt 'bend it', pá·y- 'bend' + s- and R_1 'participial' → spápiy 'crooked', k'^{w}áq^{w}- 'club, hit with stick-like object' + -əT 'purposeful control transitivizer' + Ø '3rd person object' ⇒ k'^{w}áq^{w}ət 'club s-o, hit s-th or s-o with a stick', -tém 'what?' + s- 'nominalizer(?)' → stém 'what?, what is it?', -tém 'what?' + təm- 'time' → təmtém 'when (is it)?', yéq'- 'fall (of a tree)' + R_1 'continuative' + -əls 'intransitivizer' → yéyəq'əls 'falling (of a tree)', yéq'- 'fall (of a tree)' + -əT 'purposeful control V$_t$' + Ø '3rd person object' → yéq'əət 'to fall/fell a tree', t'ə́k^{w} 'be mired' + -ɬ·ləs 'in the chest' → t'əkʷɬ·ləs

'choke on food'.

Nominals as verb roots: q'ʷəwə́ɬ 'a drum' + -əm 'intransitivizer' → q'ʷəwə́ɬəm 'to drum (for s=ə)', θ'ə́yɛ 'sibling of deceased spouse' + -ə́·m 'to use' or 'intransitivizer' → θ'ə́yə́·m 'to marry sibling of deceased spouse', sqəmə́l 'pit house' + -í·l 'go, come' → sqəmí·l 'be inside a pit house', qá· 'water' + -əm 'intransitivizer' → qá·m 'dip water, fetch or pack water', mə́·lɛ 'bait (nominal)' + -(ə)T 'purposeful control Vt' → mə́·lɛt 'bait it', mə́kʷ ~ mə́kʷ 'all, everyone, everything' + -ə́T 'purposeful control Vt' → mə́kʷə́t ~ mokʷə́t 'take it all, pick it all up', θə́·t 'darkness' + -í·l 'go, come, get' → θətí·l 'go dark, get dark', qá· 'water' + derivational R_1 → qá·qə 'to drink'.

Personal pronouns as verb roots: ʔə́lθɛ 'it's me' + R_7- 'emphasis' → ʔə́ʔɛlθɛ 'it's really me', lə́we 'it's you', etc.

Demonstratives as verb roots: ʔí· 'be here' + $x^wə$- 'become, come to' → $x^wəʔí·$ 'come to be here, come here, arrive' + -l 'happen to, manage to (control transitivizer)' + -əx^w '3rd person object' → $x^wəʔí·lx^w$ 'bring s-th here', similarly lí· 'be there' + $x^wə$- + -l + -əx^w → $x^wəlí·lx^w$ 'bring s-th there, get s-th there'.

Numerals as verb roots: ʔápəl 'ten' + A + -əs

'dollars' → ʔepá·ləs 'ten dollars' + -sT 'causative (control transitivizer)' + -əx^{w} '3rd person object (meaning neutralized?)' + -əs '3rd person subject' → ʔəpalə́stx^{w}əs 'it costs ten dollars' (possibly 's-o causes s-th to be ten dollars').

Stem types. If transitivizers and intransitivizers are considered derivational (as they seem at times), then this section would have the task of cataloguing and exemplifying their various combinations with lexical affixes and the derivational infixes R, A, and K. But we are saved the trouble because transitivizers and intransitivizers are inflectional instead, for a number of reasons: they are obligatory (with Vt's and participles for example), they form contrasting oppositions with each other, and they interact with pronominal suffixes ('3rd person object' is -əx^{w} after -l and -sT, -Ø after -T, -məT, etc.).

Verb stems then consist of roots plus (or minus) combinations of lexical affixes, derivational infixes of R, A, or K, and in a few cases petrified transitivizers. There are no cases of roots being suffixed with transitivizers and then with intransitivizers and no cases of the reverse process. The few cases of petrified transitivizers are as close as one comes, and these may well be part of the root and not affixes

at all: q^{w}ɛ́cət 'belch', x̣əlɛ́q't 'open one's eyes', ƚəq'ɛ́t - ləq'ɛ́·t '(be) wide', qəlɛ́t 'again', ʔɛ́·y(ə)ləx^{w} 'alive' (cp. ʔɛ́·y 'keep on going'), ʔɛ́·y(ə)ləx^{w}-sT-əx^{w} 'keep s-o alive', and ʔɛ́·y(ə)ləx^{w}-ləx^{w} 'bring s-o back to life, revive s-o'.

Vi stem types include naked roots and roots affixed with: R, R + -X (where X = lexical affix), R + A, X- + A (+ -X), K + -X, X-, and (X-) + -X (+ -X). That means that no more than two lexical suffixes have been found so far on a single stem, but stems have been found with one or two lexical suffixes plus a lexical prefix. Vt stem types include naked roots and roots affixed with: R, A, X- (+ -X), -X (+ -X), and probably others. Here again never more than two lexical suffixes are found on one Vt stem. Many examples of various stem types can be found in the chapters on lexical affixes and on morphophonemics (under reduplication, vowel ablaut, and consonant ablaut).

6.1. Verb Inflection. Outline:

6.1.1. Personal Pronouns: as in Chapter 4,

6.1.2. Transitivizers (Control Suffixes) + Intransitivizers,

6.1.3. Beneficiary Suffixes: benefactive, reflexives, reciprocal,

6.1.4. Aspect: continuative, non-continuative,

6.1.5. Participles,

6.1.6. Voice: active, middle, passive,

6.1.7. Mood: subjunctive (when, if, uncertainty, negation), imperative, interrogative,

6.1.8. Tense: present, past, future,

6.1.9. Plural and Diminutive: plural object, plural subject, plural action, plural action completive, repeatedly; diminutive,

6.1.10. Internal Syntax and the Co-occurence of Verb Inflections.

6.1.1. Personal Pronouns. Subject and object pronouns are suffixed onto verbs as seen in Chapter 4 (sections 4.4, 4.5, 4.8, 4.9, and 4.10). Little more needs to be said except to point out in a few cases those inflectional endings which require or exclude certain pronoun sets (this will be done in 6.1.5—6.1.9) and to specify where the pronoun sets fit in the internal syntax of the verb (this will be done in 6.1.10).

6.1.2. Transitivizers (Control Suffixes) and Intransitivizers.

6.1.2.1. Control suffixes are transitivizers which indicate whether the subject had full control of the verbal action (did it purposely), had little control of the verbal action (did it accidentally, happened

or managed to do it), or had control over someone else's action and caused someone to do it. The control suffixes are the only transitivizing devices in Upper Stalo dialects of Halkomelem. Since they are obligatory with all transitive verbs (Vt) and a decision as to degree of control must be made for each Vt, control suffixes have the status of grammatical inflection rather than derivation. The six that have been found so far are:

-(ə)T ~ -ə́T ~ -á(·)T ~ -é(·)T 'do purposely to s-o/s-th'

-l 'do accidentally, happen to do, manage to do to s-o or s-th'

-sT 'cause it (or s-o) to do, make s-o or s-th do'

-(ə)x^{y} 'do purposely to s-th or s-o (especially to an inanimate object)'

-məT 'happen (with little control) to do an action not directly affecting s-o or s-th'

-(ə)les '(accidentally, happen to, manage to) do to s-o or s-th'

The meanings given for these suffixes are seldom overtly translated as given here. The usual case is for these semantic elements to combine with the root or stem meaning, to yeild a gloss more succinct than the sum of its parts. For example, ʔé·y-st-əx^{w} 'chase s-o or s-th' < 'keep on going' + 'cause to' +

'3rd person object', mé-x^{y} 'take it off (of a button, etc.)' < 'come off' + 'do purposely to inanimate object', t'í·lém-t 'sing it' < 'sing' + 'do purposely to s-th'. As can also be seen from some of the examples, the control suffixes are often translated as mere transitivizers with the degree of control more implied than overtly stated (but definitely present semantically). Control suffixes are immediately followed by object personal pronoun suffixes.

The stressed allomorphs of control suffixes must be accounted for by morphophonemic rules with morphemic conditioning. Out of about 350 transitive verbs, only the following show stressed control suffixes:

-á(·)T: peq^{w}át 'break it in two', x^{w}ək'^{w}át 'drag s-o', θ'ex^{w}át 'wash s-th (or s-o)', łeq'^{w}á·t 'bark it (of a tree)', łx^{w}á·t 'spit (s-th)', łx^{w}áθáx^{y}es 'he spit me out', scewá·t 'know how to do s-th', possibly ?ehá·t 'wrap s-th up', (probably not ?á·t 'call (s-o)' and yá·t 'warn s-o' which seem to have -T).

-é(·)T: tqét 'close s-th', k'^{w}əx^{y}é(·)t 'count s-th (or s-o)', k^{w}əlé·t 'hold s-th (in hand)', k'^{w}əłét 'spill it', k'^{w}əłéθáx^{y}es 'he spilled me (from a canoe)', səq'ét (~ séq'ət) 'split it, crack it', wəθ'ét 'tease s-o', wəθ'éθèàmè 'tease you', ləmé·t 'kick s-o (or s-th)', cesé·t 'send s-o', x^{w}tét 'tear s-th', (probably not

k^{w}ɛ·t 'set s-o free'). Just as k'^{w}əɬɛ́t can mean 'spill s-th' or 'spill s-o', the choice of 's-o' or 's-th' or of both 's-o/s-th' depends mostly on the context; I have thus glossed the words in these paragraphs as I obtained them, and the s-o or s-th should be understood to depend somewhat on context. Also it might be noted that a number of these verbs are also attested without the transitivizers (for example, k'^{w}ə́ɬ 'spill', k'^{w}(ə)x^{y}ɛ́·m 'count', and $x̣^{w}$ə́t 'tear').

-ə́T: ləc'ə́t 'fill it up', mək'^{w}ə́t 'pick it all up', θək'^{w}ə́t 'pull s-th', x̣əθ'ə́t 'shove s-th/s-o', x̣əθ'ə́θáx^{y}əs 'he shoved me', θəx̣ə́t 'push s-th (or s-o)', q'^{w}əmə́t 'pull s-th up by roots', x^{y}əc'ə́t 'store or put s-th away', θq'ə́t 'spear it (esp. fish)', x̣ɬə́t 'beat s-o up (lit. 'hurt s-o')', ƛ'x̣^{w}ə́t 'cover s-o or s-th (with s-th cloth-like)', ƛ'x^{w}ə́t 'win it (race, game, etc.)', q'pə́t 'gather or collect s-th, pick it up', q^{w}sə́t 'launch or push s-th into water, push s-o into water', q^{w}sə́θáx^{y}əs ' he pushed me into the water', x^{w}pə́t 'pick s-th up from floor or ground', x̣t'ə́t 'put a spell on s-o', (probably not x̣ɛ́ywə́t 'scold or advise s-o, warn s-o', q'ɛwə́t 'pay s-o').

The roots in all these examples (excluding those in parentheses) are $C_1əC_2$ or C_1C_2; in other derivations or inflections of these roots, the roots always

have the shape C_1C_2 or $C_1{}^{\vartheta}C_2$ or at most $C_1{}^{\acute{\vartheta}}C_2$ (usually when the root appears uninflected or word finally). For example: p$\acute{\vartheta}$q^{w} 'broken in two', θ'$\acute{\vartheta}$x̣^{w} 'wash', ɬ$\acute{\vartheta}$x̣^{w}-ϑɬcɛ 'spitting' (where the stress shift to root is 'continuative'), s-tϑq-ṯ$\acute{\vartheta}$l 'door', ɬ-s$\acute{\vartheta}$q' 'half', x̣^{w}$\acute{\vartheta}$t '(to) tear', x̣$\acute{\vartheta}$ɬ 'hurt', ƛ'$\acute{\vartheta}$x̣^{w} 'covered', s-q'$\acute{\vartheta}$p 'a gathering', q^{w}$\acute{\vartheta}$s 'fall into water'. So it seems that these roots are zero-grade or schwa-grade roots. As such they cause an affix vowel to be stressed whenever affixed with a vowel-containing affix. Confirming this is the remainder of transitive verbs in -(ϑ)T which all feature stressed roots or stressed stems.

There doesn't seem to be any way to predict which roots take -$\acute{a}$(•)T instead of -$\acute{\vartheta}$T or -$\acute{\varepsilon}$(•)T instead of -$\acute{\vartheta}$T, other than listing the roots. However it seems that those taking -$\acute{a}$(•)T all end in a labialized consonant (C^{w}), w, or h, while those taking -$\acute{\varepsilon}$(•)T never end in C^{w}, w, or h. It is too early to say whether this is co-incidence or a phonological class. Roots taking -$\acute{\vartheta}$T seem to include those with final C^{w} as well as those without.

A handful of transitive examples have an abnormally stressed 3rd person object suffix after the control suffix: x̣ϑɬ-l-$\acute{\varepsilon}$x^{w} 'hurt s-o or s-th (by accident)'

(cp. x̣əɬ-l-ɛ́x^{y}-əs 'he hurt me (by accident)', x̣əɬ-l-ɛ́m '(he got hurt), s-o hurt him, he was hurt'), ləkʷ-l-ɛ́xʷ 'break a bone, break it (of a bone or sticklike object)' (cp. ləkʷ-l-ɛ́m 'he got a bone broken', ləkʷ-l-ɛ́xʷ-əs təl cɛ́lɛ́x^{y} 'he broke my hand (accidentally)'), c'əq'ʷ-l-ɛ́xʷ 'hit s-th or s-o accidentally with a piercing projectile)', x^{y}əq-l-ɛ́xʷ 'complete s-th', θəx̣-l-ɛ́xʷ 'discover s-th'; kʷəl-l-ɛ́xʷ 'catch s-th (ball, animal, disease)', cəm-l-ɛ́xʷ-əs 'he met up with her'; q'əl-st-ɛ́·xʷ 'fooled s-o' (cp. q'əl-sθ-ɛ́x^{y}-əs 'he fooled me'), sisi-st-ɛ́xʷ-əs 'he's scaring them'. These cases are peripheral to control suffixes but seem explainable in the same way (zero- or schwa-grade roots causing stress and ablaut of suffix vowel which is usually unstressed ə). The exceptions are cəm-l-ɛ́xʷ-əs which is related to cɛ́·m-təl 'meet up with each other, əlope' and sisi-st-ɛ́xʷ-əs (sisi < sɛ́·si, certainly not a zero-grade or schwa-grade root).

Some idea of the semantic effect of control suffixes can be obtained from the examples given in 4.5 of Chapter 4, from the examples given in the six preceding paragraphs (especially the first four paragraphs), and from the examples which now follow.

{-(ə)T} 'do purposely to s-o or s-th': tás-ət 'mash s-th (berries, etc.)' (tás 'get hit by s-th mov-

ing, bumped, mashed'), síχ-ət 'move s-th over' (cp. səχ-éyl-əm 'move over'), lépəc-t 'send s-th' (lépəc 'send'), ləq'él-cəs-t 'turn the tables on s-o', ʔík'^{W}-ət 'throw s-th away, discard s-th' (ʔík'^{W} 'lost'), θíy-t 'make s-th, fix s-th' (θíy 'make, fix'), k^{W}téx^{W}-t 'let s-o in' (s-k^{W}ətéx^{W} '(be) inside (a house or cave)'), χéym-ləq^{W}-t 'pull s-o's hair' (χéym-ət 'grab s-o/s-th'), q'é·y-t 'kill s-th or s-o' (q'é·y 'die'), qíq'-ət 'apprehend s-o, catch s-o' (qíq' 'apprehended, caught, grounded').

{-l} 'do accidentally, happen to do, manage to do to s-th or s-o': wəc'éƛ'-l-əx^{W} 'drop s-th by accident' (wəc'éƛ' 'drop down (of an object or person)'), célq-l-əx^{W} 'dropped it' (célq 'fall'), mélq-l-əx^{W} 'forget s-th/s-o', (Chwk.) (s)łé-q'əl-l-əx^{W} - (Cheh., Tait) ł-q'él-l-əx^{W} 'know s-th' (q'é·l 'believe'), χéyχəl-l-əx^{W} 'insult s-o' (χéyl-eχ 'make war'), χəł-wíł-l-àmə̀ 'disappoint you' (χəł-wíł 'disappointed'), θ'ép-l-əx^{W} 'blink', q'əp'-l-éx^{W}-əs 'he infected me, he passed a sickness on to me, he got me addicted (to an activity, food, drugs, etc.)', ʔék'^{W}-l-əx^{W} 'lose s-th' (ʔík'^{W} 'lost'), yéq'-l-əx^{W}-əs 'he fell a tree, he managed to fell it' (yéq'ət 'fall it (of a tree)', s-yéyəq' 'a fallen tree, log').

{-sT} 'cause s-th or s-o to do, make s-o or s-th do':

qə́χ-st-əx^{w} 'make it thick, make it lots' (qə́χ 'be lots, many'), ʔə́wə-st-əx^{w} '(to) deny s-th' (ʔə́wə 'be not, not be, no'), ʔɛ́·yələx^{w}-st-əx^{w} 'keep s-o alive', θ'q'ɛ́ɬχamə́-st-əm 'he was made to kneel' (θ'q'ɛ́ɬχɛ́m 'kneel'), mə́-st-əx^{w} 'bring s-th, fetch s-th' (mə ~ mí ~ ʔəmí 'come'), χɛ́yχə-st-əx^{w} 'make s-o ashamed' (χɛ́yχə 'ashamed'), ʔəpalə́-st-əx^{w}-əs 'it costs ten dollars' (ʔəpáləs 'ten dollars'), ɬəqtá·lə́-st-əx^{w} 'join s-th together', s-x^{w}á·x^{w}ə-l-st-əx^{w} 'holding s-th up' (x^{w}á·x^{w}ə 'lightweight'), χtɛ́·-st-əx^{w} 'do it', ʔiyá·ləm-st-əx^{w} 'obey s-o' (ʔiyá·ləm 'alright, correct, okay, can').

-(ə)x^{y} 'do purposely to s-th or s-o (especially to s-th)' (including all examples found so far): lə́w-əx^{y}-əs 'he put it in' and lə́w-əx^{y}-əm 'it was put in' (lí·w 'inside (s-th)', ləw-í·l-əm 'go inside a hole'), lə́p'-əx^{y} 'eat s-th' (lə́p'-əT 'eat s-o'), tɛ́·l-x^{y} 'track s-th (or s-o), follow tracks of s-th', k^{w}ɛ́·l-x^{y} 'hide s-th (an object, not a person)' (k^{w}ɛ́·l 'hide (oneself)'), ƛ'p-ì·l-x^{y} 'bring it down (from upper shelf or upstairs)' (ƛ'p-í·l 'descend, go down'), wɛ́·l-x^{y}-əs 'he threw it (upwards)' (wɛ́·ls 'throw to a crowd, scramble-give (['throw a pole or blankets to a crowd at a winter ceremony; the thrower gives each person a gift proportionate to the portion of

pole or blanket he is able to hold onto'])'), hɬ́·k^{w}-əx^{y}-əs 'he used it', x^{w}ə́l-x^{y}-əs 'he lifted it', x^{w}ə-mə́-x^{y} 'open s-th (a door for ex.)' and mə́-x^{y} 'take it off (from something it is attached to)' and məmə́-x^{y} 'to separate or split up people fighting' (all compared with məmə́ 'it came off (a button, etc.)'), tə́m-əx^{y} 'desire s-th, wish for s-th', t'ə́m-əx^{y} 'braid it'.

-məT 'happen to do an action (with little control) not directly affecting s-o or s-th' (including all examples found so far): θə́l-məθ 'look after s-o' and θə́θəl-məθ 'admiring s-o' (< θ'ə́lə 'heart'?), ƛ'ə́lƛ'əl--məθ 'get used to it', k'^{w}ə́ck'^{w}əc-məθ 'expect s-o, look for s-o', s-íwə́l-məθ 'sense s-th/s-o' (-íwəl 'thoughts, feelings, insides'), st'ɛwə́l-məθ 'thinking about s-th' (steʔə́-wəl (AC) ~ st'ə́-wəl (EB, CT) 'guess, think'), ʔə́liyə-məθ 'dream of s-o' (ʔə́liyə '(to) dream'), sí·si-məθ 'be afraid of s-th/s-o' (sí·si 'be afraid'), q'ə́l-məθ 'believe s-o' (q'ə́·l 'believe'), x^{w}lə́lə́·-məθ 'listen to s-o/s-th' (x^{w}lə́lə́· 'listen'), sq'əq'á-məθ 'stay together with s-o' (sq'əq'á 'together'), ɬə́w-məθ 'run away from s-o' (ɬə́·w 'run away; cured', ɬíw ~ ƛ'íw 'run away'), θ'íwə́l-məθ 'be fed up with s-th/s-o' (θ'-íwə́l 'annoyed'), θ'ə́χ^{w}-məθ 'pity s-o', wawistə́ləq--məθ 'jealous of s-o' (wawi-stə́ləq 'jealous'), x^{y}ə́ƛ-məθ 'look after s-o, take care of s-o', q^{w}ə́q^{w}əl-məθ 'bawl

s-o out' and q^{w}əlq^{w}ə́l-mət 'scold s-o' (q^{w}ə́lq^{w}əl 'rowdy', q^{w}áq^{w}əl 'talking'; these two examples alone do not fit the gloss proposed for -mət 'happen to do action not directly affecting object').

-(ə)ləs '(accidentally, happen to, manage to) do to s-o or s-th' (including all examples found so far): mə́lq-ələs 'forget s-o or s-th', sk'^{w}ə́·y k'^{w}əls mə́lq-ələs-ámə 'I'll never forget you', hə́k'^{w}-ələs 'remember s-o or s-th', hə́k'^{w}-ələs-áx^{y}-əs 'he remembered me', ƛ'í·-ls-áx^{y}-əs '(s)he loves or likes me' (s-ƛ'í· 'want, desire'), ʔə́·y-ələs-áx^{y}-əs 'he left me' and ʔə́·y-ələs-əs 's-th/s-o went away from s-o/s-th' (ʔə́·y 'keep on going'; these last two examples may be from ʔə́·y + -əl ~ -í·l 'go, come, get', i.e. < ʔə́·yəl 'go away, get away', but the -əs is unexplained), pə́təm-əs-àx^{y}-əs 'he asked for me' (pə́təm-ət 'ask s-th'). This -(ə)ləs suffix may involve mental or emotional action and this should possibly be reflected in its gloss.

6.1.2.2. Intransitivizers (-əm, -ə́·ls ~ -əls, and possibly -(ə)θət and -í·l ~ -əl).

{-əm} 'intransitive' (and {-əm} 'middle voice' as well) appears to have several allomorphs, namely -m (after vowels), -ə́m (after l or y which follows a high-stressed vowel, i.e. V́ (l,y)___), -ə̀m (after l

or y which follows a mid-stressed vowel, $\grave{V}$ (l,y)___), -é·m (after a few morphemes which are either vocalically a weak or zero grade or which become so before the stressed suffix), and -à·m (after a few morphemes with root vowel á· which metathesizes to the -əm suffix). Examples of all these are found in 6.l.6 but not in an organized way, so some will be given here. (For further discussion and examples see 6.l.6, where -əm 'intransitive' is disentangled from -em 'middle' and -əm 'passive'.)

-m: θ'ém ~ c'ém 'chew' (θ'ét ~ c'ét 'chew s-th'), x^{w}lélé·m 'listen' (x^{w}lélé· 'listen hard'), qá·m 'dip water, pack water, fetch water' (qá· 'water'), lém 'go, going, go to, going to' (lɛ 'go(ing)(to)').

-ém: q'^{w}élém 'barbecue, roast, put in oven' (q'^{w}él 'cooked; ripe'), q'élém 'to camp', ləqélém 'dirty (of water)', hílém 'tumble, fall and tumble', ləwí·lém 'go into an opening' (lí·w 'inside (s-th)', lówəx^{y}əs 'he put s-th in'), həqílém 'crawl underneath', t'élém 'stick to s-th or s-o', líyém '(to) laugh', θíyém 'bake bread, fix food' (θíy 'make, fix'), x^{w}áyém 'sell', ?áyém 'slow', spəx^{w}əɬé·lém 'breathe, sigh, blow or puff air from throat', méθ'elqéylém (//méθ'el-qəl-í·l-əm//) 'tell a lie, to lie'.

-èm: ?əχá·yθèlèm 'shave oneself' (?íχ 'scraped,

scratched'), spéx^{w}əɬὲ·lə̀m (variant form of 'breathe, sigh')

-έ·m: c'εtέ·m 'crawl', c'ɬέ·m ~ c'ic'ɬέ·m 'hear', c'ƛ'έm ~ c'ƛ'ə́m 'jump', θ'q'əɬx̣έ·m 'kneel', x̣^{w}iyx̣^{w}iyέ·m 'tell stories' (the i here and in the next word could be analyzed as //ə//), k'^{w}íyὲ·m 'refuse, be stingy' (k'^{w}iyέ·t 'refuse s-o s-th', sk'^{w}íyk'^{w}iy 'stingy'), q'θέ·m 'have a short memory', possibly x^{w}əlέm 'over to, towards' and x^{w}lέm 'through'; it seems that k'^{w}x^{y}έ·m 'counting' has its stress and vowel through 'continuative' stress shift and metathesis (cp. k'^{w}έx^{y}əm 'count', k'^{w}x^{y}έ·t 'counting it', and k'^{w}έx^{y}ət 'count it').

-à·m: x^{y}íx^{y}k'^{w}à·m 'swimming' (x^{y}á·k'^{w}əm 'to bathe (oneself)'), x^{y}íx^{y}pà·m 'whistling' (x^{y}á·pəm 'to whistle'), x^{y}ix^{y}q'ὲ·m (dubious recording of vowels, probably sic for x^{y}íx^{y}q'à·m) 'one's mouth hanging open' (x^{y}əq'á·θət 'hang s-th up'), θ'q'^{w}à·mθət 'rotted' (θ'á·q'^{w}əm 'to rot')(-θət in this example and in words like x̣εyx̣əc'ə́mθət 'real itching' seems to trigger stress shift to last vowel before -θət).

It should also be noted that -ə́m occurs in four examples (out of the 20 which could be cited) after consonants other than l or y; however, it seems all four have had stress shifting for aspect or derivation or have weak grade vowel roots, accounting for

the -ɬ́m: χɛ́yχɛc'ɬ́mθɛt 'real itching' (χɛ́yχɛc'ɛm 'itching'), p(ɛ)k'^{w}ɬ́m "fly or burst (of airborne seeds or dust), dusty" (probably better glossed as 'blowing of light dust, fluff or snow')(cp. pák'^{w}ɛm 'blow (of plant fuzz, airborne seeds, or light snow)'), tx^{w}ɬ́m 'be early' (tɬ́x^{w}ɛm 'being early', cp. χ^{w}ɬ́m 'hurry, be fast'), ƛ'x^{w}ɬ́m 'win a contest' (ƛ'x^{w}ɬ́ɬeq also 'win a contest').

For a discussion and examples of -(ɛ)θɛt 'get, become, go' (which acts somewhat like an intransitivizer) see 6.1.3 in which it is derived morphosememically from -(ɛ)θɛt //'reflexive'//. For a discussion and examples of -f•l ~ -ɛl 'go, come, get' see the chapter on lexical suffixes; it is still unclear whether -f•l ~ -ɛl is a very productive lexical suffix or a productive intransitivizer; it is included in lexical suffixes because it adds a clear lexical meaning, as well as either intransitivizing or not changing the intransitivity of the root.

In addition to -ɛm 'intransitive' and perhaps {-f•l} and {-(ɛ)θɛt}, the suffix -ɬ́•ls ~ -ɛls is also an intransitivizer. The following examples show -ɬ́•ls ~ -ɛls:

ɬɛtq^{w}ɬ́•ls 'boil' (ɬá•tq^{w}ɛm 'is boiling, (being boiled)'), yɛq^{w}ɬ́•ls 'burn at a ritual, perform a burning'

and hɛ́yəqʷəls '(performing a) burning at a ritual' (yə́qʷ 'burn', hɛ́yəqʷ 'burning'), θiyqʷɛ́·ls 'dig' and θɛ́yqʷəls 'digging' (θɛ́yqʷt 'dig s-th up'), xʷəqʷɛ́·ls 'drag (for ex. 'drag the river for a body')' (xʷəqʷɛ́t 'drag s-o or s-th')(EB has kˀʷ instead of qʷ), łək'ʷɛ́·ls 'hook (fish for ex.)' (łɛ́·kˀʷ 'hooked, gaffed', łɛ́kˀʷət 'hook it, gaff it'), kʷxʷɛ́ls ~ kʷxʷɛ̀·ls (ɛ́ probably misrecorded for ɛ́·) 'knock (once), rap' and kʷə́kʷəxʷəls 'knocking, rapping' (kʷə́kʷəxʷəm 'rapping, knocking (in distance)', kʷə́kʷəxʷəcəsəm 'knocking with one's hand', kʷə́xʷət 'beat or rap on it (drum, wood, etc.)'), θəqˀɛ́·ls 'to spear' and θɛ́·qˀəls 'spearing (fish for example)' (θəqˀɛ́t 'spear s-th', θɛ́qˀtəs 'he's spearing s-th'), ʔɛlqɛ́·ls 'buy' (ʔilɛ́qət 'buy s-th'), χətˀkˀʷɛ́·ls 'carve in wood' and χɛ́tˀkˀʷəls 'carving, whittling', łcˀɛ́·ls 'cut (for ex. wood with a saw)' (łɛ́cˀcəs 'cut on the finger', łɛ́cˀət 'cut s-th (off)(for ex. meat, hide, etc.)'), cˀəkʷχɛ́ls 'fry' and cˀɛ́kʷχəls 'frying' (cˀɛ́kʷχt 'fry s-th', cˀɛ́kʷχt 'frying s-th'), χtˀɛ́·ls 'cast or throw a spell' (χtˀɛ́t 'cast or throw a spell on s-o'), yəqˀɛ́·ls 'to file (abbrasively)' (yə́qˀət 'file s-th'), qˀətχɛ́·ls 'to rattle (cans, etc.), to shivaree or wake newlyweds' (qˀɛ́tχəm '(make) a scraping or rattling sound (dishes, metal pots, food off dishes, wagon on gravel, etc.)', qˀɛ́tχtəs 'he's rat-

tling s-th (dishes, etc.)'), pəhè·ls 'to blow (of the wind)' (pá·t 'blow with mouth' prob. < *pəhá·t, cp. also spəhé·ls 'the wind'), possibly łé·lt-əlɛc-é·ls 'spraying (in garden)' (łélt 'sprinkle or splash s-th with water' (this last word may not belong since -əlɛcé·ls may be a lexical suffix).

pípəwəls 'freezing cold' (píwət 'freeze s-th/s-o', spípəw 'frozen'), qétxəls 'feeling around' (qétxt 'feel s-th/s-o (with hands)'), ƛ'émq'^{W}əls 'making a crunching/crackling noise (ice breaking, eating an apple, etc.)', xépk'^{W}əls 'gnawing, nibbling' (xépk^{W}t 'gnaw s-th', k^{W} or k'^{W} uncertain, cp. also xépk'^{W}əm 'brittle'), xéyxəq'əls 'scratching (without breaking surface)' (xéyq'ət 'scratch s-th (w/o breaking surface)', xéyxəq'ət 'scratching s-th'), yéyəq'əls 'falling (of trees)' (yéyəq'ət 'falling s-th (a tree)', yéq'ət 'fall it (a tree)'), łéłəq'əls 'laying down, putting down (bricks, foundation, prob. anything)' (łéłəq'ət 'putting s-th down'), łéłəwəls '(an Indian doctor) working, curing' (łé·wət 'cure s-o by Indian doctoring', łé·w 'cured by Indian doctoring (by a medicine man)'), t'éqəls 'farting' (t'éq 'to fart'), c'étx^{W}əls '(mice) chewing (a wall, a box, etc.--esp. the sound)', t'ółəq'^{W}əls 'scratching to get in' (t'ółəq'^{W}təs 'he scratched on s-th'), t'əłt'ółəq'^{W}əls

'scratching repeatedly to get in' (t'əɬt'éɬəq'^{W}təs 'it has scratched s-th up'), há·q^{W}els 'smelling, sniffing (of dog, other animals)' (há·q^{W}əm 'smell, give off smell', há·q^{W}ət 'smell s-th on purpose', há·q^{W}ləx^{W} 'happen to smell s-th, catch scent of s-th'), sé·yt'əls 'tickling' (sé·yt'əm 'being tickled', sé·yt'ət 'tickling s-o', síyt'ət 'tickle s-o'), ƛ'éwəls 'barking (of a dog)' (? ƛ'əwéls 'to bark (of animal)'), t'ə́méls 'to adze, chop' (should gloss be continuative?).

The above examples explain the nature of this suffix's phonological alternation. -é·ls occurs in non-continuative forms and -əls occurs in continuative forms, consistently. Since continuatives are inflected forms and the non-continuatives are the base forms, it follows that -é·ls is the base form of this intransitive suffix; then, since most of the examples here form their continuatives by ablaut and stress-shifting (2.3.3.2), it is natural to expect -əls as the unstressed version of -é·ls. The stress-shifting even takes place in the continuatives formed by reduplication because morphophonemic rule 2.3.3.4 operates to de-stress, downgrade to schwa and drop root vowels before stressed suffixes like -é·ls.

The semantics of {-é·ls} is also interesting. All the examples show: the subject is a semantic agent,

doing the action on purpose (except where the agent is inanimate), and the semantic focus is upon the activity not upon its results. Of these elements, the 'on purpose' element is most interesting because in the few examples where there is an -əm intransitive with the same verb root, the -əm intransitive has the meaning 'not on purpose, happen to, accidentally'. The 'not on purpose' meaning for -əm 'intransitive' is seldom found in the examples in 6.1.6; it seems that either this semantic element is inconsistently present in -əm 'intransitive' or it is present only in verbs which also have contrasting -é·ls forms, or the intransitive examples in 6.1.6 still need further sorting out. At any rate, {-é·ls} would seem in part to be the intransitive equivalent of purposeful control transitivizer {-(ə)T}.

6.1.3. Beneficiary Suffixes (benefactive, reflexives, reciprocal):

-(ə)łc 'benefactive, for s-o' (precedes control suffixes)
-lá·məɬ 'reflexive, oneself'
-(ə)θəɬ 'reflexive, oneself, itself' (replace control suffixes and object pronouns)
-təl 'reciprocal'

The benefactive is a suffix which was attested only three times in my material from AC; it appeared in a number of examples from EB, at first as -(ə)ł

because the consonant clusters it produces are difficult to pronounce with -(ə)łc (noticed during elicitation). However after several elicitation sessions these examples were corrected to -(ə)łc and Edna began to use the benefactive quite productively. A number of these examples were also verified with the Coqualeetza Elders Group. As examples 16 and 17 will show, -(ə)łc can also be used as a malefactive but with somewhat humorous force as in the English constructions. -(ə)łc follows the stem (i.e. follows all the lexical suffixes) and precedes the control suffix -(ə)T; it might also, in the shape of -(ə)ł, precede the control suffix -sT, but this is poorly attested and doubtful. The schwa is dropped from -(ə)łc after vowel-final stems; otherwise it is present (-əłc); it is stressed after θiy 'make, fix'. The examples found so far are:

1.(AC) θiy-ɬ́łc-ət 'make it for s-o',

(AC) θɬ́y-əłc-ət 'making it for s-o'

2.(AC) qɑ́·-łc-əθ-ɑ́x^{y}-əs tə qɑ́· 'he brought me the water' (cp. qɑ́·-m 'fetch water, pack water')

3. (remaining examples by EB:) θiy-ɬ́łc-ət-łɛ 'make it for him!, fix it for him!', ƛ'ə-s θiy-ɬ́łc-t-əs tə sq^{w}əmɛ́·y 'he made it for the dog', θiy-ɬ́łc-t-əm tə swɬ́yəqə 'the man made it for s-o'(sic 'it was made for the man'), θiy-ɬ́łc-θɑ́x^{y}(-cəx^{w}) '(you) make it for me'

4. cəl/cət ʔiləq-əɬc-ət 'I/we bought it for him',
ʔiləq-əɬc-ət-ɬɛ 'buy it for him!',
ƛ'əs ʔiləq-əɬc-t-əs tə sqʷəmé·y 'he bought it for the dog',
ƛ'əs ʔiləq-əɬc-t-əs ƛ' Bill tə sqʷəmé·y 'Bill bought it for the dog',
ʔiləq-əɬc-t-cəxʷ 'you buy it for him(!)',
ʔiləq-əɬc-θáxʸ(-cəxʷ) '(you) buy it for me(!)' (can be either declarative or imperative with -cəxʷ),
ʔiləq-əɬc-θáxʸ-ɬɛ 'buy it for me!',
ʔiləq-əɬc-tá·lxʷ-ɬɛ 'buy it for us!'
5. kʷɛ́·lxʸ-əɬc-θáxʸ-ɬɛ 'hide it for me!'
kʷɛ́·lxʸ-əɬc-θáxʸ-əs θúƛ'à 'she hid it for me'
kʷɛ́·lxʸ-əɬc-t-əm θúƛ'à 'it was hidden for her'
kʷɛ́·lxʸ-əɬc-θáməθ 'hide it for you'
kʷɛ́·lxʸ-əɬc-θaməs-cəl 'I hide it for you'
6. c'əkʷχ-əɬc-θáxʸ(-cəxʷ) '(you) fry it for me(!)'
7. q'ʷəm-əws-əɬc-θáxʸ(-cəxʷ) '(you) pluck it for me(!)'
8. qʷəls-əɬc-θáxʸ(-cəxʷ) '(you) boil it for me(!)'
qʷɔ́ls-əɬc-t-ɬɛ 'boil it for s-o (him, her, etc.)!'
qʷɔ́ls-əɬc-t-əs tə swíyəqəθ '(s)he boiled it for the man'
qʷɔ́ls-əɬc-t-əs θə sɬɛ́lí tə swɛ́qəθ-s 'the woman boiled it for her husband'
9. píxʷ-əɬc-t-ɬɛ 'brush it for s-o!'
píxʷ-əɬc-t-əs tə swíyəqəθ '(s)he brushed it for the man'
píxʷ-əɬc-t-əs θə sɬɛ́lí tə swíyəqəθ 'the woman brushed it for the man'

píx^{w}-əɬc-t-əm tə swíyeqə 'it was brushed for the man'

10. ɬíc'-əɬc-θáx^{y}-cəx^{w} k'^{w}ə sméyəθ 'cut off some meat for me!'

ɬíc'-əɬc-θamé-cəl-cɛ tə sméyəθ 'I'll cut off the meat for you'

ɬíc'-əɬc-ət-cəl-cɛ tə sméyəθ 'I'll cut off the meat for him/her/it/them'

11. cəl yéq^{w}-əɬ(c)-t 'I burned it for s-o (him/her/etc.)'

yəq^{w}-əɬ(c)-θáx^{y}-cəx^{w} '(you) burn it for me(!)'

(cp. yàq^{w}-əlcəp-θáx^{y}-ɬɛ 'make a fire for me!')

12. p'éwiy-əɬc-θáx^{y}-cəx^{w} tə(l) s(ə)qíws 'patch my pants for me!'

13. pətém-əɬc-θáx^{y}-cəx^{w} we?éswɬ x^{w}ə?í· təl s?ă·m 'ask for me if my order is in!'

14. mè·lɛ-ɬc-θáx^{y}-cəx^{w} '(you) bait it for me(!)'

15. k^{w}ú-ɬc-θáx^{y}-əs 'he took it for me'

16. cəléq-əɬc-t 'divide it in half with s-o (for s-o)'

17. qá·qə-ɬc-θáx^{y}-əs təl tí '(s)he drank my tea on me'

18. cəx^{w} lək^{w}á-ɬc-θáx^{y} təl sxóle 'you broke my leg for me'

19? ?i-ɬ-st-əx^{w}-cəx^{w} (?)à tə sq^{w}əmé·y 'leave it here for the dog!', ƛ'əs ?í-ɬ-st-əx^{w}-əs tə sq^{w}əmé·y 'that's what he left here for the dog' (?í-st-əx^{w} 'leave s-th here')

20? q'éw-əɬ 'pay for s-th' (cp. q'ɛw-éT 'pay s-o')

-lá·mət and -(ə)θət are the two reflexivizing suffixes in Upper Stalo Halkomelem. Both replace control suffixes and following object pronoun suffixes. -lá·mət is less common of the two and seems to contain the -l control suffix, 'do accidentally, happen to do, manage to do'. It also has allomorphs -là(·)mèt (when high stress precedes in the word), -lémét (after ɬistéʔ(l)-) and -lá(·)mət (elsewhere). The allomorph -là·mèt is homophonous with the -l control + 2nd person sg. passive (after 'negative' and 'impossible' constructions), but the syntactic environments of the two rule out equating the two. Examples include:

c'íʃəmlà·mèt 'grow up, raise oneself' (c'í·səm 'grow')

χéyχelà·mèt 'shame oneself, be embarassed' (χéyχe 'be ashamed')

qʷá·làmèt 'make it through the winter'

ʔitətlámet 'fall asleep' (ʔítət '(to) sleep')

ɬχɛylɛxʸlámet 'stand up by oneself' (ɬχéylɛxʸ 'stand')

kʼʷəmlá·mət 'raise oneself, pull through (illness, crisis, or childhood)'(kʼʷémət 'raise s-o')

təl·á·met ~ tatəl·á·mət 'understand' (tél·ɛxʷ 'understand s-th, learn s-th, find s-th out', tá·l-θət 'wonder, think about s-th')

sí·silàmèt 'scare oneself, do s-th dangerous and get even more scared than expected'

ƛ'əwlàmə̀t 'escape, get oneself free (like from a trap)' (ƛ'íw 'run away, escape')

wəc'é·làmə̀t 'bring oneself to a summit (of mountain), masturbate'

x^{w}ə?ílàmə̀t 'manage to get here'

łél·àmə̀t 'get to the shore (from water), land'

łistólɛ́mɛ́t 'feel sorry for oneself'

There are many more examples of -(ə)θəṭ:

lá·sθəṭ 'get fat, make oneself fat' (lá·s 'be fat')

q'áyθəṭ 'kill oneself' (q'áy 'die')

q'^{w}íyχθəṭ 'shake oneself, shake itself (for ex. of the earth in earthquake), bob about (of canoe for ex.)'

?iyá·qθəṭ 'change oneself' and ?íyəqθəṭ 'get out of the way, dodge' (?iyé·q-T 'change s-th/s-o')

qəlqəlí·lθəṭ 'go get oneself dirty' (qəl 'bad, dirty')

χɔ́lc'θəṭ 'turn (oneself) over or around' (χ-ɔ́lc' 'twist, turn over or around')

x^{y}á·łməθəṭ 'take care of oneself' (x^{y}á·łməT 'look after s-o, take care of s-o')

χəhé·məθəṭ 'cry for oneself' (χɛhé·məṭ 'cry for s-th', χɛ̀·m 'weep, cry')

łílθəṭ 'bail (water), bail (oneself out)' (łí·lt 'bail s-th')

q'á·lθəṭ 'come back' (q'ɔ́lstəx^{w} 'bring s-th back', q'əq'á· 'be together with')

páq^{w}θət 'get decayed, mouldy' and pq^{w}é·yθət 'wood decays' (páq^{w} 'split in two, broken', pq^{w}é·y 'decayed wood, broken wood', pəq^{w}át 'break s-th in two')

χéylθət 'mark oneself' (χéyl-t 'write s-th, mark it')

x^{w}íθət 'wake (oneself) up' (x^{w}í-x^{y}-əT 'wake s-o up')

ləc'ə́θət 'fill oneself' (ləc'ə́t 'fill s-th')

x^{w}ə́θət 'make oneself famished, starve oneself' (x^{w}ə́ 'starved')

θíyθət 'fix oneself up' (θíy 'fix, make')

q'é yλ'θət 'heal up' (sq'é yλ' 'a scar')

q'əpə́θət 'gather themselves' (q'əpə́t 'gather it')

θəx^{w}á·θət 'disappear on purpose' (θə́x^{w} 'disappear')

lə́χ^{w}əθət 'cover oneself up' (lə́χ^{w}ət 'cover s-o/s-th')

k'^{w}ək'^{w}íyθət 'training oneself (to be a shaman, spirit dancer, canoe-puller (canoe racer), etc.)' (k'^{w}ək'^{w}íy 'climbing up')

k'^{w}q^{w}əmə́θət 'drop oneself into a seat angrily, throw oneself on the floor or ground in a tantrum, throw a tantrum' (k'^{w}áq^{w}əT 'club s-o/s-th')

q'əq'á·θət and q'á·θət 'mix, associate or go with s-o' (sq'əq'á· 'together with')

ʔát'əθət 'to stretch out (oneself)' (ʔát'əT 'stretch s-th')

qəχéθət 'to slide (purposely slide oneself as in skating, sledding, playing)' (qéyχəm 'to slip, skid')

x^{y}élx^{w}-θət 'to cool off (of a person)'

təmí·lθət 'to cool off (of food)'

χéyχəθət 'shame oneself' (cp. χéyχəlà·mət above)

It is tempting to propose that the -(ə)θ in -(ə)θət represents the purposive control suffix -(ə)T and that the final -ət in -(ə)θət might be equated with that in {-l-á·mət} as the reflexivizer. But neither proposition can be conclusively supported by the evidence; in fact, some words inflected with -(ə)θət seem to have accidental and causative translations (or implications) in addition to some which have purposive implications.

A number of examples, not cited above, seem to either have a homophonous suffix -(ə)θət '(verbalizer), get, become' or to have extended the semantic content of reflexive -(ə)θət to include these meanings. For example: x^{y}á·mθət 'got shallow' (sx^{y}éx^{y}əm 'shallow'), hí·k^{w}θət 'get big' (hí·k^{w} '(be) big'), χé·yʌ'θət 'getting colder', k'^{w}ásθət 'get warm, get warmer' (χéyʌ' 'cold', k'^{w}ák'^{w}əs 'warm, hot'), páyθət 'went crooked (like a nail)' (páy-t 'bent it'), t'épiθət 'go dead or die (of a tree)' (st'épi 'dead (of a tree)'), χalémθət 'getting/turning gray (of hair)' (χáləm 'gray (of hair)'), (s)χáyʌ'θət 'aggressive, ready to fight, cruel' (χéyʌ' 'cold'), θ'q'^{w}á·mθət 'getting rotten

(berries for ex.)' (θ'á(·)q'^{w}əm 'rotten' + continuative metathesis), χə́ƛ'θət 'windy' (χə́ƛ' 'turbulent, rough (of wind or water)'), q'əq'á·θət 'mix, associate or go with s-o' (q'əq'á· 'be together with'), tí·lθət 'to clear land' (tí·l-t 'clean it, clear it (of a table, etc.)'), ?á·lθət 'to groan', ?áwθət 'to be in a hurry, to hurry'.

Some of these examples could have a reflexive element ('getting gray (by itself)', 'getting rotten (by itself)', 'mix with s-o (bring oneself together with s-o)'), but others seem to lack any reflexive force ('to clear land', 'windy', 'got shallow'). The most likely rule to account for all this is a morphosememic rule: //'reflexive'// → /'get, become'/ in the environment: //'inanimate'//. Also in support of a single -(ə)θət suffix is the fact that in both the clearly reflexive examples and those with 'get, become' the suffix seems to be accompanied by ε → a ablaut; it seem unlikely that this ablaut would be found co-incidentally in two homophonous suffixes.

The reciprocal suffix, -təl, is an easier matter. When not overtly translated with 'each other, one another', words containing this suffix still can be seen to have this reciprocal meaning present. The

suffix is homophonous with lexical suffix -təl 'device, thing for', but the two are easily kept apart (one is used in verbal context and one is used in a nominal context) (-təl 'reciprocal' could be numbered {-təl$_2$} if need be). -təl 'reciprocal' may have allomorphs -ɬ·təl and -tá·l, -tà·l (the latter set seems used in contests, perhaps meaning 'against each other'), but there are not enough examples yet to predict their occurence. Examples are not too numerous, but the suffix seems productive:

q^{w}ólq^{w}eltəl ~ q^{w}ó·lq^{w}eltəl '(a lot of people) talking together' (q^{w}è·l 'talk' (~ q^{w}el in derivations) + R plural subject)

q'eq'átəl 'to meet' (q'eq'á· 'be together with')

θeθk'^{w}ɬ·təl 'tug-of-war' (θék'^{w} 'pull', R 'continuative', possibly θeθk'^{w}ɬytəl with -ɬy 'wood, bark' if the tugged item was cedar withe rope, poles, etc.)

qeqəmátəl 'having the same parents' (qemá· 'suckle', R 'continuative', -təl here 'with each other')

qelá·qtəl 'be siblings (to each other), be cousins (to each other)' (s-qé·q 'younger sibling', -əl- 'plural' as in sqelé·q 'younger siblings')

sélƛ'ɛtəl 'elder sister', sé·ƛ'ɛtəl 'elder sisters' (sélƛ'a 'oldest (of children)')

k^{w}eltá·l 'wrestle'

sk^{w}ek^{w}átəl 'to separate in marriage'

ƛ'íƛ'eχ^{w}tà·l 'beating one another (in contest), competing' (ƛ'eχ^{w} 'beat')

q'ɛyq'χátəl 'contradicting each other' (q'éyq'χèt 'contradicting s-o')

ʔiyá·təl 'fight', ʔá·ytəl 'fighting'

yéyətəl 'make friends', yáyətəl 'making friends' (siyéyə (or better, s-yéyə) 'friend')

lə st'əlá·stəl 'they were sitting side by side (beside each other)' (t'áləs-T 'sit beside s-o')

ʔé·x^{w}í·təl '(they're) sharing' (ʔé·x^{w}əst-əs 'he's giving gifts to s-o')

mɛmíy-əɬ-təl 'helping one another' (mɛmíyət (< mɛ-me-y-əT with R_1) 'helping s-o', -əɬ meaning uncertain)

χéyəslátəl 'wild ginger (asarum caudatum)(lit. 'facing one another', referring to the paired, facing leaves)'

6.1.4. Aspect (continuative, non-continuative).

The 'continuative' aspect is marked by reduplication (see 2.5), ablaut (see p. 82 and preceding in 2.3.4), stress-shifting (2.3.3, especially 2.3.3.2 and 2.3.3.3), metathesis (see 2.3.5.3), and prefixing {hé-} //hé- - hə-//(see 2.3.3.7). The 'non-continuative' is unmarked and contrasts with the 'continuative' by its lack of the five processes and affixes mentioned. Continuative and non-continuative are mutually exclusive;

'inceptive' is not and can occur with either of the two aspects (thus 'inceptive' suffixes like -ɬ·l and -(ə)θət and inceptive auxiliary {mə} 'come to, become' are not grammatically aspect inflections).

Since complete lists of examples have been given in the previous sections referred to in the last paragraph, only a brief sampling of examples is necessary here. In the following list, first the process or affix is given which indicates 'continuative', then the non-continuative example, and last its continuative counterpart.

R_1: t'ɬ·ləm 'sing': t'ɬt'ələm 'singing'
k^{w}f(·)məl 'get red': k^{w}fk^{w}əməl 'getting red'
s-t'ɬ·ləm-s 'his song': s-t'ɬt'ələm-s 'his singing'

R_2: q'^{w}ə́l 'ripe': q'^{w}ə́lq'^{w}əl 'over-ripe'
χ́ə́ləq'ət 'open one's eyes': χ́ə́lχ́ələq'ət 'opening his eyes (of Thunderbird esp.)' (as in χ́ə́lχ́ələq'ət tə sx^{w}əx^{w}á·s 'Thunder(bird) opening his eyes, lightning')
(ƛ'ə́wəls 'bark (of a dog)': ƛ'ə́wƛ'əwəls 'barking (of dog(s))')

R_5: x^{w}ɬ 'wake': x^{w}əx^{w}ɬ 'waking'
χ́ə́ylt 'draw s-th, write it': χ́əχ́ə́ylt 'writing s-th, drawing s-th'
x^{w}ɛ́ 'starve': x^{w}əx^{w}ɛ́ 'starving'

R_8: p'ə́k^w 'to float, surface': p'ɛp'ə́k^w 'floating' (also has Aɛ)

R_9: c'íƛ'əm 'jump': c'ic'éƛ'əm 'jumping' (AC)
s-θéḱ'^{w} ~ θéḱ'^{w} 'straight': s-θəθé·k'^{w} 'stretched, straight, pulled tight'

Ai: q^{w}éq^{w}əlέc 'to gossip': q^{w}íq^{w}əlέc 'gossiping together, two of them gossiping'
χ^{w}oχ^{w}iyém 'tell some stories': χ^{w}ix^{w}iyém 'telling stories'

Ai·: ?íməx^{y} 'walk': ?í·məx^{y} 'walking'
?éɬtəl 'eat a meal': ?í·ɬtəl 'eating a meal'
?éx^{y}əl 'to paddle': ?í·x^{y}əl 'paddling'

Aε: θéq'əm '(to) drip': θéq'əm 'dripping'
s?á·wθ 'be in a hurry': s?éwθ 'hurrying'

Aε·: θíyt 'make s-th': θé·yt 'making s-th'
c'əƛ'ém ~ c'íƛ'əm 'jump': c'é·ƛ'əm 'jumping'
x^{w}ámx^{y}ələm 'run': x^{w}əmx^{y}é·ləm 'running'
?áx^{w}əstəs 'he gives s-o a gift': ?é·x^{w}əstəs 'he's giving s-o a gift'

Aεy: q'əmás 'to dip-net': q'éyq'əmàs 'dip-netting'

Aə: q'^{w}əyíləx^{y} 'to dance': q'^{w}əyél·ɣ̓ex^{y} 'dancing'
csέθà·m 'you were told': cέsətəm 'being told'
c'ɛtɛ́·m 'crawl': c'étəm 'crawling'
sá·ləs '(get) drunk, (get) dizzy': sélés 'getting drunk, getting dizzy'

Aa: θiy(ə)q^{w}é·ls 'dig': θéy(ə)q^{w}əls 'digging'
t'épiθət 'it's dead (of a tree)': t'ápiθət 'it's going dead (of a tree)'

q^{w}ə́·l 'talk': q^{w}áq^{w}əl 'talking' (with R_1 as well)

Aa·: k'^{w}écət 'look at s-th': k'^{w}á(·)k'^{w}əcət 'looking at s-th'

hə́q^{w}ləx^{w} 'smell s-th': há·q^{w}ləx^{w} 'smelling s-th'

Au·: q^{w}ə́·l 'talk': q^{w}ú·lq^{w}əl ~ q^{w}ó·lq^{w}əltəl 'talking together, all talking'

#SS... → #SS... (where S = syllable):

ɬɛlqí 'soak, rehydrate': ɬélqi 'soaking, rehydrating'

ƛ'əwə́ls 'to bark (of dog)': ƛ'éwəls 'barking'

ɬəχ^{w}ə́ɬcɛ 'spit': ɬə́χ^{w}əɬcɛ 'spitting' (χ^{w} ~ x^{w})

cà·lə́χ^{w}əm 'bleed': cá·l(ə)χ^{w}əm 'bleeding'

#SS → #SS: ƛ'éx^{y}təm 'diarrhea': ƛ'x^{y}étəm 'continuing diarrhea'

k^{w}ésuyəl 'throw out a drift net': k^{w}sé·yəl 'drift-netting down the river' (k^{w} probably sic for q^{w} in each case)

sq^{w}élx^{y}əm 'dry snow that can drift': sq^{w}əlx^{y}áməɬ 'dry snow drifting in'

metathesis: examples above with ƛ'éx^{y}təm and k^{w}ésuyəl (q.v.)

ʔiyá·təl 'fight': ʔá·ytəl 'fighting'

k'^{w}(ə)x^{y}é·t 'count s-th': k'^{w}éx^{y}təs 'he's counting s-th'

{hé-}(hé- ___l,y ; hé- ___m,w):

yə́q^{w} 'burn': héy(ə)q^{w} 'burning'

lə́p'əx^{y} 'eat': hélp'əx^{y} 'eating'

méq'ət 'swallow (s-th)'; hémq'ət 'swallowing (s-th)' wec'éλ' 'fall, drop (intransitive)'; héwc'əλ' 'falling'

The phonological details of the above processes have already been described in Chapter 2 in the sections mentioned. Morphologically, all transitive verbs and most simple or lexically affixed intransitive verbs can be and must be inflected for continuative or left non-continuative. On the other hand, interrogative, personal pronoun, demonstrative, and auxiliary intransitive verbs are never inflected for continuative, while many adverbial and prepositional Vi's are. For participles (see 6.1.5) continuative inflection by reduplication is almost obligatory. Participles function as adjectival Vi's, but adjectival Vi's which are not participles (hí·k^{w} 'be big', etc.) are seldom if ever inflected for continuative.

The co-occurence of the continuative with other verb inflections and the internal syntax of verb inflections will be covered in 6.1.10. The allomorphy, semantics and sememics of /'continuative'/ have been discussed in 2.5.12 and 2.5.13. Only a few more remarks are necessary on the semantics of /'continuative'/ and /'non-continuative'/. /'Continuative'/, usually glossed by adding be + -ing to the non-continuative, implies that the action of the root continues

for a moderate length of time after onset (if a time of onset is implied or stated within the speech event) or before conclusion (if a time of conclusion is implied or stated within the speech event). In absence of implication or statement of onset or conclusion, the 'continuative' action is assumed to be continuing indefinitely. It would be inaccurate to gloss the 'continuative' as 'non-completive' and the 'non-continuative' as the 'completive' in Upper Stalo Halkomelem because the focus of aspect here is on duration not completion.

Several affixes and constructions could be termed 'inceptive' and have some semantic features of aspect, for example -f·l ~ -əl 'go, come, get, become' (see 5.2.3, pp. 206-207), -(ə)θət //'reflexive'//(/'get, become, go'/ in the environment 'inanimate', see 6.1.3), and pre-posed auxiliary verb mə 'come to, become' (see 6.2.8). But they are better considered not as aspect inflection because they can co-occur with both 'continuative' and 'non-continuative' aspects.

6.1.5. Participles. Participles can be derived from many verb roots by inflection (usually with s- plus reduplication, often plus -əm 'middle voice'). It seems best to consider Halkomelem participles inflective rather than derivational because 1.) the com-

bination of affixes used simultaneously is more typical of an inflection than a derivation, 2.) participles can be formed fairly productively, and 3.) Halkomelem participles are translated and used much like English participles. The Halkomelem participle however is used like an adjectival intransitive verb and may be classed as a subtype of adjectival verb syntactically. Most participles should be strictly translated with an initial 'be' in the gloss as they are stative in nature; this 'be' is omitted however when participles are used as adjectives in front of nominals (tə stˀépi θeqét 'the dead tree'), and it is omitted in the following lists to avoid tedious repetition.

The most typical and productive type of participle inflection is s- plus reduplication (R probably adds a 'continuative' element): spápiy 'crooked' (pá·y-t 'bend s-th'), spípew 'frozen' (píw-et 'freeze s-th'), stétəw 'light (in illumination)' (téw-él 'get light'), sθəθé·kˀʷ 'stretched, straight, pulled' (θékˀʷ 'pulled'), scécəxʷ 'got a wife' (céxʷ 'wife, mistress'), sxʷəxʷí(y) 'awake' (xʷílàmət 'wake (oneself) up'), sɬaɬəkˀʷí·wəl 'stupified, dumbfounded, surprised' (ɬá·kˀʷ 'fly', -í·wəl 'insides'), skʷíkʷəxʸ 'wild (of animals)', sɬéɬəq' 'laying on the ground' (léq'-ət 'lay s-th down'), spépəθ 'spread out', sʌˀéʌˀəl 'stuck

(like burdock in shirt for ex.)', stətí·l 'cleared (of land)' (tí·l-t 'clear it, clean it (of a table, land, etc.)'), sɬé·ɬəl 'tied up (of a canoe)' (ɬé·l·àmə̀t 'land (in a canoe)', when a canoe is landed or beached it is tied up), sk'^{W}ík'^{W}iy 'stingy' (k'^{W}íy-ɛt 'refuse s-o s-th'), sc'éc'ex^{W} 'silent, quiet' (c'éx^{W}-əl 'get quiet, get silent, shut up'), spɛpí·l 'buried' (pí·l-t 'bury s-th'), sq'^{W}əq'^{W}í·l 'already cooked' (q'^{W}él 'cooked; ripe'), sp'íp'eɬ 'flattened (can, bread, etc.)' (p'íɬ-ət 'flatten s-th'), sq'éq'əθ' 'leaning backwards', slí·leq^{W} '(too) loose', sp'ɛp'íɬ 'sober' (p'éɬ 'become aware, come to oneself, sober up'), sk^{W}ək^{W}á·təl 'separated in marriage', s?i?ehá - s?ehá 'wrapped up' (?ehá·t 'wrap it up'), sƛ'íƛ'əsəl 'dark-colored', sχéyχəp' - sχíχəp' 'striped' (χéyp'-ət 'scratch/scrape s-o or s-th'), sk'^{W}ák'^{W}əx^{W}ə 'boxed, put in a box' (k'^{W}áx^{W}ə 'a box'), sθ'əθíχ or sθ'əθíχ^{W} 'clean (of house for ex.)' (θéχ^{W} 'wash'), st'əlt'élq 'spotted with many spots' (plural R)(st'é·lq 'spotted'), sɬəɬéχ 'stiff (in body)' (ɬχétəm is also 'stiff (in body)')

Some examples also occur with s- plus R which are translated more as adjectives than participles, but this may be only fluent translation, and most likely the following are participles as well (at least in

origin): stítəθəl 'puny' (tíθ-əl 'get skinny', s-tí·θ 'skinny, thin'), sməɬméɬqʷ 'rough (of wood)', sxʸɛ́xʸəm 'shallow' (xʸɛ́·mθət 'got shallow'), sxʷɛ́·xʷθ' 'crazy, insane', sxʷixʷɛ́·xʷθ' 'stupid, a little crazy', (s)lí·ləq 'easy', sx̣ɛ́yx̣əθ'əs 'shamefaced' (x̣ɛ́yx̣ə 'ashamed'), sxʷúxʷə 'ambitious', syə́myəm 'pregnant'.

A number of examples are also found with s- alone or reduplication alone indicating their participial nature; see the next two paragraphs. (Some whose translation is more adjectival than participial have been included too; this seems to include most of those with reduplication alone).

st'ɛ́pi 'dead (of a tree)' (t'ɛ́piθət 'die (of a tree)'), sƛ'ə́p (AC) ~ sxʷƛ'ə́p (Cheh., Tait) 'deep', sc'ɛ́yxʷ 'dried' (c'ɛ́yxʷt 'dry s-th'), scəlɛ́·l 'fading (of eyesight)', slíc' or səlíc' 'full' (ləc'-ə́t 'fill it'), smə́k'ʷ 'found', scəwə́t 'smart, good at, know how to' (also a plain Vi), sk'ʷíy-ləc 'lame' (k'ʷíy 'climb'), slə́kʷ-ləc 'lame' (ləkʷ- 'break (a bone)'), sʔú·mət '(always) lazy' (perhaps ʔəmə́t 'sit'), sqəʔíy-əqəl-ɛ́·yθəl 'not fluent in speaking', stí·θ 'skinny, thin', slɛ́ or səlɛ́ 'tight, tightly' (adverbial Vi as well), st'əlɛ́·stəl 'sitting side by side' (t'ə́ləs-T 'sit beside s-o'), sθí·-qəl (Sardis, AC) ~ sxʷƛ'ɛ́·s (Cheh.) 'loud' (θí·- 'big'), sʔɛ́·wθ 'in a hurry, in a rush'

(possibly adverbial), stí·m 'hard (of exertion), done hard' (tí·m-ət 'do it hard(er)'), sqayéχ-iyɛ 'bragging, extravagant in claims, bull-headed', sχáyƛ'-θət 'aggressive, touchy, hot-headed', sq^{W}ɛ-ʔí·wəl 'hollow' (q^{W}é 'get a hole'), sx^{W}átk^{W}-əwəl 'hollow', st'éyχ^{W} 'brooding' (t'éyəq' 'angry'), syəmyá 'cheap', s?í·k'^{W} 'lost (and presumed dead)' (?í·k'^{W} 'lost (of a person or an object)'), scák^{W}əɬtɛ 'borrowed, nick- (as in 'nickname')' (cák^{W}əɬtɛ 'borrow'), sx^{W}əmé 'open at the top' (x^{W}ə-mé-x^{Y} 'take s-th off that's fastened, (unfasten s-th)', məmé (possibly mə mé) 'come off, (come unfastened)'), sméθ'əl 'proud', st'é·yχ^{W} 'sad, worried', sƛ'épχ 'scattered all over' (ƛ'əpχ-t 'scatter s-th'), scəlé·w 'turned inside out' (cəlέw-t 'turn s-th inside out'), sc'épχ 'dirty (of body, house, etc.)', st'é·lq 'spotted', stɛʔé (Chwk., Sardis), st'é (Tait, Cheh.) 'same, similar (to), like', st'əlέk'^{W} 'circular; a circle' (also nominal), sχé·lc'-əməθ' '(grown) twisted (of a tree)' (χélc' 'twist'),

cəcíx^{W} 'swollen', χɛχək'^{W}íwəl 'constipated (wedged in rump)' (χék'^{W} 'to wedge'), χéyχə (~ χíχə occasionally) 'ashamed', x^{Y}ix^{Y}q'á·m '(mouth) hanging open' (x^{Y}əq'- 'hang'), qéyqə 'soft', wàwistéləq 'jealous', c'í·c'əƛ' 'short', c'í·c'ƛ'-əməθ' 'short (of a person)' (-əməθ' 'stature, standing'), θ'əθ'əmí·l 'thin (of

material, string, dough, etc.)', x^{W}ax^{W}eyí·wəl and x^{W}ayí·wəl 'happy', q'^{W}áq'^{W}əl 'tame (of an animal)', məθ'məθ' 'supple, easy to bend (of things, esp. roots)', cícəɬ 'be above, high' (cíɬ-əq^{W} 'bushy and uncombed hair ("high hair")'), k'^{W}á·k'^{W}əs or k'^{W}ák'^{W}əs 'hot' (k'^{W}ás-θət 'get warm(er)'), q'áq'əy 'sick; dying' (q'á·y 'die, dead'), θíθə 'larger, bigger' (θí·-stəx^{W} 'make it big'), x^{W}áx^{W}a or x^{W}áx^{W}ə 'lightweight', t'ə́k^{W}t'ək^{W} 'muddy' (t'ə́k^{W} 'get mired in mud'), k^{W}ək^{W}ís ~ k'^{W}ək'^{W}ís 'narrow', k'^{W}ámk'^{W}əm 'strong (of a person)', səpsép 'stubborn', χé·χə 'sacred'.

Only a few of the examples with reduplication seem to be translated as true participles; in the other examples reduplication forms simple adjectives (often adding a somewhat 'augmentive' meaning to the root, where the root is attested). However a number of examples with reduplication plus -əm (probably 'middle voice') seem to be more often translated as participles in the English; there are no examples of participial s- plus -əm, perhaps significantly. Examples with R plus -əm include: θ'áθ'əɬəm 'chilled, cold (of body)' (θ'á·ɬəm 'chilled, cold'), ƛ'éƛ'əɬəm 'salty' (ƛ'éɬəm 'salt' (nominal)), sésəχəm 'bitter', t'ét'əθ'əm 'sour (of half-ripe fruit), fermenting', x^{Y}íx^{Y}əc'əm 'stinking', q'éq'ət'əm 'sweet-tasting', c'éc'əsəm 'tasty, good-

tasting (of meat, nuts, etc., not sweet things)', p'ɛ́p'x^{w}əm (x^{w} or χ^{w}) 'shy, quiet, not talkative', páp̓əq^{w}əm '(getting) mouldy (taste or smell)' (páq^{w}əət 'to rot'), θ'áθ'əq^{w}əm 'rotten' (θ'áq^{w}əm 'to rot'), qéyqəχəm ~ qíqəχəm (Cheh.) 'slippery' (qéyχəm 'slip, skid, slide'), χéyχəsəm 'creepy', títəx^{y}əm 'slimy' (stíx^{y}əm '(fish) slime'), p'ɛp'ɛ́k^{w}əm 'smooth (water), calm' (p'ɛp'ɛ́k^{w} 'floating', pɛ́k^{w} 'to float, surface'), (ʔí·təməm 'sleepy' has continuative + -əm though not reduplication).

Functioning in a similar way but possibly not participles are the words inflected with -təm 'be in a state of (verb)-ness' (probably not from -T + middle or passive because all examples lack purposeful control): χɛ́·p'q^{w}təm 'aching; rheumatism' (also a nominal), x^{w}ák^{w}əltəm 'numb' (x^{w}ák^{w}əl 'get numb'), x^{w}á·x^{w}əθ'təm 'sexy' (sx^{w}á·x^{w}əθ' 'crazy, insane'), ʔát'ətəm 'stretched' (ʔá·t' 'stretch'), sɛ́·lc'təm (c' ~ θ') 'dizzy' (sel- 'spin', -élc' 'around, in circles'), q'əɛ́·mtəm 'absent-minded' (q'əɛ́·m 'have a short memory'), ɬχɛ́təm 'stiff (in body, as of arm, leg, etc.)' (cp. synonym sɬəɬɛ́χ), q'ɛ́·lptəm 'cramped' (but cp. q'ɛ́lptəm 'to cramp, have cramps' and q'ɛ́q'əlptəm 'cramping'), syɛ́lθtəm 'poisoned' (participial gloss may be from s-; yɛ́lθ 'to poison'), cx^{w}ɛ́təm 'swelling (of infected sore, balloon,

etc.)' (cp. cecíx^{w} 'swollen'), télstəm 'get staggered' (té·lstəm 'staggering' and χ^{w}eχ^{w}elá·stəm 'staggering'), and three marginal examples: ƛ'éx^{y}təm '(have) diarrhea' (but cp. ƛ'ɔx^{y}étəm 'continuing diarrhea', root may be ƛ'ɔx^{y}- 'ripped apart'), ɬétχtəm 'tremble' (but ɬétχtəm 'trembling, (thus) shiver, shivering' and ɬétχθé·ləm 'I'm trembling' seems to point to 'passive'), tatəq'^{w}á·məstəm 'tuberculosis' (táteq'^{w}əm 'coughing') may fit here although it seems nominal.

6.1.6. Voice (active, middle, passive). The major question of this section is the middle voice. The active voice in Halkomelem is perhaps best defined as non-passive and non-middle voice. The inflectional affixes and paradigms of the active voice are given and discussed in the chapter on pronouns (4.4, 4.5, 4.8, 4.9, 4.12, and 4.13). The passive voice can be defined as a verb with an object pronoun being acted upon by an unspecified subject pronoun. The inflectional affixes and paradigms of the passive voice are also given and discussed in Chapter 4 (4.10, 4.12, and 4.13). The middle voice can be defined as a verb with a subject pronoun acting on or for itself without an object pronoun. Should this include reflexives and also many intransitives which have a patient (semantically) as subject? In fact, it is difficult to decide

whether there is a middle voice in Halkomelem. In reviewing a list of about 850 intransitive verbs, almost 200 were found with the suffix -əm (~ -m ~ -ə́m ~ -ɛ́·m ~ -à·m)(see 6.1.2.2 for this allomorphy). None of the 200 examples are passives. The question is, are all these middle voice or reflexive or intransitivized or are there some of each? Is this -əm an intransitivizer, a reflexive, or a middle voice, or several of these (two or three homophonous suffixes with the shape -əm, in addition to the passive -əm)?

There is no use setting up a "middle-passive" or "medio-passive" -əm because the nearly 200 examples of the "middle (?)" take pronoun subjects (whether patient or agent semantically) from 4.4 and 4.9, whereas the 'passive' takes its pronoun affixes from 4.10. Compare especially the first and second persons, which contrast clearly in this regard. The term "middle-passive" or "medio-passive" has been used up to now (when used) for third person forms where -əm 'middle' and -əm 'passive' forms are homophonous and the voice is unclear, but the terms "middle-passive" or "medio-passive" are probably misleading for Halkomelem.

The nearly 200 examples with -əm fall into several groups according to their glosses. The first group fits the classical definition of middle voice best

but also fits as a reflexive:

Group A: xʸá·kʼʷəm 'take a bath, bathe (oneself)' (xʸá·kʼʷ-əT 'bathe s-o', xʸfxʸkʼʷà·m 'swimming'), qəpʼásəm 'to bend (with one's head down), stoop down, put one's face down' (qəpʼá·s 'face down'), spəxʷəɬé·ləm ~ spéxʷəɬè·ləm 'breathe, breathe heavily, sigh, blow out one's breath', ʔí·θʼəm 'to dress (oneself)', θʼəχʷá·səm 'wash one's face' (θʼéχʷəsəm 'washing one's face', θʼéχʷ 'wash'), ɬé·χəm ~ kʼʷé·ləm 'serve oneself (food, drink)', píwsəm 'cross oneself, make the sign of the cross', xʷáyəqʷəm 'wash one's head' (-əqʷ 'on top of head, hair'), tʼəwókʼʷəsəm 'paint one's (own) face' (stʼəwókʼʷ 'red clay powder for paint'), xʷámxʸələm 'run (hurry one's feet)' (xʷəmxʸéləm 'running', χʷém 'hurry; fast'), ɬowəʼém 'undress (oneself)' (ɬ-owə-iθʼɛ-m), ʌʼɛpʼéləcəm 'wagging its tail' (cp. s-ʌʼəpʼ-éləc 'tail'), ɬícʼəqʷəm 'cut one's (own) hair' (ɬícʼ-əT 'cut s-o/s-th'), ʔíqʼʷəsəm 'wipe one's face' (xʷə-ʔíqʼʷ-əwí·ls 'wipe the dishes', ʔíqʼʷəm 'rubbed off'), səqí·wsəm ~ həqí·wsəm 'put on one's pants' (səqí·ws 'pants', -í·ws 'on the body (or covering)'), qʷɛyχéləcəm 'shake one's hips' (qʷéyχ 'shake'), təxʸqéylém 'comb one's hair' (təxʸqéylT 'comb s-o's hair'), ʔəχá·yθílèm ~ ʔəχá·yθílém 'shave oneself (on the jaw)' (ʔíχ 'scratch' + -á·yθəl + -í·l + -əm),

s?aθ'á·mə́wsəm 'put on a shawl (shawl oneself)' (cp. s?aθ'á·məs 'a shawl (for the head)' + -ews 'on the body' instead of -əs 'on the face', root probably < s-?íθ'ə-m 'clothes' + Aa and Aá·), ləqèlèm 'go underwater, submerge oneself' (lə́qəm 'dive (into water)'), and possibly q'^{w}íq'^{w}ələ́mqəl 'changing one's voice (of an adolescent boy), one's voice is changing' (q'^{w}áq'^{w}əl 'tame (of an animal)', -ə́m ('one's own'), -qəl 'voice, throat').

More examples could be cited. In all of them the subject is both agent and patient (semantically) and is animate. Most of the examples have somatic suffixes. Other examples which may marginally belong in this set include the remaining examples with somatic suffixes + -əm as well as a few without somatic suffixes:

Group B: məlqí·wsəm 'to faint' (mélq 'forget', -í·ws 'body', -əm '(one's own)'), k'^{w}əcəwí·cəm 'look back' k'^{w}əc 'look', -ewí·c 'on the back (of a person)', -əm '(one's own)'), χ́éyχ́əc'əm 'to itch', səχ́éyləm 'move (oneself), move (oneself) over' (síχ́eT 'move s-th/s-o (over)'), c'élecəm 'take a seat, be seated' (c'é 'on top of', -lec 'rump', -əm '(one's own)'), qéyχ́əm 'slip, skid (as of kids on ice or snow for ex.)', θ'ik'^{w}á·lə́səm and θ'íθ'(i)k'^{w}á·səm 'winking' (-á·les, -á·s),

yəqəlcéləm 'take his place' (yéq 'change, trade', -ləc 'rump', -él 'go', -əm 'one's' > 'go trade one's seat'), qəliyθí·ləm 'swear, curse, cursing' (qəl 'bad', -á·yθəl ~ -əyθəl 'lip, jaw', -í·l 'go', -əm 'one's'), q^{w}əlayθí·ləm 'make music' ('talk' + 'lip' + 'go' + 'one's'), q^{w}əlɬé·ləm 'grumble, talk under one's breath' ('talk' + 'in throat' + 'one's')(cp. q^{w}əlq^{w}éləm 'grumble').

If the examples in group B are reflexive they are more covert (semantically) than examples in -lá·məṯ or -(ə)θəṯ. However they all seem to have subjects that are simultaneously both agent and patient and are animate. The alternate explanation to an -əm 'reflexive, one's, oneself' in the examples of the last two paragraphs would be an -əm 'middle voice'. The examples (especially group A) match examples of middle voice from other languages fairly closely. In any case, it seems that the -əm of groups A and B is more than just an intransitivizer or else θ'əx^{w}á·səm, for example, would be 'wash on the face' instead of 'wash one's (own) face'.

A larger group of examples (group C) could be interpreted as reflexives or middles by a stretch of the imagination: in some sense all can be interpreted as action by the subject upon itself or as a state of

being (adjectival, participial) developed by and upon the subject itself with no perceived outside agent. The subject can be agent or patient, animate or inanimate. This group (C) includes the whole list of 15 participles cited in the next to last paragraph of 6.1.5 above (those with $-R_1-$ plus -əm). Semantically the following group (C) includes a large number of words for tastes, sounds and visual effects, with some words for smells and tactile feelings and a number for involuntary physical actions (as well as other semantic areas). Omitting those already listed in 6.1.5 (largely tastes ('bitter', 'sour', 'sweet', etc.), smells ('stinking', 'mouldy', etc.), and tactile feelings ('chilled', 'slippery', 'slimy', etc.)), these marginal middles include:

Group C: θ'é·cəm 'to jingle, rattle, clatter, peal, toll', k^{W}á·t$\underline{x}^{W}$əm 'make a banging noise (hammering, banging), roar (falls, etc.), rumble (thunder, quake, slide, for ex.)', ƛ'é·y$\underline{x}$əm ~ ƛ'é·l$\underline{x}$əm 'to crackle (of fire, firecracker)' (ƛ'é·yéx^{W}əm (y ~ l) 'crackling'; the variation is unexplained, probably includes errors), $\underline{x}$épk'^{W}əm ~ ƛ'émq'^{W}əls 'make a crunching or cracking noise (like ice breaking, chewing apples)', lá·p$\underline{x}^{W}$əm '(make) noise', (possibly k^{W}ák^{W}ex^{W}əm 'rapping, knocking (in the distance)'), k^{W}ém 'to thud (dull, outside)',

(possibly sɛ́·wc'əm 'sharp rustling (leaves, paper)' and x^{w}ɛ́t'k'^{w}əm 'soft rustling (of material), shuffling'), qɛ́·yƛ'əm 'squeaking sound (tree, chair, shoe, etc.)', q'^{w}ɛ́t'c'əm 'gurgling, (make) sound of water sloshing or gurgling inside', t'ɛ́x^{w}qəm 'suction sound of s-th pulling out of mud', c'ɛ́wq'əm 'sizzling (of grease for ex.)', t'ɛyíc'əm 'fizzing (of soda, etc., of s-th dropped into water)', c'ɛ́tχəm ~ θ'ɛ́tχəm 'clinking, tinkling (of glass, metal, dishes, ice in glass, etc.)', wɛ́lwəlè·m 'echoing'; p'ɛ́lq'əm 'sparkle, glitter, flash', ƛ'ɛ́·wq'əm 'to glitter', c'ɛ́·lc'əm 'dazzling'; tɛ́·q'^{w}əm 'to cough', χè·m 'cry, weep' and χɛ́yχè·m 'sob', hɛ́s·əm 'to sneeze', $χ^{w}$íq'^{w}əm 'snore', yɛ́·q'^{w}əm 'to sweat', k^{w}ɛ́cəm 'to scream', χɛ́ylɛ́m 'to growl (animals)', χɛ́ytəm 'to growl (people)' (χɛ́ytəƮ 'growl at s-o'), k'^{w}ɛ́·yχ^{w}əm 'to growl (of stomach)', (q^{w}əlq^{w}ɛ́ləm 'grumble' may belong here), q'əɛ́·m 'have a short memory'; yɛ́·k'^{w}əm 'it broke, to break (of its own accord)(car, ice, plank, etc.)', pək'^{w}ɛ́m 'burst or fly into dust (of airborne seeds, dust, snow), get dusty', x^{w}ə?ɛ́yəm 'clear (of river)', t'ɛ́·lk'^{w}əm ~ t'ɛ́lq'^{w}əm 'warm, lukewarm (of food, drink)', lɛ́q^{w}əm 'warmer (of day)', p'ɛ́q'əm 'to bloom', píχ^{w}əm 'fall off a plant (of petals, seed fluff, etc.), blow from plant', ləqɛ́lɛ́m 'dirty (of water, river)'; q'ə?í·ləm

'ancient (of person or thing)', c'f·səm 'grow (of anything animate for ex.)' (c'sí·mt 'grow s-th planted'), θ'áq'^{W}əm 'to rot (fruit, animal, etc.)', p'á·x'əm 'to smoke' (belongs here when subject is patient; when subject is agent belongs more with intransitivized set)(cp. p'x'ámt 'to smudge or smoke s-th out (mosquitoes, flies, etc.)', χ̌ópk'^{W}əm 'brittle', χəlc'íwélém 'twisted'; x^{W}cθtéləm 'to cloud up' (sx^{W}ʔéθtəl 'a cloud'), p'áq'^{W}əm 'to foam' and p'áp'əq'^{W}əm 'foaming; beer', p'é·yc'əm 'give off spark(s), sparking' (aspect unclear), θ'ém 'subside, go down (of water or tide)'; sisəlc'iyásəm 'turn(ing) around in a circle', q'əwqé·yləm 'turn around; turn or go around a bend', pálχ^{W}əm 'to steam' (pá·léχ^{W}əm 'steaming'); c'ɛtɛ́·m 'crawl', léqəm 'dive (in)' (hélqəm 'diving'), lém 'go, go to, going (to)' (lɛ is auxiliary verb 'go, going, go(ing) to'), k^{W}ətx^{W}í·ləm 'go inside, come inside' (sk^{W}ətéx^{W} 'be inside (a house, cave, etc.)'), ləwí·ləm 'go into an opening', x^{W}əwq'^{W}éyləm 'go downstream', x^{W}əck^{W}í·ləm '(go) far away' (cák^{W} '(be) far'), ʔimɘx^{Y}ásəm 'go for a walk' (< walk (step + upright) + in a circle + middle/reflexive), t'f·c(')əm 'swim (of a person)', x^{Y}étəm 'swim(ming)(of a fish)', síχ^{W}əm 'to wade', θ'q'əłχé·m 'kneel', x^{Y}á·pəm 'whistle' (cp. x^{Y}íx^{Y}pà·m 'whistling'), x^{W}ə?í·yɛ́·qəpəm '(to) joke'

(x^{w}ə- 'go, become', possibly x^{w}ə?í· 'arrive, get here', yé·q 'change'); q'^{w}ém 'come out (at roots)(of plants, hair, etc.)', θ'é·łəm 'chilled, cold (of animate being)', sísəm 'feel creepy, fear s-th behind one' (sí·si 'fear, be scared'). All of the examples above (group C) could be alternatively analyzed as intransitivized by an -əm 'intransitivizer'.

The next group shows an -əm 'intransitivizer' which cannot be middle or reflexive. All the examples have subjects which are agents and implied objects which are patients not equivalent to the agent subject. The agent is usually animate. The fact that the agent and patient are different from each other proves that these are neither middle nor reflexive: Group D: q'^{w}él(·)ém 'to barbecue', łəqlí·səm 'to button' (lúł słəqlí·s 'it's buttoned'), síq'^{w}əm 'peel (cedar bark)', θ'ém ~ c'ém 'chew' (θ'ét ~ c'ét 'chew s-th'), k'^{w}x^{y}é·m 'count' (k'^{w}x^{y}ét 'count s-th', k'^{w}x^{y}é·ls 'count'), qá·m 'dip/pack/fetch water', łí·m 'pick (fruit, leaves), picking', t'í·ləm 'sing', x̌^{w}i(y)x̌^{w}iyém 'tell (children's) stories', lé·c'əwtx^{w}əm 'visit, drop in', x^{y}əc'í·ləm '(go) through the woods', k'^{w}í·m 'get off a canoe' (possibly < k'^{w}íy 'climb'), té·lx^{y}əm 'tracking, following footprints', cé·lqəm 'following (a person)', t'əlí·lésəm 'get side by side',

heqílém 'crawl underneath', x^{W}cémés 'he met the place he started' (-es 'in a circle' here; cá·mtel 'meet each other, elope'), x^{W}eq^{W}qé·ylem 'stick (s-th) down one's throat', táx^{W}esem 'pull a canoe (by rope)(usually in rough water)', p'ek'^{W}eθílem 'eat a snack, throw a meal together of leftovers', cθ'éylem 'spearing silver spring salmon (sq^{W}é$x$em) in clear water after waiting for them', θíyém 'bake (bread), fix (food)' (θíyθet 'fix oneself up', θíy 'fix, make'), k'^{W}fk'^{W}ec'em 'butchering', ƛ'x^{W}é·yɬem 'sit on eggs, brood eggs' (ƛ'éx^{W} 'cover'), k^{W}él·em 'get, fetch' (k^{W}elét 'hold s-th'), θiyéltx^{W}em 'build a house, make one's home', ʔé·x^{W}em 'give, giving' (aspect unclear), θ'éyé·m 'marry a sibling of one's deceased spouse' (θ'éyɛ 'sibling of deceased spouse'), cémem 'pack on one's back' (cémeT 'pack s-th on one's back', cmé·T 'packing s-th on one's back'), cémemɬɛ 'pack some (on your back)!, pack a bit (on your back)!', k'^{W}íyè·m 'stingy of food, refuse to give (food)' (k'^{W}íyɛtɛs 'he refuses s-o s-th', hé·k'^{W}elem 'remember' (cp. hé·k'^{W}eles 'remember s-o/s-th'), x^{W}áyém 'to sell' x^{W}á·y-met 'sell s-th'), ƛ'x^{W}ém 'win a contest' (possibly cp. ƛ'éx^{W} 'cover' or ƛ'éx^{W}t 'take advantage of s-o'), θ'éx^{W}elwetem 'wash clothes', yɛlk'^{W}éɬem 'close up a meeting , wind up or complete a meeting,

"break the canoe" (give last spirit dance of the season in a given longhouse)', csέləm 'send for s-th, send with a message' (csέT 'send s-o').

In addition to group D (and possibly group C), the remaining verbs in -əm may be examples of an -əm 'intransitivizer' as well:

<u>Group E</u>: ɬátq^{w}əm 'boiling, boil (?)(of water)', hὲm ~ hέ·m 'finished (of a story), over', x^{w}mέ·m 'empty', calə́x̣^{w}əm 'bleed', ʔiyá·ləm 'right, correct, alright, okay, can', (mə) tx^{w}ə́m 'early', ʔá·yəm (ə ~ ə́) 'late, slow' (possibly related to ʔέ·y 'keep on'), há·q^{w}əm 'give off smell' (há·q^{w}əT 'smell s-th/s-o', há·q^{w}ləx^{w} 'catch scent of s-th', háq^{w}əls 'smelling, sniffing (of an animal)'), θ'əq'ə́m 'drip (once)' and θ'έq'əm 'dripping continuously', p'á·ƛ'əm 'to smoke' (belongs here when agent is human subject and the implied object is a cigarette, pipe, etc.), ƛ'έpəx̣əm 'fall down and scatter, drop and scatter (apples, seeds in planting, etc.)', ɬέqəm 'whisper' and ɬέɬəqəm 'whispering', híllə́m 'fall and tumble, tumble', mέθ'əlqέylə́m 'tell a lie, lie' and mεθ'έləm 'bluff, pretend one knows' (smέθ'əl 'proud', -qəl 'speech, language' + -í·l 'get, go, come'), ʔəwáləm 'play', tὲ·m ~ tέ·m 'shout, yell, holler', sέ·yəm 'ache, hurt, sore', θə́qələm ~ θqέ·ləm 'to still-dip with dip-net' (one or the other is 'con-

tinuative'), ʔiʔayá(•)m 'walk slow', q'élém 'to camp, make camp', ʔf•yá•səm 'having fun', qəliyθílem 'swear, curse', q'əwétəm 'drumming (for s-o)' (q'əwét 'a drum').

So it seems that there is quite probably a middle voice (if not a reflexivizer) -əm, distinct from the -əm intransitivizer and from -əm 'passive (3rd person)'. The active voice is best defined as non-passive and non-middle. And the passive is used for avoiding specification of subject agent (or for focusing on the object patient), for expressing an impersonal subject (especially with non-second person objects), and for expressing a third person subject with a second person object.

The three voices can also be looked on as Halliday does[1], to paraphrase: a middle clause has only one inherent participant (an actor)("Hector sneezed", "the cat washed"); a non-middle clause has two inherent participants (actor and goal) but one or the other may not be actualized: the active may lack a goal ("Mary is washing (the clothes)") and the passive may lack an actor ("the clothes have been washed").

---

1. M.A.K. Halliday: "Language Structure and Language Function", pp. 146-165 in New Horizons in Linguistics, edited by John Lyons, 1970, Penguin Books, Baltimore, Md.

6.1.7. Mood (subjunctive ('when, if, uncertainty, with negation), imperative, interrogative). As discussed in detail in 4.9 of the pronoun chapter, with many examples, there is a special set of pronoun suffixes which are used as subject pronouns of verbs prefixed with wə- 'if; when', with verbs after negative verbs ʔə́wə 'not be, be not', ʔəwə́ 'if not', xʷəwə́ 'not yet', and with auxiliary verbs after some interrogative verbs. This inflectional set (4.9) can be called the subjunctive mood, since the term subjunctive mood is used in many other languages for similar syntactic and semantic purposes (hypothetical, negative, and uncertain). It further fits well as a "mood" because it contrasts with the other traditional declarative, imperative and interrogative moods. All four moods are mutually exclusive within a verb; they do not affect object inflection, that is, the same object affixes can be used in all four moods. More will be said of the subjunctive in the syntax chapter, but little needs to be added here to what has been given in discussion, paradigm and example in 4.9. It could be added that even nominals used as verbs (swíyəqəcəl 'I'm a man') can be made subjunctive: (EB) wəswíyəqə́·s qə wəsɬélíyəs 'if it's a man or a woman' and (AC) wəlalec'ə́·s 'if it was one person' (both examples show

the morphophonemic rule of vowel combination ə + ə → é·).

A declarative mood can be set up and defined as inflectionally non-subjunctive, non-imperative, and non-interrogative. Most of the verbs given so far in this grammar have been in the declarative mood. More will be said of the declarative in the chapter on syntax since moods have a tendency to be syntactically and semantically transferred to whole phrases and sentences. But here we are discussing verb inflection and there is no overt 'declarative' morpheme (it cannot be the -c- in first and second person subject pronoun suffixes). The declarative verb is merely one which lacks subjunctive, imperative and interrogative morphemes or inflections.

The imperative mood gives a command to the hearer or hearers and has several inflective suffixes:

-łɛ [łæ] 'imperative, you (sg.) subject' (not used with negative or auxiliary verbs)

-ɛłɛ [æłæ] 'imperative, you (pl.) subject' (not used with negative or auxiliary verbs)

-ł (EB has -tł) 'imperative, you (sg.) subject, mildly urging' (used with auxiliary verbs lɛ(m) 'go(ing)(to)' and mə ~ mí 'come, coming')

-cəx^{w} 'you sg. subject' substitutes for -łɛ imperative

(most frequent in Cheh. and Tait, less common in Chill. where -łɛ is preferred; used also with auxiliaries lɛ(m) and mə ~ mí, and used with ʔə́we or ʔə́we 'not, don't' in all three dialects; Cheh. and Tait frequently have a more emphatic form -cx^{W}ə̀ 'you just ...!' < -cəx^{W} ʔàl (ʔàl ~ ʔà ~ ʔəl 'just' as in English "you just do it!"). Also note that since -cəx^{W}, -cɛp, and -cət are used as imperatives their initial -c- cannot be a declarative morpheme.)

-cɛp 'you pl. subject' substitutes for -cłɛ imperative (most frequent in Cheh. and Tait, less common in Chill.; used also with auxiliary and negative verbs in all three dialects)

-cət, -ct 'we subject' substitutes as a first person plural imperative when it follows auxiliaries lɛ and mə (lɛcət ~ lɛct 'let's' and 'we're going to', məcət ~ məct 'let's (come and)' and 'we're coming to')

-ə̀wə̀ł (Chill.), -ə̀wə̀ł (Cheh., Tait) 'polite imperative?, you sg. subject' (rare, used only in a few phrases: háyə̀wə̀ł ~ háyə̀wə̀ł 'goodbye (leaver to stayer)' (almost like 'stay well!', háy means 'finish'), lə́məwə̀ł ~ lə́mə̀wə̀ł 'goodbye (stayer to leaver, leaver to leaver), go ahead (polite)!' (like "go well!"), ʔə́ʔɛʔə̀wə̀ł 'you're welcome' (ʔə́·ʔɛ 'yes'),

?ó?àwèɬ '(I'm listening)(said while listening to stories)' (AC)

-ɬq^{w}e 'polite imperative?, you sg. subject' (dubious, only one example: ?əmét-ɬq^{w}e 'Sit down (polite command)!' which contrasts with ?əmét-ɬɛ k^{w}ó 'Sit down then!' which includes k^{w}ó 'then').

These imperatives and pronouns used as imperatives are always final in the verb word when they occur. They can be preceded by any intransitivizer, beneficiary suffix (benefactive, reflexive, reciprocal), transitivizer (except -l 'happen to, ...'), object suffix, or voice (except passive). Imperatives have not been attested with continuative aspect, -l transitivizer, participles, nor in the passive, and imperatives cannot co-occur with past or future tense affixes nor with subjunctive or interrogative affixes. Imperative suffixes function in part like subject suffixes and so perhaps also belong in the chapter on pronouns.

The lack of imperatives with -l control verbs and some intransitive verbs (prepositional, adverbial, interrogative, personal pronoun, demonstrative, and some verbs whose action a subject cannot do on command) is quite interesting; it seems the result of morphosememic and/or syntactic incompatibility. The -l

verbs in particular are verbs over which the subject does not have complete control and therefore cannot be ordered to do (see examples below). Examples:
1.(AC): (ʔə)mí-łɛ '(you sg.) come!', míy-ɛłɛ '(you pl.) come!', ʔəmə́t-łɛ '(you sg.) sit down!'(also 'sit up!'), ʔəmə́t-ɛłɛ '(you pl.) sit down!/sit up!', łəχə́yl-ə́xʸ-łɛ 'stand up!', píxᵂ-ət-łɛ 'brush it!', mɛy-θ-áxʸ-łɛ 'help me!', mɛy-θ-áxʸ-ɛłɛ '(you folks) help me!', ʔə́yələxᵂləxᵂ 'get well!' (not -l control, cp. ʔə́yələxᵂləxᵂ 'keep s-o alive'), k'ᵂxʸə́·m-cəxᵂ 'you count! (said if you already told him once and he stands there stupidly)'
2.(EB): ʔáł-st-əxᵂ-łɛ 'put it on board!', píxᵂ-ət-cəxᵂ 'brush it!', mɛy-θ-áxʸ-cəxᵂ 'help me!', cə́m-ət-łɛ 'pack it (on your back)!', cə́m-əm-łɛ 'pack some!, pack a bit (on your back)!', c'əkᵂχ-é·ls-łɛ 'fry some!, fry a bit!', θiy-ə́łc-ət-łɛ 'make or fix it for him!', p'ə́wiy-əłc-θ-áxʸ-cəxᵂ 'patch it for me!', ʔí-łc-st-əxᵂ-cxᵂà '(just) leave it for him!', sθəhí-θət-cxᵂà 'just you be careful!', təsə́-θət-ɛłɛ - míy-ɛłɛ təsə́θət '(you folks) come near!, (you folks) sit in (with us) and eat!' (təsə́θət 'come close or near', tə́s 'get up to, approach'), yə̀qᵂ-əlcəp-θ-áxʸ-łɛ 'make a fire for me!', can't say *k'ᵂə́l-l-əxᵂ-łɛ 'find it!' nor *k'ᵂə́c-l-əxᵂ-łɛ 'see it!' (AC agrees)(one

must use k'^{w}ə́c-ət-ɬɛ 'look at it!')

3.(AC): lɛ-ɬ x^{y}á·k'^{w}əm 'go bathe!', lɛ-ɬ mə́·yt 'go help him!', lɛ-ɬ ʔə́·yəl 'go away!', lɛ-ɬ t'á·k'^{w} 'go home!', lɛ-ɬ ɬəq'ə́t tə x^{y}ə́ɬ '(go) widen the path!', mí-tɬ q'ax^{y}əlθáx^{y} 'come with me!', mə-ɬ q'á·l-θət 'come back!', mə-ɬ qá·l-t tə qá· 'come get/dip the water!'

4.(EB): lə́m-tɬ k^{w}ə́l-l-əm tə s(i)yáɬ 'go fetch the wood!', lə́m-tɬ ʔə́·yəl 'go away!', mə-tɬ yə-sq'á - mí-tɬ yə-sq'á 'come along!' (vs. mí-ɬs 'come!' and míy-ɛɬɛ '(you folks) come! (telling them they have to)'), x^{y}áɬm-əθət-cəx^{w} 'take care of yourself!', ʔówə-cx^{w} tátəs-ət-əx^{w} 'don't touch it!'

5.(AC): ʔówə-cəp lə́m-ə́p q'á·-θət 'don't you folks go mix (or associate) with them!', ʔówə-cx^{w} (wə)lə́m-əx^{w} qəlqəl-í·l-θət-əx^{w} 'don't (when you go) go get yourself dirty!', ʔówə-cx^{w} x^{w}íyə-əqə-θáx^{y}-əx^{w} 'don't you repeat what I say!', lɛ-ct ʔə́ɬtəl 'let's go eat (a meal)!', lɛ-ct hə́·wə 'let's go hunting!', lɛ-ct t'á·k'^{w} 'let's go home!; we're going home', lɛ-ct məy-t-álə 'we're going to help you folks'

6.(EB): mə-ct ʔə́·yələx^{w}-stəx^{w} tə s-q^{w}ə́·l-cət 'let's keep our language alive!', lɛ-ct ɬí·m 'we're going to pick (fruit, etc.), we're going picking', lɛ-ct ʔiməx^{y}-ás-əm 'we're going to go for a walk' (AC 'let's

go for a walk!)

(lɛ-ct t'á·k'^{w} (AC) in 5 above could be seen as having the imperative interpretation, 'let's go home!', if the speaker intends first person plural inclusive, and having the declarative interpretation, 'we're going home', if the speaker intends first person plural exclusive.)

The interrogative mood, like the other moods, has syntactic and morphosememic jurisdiction over the whole sentence, and more will be said of it in both Chapters 11 and 13. The most common method of forming interrogatives is syntactic, using interrogative auxiliary verb lí at the beginning of the sentence. There are also interrogative verbs which form a distinct set (see 6.7 in this chapter) but which are not inflections. Here we are dealing only with inflections, and the only interrogative inflection found in Upper Stalo Halkomelem is {-ə} //-ə ~ -ɛ ~ -é·// 'interrogative'.

Interrogative {-e} is found in the nine morphological contexts given below. Although only third person sg. is glossed in 1, 2, 3, 4, and 6, all other persons, numbers, and genders occur as interrogative subjects; other persons and numbers are likely in 5 and 8 but are not yet attested.

1. lí(·) ~ lí$^{\circ}$ ~ líyə (+ pronoun suffixes 4.4) 'Does he ...?, Did he ...?, Is he ...?' (the latter gloss with statives). lí$^{\circ}$ and líyə are not frequently found, mainly occuring in slow or hyperslow pronunciation; lí(·) seems to be acceptable in all cases instead, waxing historically while {-ə} is waning. The answer to lí(·) (and lí$^{\circ}$ or líyə) questions can be simply lí 'He does., He did., He is.' (Note that lí(·) also means 'Does she/it/they ...?, etc.' and with suffixes 4.4 interrogates other persons that third person (fór ex. lí(·)-cəl 'Do I...?, Did I ...?, Am I ...?). 'He' in 1, 2, 3, 4, and 6 is only an abbreviation for these possibilities.)

2. lí(·)-ɬ-ə ~ lí(·)-ɬ-ɛ (+ 4.4 suffixes) 'Was he ...?' This is the same interrogative lí(·) as in 1., but when past tense -ɬ is suffixed the {-ə} follows the -ɬ. -ə also varies with -ɛ, mainly in slower pronunciations of AC. The answer can be lí(·)ɬ 'He was.'

3. lém̓ə (+ 4.4 suffixes) 'Is he going?, Is he going to ...?' Alternates with lí(·) lém̓ which is translated identically. The answer can be lém̓ 'He is going., He is going to ...?'

4. sk'^{W}é(·)yə ~ sk'^{W}éyɛ ~ k'^{W}é·yə ~ k'^{W}é·yɛ (+ k'^{W}(ə) + 4.8 affixes) 'Can't he ...?' Again the -ɛ variants seem to appear in slower speech, but otherwise the forms

seem to be in free variation. AC hinted that some people prefer the forms with s- and some do not, but it is unclear whether this is idiolectal or dialectal variation. *lí(·) sk'^{W}é(·)y is not permitted. The declarative is sk'^{W}é(·)y (+ k'^{W}(ə) + 4.8 pronouns) 'He can't ..., It's impossible that he ...'

5. ʔɛ sƛ'íyɛ 'Do you want ...?' The use of {-ə} with sƛ'í(y) is only attested in 2nd person singular so far. sƛ'í(y) is a nominal in Halkomelem but a verb in English; it takes possessive pronoun inflection to show its subject in English (ʔɛ sƛ'í(y) is literally 'my want', and becomes 'I want' in smooth English translation). The interrogative lí(·) ʔɛ sƛ'í 'Do you want ...?' is much more common than ʔɛ sƛ'íyɛ; ʔɛ sƛíyɛ seems like a remnant of a once more common inflection.

6. ʔəwé (+ 4.4 pronoun suffixes) 'Doesn't he ...?'

ʔəwé-ɬ (+ 4.4 pronouns) 'Didn't he ...?'

(ʔə)wé·tɛ (+ 4.6 pronouns) 'Doesn't he have any ...?' All three interrogatives are based on ʔéwə 'is not, does not, etc.' + -é(·); the second adds -ɬ 'past tense' before the interrogative; the third adds -tɛ '-body, -thing'. Compare ʔéwə 'he is not, he doesn't', ʔéwəɬ 'he didn't, he wasn't', and (ʔə)wétɛ 'none, nobody, nothing'. *lí(·) ʔéwə (+ 4.4), *lí(·) ʔéwəɬ (+ 4.4), and *lí(·) (ʔə)wétɛ are not permitted.

7. ƛ'á·, possibly ƛ'á$^{\theta}$ or ƛ'á?ɛ 'Is that ...?, Is it ...?' Compare ƛ'á 'that is ..., it is ...'. The traces of -ə ~ -ɛ here are very tenuous but apparently present.

8. ləwé· 'Is it you?' was recorded twice from AC and seems to indicate the interrogative suffixed to pronominal verbs. Compare ləwe 'it is you'.

9. spé·θe 'Is it a bear?' and sc'á·łé$^{\theta}$ 'Is it a leaf?' were each recorded once from AC. They seem (if not errors) to indicate that nouns used as verbs can be made interrogative with {-ə}. Compare spé·θ (used all by itself) 'It is a bear.' and sc'á·łɛ (used alone) 'It is a leaf.' The cognate construction in Musqueam dialect Halkomelem is spé?ɛθ ?ə 'Is it a bear?' with ?ə 'interrogative'.[2] It should be noted however that this construction is not common in Upper Stalo dialects. And the alternates lí· spé·θ (or líyə spé·θ) are found 95% of the time instead.

Examples (from AC except where marked):

1. líyəcəx^{w} k'^{w}ámk'^{w}əm (slow) 'Are you strong?' lícx^{w} léyəm (normal), líyəcəx^{w} léyəm (slow) 'Are you laughing?'

---

2. Wayne Suttles: Unpublished grammatical notes on Musqueam Halkomelem for Anthropology 407, Winter 1969, Portland State University, Portland, Oregon.

líyə mə k^{W}ətx^{W}íɬləm tə sq^{W}əméy 'Is the dog inside?'

líyəcəl sí·silàmə̀ 'Did I scare you?'

lí^{yə} qéx̌ 'Is there a lot?' (lí· qéx̌ 'There is a lot.')

(EB) líyəcəx^{W} hék$^{'W}$ələs 'Do you remember?'

2. lí(·)ɬəcəl məmíyət θə Mary 'Was I helping Mary?'

lí·ɬəcət məmíyət θə Mary 'Were we helping Mary?'

líɬəcx^{W} məmíyət θə Mary 'Were you (sg.) helping Mary?'

lí·ɬəcəp məmíyət θə Mary 'Were you folks helping Mary?'

líɬɛ məmíyətəs tú·ɬ'à θə Mary 'Was he helping Mary?'

(EB) líɬəcəp lém k'^{W}ə táwəl 'Did you folks go to town?'

(Cp. lí·ɬcəl 'I was.' and lí·ɬcət 'We were.')

3. lémməcəl 'Am I going?'

lémməcəx^{W} 'Are you going?'

lémə ʔé·ɬtəl 'Are they going?'

lémə yiθéʔ 'Are those people going?'

(AC,NP) lémməcəx^{W} t'à·k'^{W} 'Are you going home?'

(EB) lémməcəp táwəl 'Are you folks going to town?'

(Cp. lí· lém ʔé·ɬtəl 'Are they going?' and lí· lém 'Is he going?')

4. sk'^{W}éyə k'^{W}əls k'^{W}éclex^{W} ~ sk'^{W}éyɛ k'^{W}əls k'^{W}éclex^{W} 'Can't I see it?'

sk'^{W}éyə (~ sk'^{W}éyɛ) k'^{W}ɛs k'^{W}éclex^{W} 'Can't you see it?'

sk'^{W}éyə k'^{W}(ə)s k'^{W}éclex^{W}s 'Can't he see it?'

sk'^{W}éyə k'^{W}əs k'^{W}éclex^{W}cət 'Can't we see it?'

sk'^{W}éyə k'^{W}ɛs k'^{W}éclex^{W}ələp 'Can't you folks see it?'

k'^{W}é·yɛ k'^{W}ɛs k'^{W}éclɐx^{W} 'Can't you see it?'

k'^{W}é·yɐ k'^{W}ɛs k'^{W}éclɐx^{W}ɐlɐp 'Can't you folks see it?'

(Cp. sk'^{W}é·y k'^{W}ɐls k'^{W}éclɐx^{W} 'I can't see it.', etc. and lí ʔiyá·lɐm k'^{W}ɐls k'^{W}éclɐx^{W} 'Can I see it?')

5. ʔɛ sƛ'íyɛ k'^{W}ɐ qá· 'Do you want some water?'

lí ʔɛ sƛ'í k'^{W}ɐ qá· 'Do you want some water?'

6. ʔɐwé lís yéθɐstàlèm 'Did(n't) they tell you folks?, Weren't you folks told?'

ʔɐwé ʔɛ sƛ'íyɐs k'^{W}ɐs k'^{W}éclɐx^{W}cɐt 'Don't you want us to see it?'

ʔɐwéɬ lɐ t'íɬɐmɐθàm tɐ syúwɬs 'Didn't he ever sing his spirit song to you?'

wɛ́·tɛ ʔɛ sméyéθ 'Have(n't) you got any meat?' (lit. 'Is it none, your meat?')

ʔɐwétɛ k'^{W}ɐ lɐ q^{W}élsθà·m 'Did nobody/Didn't anybody speak to you?' ('Is it nobody that spoke to you?')

(EB) wɛ́·tɛ st'élmɐx^{W} 'Do(n't) you have any medicine?' (lit. 'Is it none, the medicine?')(a more strict translation would be 'Is(n't) there any medicine?')

(Cp. ʔéwɐ lís yéθɐstàlèm 'They didn't tell you folks., You folks weren't told.', ʔéwɐɬ lɐ k'^{W}éclà·m 'He didn't see you., You weren't seen.', and ʔéwétɛ k'^{W}ɐ lɐ q^{W}élsθà·m 'Nobody spoke to you.')

7. ƛ'á· k'^{W}ɐl méle 'Is that my child? (you're talking about' (unclosed parenthesis within a gloss indi-

cates semantic context)

ƛ'á· (~ ƛ'á$^{\ominus}$) k'^{W}ə spéɬχəl 'Is it the prairie?'

ƛ'á?ɛ su lém̓s yiəé 'Are those people going?' (ƛ'á· ?ɛsu?)

(Cp. ƛ'a təl mél̓ə 'That's my child.')

8. ləwé· 'Is it you?'

ləwé·, ídí 'Is it you, Edie?'

(Cp. lém̓wə 'It's you (sg.)')

9. spé·θə 'Is it a bear?' (rare)

sc'á·ɬé$^{\ominus}$ 'Is it a leaf?' (rare)

(Cp. spé·θ 'It's a bear.', sc'á·ɬɛ 'It's a leaf.',

and lí· spé·θ 'Is it a bear?' (AC, MC, etc.))

6.1.8. Tense (present, past, future). Present tense is the catch-all tense, used to indicate present action (which must be continuing as the speaker speaks --continuative aspect), habitual action (which may be spread over past, present, and future), momentaneous action (which the speaker is about to perform -- non-continuative aspect), and past action (historical present in narratives, legends, etc.). Present tense is the unmarked tense. Past tense is marked by {-ɬ} on a preposed auxiliary verb or syntactically by preposing subject pronoun affixes of 4.4. It can refer to past time of any depth, duration or iteration. It can also be used interchangeably with historical present in narratives or stories. Future tense is

marked by verb final {-cɛ} or syntactically by auxiliary lɛ 'going to' (as in English "I'm going to go."). It can refer to future action of any depth, duration or iteration, but it cannot begin momentaneous to the time of speaking -- that is, the action may be imminent in five minutes, five hours or fifty years but not in five seconds with the actor already poised to begin (that would be present non-continuative). Future is also translated by 'will' + verb + 'in a while'. The same pronoun sets are used for all three tenses. Some examples will contrast the tenses: p'éθ'cel 'I sew, I'm going to sew (momentarily, holding the needle)', p'éθ'celcɛ 'I'll sew (in five minutes, five hours, or tomorrow)', p'ép'eθ'cel 'I'm sewing', p'ép'eθ'celcɛ 'I'll be sewing', (ʔí·ɬ)cel p'é·θ'et 'I sewed s-th', (ʔí·ɬ)cel p'ép'eθ'et 'I was sewing s-th'.

Many examples of the present tense have been given already in this chapter and chapter 4; since there is no inflection for the present, not much need be added here.

Similarly, the inflection for future is quite straightforward: -cɛ is added as the last suffix on the verb word. There are no complications except for the auxiliary future: lɛ + subject pronoun suffix

(set 4.4) + verb (as in lɛcəl méyθàmè 'I'm going to help you.'). In this latter construction some displacement from the site of the speech event is usually also implied -- that is, the speaker is literally going somewhere to perform the action. It is unclear at present whether this displacement is future or momentaneous present or either one; AC implied that it could be either one. Some examples of the -cɛ future follow, showing its co-occurence with most of the other verb inflections:

p'ék^{W}cɛ 'it will float'

k'ácɛ 'that will be, it will be (him, her, them)'

səlcí·mcɛ 'how shall ...?, how should ...?'

sk'^{W}éycɛ k'^{W}els mélqles 'I'll never forget s-o/s-th'
(lit. 'it will be impossible that I forget s-o/s-th')

lícɛ sp'ɛp'ék^{W} 'Will it float?'

líyəcɛ lèm 'Will he go?' (Mamie Cooper)

?éwəcɛ mə k'^{W}éclèlèmèt 'I won't be seen., Nobody will see me.'

wécɛ lɛmél yəwé· '(Won't you take me along?), Will you take me along?, Can I go along?'

θ'íq'^{W}eθaméclcɛ 'I will punch you'

q'^{W}áq^{W}laméclcɛ 'I'll hit you accidentally'

stɛ?éstəx^{W}escɛ 'they will follow him, they will do like him' ('they' and 'him' could be replaced in other

contexts than the one in which stɛ?ésteχ^{w}escɛ was elicited by 'he/she/it/they' and 'her/it/them')

?el?éliyɛmeθaméɛlcɛ 'I'll dream about you'

ƛ'f•lsàx^{y}escɛ ~ ƛ'f•lsləsàx^{y}escɛ 'he/she/they will like me'

łfc'ełcθaméɛlcɛ 'I'll cut it off for you'

t'ft'eləmɛɛlcɛ ~ ɛelcɛ t'ft'elem 'I'll be singing' (AC uncertain on this)

mɛlqí•wsəmɛɛlcɛ 'I'll faint'

χéywəθà•mcɛ 'you'll be warned, s-o will warn you'

k'^{w}éclà•mcɛ 'you'll be seen'

?éysθèlèmcɛ 'I'll be liked'

lícx^{w} słéq'el•ex^{w} welémescɛ 'Do you know if he'll go?'

There are no examples with imperatives. No examples have yet turned up of -cɛ with reflexives or participles but they are likely to occur.

The inflections for past are somewhat more complex. The following constructions and inflections are employed for past tense:

1. Present forms can be translated as past in a narrative context (as mentioned above), even narrative in conversation, and after past time adverbial verbs (like 'before', 'long ago', etc.).

2. A past tense is formed by pre-posing subject pronouns in set 4.4 as independent words in front of

the verb (see pronoun chapter under 4.4); this is sometimes also translated by present tense, perhaps depending on context.

3. Subject pronouns 4.4 can be suffixed to a meaningless auxiliary verb ʔə́ ≟ ʔə́ ([ʔɪ́] ~ [ʔə́]) and remain pre-posed to the main verb; this construction seems to be used like the past tense in 2 just above. Also {ʔə́} + t'wə 'must' + wəɬ 'already' (//ʔə́ t'wə wəɬ// → /ʔə́t'wo(w)ɬ/ ~ /ʔə́t'wo(w)ɬ/ 'must have, must have been'.

4. Subject pronouns 4.4 can be affixed to the past tense suffix -ɬ; -ɬ usually is affixed to an auxiliary or negative or interrogative verb preceding the main verb. There are many types of these constructions, and none can be translated with present tense:

4.1. ʔɪ́·-ɬ-4.4 m.v.(=main verb) past tense

ʔɪ́·-ɬ-4.4 t'wə m.v. 'must have, must have been'

ʔɪ́·-ɬ ʔiyə́·ləm k'^{w}-4.8-s m.v. 'could have'

4.2. d.a.(=demonstrative article) ʔɪ́·-ɬ 4.6 s-subord.verb past relative (as in 'what you folks wanted')

d.a. ʔɪ́·-ɬ (lə) subord.verb past relative (as in 'the one who escaped')

d.a.-4.8-s ʔɪ́·-ɬ subord.verb past subordinate (as in 'it was loud, your past laughing')

d.a.-4.6 sx^{w}-subord.verb-ɛɬ past relative (as

in 'where I used to walk')

4.3. lí·-ɬ-4.4 m.v. past tense

4.4. lí·-ɬ-ɛ-4.4 m.v. past interrogative

4.5. lém-eɬ-4.4 m.v. auxiliary past with lɛ(m)
mí·-ɬ-4.4 m.v. auxiliary past with mí·

4.6. ?éwe-ɬ-4.4 m.v. ~ ?éwe-4.4-ɬ m.v. negative past habitual, 'never'
?ew-éɬ-4.4 (?í·, lí·)-4.9b m.v. negative past habitual, 'never'
?ew-éɬ-4.4 m.v.-4.9a negative past habitual, 'never'
?ew-ɛ-4.4-ɬ (?í·-4.9b) m.v. neg. past habitual, 'never'

4.7. ?ew-é-ɬ-4.4 (le) m.v. neg. past interrogative

4.8. adverbial Vi-eɬ past adverbial

(weɬ 'already' is an adverbial verb or particle which may have -ɬ 'past' or lack it; its derivation is unclear. le weɬ m.v. is a completive construction generally in the past because of pre-posed le (note that le weɬ always —> /luɬ/); but lí weɬ (the interrogative version of le weɬ) shows present is possible as well as past: lí weɬ lém 'Is he already gone?, Has he already gone?'. weɬ is often merged with preceding unstressed words and becomes -wɬ or -uɬ (as in luɬ, k'^{W}ewɬíθeɬ (AC) ~ k'^{W}uɬíθeɬ (EB, et al), ?ét'wewɬ ~ ?ét'wo(w)ɬ).

Examples:

1. yéθəstəxʷcəxʷ 'you told him, you tell him'

yéθəstálxʷəs 'he told us, he tells us'

lícxʷ xʷə?í·lxʷ 'did you bring it?'

lí· lɛ héwe 'has he gone hunting?'

líye méyθà·m 'were you helped?'

?éysθèlèm 'I was liked, I am liked' (Passives are usually translated with past tense. Questions often are too.)

?íɬ χét'e kʼʷəs xʷə?í·s kʼʷe sχéχəɬèt 'He said he'd come on Sunday.'

?í·ɬcxʷ χét'e kʼʷəs mə méyθàxʸ 'You said you were coming to help me.'

ɬíθ lís ɬəq'él·əxʷ 'She knew long ago.'

yəlέw sχéχəɬèt kʷsəs xʷə?í· 'He came after Sunday.'

yəwélməls kʼʷəs xʷə?í· tə xʷəlítəm 'before the white man came'

2. cəl ?á·xʷəst 'I gave it'

cəl yéθəstəxʷ 'I told him'

lə pətláxʸəs 'he recognized me'

lə lèm 'he went'

lə lèm tlàwéyél 'he went today'

lə lɛ héwe $\overset{f}{=}$ lə lèm héwe 'he's gone hunting'

?íɬcəxʷ tus?éy?èl kʼʷəs lə léyəm 'you were laughing softly'

təmtə́m k'^{W}ɛs lə θíyt 'When did you make it?'

(Normally subordinated past uses lə (in any person).)

cəl k'^{W}ə́clàmə̀ 'I saw you'

lə c'əməθáx^{y}ɛs 'he bit me'

lə mə́yθà·m 'you were helped'

lə mə́ytəm 'he was helped'

lə mə́yθələ̀m 'I was helped'

lə k'^{W}ə́clə̀lə̀m 'I was seen'

lə q^{W}ə́q^{W}əl 'he was talking'

lə q^{W}ə́·lq^{W}əltəl 'they were talking together'

(The next four examples show present translation in spite of inversion.)

cəl ʔí·k'^{W}əlà 'I'm here'

lə ʔí·k'^{W}əlà 'he's here'

cəl t'íɬ'ələm 'I'm singing'

cəl ɬí·m 'I'm picking (fruit)'

lə ʔə́ɬtəl 'he (she, etc.) ate a meal'

lə ʔí·ɬtəl 'he's (she's, etc.) eating a meal'

ʒ. ʔə́cəl lə̀m 'I went' (cp. cəl lə̀m 'I went')

(ʔə́cəl, ʔə́cəx^{W}, ʔə́cət, ʔə́cə́p) ʔə́ɬtəl '(I, you, we, you folks) ate a meal'

(Note: {ʔə́} is not found in third person, only lə.)

ʔə́cəl ɬí·c' 'I got cut'

ʔə́cəx^{W} x^{y}á·lí·s 'you went into fatal shock'

ʔə́cəl k'^{W}ə́clex^{W} 'I saw him, I see him'

ʔéc̓əl θ'á·ɬəm 'I got cold'

ʔéc̓əl θ'áθ'əɬəm 'I'm still cold'

(ʔé)cəl cá·ləx̣^{w}əm 'I'm bleeding'

ʔécəx^{w} x^{w}əʔí·t; ʔéwəcəlɬ təl·á·məɬ 'What did you say?; I didn't understand.'

ʔéc̓əl sí·silàlè 'I scared you folks'

ʔéɬ'wo(w)ɬ lèm 'He must have gone., He/She/It/They must be gone.'

4.1. ʔí·ɬ lèm 'he's gone, he went'

(ʔí·ɬcəl, ʔí·ɬcəx^{w}, ʔí·ɬcəɬ, ʔí·ɬcɛp) lèm '(I, you, we, you folks) went'

ʔí·ɬ x̣éɬ'ə 'he said'

ʔí·ɬcəx^{w} ʔí·k'^{w}əlà 'you were here'

ʔí·ɬcəx^{w} lí· tí k'^{w}ɛs t'íɬ'ələm 'you were over there singing'

ʔí·ɬcəl t'íɬ'ələm 'I was singing'

ʔí·ɬcəx^{w} lé·yθàx^{y} 'you were laughing at me'

ʔí·ɬ(cəl, -cəx^{w}, -cəɬ, -cɛp) q'áq'əy '(I, you, we, you folks) was/were sick'

ʔí·ɬ q'áq'əy θúɬ'à 'she was sick'

ʔí·ɬcəl x^{w}éyθəqəl 'I was interpreting'

ʔí·ɬcəx^{w} ʔəlécɛ 'where have you been?, where were you?'

ʔí·ɬcəx^{w} x^{w}əʔí·(yə)t 'what were you doing?'

ʔí·ɬcəl t'we ʔí·təɬ 'I must have been sleeping/asleep'

ʔí·ɬ ʔiyáləm k'^{w}s ʔéɬtələlép 'you folks could have

eaten' (lit. "it was alright that you folks eat")

4.2. tə ʔɬ·ɬ ʔɛ sƛ'ɬyələp 'what you folks wanted'

tə ʔɬ·ɬ lə ƛ'ɬ·w 'the one who escaped'

x^{w}ayɬwəl təl sq^{w}élewəl k'^{w}əs lə tés tə ʔɬ·ɬ ʔɛ sk^{w}é·l

'I'm happy (my thoughts/feelings are happy) that it has come to (the occasion of) your past birth.'

(translation by NP of the Happy Birthday song)

ʔɬ·ɬcəx^{w} sθɬ·qəl k'^{w}ɛs ʔɬɬ lé(·)yəm 'You were laughing loudly.'

təl sx^{w}ʔɬ·məx^{y}ɛɬ 'where I used to walk' (from a song as sung by CT)

4.3. lɬ·ɬ(cəl, -c$ə x^{w}$, -cət, -cɛp) q'éq'əy '(I, you, we, you folks) were sick'

lɬɬ q'éq'əy (túƛ'à, θúƛ'à, yəθé) '(he, she, they) was/were sick'

lɬɬcəl hé·wə 'I've been hunting'

lɬ·ɬcəl lɛ t'ák'^{w} 'I went home'

lɬ·ɬcəl 'I was'

lɬ·ɬcət 'we were'

lɬ·ɬ ʔéysθà·m 'you were helped'

lɬ·ɬcəl q'^{w}eyél·əx^{y} 'I was dancing'

lɬ·ɬcəl lɛ q'^{w}eyél·əx^{y} 'I went dancing'

4.4. lɬ·ɬɛ(cəl, -cx^{w}, -cət, -cɛp) mɛmíyət θə Mary '(Was I, Were you, Were we, Were you folks) helping Mary?'

lí·łɛ mɛmíyetes tú·ʔ'à θe Mary 'Was he helping Mary?'

lí·łɛ lí· yiθé 'Were they (those people) there?'

lí·łɛ lí· ʔé·łtəl 'Were they there?'

lí·łɛcx^{w} lí· 'Were you there?'

líłɛcɛx^{w} x̌è·m 'Were you crying?'

líłɛcɛp lèm k'^{w}ə táwel 'Did you folks go to town?'

4.5. lémə́łcel méyθàmè 'I was going to help you'

lémə́łcɛx^{w} méyθàx^{y} 'You were going to help me'

mí·łcɛx^{w} méyθàx^{y} 'You were coming to help me'

4.6. ʔéwəcəlł q^{w}élsθàmè 'I don't speak to you., I never speak to you.'

ʔéwəcx^{w}ł q^{w}élsθàx^{y} 'You don't speak to me., You never speak to me.'

ʔéwəł q^{w}élsθàx^{y}ès (tú·ʔ'à, θú·ʔ'à) '(He, She) doesn't speak to me., (He, She) never speaks to me.'

ʔéwəcətł q^{w}élsθàmè 'We (don't, never) speak to you.'

ʔéwəcɛpł q^{w}élstàlx^{w} 'You folks (don't, never) speak to us.'

ʔéwəcəlł lèm 'I never go'

ʔéwəcəlł lɛ q'é·θət 'I never go mix (with them)'

ʔéwəł lə k'^{w}éclà·lèm 'He doesn't see you folks., You folks are never seen.'

ʔéwəł lə k'^{w}éclèlèm 'I wasn't seen., (I was never seen)'

(cp. ʔéwə lís k'^{w}éclèlèm 'I wasn't seen.')

(ʔéwəcəlł, ʔéwəcətł) təl·é·mət '(I, We) don't under-

stand.'

ʔéwəɬ təl·á·məɬ 'He doesn't understand.'

ƛ'ák'ʷsəlcí·ms/xʷeʔíɬ ʔɛs ʔéwəɬ qʷélsθàxʸ 'Why is it you don't talk to me?' (ʔɛs probably sic for k'ʷɛs)

(The next five examples are from EB:)

ʔéwəɬcəl k'ʷὲ·y (and ʔéwəɬcəl k'ʷέk'ʷəy) 'I'm never hungry.'

ʔéwəɬcəl xʷlɛlὲ·m 'I never listen.'

ʔéwəɬ ʔíɬət 'He never sleeps.'

ʔéwəɬ χὲ·m 'He never cries.'

xʷʔíɬ k'ʷɛ́(ʔɛ)s ʔéwəɬ nɛ́·k'ʷələs 'Why don't you (ever) remember?' (k'ʷɛ́ʔɛs is hyperslow equivalent of k'ʷɛs and is found in EB's idiolect but not in AC's)

(The remaining examples are from AC unless noted.)

ʔəwɛ́ɬcəl ʔíl sƛ'íƛ'əqəɬ [f] ʔəwɛ́ɬcəl sƛ'íƛ'əqəɬɛ́l 'I wasn't a child., (I wasn't ever a child.)'

ʔəwɛ́ɬcəxʷ líxʷ sƛ'íƛ'əqəɬ 'You weren't a child.'

ʔəwɛ́·ɬcəl líl líl 'I was never there.'

ʔəwɛ́·cxʷɬ təl·á·məɬ 'You don't understand.'

ʔəwɛ́·cɛpɬ təl·á·məɬ 'You (pl.) don't understand.'

4.7. ʔəwɛ́ɬ lə t'íləmθὰ·m tə syúwɛ́ls 'Didn't he ever sing you his spirit song?' (This is the only example of 4.7 but is convincing because ʔəwɛ́ is negative interrogative, as in ʔəwɛ́cxʷ lɛ́məxʷ 'Will you go?' or ʔəwɛ́cxʷ t'íləməxʷ 'Will you sing?, (Won't you

sing?)')

4.8. ɬéq'əɬ 'used to' as in ɬéq'əɬ x̣ét'e yé x^{W}ələməx^{W} 'the people used to say'(EB) and (EB) ɬéq'əɬ wiyáθ c'í·yəɬ yé x^{W}ələməx^{W} k'^{W}uwɬíθəɬ 'The (Indian) people used to pray all the time long ago.' (AC would have c'əhéyəɬ 'pray'; k'^{W}uwɬíθəɬ < k'^{W}e weɬ híθ -əɬ 'what' + 'already' + 'is a long time' + past tense)

(AC) lé·tɛɬ 'morning' (ɛ-lé·t 'night', lɛlé·t or lɛ lé·t 'getting night', -əɬ 'past')

(AC) spəlwéɬ 'last year'

(AC, EB) cəléqəɬ 'yesterday' and cəléqəɬəɬ 'it was yesterday' (latter is used in sentences more than the former)

6.1.9. Plurals and Diminutive (plural subject, plural object, plural action, plural completive, repeated action, and diminuative). In something over 1200 verbs, 53 were found with special inflections for plurality. Since all but one or two were volunteered without being asked for the pattern is apparently quite productive in the language. Most of the forms came from the Coqualeetza Elders Group or EB; few came from AC but she also knew fewer nominal plurals. The pattern for pluralizing verbs is much the same as for pluralizing nominals: reduplication R_3-, less often -R_2, and sometimes infix -lə- or -əl-. The suffix

-f•m 'repeatedly' (treated as a lexical suffix in the previous chapter) seems to also belong here. These inflections can semantically pluralize the subject, the object or the action; this pluralizing often includes a 'continuative' aspect; an additional type will also be cited in which pluralization includes a 'completive' meaning.

When the subject or object is pluralized, the corresponding pronoun must be plural too if possible (unless the semantic subject or object is a body part). Note that subject and object pluralizing is done in the examples only with R_3- or -əl- ~ -lə-. Action pluralizing is done with -R_2, R_3-, or -f•m.

.1. Plural subject (agent):

ɬəmɬf•m 'lots of people picking' (ɬf•m 'pick, picking (fruit, leaves, etc.)')

lilək^{y}á•ltɛ 'a bunch playing cards' (ləkʲá•ltɛ 'one person playing cards (solitaire or patience)' (-lə- and Ai))

possíbly pəɬpéɬ 'get crowded out' (péɬ 'get crowded')

.2. Plural subject (patient):

χ^{w}əɬχ^{w}éɬəpx^{y}əl 'slip with both feet, lose balance with both feet' (χ^{w}ɬépx^{y}əl 'slip off or lose balance with foot', χ^{w}éɬəpx^{y}əl 'slipping off with foot')

s?ək'^{w}?f•k'^{w} 'a lot of people lost and presumed dead'

(s?f·k'^{W} 'one person lost and presumed dead', ?f·k'^{W} 'lost')

məq'^{W}méq'^{W} 'squished, crushed (of round plural objects, like berries)' (méq'^{W} 'squished, crushed (of round object)')

?á·ləq'^{W} 'a lot rubbed off' (?íq'^{W}əm 'smear, rub(bed) off, fade (of material)')

θ'əlíθ'əplex^{W} '(lots of) eyes being closed; wineberries' (both θ' ~ c')(θ'íθ'əplex^{W} 'one eye being closed, closing one's eye')

?ɛl(ə)yámex^{y} '(plural) good-looking' (as in ?ɛl(ə)yámex^{y} sɬəlɬé·lf 'good-looking women')(?ɛyámex^{y} '(sg.) good-looking')

possibly ləc'lé·c'təl 'be of different colors, be variegated' (lé·c' 'be different')

possibly st'əlt'élq 'spotted with lots of spots' (st'é·lq 'spotted')

.3. Plural object:

pəq^{W}péq^{W}ət 'break it in pieces (with hands)' (peq^{W}át 'break it in half with hands (apple, orange, etc.)')

pəq^{W}péq^{W} 'broken off in pieces (riverbank, etc.)'

səq'séq'ət 'chopping lots of wood' (séq'ət 'chop wood', səq'ét 'split s-th', sísq' 'kindling')

ləmlémət 'fold things (like the laundry)(pl. obj.)'

χ^{W}əyχ^{W}iyém 'tell stories' (χ^{W}iyém 'tell a story')

ɬáleqʷət 'wetting many things' (ɬáqʷət 'wet s-th', ɬéqʷ '(be) wet')

ɬéləq'ət 'put down several objects' (ɬéq'ət 'put/lay s-th down, put down one object')

.4. Plural action:

xʷəxʷəmxʸələ́m 'running on and off' (xʷámxʸələm 'running')

For derivation of other examples in -í·m 'repeatedly', c'éc'əƛ'í·m 'jumping up and down, jumping along, jumping repeatedly', tètí·m 'hollering more than once, shouting repeatedly', t'éc'əχələ́m 'splitting roots unevenly', xʷtiytí·m 'eddy water, to eddy upstream' (become upstream repeatedly), xʷəlk'ʷí·m 'an eddy' (nominal < petrified verb), xʸc'í·məət 'repeatedly smell oneself stink', see lexical suffixes under -í·m 'repeatedly'.

Inflection by reduplication:

t'əɬt'éɬəq'ʷəls 'scratching repeatedly to get in' (t'éɬəq'ʷəls 'scratching to get in')

t'əɬt'éɬəq'ʷətəs 'it has scratched s-th up' (cp. t'éɬəq'ʷətəs 'he scratched on s-th')

t'élt'ələm 'continuing on singing (songs)'

kʷámkʷəm 'thudding of footsteps on ground (person, horse, etc.)' (kʷém 'to thud (dull, earthen sound)')

ƛ'élƛ'ələqʷ 'making continuous explosions or shooting

or popping sounds' (ƛ'ółəq'^{W} 'to explode, make a pop or shot')

q'é·yq'ey 'always sickly' (q'éq'ey 'sick; dying')

ɬémɬəmex^{W} 'rainy (off and on)' (ɬémex^{W} 'to rain')

yélyələsəm '(have) a steady toothache' (yélš 'tooth')

ə'épə'əplex^{W} 'blinking' (ə'épləx^{W} 'blink once, close eyes once')

q^{W}əlq^{W}éləm 'grumble', q^{W}élq^{W}əl 'be rowdy', and q^{W}əlq^{W}elé·yəəl 'talk(ing) too much' (q^{W}è·l 'talk')

líyliyəm '(doing) lots of laughing' (líyém 'to laugh')

ləmləmé·təs 'he kicked them around (shoes, for ex.)' (ləmé·təs 'he kicked s-th')

k'^{W}éck'^{W}əc(məT) 'expect (s-o)' ("look repeatedly (for s-o)")

wélwəlè·m 'echoing'

ʔécʔəc 'stuttering'

possibly qəlqəlí·ləət 'get oneself dirty' (qél 'bad, dirty', R$_{3}$ 'plural, repeatedly', -í·l 'go, get, become', -əət 'oneself')

.5. Plural > 'completive' (often translated by past participle + 'up')

x̌^{W}ətx̌^{W}ét 'torn up (in pieces)' (x̌^{W}ét 'torn (as of clothes, etc.)')

lékʷlekʷ 'all broken up (of sticks, of bones (in multiple breaks like in accident))' (lékʷ 'broken (of

bone or stick)')

x̌əpx̌épk'^{W}təs 'he chewed up s-th hard' (x̌épk'^{W}təs 'he chewed s-th hard')

q'^{W}élq'^{W}əl 'overripe' (q'^{W}él 'ripe; cooked')

possibly pəɬpéɬ 'get crowded out' and t'əɬt'éɬəq'^{W}ətəs 'it has scratched s-th up', both cited above (in .1 and .4 respectively)

ƛ'əx^{W}ƛ'éx^{W}təm 'badly beaten, really lost (a contest)'

In a few examples there is stress shifting which may be derivational but seems to play no consistent part in the pluralizing process. (Incidentally it seems that both yélyələsəm and ƛ'élƛ'ələq'^{W} have CVCVC roots and must have stressed R_3 since R_2 is suffixed to roots.)

.6. Diminutivization:

A few examples have also turned up of diminutivized verbs, using R_4- as their inflection just as nominals do. The process is so much like pluralizing that the examples may as well be given here:

ɬiɬí·m 'picking a little (bit)' (ɬí·m 'pick, picking (fruit, leaves)')

qíqəl 'be a little bad, be naughty' (qél 'be bad')

k^{W}ik^{W}ək^{W}cé·m 'scream a little, squeal' (k^{W}ək^{W}cé·m 'to scream')

ʔiʔɛx̌íθ 'little baby lying down' (ʔéx̌əθ 'lie down',

ʔé·χəθ 'lying down')

qiqelé·m 'weak' (qelé·m 'weak', presumably more so than qiqelé·m))

sxʷixʷáxʷəθ 'be stupid, be a little crazy' (sxʷáxʷəθ 'be insane, be crazy')

χíχè·m 'to sob' (χè·m 'to weep, cry')

sesí·si 'scared a little' (sí·si '(be) scared', R_5- or a dissimilation from *sisí·si)

qʷíqʷelèc 'to gossip' (little talk on the rump)

As with the pluralized verbs, the diminutive sometimes applies to the subject (ʔi?ɛχíθ), sometimes to the object (ɬiɬí·m), and most of the time to the action (all the rest of the examples, perhaps including ɬiɬí·m). There is more stress shifting here than in the pluralized examples since R_4- is supposed to be stressed.

6.1.10. Internal Syntax of the Verb and Co-occurence of Verb Inflections. Verb inflections are prefixed, infixed and suffixed, and these processes are sometimes combined for one inflection. Where there is more than one prefix, more than one infix, or more than one suffix they can be seen to be added in particular sequences. Infixing processes are used for continuative (6.1.4), participles (6.1.5) and pluralized verbs (6.1.9) and include R, A, stress shift,

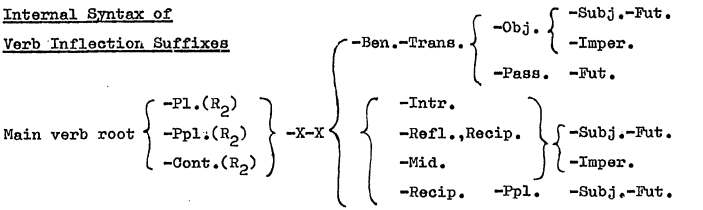
vowel metathesis, and -el- ~ -le-. It seems these processes occur in a certain order as processes, regardless of the inflections they are used for. From examples like θ'əlíθ'əpləx^{w} 'eyes being closed', ɬiɬí·m 'picking a little', ʔiʔɛxíθ 'little baby lying down', and so on, we can infer the order of these processes to be: first reduplication, then ablaut or vowel metathesis, then -el- ~ -le-, then stress shift. Examples from nominal inflection confirm this order.

The following prefixes are used in verb inflection: {hɛ-} 'continuative', R_5- and R_8- 'continuative', s- and s- + R 'participle', we- 'subjunctive', R_3- 'plural', and R_4- 'diminutive'. There are few examples of any of these occuring together (like sx^{w}ix^{w}á(·)x^{w}əʔ 'a little crazy, stupid'), but several things can be noted from what occurs and what does not. There are no examples of reduplication prefixed twice in the same word; there are no examples of participles prefixed with {hɛ-}; participles are all continuative semantically whether reduplicated or not, but if the participial R is continuative prefixed R_5- or R_8-, as it sometimes is, note that the participial s- always precedes it. Since the following pairs do not co-occur, {hɛ-} and R-, {hɛ-} and s-, R- and R-, the internal syntax of verb prefix inflections can be summed up as:

s- precedes R- ('diminutive', 'continuative', 'participial'), and we- 'subjunctive' precedes s- 'participial' or hɛ- 'continuative' or R- ('continuative', 'participial', 'plural' or 'diminutive').

There are many more verb suffixes than prefixes and infixes, but their internal syntax can be described by charts after grouping them in the following sets:

Subj. = pronoun sets 4.4, 4.8 (3rd person, 1st and 2nd persons pl.), 4.9a
Obj. = pronoun set 4.5
Pass. = pronoun set 4.10
Trans. = control transitivizer in 6.1.2.1 (-(ə)T,-l,-sT, -(ə)x^{y},-məT,-(ə)ləs)
Intr. = intransitivizers in 6.1.2.2 (-əm,-ɛ́·ls,-θət)
Ben. = benefactive -əɬc in 6.1.3
Refl. = -lá·mət and -(ə)θət in 6.1.3
Recip. = -təl in 6.1.3
Cont. = $-R_2$ in 6.1.4 (the only continuative suffix)
Ppl. = participle suffixes -əm (probably 'middle') and -təm in 6.1.5
Ppl. (R_2) = participle suffix $-R_2$ in 6.1.5
Mid. = -əm 'middle voice' in 6.1.6
Imper. = imperative suffixes in 6.1.7 (-ɬɛ,-ɛɬɛ,-(t)ɬ, -cəx^{w},-cɛp,-cət,-ɬ̀wə̀ɬ ~ -ɬ̀wə̀ɬ,-ɬq^{w}ə)
Interrog. = -ə ~ -ɛ́ ~ -ɛ́· as in 6.1.7
Past = -ɬ (i.e. -ɬ ~ -əɬ ~ -ɛɬ) as in 6.1.8
Fut. = -cɛ as in 6.1.8
Pl. = pluralizer $-R_2$ as in 6.1.9
X = lexical suffix
Aux. = ʔí·, lí·, lɛm, mí(·), ʔɛ́wə
Adv.Vi = adverbial intransitive verbs



Aux. (-Past,-Interrog.)
lí· -Past-Interrog.
ʔewé ('never') -Past
ʔewe(-Past,-Interrog.(-Past)) } 4.4 subj. pronouns

ʔewe(-4.4-Past,-Interrog.-tɛ)

some Adv.Vi-Past

((s)kʼʷé·y,sʌʼí(y),ʌʼá·,lówe (other 4.1ʔ),rarely stative nom.)-Interrog.

(A) = A is optional

(A,B) = A or B is obligatory

Co-occurence of Verb Inflections Within the Main Verb Word.

(Here Cont. = any continuative affixes; Ppl. = any participle affixes; Sbjn. = subjunctive affixes; Pl. = any plural affixes and the diminutive prefix; ? = unattested but probable; +A = +A and -everything else.)(notes on p.319).

	Subj. +Obj.	Trans.	Intr.	Ben.	Re-fl.	Re-cip.	Cont.	Ppl.	Voice (A,M,P)	Sbjn.	Im-per.	Inter-rog.	Fut.
Trans.	+												
Intr.	+Subj.	-[3]											
Ben.	+	+	-										
Refl.	+Subj.	-	+	-									
Recip.	+Subj.	-	+?	-	-								
Cont.	+	+	+	+	+	+							
Ppl.	+Subj.	-	+	-	-?	+	(+)						
Voice	+	+	+A	+	+A	+A	+	+A,M -P?					
Sbjn.	+	+	+	+?	+?	+?	+	+?	+				
Imper.	-[4]	+[5]	+	+	+	+	-	-	+A -M,P?	-			
Interrog.	+Subj.	-	+ɛm	-	-	-	-	-	-	-	-		
Fut.[6]	+	+	+	+	+	+	+	+	+	+	-	+	
Pl.	+	+	+	+?	+	+	+-f·m	+	+A,M +P?	+?	+	-?	+

Notes to chart on preceding page:

3. + only if one considered -məT 'transitivizer' as -m 'intransitivizer' + -əT 'transitivizer (purposeful control)'.

4. or +Subj. (2nd person sg./pl., 1st person pl.)

5. but minus -l and -(ə)ləs

6. If past tense -ɨ were substituted in this row the row would read nearly as the row above it does (all entries minus except +Subj. in column one)(Past + Interrog. would be plus while Past + Pl. would be minus).

6.2. Types of Intransitive Verbs (Vi's).

6.2.1. Plain Vi. This type corresponds to the English intransitive verb. In Halkomelem there are several groups: unaffixed, intransitivized, and derived but not intransitivized.

Unaffixed: t'éq'^{W} 'it broke (rope, breath), to break, run out (of breath)', péq^{W} 'break in two, split', yéq^{W} 'burn', móq'^{W} 'burst or pop (of balloon), smashed (of spherical object)', ʔá·ɬ 'get aboard, get in a canoe (or later: in a wagon, car, etc.)', k'^{W}ʔy 'climb (tree or ladder)' (k'^{W}ʔyəqəl 'climb a rock or mountain'), mɨ ~ ʔəmɨ 'come', ʔéχəθ 'lie down', x^{W}ʔy 'wake, open (of plants)', θéχ^{W} 'go out of sight, disappear', ʔéliyɛ 'to dream', wóq'^{W} 'drown', c'éyx^{W} 'to dry', céɬq 'fall (through air), drop' (cp. hɨɬém 'fall and tumble, tumble' and wec'éɬ' 'fall off, drop down'), ɬás 'to drift-net', p'ók^{W} 'to float', ɬá·k'^{W} 'to fly', q'ép 'gather', tés 'get near', lehél 'play slahal'. These are plentiful; nearly one-fifth of the intransitive verbs appear to be of this type (for example, about 150 out of a list of 850 Vi's).

Intransitivized: See 6.1.2.2 for examples with -é·ls (~ -els), 6.1.6 and 6.1.2.2 for examples with -əm (~ -m ~ -ém ~ -é·m ~ -à·m), 6.1.3 for -(ə)θət (possibly an intransitivizer) and 5.2.3 for -ɨ·l ~ -əl 'go, come,

get, become' (another possible intransitivizer). Many examples are given in these sections and include some derived intransitivized forms as well as underived ones.

Derived but not intransitivized: sí·si 'to fear, be afraid, be scared' (R), x^{W}ətiyéqəl 'to answer, reply' (-əqəl), c'əq'^{W}ó·wəɬ 'weave a fine-cedar-root basket' c'éq'^{W} 'poke, pierce, weave fine cedar roots', -ó·wəɬ), t'(ə)k^{W}í·les 'choke on food' (-í·ləs), q'^{W}əyí·lex^{y} 'dance' (-í·l, -ex^{y}), k^{W}í·məl 'get red, turn red' and məθ'í·l 'get blue, turn blue' and θətí·l 'go(ne) dark, get dark' (these three examples belong here unless -í·l ~ -el is an intransitivizer), qé·qə 'drink' (R), wəc'éƛ' 'fall off, drop down' (wə-), ƛ'(ə)pí·l 'go down, go downstairs' (-í·l), ɬex^{W}éɬcɛ 'spit' (-əɬcɛ), θ'iq'^{W}élcəp 'split or chop firewood' (-élcəp), ɬék'^{W}x^{y}əl 'to trip (hooked on foot)' (-x^{y}əl), x^{W}əhíwəl 'go upstream' (x^{W}ə-, -əl), wí·qəs 'to yawn' (-əs), x^{W}əx^{W}á·s 'to thunder' (-á·s), ɬəc'əlé·xəl 'cut on the arm' (-elé·xəl), x^{y}əc'ó·wəs 'store away canoe paddles' (-ó·wəs). These verbs are also numerous. They have the same intransitive force as the unaffixed intransitives.

6.2.2. Adjectival Vi. Participles function as adjectival Vi's, and many examples have been given in 6.1.5. Other adjectival verbs are also found in good

numbers; some are unaffixed and some are derived (with lexical affixes, etc.), but both sets are used the same way syntactically and semantically. Adjectival verbs are stative ('be' + adjective); they can be inflected for subject, tense, etc., but only the participles can be inflected for aspect. Adjectival verbs can also precede nominals after a demonstrative article, just as English adjectives can; in such a case the 'be' is omitted. For example, méstɛxʷ tə ckʷíʷm súkʷə 'bring (or fetch) the brown sugar, give me the brown sugar', tə hík̓ʷ xʷśtəs məstíyɛxʷ 'a big heavy person', qʷáqʷəl θə ʔiyá·mɛxʸ sɬɛ́·lí 'the pretty woman is talking', tə ƛ'í syá·ys 'the difficult work'. Comparatives and superlatives (except in a few cases like θíθə 'bigger') are formed syntactically; they are described in the syntax chapter. In a sample of 850 Vi's, 282 of them were adjectival (including participles). Here are some examples of non-participle adjectival verbs (from a list of about 125):

ʔéy 'be good', qél 'be bad, be dirty', hí·kʷ 'be big', ʔɛxʷíʷl 'be small', qéx̣ 'be many, lots, a lot of', ɬéqʷ 'be wet', ƛ'éqt 'be long (in length)', ʔé·yələxʷ 'be alive', t'éyəq' 'be angry, mad', ʔiyá·mɛxʸ ~ ʔɛyá·mɛxʸ 'be good-looking , pretty, handsome', kʼʷés 'be scalded, burned on skin', x̣éyƛ' 'be cold (of a

thing)', q'ʷɓ́l 'be dull (of an edge or point)', ləq'ɛ́·ɬ 'be in the way', p'ɓ́q' 'be white' (and the other color words listed under lexical prefix c'- ~ c-), xʷə?íywəɬ ~ xʷə?ɛ́ywəɬ 'be generous, kind-hearted', ɬsɓ́q' 'be half', ƛ'í 'be difficult, hard', xʷɓ́t(·)əs 'be heavy', kʼʷɛ̀·y ~ kʼʷɛ́·y 'be hungry', θə?í·t 'be true, it's true', ?í(·)kʼʷ 'be lost', χɛ́·ws 'be new, fresh', xʸəlá·kʼʷ 'be round', xʸəlkʼʷá·ls 'be spherical', mɓ́kʷ 'be stout, thick (around)' (EB mɓ́qʷ), ?ɛyɓ́m 'be strong', qəlɛ́·m 'be weak', ƛ'əqtá·məθ' (á· ~ é·) 'be tall (of a person)', pɬɛ́·t 'be thick', cqá·lə 'be thirsty' (EB ɬqá·lə), χɛ́yθ' 'be unripe', ɬəq'ɛ́·t 'be wide', kʼʷəscəs 'be burned on the hand', ?ɛl(ə)yá·məxʸ 'be (plural) good-looking', q'ɛ́lχ 'be unfamiliar, not known or recognized', ƛ'ɓ́p 'be low, deep', lɓ́q' 'be level', təwɛ́lə 'be tilted', q'áy 'be dead, paralyzed' (also a plain verb 'to die'), ləxʷsí·si 'be always afraid', θíθəs 'be larger, bigger', wə?ál 'be more'.

6.2.3. Prepositional Vi. There are a small number of verbs which express orientation toward nominals or pronouns, in a way similar to English prepositions. In Halkomelem they are intransitive verbs. They can have noun phrase objects or independent pronoun objects but are not inflected for object; when they are inflected for subject (which is rarely) they are translated

as stative verbs. For example, təlícəl k'^{W}ə péstəl 'I'm from the United States', k^{W}útəs təlí ƛ'é?ɛlθə 'he took it from me' (note the use of pronoun set 4.11 after prepositional verbs), k^{W}útəs təlí tə k'^{W}áx^{W}ə 'he took it from the box', lə ɬá·k'^{W} təlí tə cá·k^{W} 'he flew from far away'. Not all of these verbs are as straightforward as təlí 'from, be from'; some are inflected as participles; some also share features of nominals or adverbial Vi's. More research remains to straighten out these latter features. Some prepositional verbs are:

1. lí 'at, to, in' (EB sometimes replaces this with lé; both may indicate (besides the gloss given) some displacement from the speaker or actor. Tait and Chehalis dialects also have ?í in place of lí, perhaps indicating no displacement from the speaker or actor; almost certainly lí and lé and ?í are historically < lí(·) 'be there', lé(m) 'go(ing)(to)', and ?í(·) 'be here', respectively.)
2. təlí 'from, be from; than (with comparatives)' (related to lexical prefix təl-)
3. ɬə?é 'via, by way, through'
4. x^{W}əlé(m) 'over to, as far as, towards, against, through (?), for (?)'
5. yəléw 'past, after' (-x^{y} ~ -T 'pass by s-th/s-o')

6. yewé·lməls 'before'

7. stətís 'near, close, beside' (-T 'be near s-o')

8. sc'ec'é 'on top of, astride'

9. sq'á, sq'əq'á 'together, with' (-məT 'stay together with s-o', (q'ə)q'á·θət 'mix/associate/go with s-o')

10. slí·w 'inside (a container)'

11. sk^{w}ətéx^{w} 'inside (a house, cave)' (k^{w}téx^{w}T 'let s-o in (a house)')

12. stɛ?é 'similar to, like' (Tait, Cheh. st'ɛ?é ~ st'é) (stə?éstex^{w} 'follow s-o, do like s-o')

13. sƛ'əpá·lweɬ 'below, under, underneath; the underside'

14. scəɬsá·lweɬ 'over (in the air), above; the upper side'

15. slə?á·lweɬ 'on the other side, across; the other side'

16. slə?á·θəl 'across'

Some examples of these verbs in action:

1. lí tə sƛ'əpí·wəl 'in the shirt', lí tə sqəlx^{w}éləs 'in his throat', k'^{w}écətəs lí k^{w}θɛ lélem 'he saw it in your house', lí tə sq'ép 'at the gathering', lí k'^{w}ə sə'á·məs 'in Victoria', lí tə ?ɛlx^{w}ícəl 'in the middle', lə k'^{w}íyəqəl lí tə cícəɬ 'he climbed up high (up a rock or mountain)', lí tə cá·k^{w} '(way) far away, in the distance'; lə ɬá·k'^{w} tə má·q^{w} lé tə θqét 'the bird

flew to the tree' (EB), lə ɬá·k'ʷ tə má·qʷ ʔí təl scəɬ(s)á·lwəɬ 'the bird flew over me' (EB), ɬέx̣əm ʔí təl láθəl 'serve yourself (lit. oneself) in my plate' (CT, Tait).

2. Besides examples above and in 4.11: təlí k'ʷə sq'əwqέyl k'ʷəls lə ʔímexʸ qəƛ'álsu tés k'ʷə θ'əwέlí 'I walked from Scowkale to Soowahlie' (lit. "from the (distant) Scowkale that-I walked and-I-so got-to the (distant) Soowahlie"; both Scowkale and Soowahlie were villages on the Chilliwack River), lə x̣əθ'étəs tə sq'émél təlí ƛ'εʔέlθə 'he pushed the paddle (away) from me', ləkʷέ·təm təlí tə qíq'έwtxʷ 'he was let go/ set free/turned loose from jail, they let him go from jail', cəl θíyt tə swóq'ʷəɬ təlí tə sέys tə p'əq'élqəl 'I made a blanket of/from the wool of the mountain goat'; híkʷ təlí k'ʷə spəlwέɬ 'bigger than last year', yəlέwəl qél təlí ƛ'έʔεlθε 'he's worse than me', yəlέwəl ƛ'έqt təl x̣éltəl təlí tεʔ swέ 'my pencil is longer than yours'

3. lε yə-ɬəʔέ k'ʷə sq'éwləc 'he went via (by way of) Scowlitz' (Scowlitz was and is a village at the mouth of the Harrison River), cəl yə-ɬəʔέ k'ʷə sq'éwləc 'I went via Scowlitz' (yə- is probably the lexical prefix 'travelling by'), lí ɬəʔέ k'ʷə là 'Did he go through there?'

4. x^{w}əlɛ́ ± x^{w}əlɛ́m can be seen in the following examples (besides those in 4.11): lə x^{w}əlɛ́(m) tə Agassiz 'he got to Agassiz (instead of going all the way), he reached Agassiz (the speaker is at Agassiz)' (EB), ləmə́lstəx^{w}əs ƛ' Bill tə sq'ə́mə́l x^{w}əlɛ́m ƛ' Bob 'Bill (absent) threw the paddle over to Bob (absent)', lə ɬá·k'^{w} tə má·q^{w} x^{w}əlɛ́m tə sc'ɛ́x^{y}t 'the bird flew toward the branch', lə θə́k'^{w} x^{w}əlɛ́ tə sʔəmʔamə́lɛ 'she was pulled toward (influenced by) the Thompsons' (note sʔamə́lɛ 'Thompson Indian'), tiyə́lə́stcəx^{w} tɛʔ q'ə́wə x^{w}əlɛ́m tə t'ámə́l 'lean your cane against (towards) the wall!' (tiyə́lə́s-T 'lean s-th'), x^{w}lɛ́m tə mɛ́qɛ 'through the snow' (as in driving through the snow on a sleigh), lə́c'ə x^{w}lɛ́m tə siyɛ́m, qɛs tə lə́c'ə x^{w}lɛ́m θə sɬɛ́·lí, qɛs tə lə́c'ə x^{w}lɛ́m tə sƛ'íƛ'əqəɬ tə ƛ'əlɛ́x^{w} stətís tə x^{y}ɛ́ɬ 'One for the master, and one for the dame, and one for the little boy that lives in the lane' (translation of "Baa Baa Black Sheep" by Alice Hunt of the Deming Halkomelem Workshop).

5. yəlɛ́w tə syɛ́yəq' 'past the log', yəlɛ́w (k'^{w}ə) sx̣ɛ́x̣əɬə̀t k^{w}səs x^{w}əʔí· 'after Sunday he came'

6. yəwɛ́lməls k'^{w}ə sx̣ɛ́x̣əɬə̀t 'before Sunday', yəwɛ́lməls k'^{w}ə 1910 'before 1910'; (also used as adverbial Vi or as conjunction (the rest of which are particles or demonstratives)): yəwɛ́lməls k'^{w}əls lɛ́(m) ʔɛ́·yəl 'before

I go away', wé·lx^{y}cəx^{w} yəwé·lməls k'^{w}ɛs wəc'ə̓ƛ' 'throw it before you fall off!', luł q^{w}áyəl tə s?áθəs yəwé·lməls k^{w}səs məlqí·wsəm 'her face is turning green (or yellow) before she faints'

7. Besides examples in 4.11: lə wé·lx^{y}əs tə sq'émél stətís ƛ'ə?élθə 'he threw the paddle beside (or near) me'

8. sc'əc'é tə yá·seq^{w} lí tə (lətém, sc'éləctəl, sx^{w}?éχəθ) 'the hat is on (top of) the (table, chair, bed)', sc'əc'é tə stiqíw 'on top of the horse, astride the horse' (cp. wə-c'é 'get to a summit or top')

9. Besides examples in 4.11 (q.v.): ?íłtəl sq'əq'á tə sq^{w}əmé·y 'he's eating with the dog' (other ways of using this root as Vt include: sq'ameθáx^{y} 'with me' and q'ɛx^{y}í·lθàx^{y} 'with me' as in mítł q'ɛx^{y}í·lθàx^{y} 'come with me!' (q'á + Aɛ + -x^{y}əl + -í·l + -T))

10. cəl slí·w tə k'^{w}áx^{w}ə 'I'm inside a box', (EB) slí·w ?í tə k'^{w}áx^{w}ə 'it's in the box', stém k'^{w}ə slí·w ?í tə sk:^{w}á·wəs 'what's in the pail?' (necessity for ?í is unknown)

11. lí sk^{w}ətéx^{w} 'Is he inside?', sk^{w}ətéx^{w} tə léləm 'inside the house' (EB sk^{w}ətéx^{w} lí tə léləm)

12. stɛ?écət 'like we are; we are similar', stɛ?é tə k^{w}əšú 'like a pig', stɛ?écəl tə x^{y}é·yəsəm 'I'm like the ant', stɛ?é tə k^{w}əšú tə Doug 'Doug is like a pig'

13. cəl sɬ'əpá·lwəɬ lí tə q'əlέc'əq^{w}təl 'I'm under the umbrella' (incidentally, cp. sq'əlάc'əq^{w}-cəl 'I'm under an umbrella', sq'əlάc'əq^{w} 'be under an umbrella' < q'əlέc' 'rainshelter', -əq^{w} 'on the top of the head', s- participial inflection), lə ɬá·k'^{w} tə má·q^{w} sɬ'əpá·lwəɬ tə sc'έx^{y}t 'the bird flew under the branch'

14. lə ɬá·k'^{w} tə má·q^{w} scəɬsá·lwəɬ tə sc'έx^{y}t 'the bird flew over the branch', lέmcət scəɬsá·lwəɬ tə spέɬχəl 'we're going over (above) the prairie'; but beside these EB also has lə ɬá·k'^{w} tə má·q^{w} ?í təl scəɬsá·lwəɬ 'the bird flew on top of me' which seems to show scəɬsá·lwəɬ as a nominal.

15. cəl slə?á·lwəɬ tə k^{y}á· 'I'm on the other side of the car', lí k'^{w}əs slə?á·lwəɬ tə lέləm 'on the other side of the house', slə?á·lwəɬs tə k^{y}á· tə ləpέl 'the shovel is on the other side of the car', slə?á·lwəɬs tə Bill 'behind Bill (if Bill is facing)(lit. on the other side of Bill)'

16. lέmcət slə?á·θəl tə spέɬχəl 'we're going across the prairie', cəl slə?á·θəl tə stá·lo 'I'm across the river' (ɬslə?álwəɬ can't bè used with 'river')

At the same time, many of the prepositions used with English verbs are included semantically within Halkomelem transitives or are not expressed at all. For example: k'^{w}έcət 'look <u>at</u> s-th', ?έclex^{w} 'hear

about s-th', ɬéc'là·mɛc tə ɬéc'təl 'you'll get cut by the knife', lə c'əƛ'ɛmétəs tə q'əléχəl 'he jumped over the fence' (lit. 'he jumped the fence'), c'əƛ'ɛməθéxʸəs 'he jumped over me', lə wəc'éƛ' tə sƛ'fƛ'əqəɬ lí tə sxʷt'éɬ 'the child dropped off a bridge' (wəc'éƛ' 'drop off, fall off'), k'ʷaqʷəθéxʸəs tə ləpè·l 'he hit me with a shovel', lém 'go(ing), go(ing) to (somewhere, or to do s-th)'.

6.2.4. Adverbial Vi. These words modify the verb and usually directly precede or follow the verb. They are glossed as adverbs or statives in English but are verbs since they are inflected for subject and tense like Vi's (though not for continuative aspect). About 50 of them turned up in a sample of 850 Vi's. As some English prepositions are semantically included within the Halkomelem plain verbs, so are some English adverbs (usually in verbs with middle voice): yák'ʷəm kʷθəl kʸá· 'my car broke down', q'ʷém 'come out (at the root)', xʷɛθtéləm 'to cloud up', ʔéχəθ 'lie down', léqəm 'dive, dive in', χɬét 'beat s-o up'. Control transitivizers also communicate somewhat adverbial ideas like 'purposely', and 'accidentally'. But none of these are syntactically adverbial in Halkomelem. Here are some of the adverbial Vi's found:

1. c'ɛ́c'əl '(be) very' (often plus -əw intensifier)
2. EB: k^{W}əɬtu '(be) very' (also has c'ɛ́c'əl)
3. ʔɛ́əʔəl '(be) really'
4. yəwɛ́·l '(be) first'
5. ɬiyá·q^{W}t '(be) last, after, behind'
6. ʔɛhíw '(be) upstream' (cp. x^{W}əhíwəl '(go) upstream')
7. woqʷ^{W}ɛ́yləm 'downstream' (x^{W}əwqʷ^{W}ɛ́yləm '(go) downstream')(woqʷ^{W}ɛ́yləm may not belong here because it may be mistranslated for 'go downstream' since -ɛ́yl probably < -í·l 'go, come, get' and since there appears to be a continuative, hɛ́wqʷ^{W}ələm 'going downstream')
8. təlɬá·s 'from downriver'
9. sɬɛ́qʷqəl 'way upriver'
10. tíytəχəl 'way upriver', təltíyt 'from upriver'
11. tá·l ~ cúcu 'toward the river, (if on a river) away from shore' (cp. stá·lo 'river')
12. cá·ləq^{W} 'away from the river, toward the backwoods'
13. cá·m 'away from the water'
14. cá·k^{W} '(be) far, far off, far away', təlcá·k^{W} 'from far away'
15. t'á(·)kʷ^{W} '(go?) home, homeward' (t'ɛ́kʷ^{W}stəx^{W} 'take s-o home')
16. ƛ'əlɛ́x^{W} '(be) at home; stop'
17. c'íməl '(be) almost, near'

18. x^{W}ɛ́·lq 'almost; almost die' ~ x^{W}ɛ́·lqi 'almost'
19. sx^{W}ɛ́·yɐ 'in the middle or center'
20. numerals lɐc'ɛ́x^{W} 'once', θɐmɛ́ 'twice', etc.
21. qɐlɛ́t 'again'
22. yɛɬ 'just, now'
23. qɛ́·ys 'lately, recently'
24. tlaqɛ́·ys 'now (this instant), right now'
25. ʔíɬuɬày 'the last time' (also conjunction)
26. tɛ́χ^{W} ~ tɛ́x^{W} '(be) later, in a while'
27. ɬɛ́q'ɐɬ 'used to' (< ɬɛ́q' 'sometimes' + -ɐɬ 'past')
28. hí·θ 'a long time'
29. wɐɬí·θ(ɐɬ) 'a long time ago' (wɐɬ-hí·θ-ɐɬ)(~ (EB) k'^{W}uwɬíθɐɬ and (CT,AC) k'^{W}ɐɬíθɐɬ)
30. cɐlɛ́qɐɬ 'yesterday'
31. tlàwɛ́yɛ́l 'today'
32. wɛ́yɐles 'tomorrow'
33. lɛ́c (AC) ~ (Cheh.) ɬɛ́q' ~ (Cheh.) ɬíq' 'sometimes'
34. (wɐ)tɐmtɛ́mɐs(cɛ) 'someday; whenever'
35. wɐtɛ́sɐscɛ k'^{W}ɐ/k^{W}s tɛ́s 'until (?)'
36. x^{W}ɐl 'still, yet'
37. wɐ?ál(-ɐw) 'too (overly)'
38. wiyáθ 'always'
39. wɐláy 'only, just'
40. yáswɐ 'possibly, perhaps, might, maybe'
41. ?ɐl 'just, simply' (Cheh. ?àl ~ ?à ~ -à (most common))

42. wəɬ 'already'

43. θə?ɨ́·t 'for sure, truly; it's true' (also adjectival)

44. yəwɛ́ 'along, also'

45. sq'əq'á 'along, together'

46. tus?ɛ́y?əl 'softly, quietly' (probably compounded)

47. s(ə)lɛ́ 'tightly, tight' (also adjectival)

48. tx^{W}ɛ́m 'early' (adjectival too)(cp. ?áyəm 'late')

49. x̌^{W}ɛ́m 'fast; hurry' (also plain verb)

50. ?ɛ́k'qəl '(go) outside' (probably belongs elsewhere)

51. yəlɛ́wəl 'just past, over, more'

52. -q^{W}ɬɛ 'how ___!, really ___!'

It is unclear whether the negative verbs belong here or with auxiliaries; the negative verbs include:

53. ?ɛ́we '(be) not, no'

54. ?əwɛ́ 'if not' ~ 'isn't?, doesn't?'

55. ?əwɛ́ɬ 'never'

56. x^{W}əwɛ́ '(be) not yet'

Examples of adverbial Vi's in action (the following list is thorough because it will be used for the syntax chapter as well):

1. (Chill.) c'ɛ́c'əl k'^{W}ák'^{W}əs tlàwɛ́yɛ́l ~ (Cheh.)(EB) c'ɛ́c'əl-əw k'^{W}ák'^{W}əs tlàwɛ́yɛ́l (both mean) 'It's really hot today., It's very hot today.', (EB) c'ɛ́c'əl-əw sθəwát 'very smart' (the θ is idiolectal for a /c/ in this word; other speakers of upriver dialects have

scewét or scəwá·t '(be) smart, know how to'), (AC) c'éc'əlcəl méq' 'I'm very full.'

2. (Cheh.) k^{W}əɬtu ctéwél tə s?íθ'əms 'her dress is really bright', (Cheh.) k^{W}əɬtu (θé·t, χ^{W}ém, s?ú·mət, hí·k^{W}) 'very (dark, fast, lazy, big)'

3. ?éθ'əlcx^{W} (χ^{W}ém, ?éyəm) 'you're really (fast, slow)', ?éθ'əlcɛ wəhíθ k'^{W}ɛs hák^{W}ex^{y} 'you'll use it a really long time'

4. səs yəwél 'he's to be first', léwe yewél 'you're the first', lém yəwé·l ~ lɛ yəwé·l 'go ahead, (go first)'

5. ?é?ɛlθe ɬiyáq^{W}t 'I'm last', yeɬiyá·q^{W}t tə Bill 'Bill is last, Bill is behind', yeɬiyá·q^{W}t k'^{W}es x^{W}ə?í· 'he arrived last'

6. lémcəl k'^{W}ə ?ɛhíw 'I'm going upriver' (nominal), məcɛp x^{W}əhí·wəl 'you people come upstream', lémecəx^{W} x^{W}əhíwəl 'are you going upstream?', lɛ x^{W}əhíwəl yeθé 'those people are going upstream', lɛcəl (x^{W}əhíwəl, x^{W}əwq'^{W}éyləm) 'I'm going (upstream, downstream)', χ^{W}éχ^{W}əq'^{W}ət x^{W}əhíwəl 'poling (a canoe) upstream'

11. lə tá·l 'he went down to the river or away from shore', χ^{W}émɬɛ tá·l 'hurry down to the river!', lém k'^{W}ə cúcu 'go toward the river or away from the shore' (nominal)

12. Contrary to the consistently adverbial gloss of

the word in isolation I only have examples as nominals:
lə yə́qʷ kʼʷe cá·ləqʷ 'the backwoods are burnt'
13. lɛcəl cá·m 'I'm going away from the water', lɛcxʷ cá·m qə tə́scəxʷ ʔà tə smə́·lt 'you go away from the water till you (just) get to the mountain'
14. lí· cá·kʷ 'Is it far?', lí kʼʷe sʔə́ƛʼq qə ʔə́we ʔís cá·kʷ 'it's outside but not far'
15. lɛcəl/lə́mcəl tʼá·kʼʷ 'I'm going home', lɛɬ tʼá·kʼʷ 'go home!' (cp. lɛɬ ʔə́·yəl 'go away!')
16. lí ƛʼələ́xʷ (kʷθəl mə̀·l, səl tə̀·l) 'Is your(father, mother) home?'
17. weɬ cʼíməl ƛʼə́kʼʷel 'it's nearly going out (of a fire)', wəcʼímələs tə Christmas 'when it's nearly Christmas'
18. xʷə́·ləqi tə́s tə kʸá· 'he almost got hit by a car', xʷə́·ləqəl líl lə́m 'I almost went', xʷə́·ləqəxʷ lə́m, ʔə́tɬ 'you almost went, didn't you?', xʷə́·ləqəl 'I almost died', xʷə́·ləqi yə́qʷ 'nearly burned', xʷə́·ləqi ʔú·kʼʷ (EB)(AC substitutes ʔó·kʼʷ) 'nearly empty, nearly run out', xʷə́·ləqi lə́cʼ 'nearly full (of a container)'
20. ləcʼə́xʷ səs yə́ys 'he only worked once', ɬxʷə́·ɬ səs χə́yəθə̀xʸəs 'three times he hit me', χəθlə́·ɬ səs χə́yəθə̀xʸəs 'four times he hit me', (EB) cəl χə̀·m ləcʼə́xʷ ~ ləcʼə́xʷ kʼʷelsə́ χə̀·m 'I cried once'
21. ʔəwə́tɛ sɬə́qʼələxʷ wətəmtə́məscɛ kʼʷəs ʔə́ɬtəlcət qələ́t

'No-one knows when we'll eat again.'

22. yɛɬ s?əs méq'ətəs 'he just swallowed it', yɛɬ s?əs tɛ́cəl 'now he comes', yɛɬ s?əs q'^{W}él 'they're just ripe', yɛɬ s?əs lə pí·ltəs tə spí·ls 'he's just gone to plant his crop', yɛɬcəl x^{W}ə?í· 'I just arrived', wəyɛɬàl səs θíyt (EB) 'I just started to make it', yɛɬàl səs c'q'^{W}ó·wəɬ 'I started to make a basket' (EB), yɛɬà səs c'q'^{W}ó·wəɬ 'she started to make a basket' (EB) (the nature of EB's (wə)yɛɬà 'start to, begin' is unclear; her use of səs in 1st person seems odd also as s?əs ~ səs serves elsewhere as nominalizer + 3rd person possessive for subordinate clauses--see Chapters 7 and 9)

23. qɛ́·ys lə q'ɛ́y k^{W}θəl sí·lə 'my grandfather just died recently/lately', qɛ́·ys mə x^{W}ə?í· 'recently/just got here', qɛ́·ysà 'just now' (EB) as in qɛ́·ysà lə c'əq'^{W}ó(·)wəɬ 'he just now made a basket'

24. cət ?í·ɬtəl tlaqɛ́·ys tə Bill qɛs tɛ?ɛ́?ɛlθɛ 'Bill and I are eating right now'

25. ?íɬuɬày k'^{W}éclàmə̀ 'the last time I saw you' (EB, whose -cəl wəɬ tends to > -uɬ)

26. tɛ́χ^{W}cɛ (χ^{W} ~ x^{W}) 'it will be in a while, later on, after a while', tɛ́χ^{W}celcɛ k'^{W}éclàmə̀ 'I'll see you later, I'll see you in a while'

27. ɬɛ́q'əɬ χɛ́t'ə yó x^{W}ə̀lmə̀x^{W} 'the (Indian) people used

to say', łéq'əł wiyéθ c'í·yəł yó x^{W}ə̀lmə̀x^{W} k'^{W}ułíθəł 'the people used to pray all the time, long ago' (EB)

28. ?éwe híθes 'soon, not long', híθ k'^{W}ɛs k^{W}elét 'you'll have it a long time', (k^{W}s) híθscɛ k'^{W}ɛs hák^{W}əx^{y} 'you'll use it a long time', wəł ?iyáləm k'^{W}ɛs x^{W}f(y)x^{y}ət -- wəł ?álew híθ k^{W}s ?ítəts (?álew sic for we?ál-ew) 'it's alright for you to wake him up -- he's already slept too long', ?éwe lémes híθ k^{W}s les ləq'élέq'əl 'he's not going to be long on his travels', wəł híθ k^{W}ses míq' 'he was underwater a long time', wəł híθ yə mə q'ép 'the gathering lasted a long time', wəłíθ k'^{W}es k^{W}elét 'he'll have it a long time', łíθ lís słéq'əl·əx^{W} 'she knew all along (long ago?)', łíθ líx^{W} słéq'əl·əx^{W} lís ?ɛlécɛ k^{W}θəl lélém 'you knew all along where my house was'

29. see example in 27.

30. cəl lém cəléqəłəł 'I went yesterday', ?íłcəl lí k'^{W}e cəléqəłəł 'I was there yesterday'

31. lémcəl tlàwéyél 'I'm going today', l sq^{W}élewəl k^{W}s mes łéməx^{W} tlàwéyél 'I think it's going to rain today'

32. lémcəl wéyəles 'I'll go tomorrow', ?éłtəlcəx^{W}cɛ wéyéles 'you'll eat tomorrow' (wéyéles ~ wéyeles), ?éłtəlcɛ yiθéʔ wéyəles 'they (those people) will eat tomorrow'

33. léc k'^{W}es słélís, léc k'^{W}es swíyəqəs 'sometimes

it's a woman, sometimes it's a man' (AC), łíq'cəl ~ łéq'cəl 'sometimes I do' (EB), łéq' st'é 'Sometimes., Sometimes yes. (answer to a question)' (EB), (RM of Sardis: łéq' 'yes' (~ ʔé·ʔɛ 'yes') but no łéq' 'sometimes')

34. wətəmtémescɛ x^{W}əwétəscɛ k'^{W}əs k'^{W}écləx^{W} (x^{W}əwétəscɛ may be sic for wəwétəscɛ) 'someday somebody will see it' (also used as conjunction in ex. 21 above)

36. lí x^{W}əl ʔé·yələx^{W} 'Is he still alive?', lə x^{W}əl χéyθ' 'they're still unripe', x^{W}əl sc'əc'é tə stiqíw 'he's still astride/on top of the horse', ʔu x^{W}əl híyəq^{W} 'it's still burning' (EB)

37. wəʔálwə-l sʌ'í(y)-l siyé·yə 'I like my friend a lot', ʔáləwə láp$_{\chi}{}^{W}$əm '(making) too much noise', ʔáləwə x^{W}ótəs ʌ'əsu míq' 'it was too heavy and it sank', ʔéwə ʔís ʔáləwə k'^{W}ák'^{W}əs 'lukewarm, it's not too hot', wəʔálwə tsá·s túʌ'a ʌ'asésu sq'əq'émətəs θə stá·ləs 'he felt so poorly that he stayed with his wife', wəʔálwə qéχ 'too much', wəʔálwə qéχ tə słéχ^{W}əcɛs 'an awful lot of (lit. too much) spit', wəʔá·ləw qéχ tə sc'áłɛ 'too many leaves', wəʔáləwə łéq^{W} 'too wet' (EB prefers ʔáləwə, AC prefers wəʔál(ə)wə)

38. wiyáθ k'^{W}əs łéχ^{W}əcɛs tə siyálex^{W}ə 'the old man is always spitting', wiyáθ k'^{W}əls su méməlqləx^{W} 'I'm always forgetting', wiyáθ k'^{W}əls su mélqləx^{W} 'I always

forget', k'^{W}ə wiyáθ(cɛ) ?à ~ k'^{W}ə hélémcɛ ?à 'forever' (a nominal)

39. wəlấy (tɛ?é?ɛlθɛ, tɛléwə, túλ'à, tɛɬlíməɬ, tɛɬwéləp) 'just (me, you, him, us, you folks)'

40. yáswə λ'ás tə mè·ls 'maybe it's his father', yáswəcəl líl wəlè·m 'I might go', yáswəcəl x^{W}é·lq (?ə li (?)) məlqí·wsəm ~ yáswə x^{W}é·lqcəl məlqí·wsəm 'I guess I nearly fainted', yáswə ?é 'maybe yes' (EB)

41. cəl x^{W}lɛlé· ?əl 'I just listened', wə?í·məx^{y} ?əl qə (λ'asésu, lə) hí·qsəl 'He was just walking and he dropped dead.', sθəhíθəɬ-cx^{W}-à 'just you be careful!' (EB, who has -à frequently, see 22, 23 and 46 also in this section)

42. lícx^{W} wəɬ ?éɬtəl 'Have you already eaten?', cəl k^{W}é wəɬ (mə χè·m, lém) 'I began to (cry, go)', wəɬ λ'ék'^{W}əl tə híyəq^{W} (EB) 'the fire's (already) gone out', lí wəɬ lɛ ?é·yəl 'has he gone away?', luɬ məθ'í·l 'they're gone blue' (luɬ < luwɬ < lə wəɬ), luɬ c'ɛté·m təl mímələ 'my baby's already (been) crawling', luɬ (c'é·yx^{W}, slíc') 'it's (already)(dry, full)', (EB has ?uɬ frequently for wəɬ or luɬ, and cuwɬ for cəl wəɬ as in ?uɬ lè·m 'he's already gone' and cuwɬ hɛyáθàmè 'I (already) warned you'; there are frequent examples; it is too early to tell if this is true for Cheh. as a dialect.)(see also examples 17, 28 and 43).

43. cəl θə?í·t sɬéq'el·əx^{w} k^{w}səs wəɬ lèm 'I know for sure he's gone', c'éc'el wəl θə?í·t s?í·məθ 'he's really truly lazy!' (wəl θə?í·t 'it's really true', c'éc'el wəl θə?í·t 'it's really true!')(?éwə lís θə?í·t 'it's not true')

44. lɛcəl yəwé 'I'm going along', sʌ'í k'^{w}əls lɛ yəwé 'I want to go along', wécɛ ləméi yəwé 'Can I go along?, Will I go along?'

45. lícx^{w} lɛ y(ə)sq'əq'á 'Did you go together?'

46. ?íɬcəx^{w} tus?éy?èl k'^{w}ɛs ?íɬ léyəm 'you were laughing softly', tus?éy?èl k'^{w}ɛs mə χəθ'éθèàx^{y} '(you) push me softly', lə wə?éy ?à k^{w}əəl méle 'my child is fine', lícx^{w} wə?éy ?əl (Chill.) ~ lícx^{w} wə?éy ?à ~ lícx^{w} wə?éyà (Cheh.) 'how are you?, (lit. 'are you going gently/softly?', tus?éycəx^{w} ?àl 'go gently!, go slowly!', tus?éycəx^{w} 'you be careful', tus?éycəl 'I'm careful', cəl tus?éyà 'I was careful'

47. q'éyset k'^{w}es selé ~ selé k'^{w}es q'éyset 'tie it tightly'

48. mə tx^{w}ém x^{w}ə?í· '(he) got here early', mə tx^{w}ém q'^{w}él tə ?əlílə 'the salmonberries are ripe early' (cp. (tu) ?á·yəm k^{w}s məs q'^{w}él tə ?əlílə 'the salmonberries are ripe late')

49. χ^{w}ém (k'^{w}əls, k'^{w}ɛs, k^{w}səs) mə ?é·yələx^{w} '(I, you, he) got well fast'

50. lɛɬ ʔéƛ'qəl 'go outside!', lɛ ʔéƛ'qəl tə sqʷeméy 'the dog went outside', wəlémɘxʷ ʔéƛ'qəl 'when you go outside'

51. yəléwəl lás təlí ƛ'éʔɛlθɛ 'he's fatter than me', cəl yəléwəl lás təlí ƛ'əléwɛ 'I'm fatter than you', yəléwəl χéyƛ' tlàwéyél təlí k'ʷə cəléqəɬ(əɬ) 'today is colder than yesterday', yəléwəl qél 'worse', yəléwəl ƛ'éqt təl χéltəl təlí tɛʔ swɛ 'my pencil is longer than yours'

52. yú·wqʷɬɛ ~ ʔéyqʷɬɛ 'how beautiful!, really beautiful!', yú·wqʷɬɛ tɛʔ qʷɬíyxʷəl 'you have really beautiful shoes!' (yú·w 'beautiful! (said while admiring s-th)')

Several things should be noted before concluding with examples of negative verbs. Several of these adverbial Vi's are unstressed and could be particles functioning as adverbial Vi's since I have no examples of them being inflected (kʷəɬtu, wəɬ, yɛɬ, xʷəl, ʔəl). With others the Vi either begins in wə- 'subjunctive' ((wə)təmtémɘ(cɛ), wətésəscɛ kʷs tés) or in an unexplained wə- (wəʔáləwə ~ wəʔáləw ~ ʔáləwə, wəláy, wiyáθ (could be //wəyáθ//), wəɬ, wəɬíɁ(əɬ)). There is also an unexplained unstressed particle, tu, which may well be adverbial. Some of the listed adverbial Vi's have not been elicited in sentences yet but seem suspiciously adverbial in translation.

Negative constructions will be dealt with in the syntax chapter, and negative verb inflection has been covered in the pronoun chapter, but a few examples of each of the negative verbs are given here to show why they might be considered adverbial Vi's (they modify the verb, occur adjacent to the verb or verb auxiliary, their inflection is limited with no continuative or object inflection allowed, etc.).

53. ʔéwəcəl lémə̀l 'I don't go, I won't go'

ʔéwe lémes 'he/she/it doesn't/won't go'

ʔéwe sc'əléx^{W}əmes 'he's not a spirit dancer'

ʔéwecx^{W} líx^{W} ƛ'íɬsθə̀x^{y} 'you don't like me'

cəl méytalə k'^{W}əs ʔéwəp liyémelép 'I helped you folks not to laugh'

54. ʔewé lís yéθəstàlə̀m 'Weren't you folks told?, Didn't they tell you folks?'

ʔewé ʔɛ sƛ'íyəs k'^{W}əs k'^{W}éclex^{W}cət 'Don't you want us to see it?' (sƛ'íyəs sic for sƛ'í)

wécɛ lémə̀l yewé 'Won't I go along?'

ʔewés lís-l sƛ'í 'if I don't want it'

ʔewés lís sƛ'ís ʔewéyex^{W} (?) ʔéx^{W}esθéx^{y}es 'If he doesn't want it, will he give it to me?'

ʔewés lís (ʔɛ) sƛ'íyələp lɛcəl k^{W}ú·t 'If you folks don't want it, I'll take it.'

55. ʔéwəcəlɬ q^{W}élsθə̀x^{y} 'I don't/I never speak to you'

ʔə́wəɬ lə kʼʷə́clə̀ləm 'I wasn't seen'

ʔə́wəɬcəl kʼʷə̀·y 'I'm never hungry'

ʔə́wəɬ χə̀·m 'he never cries'

ʔəwə́·ɬcəl lí·l lí 'I was never there'

ʔəwə́·ɬcəl sƛʼə́ƛʼəqəɬə́l 'I wasn't (ever) a child'

56. xʷəwə́cxʷ ʔí·xʷ xʷə́ siyá·ləxʷə 'You're not old yet., You haven't yet become old.'

xʷəwə́cxʷ ʔí·xʷ tatəlá·məɬ 'You don't understand yet.'

xʷəwə́ ʔís méq' 'He's not yet full (of food).'

xʷəwə́ ʔí·s mə q'ʷə́l 'They're not ripe (yet).'

6.2.5. Interrogative Vi. There are 14 or 15 of these verbs (not counting lexically suffixed versions of kʼʷí·l (there are eight) and səlcí·m (there are two or three)). They fall into a separate class mainly because they are all interrogative. All are mainly sentence-initial (except sentence-final ʔə́tɬ 'tag-question'), and some are only attested sentence-initially (ƛʼakʷsəlcí·ms, lí, lə́yə́xʷɛ). When sentence-initial they can be followed by subject pronouns and future tense (except lə́yə́xʷə and the two words for 'why?'). A few can also occur after preposed pronouns or auxiliary + pronoun. None can be inflected for continuative or passive of course, but some can be inflected for subjunctive and used as relative interrogatives (təl·ə́cɛ 'where s-o is from',

x^{w}ecé·l 'where s-o is going', x^{w}ecák^{w}el 'where s-o is headed for', ʔɛlécɛ 'where s-o is', təwét 'who s-o is', stém 'what s-th is', and possibly others; the glosses just given are those used when the words are used as relative pronouns; otherwise they have the interrogative glosses listed below).

The verbal status of interrogative Vi's is further borne out by their nearly exclusive occurrence before demonstrative articles (which occur before nominals or which nominalize verbal constructions that follow). Exceptions to this occurrence before articles include the following: təmtém, léyéx^{w}ɛ, and selcí·m attested before subjunctive verbs; lí before declarative verbs; ʔɛlécɛ once before adverbial Vi wéyeles 'tomorrow'; and təwét before nominals in constructions like 'what man?', 'whose dog?'). A fuller and more definitive treatment will be found in the syntax chapter, but the above give the semantic and syntactic reasons for this class of verbs being set up. The interrogative verbs found so far are:

1. lí 'am/is/are __?, do/does __?' (sometimes inflected with interrogative -ə)
2. səlcí·m 'how?, how is it?' (also affixed: səlcí·maməx^{y} 'how does it look?, what does it look like?, what color is it?', səlcí·méléqəp 'how does

it smell?')

3. k'^{W}ʃ·l 'how many?, how much?' (also affixed: k'^{W}ʃ·les 'how much money?, how many dollars?', k'^{W}flè 'how many people?', k'^{W}flè·ɬp 'how many trees?', k'^{W}əléɬ 'how many times?', k'^{W}ilówəɬ 'how many canoes?', k'^{W}ilówəs 'how many paddles?', tə sk'^{W}ʃ(·)ls (nominal) 'the hour', (Tait) k'^{W}fltx^{W} 'how many houses?')
4. stém 'what?, what is it?'
5. x^{W}ə?ʃ·t or x^{W}ə?íyət 'what is s-o doing?, what's happening to/with s-o?, what's doing with s-o?; what is s-o saying?'
6. təmtém 'when?, when is it?'
7. ?əlécɛ (EB of Cheh. usually has lécɛ) 'where?, where is it?'
8. x^{W}əcé·l ~ x^{W}cé·l ~ x^{W}cè·l 'where is s-o going (leaving for)?, which way did s-o go?'
9. x^{W}əcák^{W}əl ~ x^{W}cák^{W}əl 'where is s-o going to (destined for)?'
10. təl·écɛ ~ təl?əlécɛ 'from where?, where is s-o from?'
11. təwét 'who?, who is it?' (used also in 'what's your name?' and 'what man is it?')
12. ɬ'ak^{W}səlcí·ms 'why?, why is it?, how come?'
13. x^{W}?ít 'why?, why is it?' (can't be used as an independent utterance unlike #12)

14. lə́yə́x^{W}ɛ 'does one have to?, do I have to?' (a semantically reflexive interrogative, this verb has an impersonal subject 'one' which can also refer to the speaker, 'I')

15. ?ə́tɬ (usually [?ə́ɬ]) 'tag-question' (always final in sentence)

Here are some examples of these interrogative verbs in sentences:

1. lícx^{W} yáyəs 'Are you working?', lícɛ sp'ɛp'ə́k^{W} 'Will it float?', lí wəɬ lə̀m 'Is he/Are they gone?', líye tí 'Is it over there?'

2. (lə) səlcí·m k'^{W}ɛs lə θíyt 'How did you make it?', səlcí·mcɛ wə-mí·-t ?əmə́stəx^{W} 'How should we bring it?', səlcí·m k^{W}s híθəs qə (yɛɬ s?əs mə x^{W}ə́ syémyəm, k^{W}əl·ə́x^{W}əs tə méləs) 'How long before she (came to be(come) pregnant, got her child)?', ləcəx^{W} səlcí·m wəlémax^{W} t'ə́·k'^{W} 'How are you going home?'

3. k'^{W}í·l tɛ (sk'^{W}ó·lməx^{W}, scí·yɛ) 'How many (blackberries, strawberries) do you have?', k'^{W}í·l (sθ'áq^{W}i, músməs, swə́·yəl) 'how many (fish, cows, days)?', ?əcx^{W} wəɬ k'^{W}í·l méqɛ 'How old are you? (lit. "You were already how many fallen snows?")', wəɬ k'^{W}í·l syilə́ləm k'^{W}ɛs yáyəs 'How many years have you been working?', tə́s tə sk'^{W}í·ls 'What time is it?' ("It's gotten up to what hour?")

4. stém tə θé 'What's that (visible, present)?', stém tə ʔí·xʷ (kʷelé·t, θé·yt) 'What is it you're (holding, making)?', stém tə lí tí c'íc'əsəm 'What is that growing?', stém kʼʷe sθʼáqʷi ʔɛ sxʸélcɛ 'What kind of fish did you catch (is your catch)?', stém tɛ sqʷélqʷəl 'What's your news?', stém kʼʷe ʔíxʷ tʼɛtʼiyəqʼémət ~ stém kʼʷe tʼɛtʼiyəqʼémətəxʷ 'What are you mad at?'

5. xʷəʔí·tcəxʷ ~ cəxʷ xʷəʔí·t 'What are you doing?', ʔí·łcəxʷ xʷəʔí·t 'What were you doing?', xʷəʔí·tcəp ~ cəp xʷəʔí·t 'What are you folks doing/saying?'

6. təmtémcɛ wəlémɛxʷ tʼák'ʷ 'When are you going home?', təmtém kʼʷɛs lə θíyt 'When did you make it?', təmtém kʼʷɛs lém 'When are you going?', təmtém kʼʷɛs ʔéxʸəl lí tə swíłcɛ 'When do you "pull" at Cultus Lake?' ("pull" is a popular term for 'to paddle in canoe-racing', ʔéxʸəl is also the normal word 'to paddle')

7. ʔɛléɛɛ kʼʷɛs lə θíyt 'Where did you make it?', lə ʔɛléɛɛ θə sɬélí 'Where is the woman?', ʔɛléɛɛcəxʷɛɛ wé·yələs 'Where are you going to be tomorrow?, Where will you be tomorrow?', ʔɛléɛɛ təl lèm 'Where's my liquor?', cəxʷ ʔɛléɛɛ 'Where are you?'

8. xʷ(ə)cé·lcəl 'Where am I going?', xʷcé·l ʔé·łtəl 'Where/Which way are they going?', lə xʷcè·l 'Where is he going?', xʷecé·lcəxʷ 'Where are you going?'

9. xʷcákʷəlcəxʷ 'Where are you going to?', ʔəcxʷ

yə-xʷcə́kʷəl 'Where are you headed for?', ʔəcxʷ yɛɬ xʷcə́kʷəl 'Where are you going now (this time)?'

10. təlʔɛlə́cɛ·tŭƛ'à (CT) 'Where is he from?', (subjunctive example, EB) cuɬ ɬq'ə́ləxʷ weʔís təlʔələ́cɛ (~ təl·ə́cɛ) 'I know (already) where he came from.'

11. lə́wə (tə)wə́t ~ təwə́tcəxʷ 'Who are you?', təwə́t tɛ(ʔ) skʷíxʸ (some prefer stə́m tɛ skʷíxʸ) 'What's your name?' (Chill. tɛ, Cheh. + Tait tɛʔ), təwə́t tə swíyəqə 'Who is the man?', təwə́t swíyəqə kʷθə ʔíxʷ sə́·wq't 'What man are you looking for?', wə́t k'ʷə lə yə́θəsθàmə̀ 'Who told you?', təwə́t k'ʷə lə yə́qʷəlcəp 'Who lit the fire?', təwə́t k'ʷə lə ɬə́c'làmə̀ 'Who cut you?', təwə́t k'ʷə ʔíxʷ θə́·yəɬcət tə slə́xʷəɬ 'Who are you making the canoe for?', təwə́t k'ʷə ƛ'íls kʷs lə́ms 'Who wants to go?', təwə́t sqʷəmə́·y 'Whose dog?'

12. ƛ'akʷsəlcí·ms k'ʷɛs lə θíyt 'Why did you make it?', ƛ'akʷsəlcí·ms k'ʷɛs lə ʔəwəstálxʷ k'ʷs k'ʷə́cləxʷcət 'Why is it you don't let us see it (lit."deny us to")?', ƛ'akʷsəlcí·ms k'ʷɛs ʔə́wə ʔí·p lə́m tɛɬwə́ləp 'Why didn't you folks go?'

13. xʷʔít k'ʷɛs ʔə́wə líxʷ lə́m 'Why didn't you go?', xʷəʔít k'ʷɛs ʔə́wəɬ (qʷə́lsθàxʸ, lə̀m) 'Why don't you (ever)(speak to me, go)?', xʷʔít kʷsəs x̣tə́ tə θə́ 'Why did he do that?', xʷʔít kʷə́ 'Why (do you)?, What for? (reply to an assertion)', cəxʷ xʷʔít ʔəsə x̣tə́·stəxʷ

tə θέ 'What did you do that for?, Why did you do that?' (ʔəsə is a variant of k^{w}səs)

14. láyə́x^{w}ε (x̣έws-əs k^{w} k^{y}á·s, c-tíqíw-əs) 'Does one (or Do I) have to have (a new car, a horse)?', láyə́x^{w}ε x^{y}ix^{y}q'έm-əs 'Does she have to have her mouth hanging open?', láyə́x^{w}ε p'ap'əq'^{w}ə́m-əs k^{w}s sə́x̣^{w}əs 'Does one have to have foamy urine? (from drinking beer'

15. ʔə́wəcx^{w} ʔíx^{w} ƛ'ə́lƛ'əlmət, ʔə́tɬ 'You never get used to it, do you?', x^{w}έ·lqcəx^{w} lέm, ʔə́tɬ 'You almost went, didn't you?'

16. Subjunctive (relative pronoun-ized) examples from EB of Cheh.:
cuɬ ɬq'ə́ləx^{w} (wəstέməs, wətəwέtəs, wəʔís lə́cε, wəx^{w}cέ·ləs, wəʔís təl·ə́cε) 'I (already) know (what it is, who it is, where it is, where he's going, where he came from).', cuɬ ɬq'ə́ləx^{w} (wətəwέtəs k'^{w}ə x̣tέstəx^{w} tə θέ, wəstέməs k'^{w}ə lə k^{w}ú·təs) 'I know (who did it, what he took).', ʔəwə́tε sx^{w}əlís wəx^{w}əcέ·lέl 'no matter where(ever) I go', wəlíx^{w} x^{w}əcák^{w}əl 'wherever you're going'.

Note: some of the interrogative Vi's are also inflected and used as indefinite pronouns: təwέtəsà 'anybody', etc. (see nominal chapter).

6.2.6. Personal Pronoun Vi. This set includes pronouns of sets 4.1 and 4.2. Nothing more needs to be added here to the discussion + examples of Chapter 4.

6.2.7. Demonstrative Vi. This set includes ʔíˑ 'be here' and líˑ 'be there', and may also include their derivatives, xʷeʔíˑ 'come to be here, come here, get here, arrive' and xʷelíˑ 'go there, get there'. ʔíˑ and líˑ are also used as prepositional Vi's and auxiliary Vi's; but while they seem related historically and semantically, they nevertheless are three distinct usages with distinct syntactic features and glosses. It seems best at present to consider them separately.

As demonstrative Vi's, ʔíˑ and líˑ can be inflected for subject, future tense, and subjunctive mood; past and interrogative suffixes must be attached to a preceding auxiliary; no continuative, imperative, participle, passive or pluralizing inflection is possible with these verbs. The reason ʔíˑ and líˑ form a special class of demonstrative Vi's, is that in addition to their demonstrative glosses they can precede and combine with demonstratives unlike other verbs. (xʷeʔíˑ and xʷelíˑ cannot do this but do have demonstrative elements 'here' and 'there' in their glosses.) Some examples will illustrate:

cəl ʔíˑ ~ ʔíˑcəl 'I'm here', cəl líˑ ~ líˑcəl 'I'm there'

ʔíˑɬcəl ʔíˑ 'I was here', ʔíˑɬcəl líˑ 'I was there',

ʔíˑɬ ʔíˑ 'he/she/it was here, they were here'

lí ʔíˑ kʷθɛ mɛ̀ˑl 'Is your father here?'

we?í·celcɛ ?ó k'ʷə là qə xʷə?í·cəxʷcɛ 'I'll stay (or be) right here till you get here.', we?í·celcɛ ?ó k'ʷə là qə tésce tə slóc'es 'I'll be here till one o'clock.' (function of we- unclear)

cel ?í· k'ʷə là 'I'm here' (?í· k'ʷə là 'here, this place' (là 'this') is so frequent as a unit that it is pronounced and regarded as one word, and I have usually written it ?í·k'ʷəlà), líye ?í·k'ʷəlà 'Is it here?, Is he/she here?', le ?í·k'ʷəlà 'He's/She's here., etc.'

cel ?í· tí 'I'm over here', cel lí· tí 'I'm over there', lə lí· tí 'he's over there'

cel ?í· tɛ lɛ́lém 'I'm here at your house.', lə ?í· tɛ lɛ́lém 'He's here at your house.', lə lí· tɛ lɛ́lém 'He's there at your house.' (The last three examples apparently show that lí 'at' is sometimes omitted after lí· 'there' or ?í· 'here'.)

le xʷe?í· 'he arrived, got here', ?ewétɛ kapú kʷses xʷe?í· 'He came without a coat.', ƛ'ácɛ Bill k'ʷə mɛ́yθàmə̀ wexʷə?í·s 'It will be Bill that helps me when he gets here.', le xʷlí· te lɛ́lóms 'they got to their house'.

6.2.8. Auxiliary Vi. This group includes: me ~ mí '(come to)' (< ?əmí ~ mí 'come'), lɛ 'go, go to, going to' (< lɛ́m ~ lɛ̀m 'go(ing)(to)'), ?í· '(here)',

and lí· '(there)'. These verbs directly precede the main verb (of the phrase or clause) and can receive some of its inflective affixes, i.e., subject pronouns 4.4 and 4.9b, future -cɛ, past tense -ɬ (with ʔí·, lí· and mí only), imperative -tɬ ~ -ɬ (with mə and mí and lɛ), subjunctive wə- (with ʔí·, lí·, mí)(+ 4.9b pronouns).

Though all four verbs contain semantic oppositions of emplacement ('here', 'come to') and displacement ('there', 'go to'), these semantic elements are rarely translated (except for lɛ). Thus the glosses parenthesized are usually omitted, though often implied. As Edna Bobb explained it, lɛ means you have to go somewhere else to do the action; mə means you have to come to do the action. With mə ~ mí,'(come to)' also has the sense of 'come to pass, become' as in archaic English phrases like "and so he came to dwell there".

Plenty of examples have been given already of auxiliaries ʔí· and lí· in 6.1 and 4.9; some have also been given of mə ~ mí and lɛ in 6.1. A few more examples of mə ~ mí and lɛ will now be given:

cəl lɛ t'ák'^{W} 'I went home'
cəl mə t'ák'^{W} 'I came home'
lɛcəl t'ák'^{W} 'I'm going home'
məcəl t'ák'^{W} 'I'm coming home'

cəl mə méstex^{w} tə ʔí·ɬ ʔɛ sƛ'í 'I brought what you wanted'

cəl mə qəlé·mθət 'I'm getting weak' ("coming to get weak")

cəl lɛ x^{y}ák'^{w}əm ləc'éx^{w} 'I went for a swim once'

mə χéywéθèlèm 'I was warned'

mə qəlqéyl təl sq^{w}é·ləwəl 'I lost heart, I became disappointed or discouraged' (CT)

mí hák^{w}ex^{y} tə s(x^{w})c'áq'^{w}əls qəsu mí c'q'^{w}ét tə sqé·wθ qəsu mí ɬé·χəm ʔí təl láθəl 'use a fork and poke the potato and serve yourself in my plate' (CT)

mə cá·lqəm 'come along after (without s-o knowning it), follow'

mə k^{w}ú·θéx^{y}əs 'he came to take me'

ləcuɬ yék'^{w} 'I already hired' (EB)

ləcəl qá·qət 'I drank it, I'm going to drink it'

mə ɬélétəm tə sɬémex^{w} '(the rain is) starting to sprinkle (come splashing)'

cəl lɛ míliyəl 'I went to set a net'

mə q'á·lθət 'to return'

mə ʔé·yəlex^{w} 'come back to life, revive'

mə p'ék^{w} 'rise/come to the surface (come float)'

mə k'^{w}éclex^{w} 'catch sight of s-th'

mə p'éɬ 'sober up' ("come to be sober")

lɛ ʔé·yəl 'go away', and lɛ ƛ'pí·l 'go down'

CHAPTER 7. PARTICLES

Particles are a small class of words which cannot be inflected and which includes subsets of interjections, conjunctions, modals, and adverbials. Not all conjunctions, modals or adverbials are particles in Halkomelem; many of them are intransitive verbs, and some conjunctions are Halkomelem demonstratives. But interjections are all treated like particles. In Halkomelem, conjunctions, modals, interjections, and adverbials are syntactic classes while particles, intransitive verbs, and demonstratives are inflectional classes. Within the class of particles, interjections are always stressed but conjunctions and modals seldom are and adverbials never are. Since particles can't be inflected there is little more to be said about them here except to list those found so far, with some examples. More will be said of them in the syntax chapter.

7.1. Interjections. These are mostly used in syntactic isolation; length can be stretched to : or even :· (three morae). The following have been found so far: qélə́méx^{y} 'oh my goodness!', also lá qèlèmèx^{y} -

ʔó qèlèmèx^{y} 'oh my goodness!'

ʔé·cele 'gee!, good grief!, my gosh!'

ʔəlelíʔ 'yipes!, eek! (said to oneself or s-o else when

scared)' (some younger speakers (middle-aged, moderately fluent) say ʔɛnɛnɛ́ʔ)

ʔɛ́ɬ [ʔɪ́ɬ] 'you're kidding! (slang popular at hop-picking 30 years ago)' (possibly < English slang, cp. "ish-kabibble", etc.)

lɛ́ʔɛ 'hey!'

ʔɬʔ 'stop!, (you're close to) danger!' (slang)

q'ʷɛ́q'ʷeleχ 'excuse me!, watch out please!'

lɛ́·lɛ 'well! (if surprised)'

yú:w 'how beautiful! (said when praising s-th beautiful you're admiring)', also yú:wqʷɬɛ and ʔéyqʷɬɛ 'how beautiful!, really beautiful!' (the -qʷɬɛ is an intensifier (adverbial) and may convert yú:w into a verb)

tu sʔáɬ k'ʷeɬɛ́ (perhaps tu sʔáɬ-qʷɬɛ ?) 'that's terrible! (of s-o's actions)' (tu is probably an adverbial particle with intensifying force as listed below; sʔáɬ may be the possessive pronoun 'our' or something entirely different)

ʔó 'oh!' as in ʔó tɐ χɛ́t'ɐtà 'oh the talking! (said when fed up with s-o talking too much)', ʔó tɛlɛ́wɐ sqʷmɛ́·y '(oh) you dog!', ʔó tɛlɛ́wɐ spipíyxʸel '(oh) you crooked leg (person)!', ʔó tɛlɛ́wɐ skʼʷfkʼʷiy 'oh, you're stingy!', or ʔó tɐ skʼʷɛ́kʼʷi(y)θ 'oh, the pitiful person! (used of kids when hurt, etc.)'

(sk'^{W}ék'^{W}iθ 'pitiful person' may < sk'^{W}íyəθ 'slave' so I have added a parenthetic (y), thus sk'^{W}ék'^{W}i(y)θ)

ʔɛʔé tə swék' 'oh-oh, (here comes) the dandy!' (swék' 's-o who overdresses, a dandy', swék'lec 'a show-off, comedian')

lέw 'say! (said to get attention politely), hello (greeting)', also lé lέw 'say! or hello! (to spouse)'

χ: '(a sound of glad greeting to see children, made while patting kids under chin with palm upright)' (used by the oldest generations now remembered -- grandparents and great grandparents of today's elders who are themselves great grandparents and grandparents, but seldom used since)

ʔé·ʔɛ 'yes' (sometimes even [ʔm̥:ʔm̥]), also ʔé (apparently when not initial in sentence) as in yáswe ʔé 'maybe yes', lí t'we ʔé 'must be', and lí ʔé 'I guess so'

lí ʔé (Cheh.) ~ lí mè (Seabird Is.) ~ ɬéq' (RM of Sardis) 'I guess so' (lí is present in affirmative reply to yes-no questions, see next item)

lí 'I am, I do, yes, he is, he does, etc.' (affirmative reply to yes-no questions which have interrogative lí)

(ʔi?é·y ~ ʔó?àwèɬ 'uh-huh (keep on going)(said to a storyteller to show you are listening and awake)' (all upriver dialects have the first form, ʔi?é·y

which is probably diminutive R_4- plus ʔé·y 'keep on (going)'; AC has it too but also uses ʔóʔàwèɬ (as do some others) in the same way as ʔiʔé·y; since R_4- and -àwèɬ ('polite imperative') are both inflections, neither word probably can be counted a particle.)

7.2. Conjunctions. Those which are particles include:

qe 'and, but, or' (gloss depends on sememic environment though 'but' is also sometimes qe-w or qe __-w) (conjoins verbs, phrases, sentences, and sometimes even nouns)(AC qe ~ qɛ)

qɛs 'and' (conjoins numerals, independent pronouns, and nouns (nominals); precedes demonstrative article)

su 'so, then'

(EB: qew __-e ~ (AC) qe __-e 'until' (probably inflectable and not a particle))

Some of these can occur in combination with qe, modal θ'ɛ, weɬ, and inflectable ƛ'a and ʔe :

qesu 'and so, and then'

ʔesu '(and) so'

suɬ 'so (already)' (< su + weɬ)

qewɬ 'and (already)'

(qe)ƛ'a-__-su (pronoun set 4.8 can go in the blank) (used especially in narratives and stories)(the paradigm with 4.8 pronouns is as follows):

(qə)ƛ'a-l-su 'and so I, and then I'

(qə)ƛ'a-ʔɛ-su 'and so you, and then you'

(qə)ƛ'a-(s?ó)s-su (~ (qə)ƛ'a(só)su) 'and so/then he/she/it/they'

(qə)ƛ'a-s?ɔ́ct-u 'and so/then we'

*(qə)ƛ'a-s?ɔ́ləp-su 'and so/then you folks' (not yet attested)

ƛ'acɛ su 'then he will, so it will be him that'

qəƛ'aθ'ɛsɔ́su 'and then they say he, and so it is said he/she/it/they'

(ʔə)wɛ́s ... qə 'if not ... then'

Examples:

1. lə ʔɛ́ƛ'qəl qə ʔəwɛ́tɛ ʔà kapʊ́s qə yíyəq 'He went outside without a coat (lit. "and he just had no coat") and it was snowing.'

lə ləmɛ́lstəx^{w}ɛs tə Bill tə sq'ɛ́mɛ́l x^{w}ələ́m tə Jim qə Bob 'Bill threw the paddle to Jim and Bob.'

cəl k'^{w}əclə́mə qə Bob 'I saw you and Bob.'

c'ɛc'íc'əƛ' qɛ mɔ́k^{w} 'short and stout'

ƛ'acɛsu q'^{w}əyílɔ́x^{y} qɛ t'í·ləm təl siyɛ́·yə 'My friends will sing and dance.'

2. ƛ'á swɛ́s ʔisɛ́lə sq^{w}əmɛ́y qɛs tə qɔ́x̣ pʊ́s 'He has two dogs and lots of cats.'

cət ʔíɬtəl tlaqɛ́·ys tə Bill qɛs tɛʔɛ́ʔɛlθɛ 'Bill and I are eating right now.'

cət ʔéɬtəl tə Bill qɛs tɛʔéʔɛlθɛ 'Bill and I ate.'

ʔápəl qɛs tə lék'ə 'eleven'

tux^{w}əlsx^{y}é qɛs tə tú·x^{w} 'ninety-nine'

slét qɛs tə swéyəl 'night and day'

3. lí lém k'^{w}ə Bill qə Bob 'Did Bill or Bob go?'

ƛ'á Bob qə ƛ'á Bill 'It's Bob or Bill.' (presumably the second ƛ'á would be absent if qə were 'and' here)

ƛ'á· Bob qə ƛ'á· Bill 'Is it Bob or is it Bill?'

ƛ'á t'wə Bob qə ƛ'á t'we Bill 'Maybe it's Bob or maybe it's Bill.'

líɬx^{w} líyəm qə líɬx^{w} χè·m 'Did you laugh or (did you) cry?' (last five sentences by EB)

(AC) lí cák^{w} tə léləms qɛ lí stətís 'Is his house far or is it nearby?'

(AC) líɬx^{w} lí tə s?ehí·ws qɛ líɬx^{w} łɛłé·l 'Are you on the outside (upriver side) or the inside (back by the wall side)(of a bed)? (cp. lémcəx^{w} tə łəłé·l 'you go to the back (near the wall)')

4. lémələcəl qə cəl ?éwə ?à 'I was going but I'm not now.'

cəl wək'^{w}ák'^{w}əcət qə lə-w lép'əx^{y}es 'I was watching him but he ate it.'

χéyχəwətəm qə-w lɛ x^{y}ák'^{w}əm 'He was (being?) warned but he bathed.'

The -w in the last two sentences may be an intensifier suffix as with adverbial Vi's.

θ'eχ^{W}ét qə ?éwəcəx^{W} c'éyx^{W}təx^{W} 'Wash it but don't dry it!'

qéχ tə ƛ'ik'^{W}íyəɬp qə ?əwéts ƛ'ík'^{W}əl 'There's a lot of bean vines but no beans.'

5. su ?í·westəs túƛ'a θú·ƛ'à 'so she showed/taught him'

k^{W}élέx^{Y}təs túƛ'a su mí k^{W}əl·éx^{W}əs 'He shot it, so he caught it.'

su x^{W}ə?í·lx^{W}əs tə sméyəθs 'so he brought him his meat'

6. (next four sentences by ER, last three by AC):

χè·m ?à qəw (léməθ t'á·k'^{W}, mí ?ə x^{W}ə?í· tə té·ls) 'He was crying until (he went home, his mother arrived).'

spípəw tə stá·lo qəw léməθ x^{W}lí tə slə?á·θəl 'The river is frozen all the way across (until it goes/gets to the other side).'

spípəw tə stá·lo qəctu (hyper-slow qə cət-əw) léməθ x^{W}lí tə slə?á·θəl 'The river was frozen until we got across.'

méqɛ qəctu léməθ x^{W}lí tə smé·lt 'snow (all the way) until we reached the mountain'

(AC) lɛcx^{W} cá·m qə téscəx^{W} ?ə tə smé·lt 'You go away from the water till you get to the mountain.'

wə?í·cəlcɛ ?ə k'^{W}ə là qə téscɛ ?ə tə slécʼəs 'I'll be here till one o'clock.'

wə?í·cəlcɛ ?ə k'^{W}ə là qə x^{W}ə?í·cəx^{W}cɛ 'I'll stay right here until you get here.'

7. qəsu lèm 'and then he went'

ʔéχqst tə méćəs qəsu yéqʷt kʼʷə sísq' 'strike the match and light (burn) the kindling'

cʼqʼʷét tə sqé·wə qəsu mə ƛé·χəm ʔí təl láθəl 'poke the potato and put it/serve it on my dish'

qəsu táːtəl·àːmət yuƛʼá·ləm 'and (so) they understand'

8. ʔəsu lém yə lí·kʼʷ 'and so a few (people) came'

ʔəsu ƛʼá sqʷélqʷəls 'So that's their news/story/narrative'

ʔəsu θét tə sá·səqʷt, "ƛʼácɛ kʷəl swé" 'So the youngest (sister) says, "That (man) will be mine."

ʔəsu léːm yuƛʼá·ləm 'So they went and went.'

ʔəsésu mə hí·kʷθət tə qá· 'and then the water got big'

ʔəsésu kʼʷéclɛxʷəs tə sqʷəqʷé lí tə sné·lt 'then he saw the hole in the mountain'

ʔəsésu lə θʼé·m 'then it subsided/went down (flood water)'

9. ƛʼəlsuɬ χèːm kʼʷəls yəʔí·məxʸ '(so) I cried when (while) I went walking'

ƛʼəlsuɬ lém tʼé·kʼʷ 'I have to go home.'

suɬ mə kʷəl·éxʷəs 'so he's got it' ('already', 'come, come to' and 'happen to' are implied but not directly translated in this example)

10. su lə kʼʷécət tə híyəqʷ túƛʼa qəwɬ lí tə híyəqʷ 'So he looked at the fire and it was already in the

fire.' (CT)

lə k'^{W}écət χtɛ́ tí θúƛ'a qəwɬ ƛ'ɛp'élɛcəm tə stqá·yɛ

'She looked over there and the wolf was (already) wagging his tail.' (CT)

qəwɬ lɛ́·m 'and he went'

11. ƛ'alsu tɛ́s k'^{W}ə ɬq'ɛ́·ləc '(So) I got to Vancouver.'

ƛ'alsu cɬɛ́·məɬ təl sk^{W}í·x^{y}. ƛ'alsu sɬaɬək'^{W}íwəl,

ƛ'alsu θət, "lɛ́w, siyɛ́yə" 'Then I heard my name. I was dumbfounded, and so I said, "Hi friends"

cəl lɛ́m tə stá·lo ƛ'alsu k'^{W}écləx^{W} tə qɛ́χ sθ'áq^{W}i

'I went to the river and saw a lot of fish.'

ʔɛ́cəl tatí·lt tə hɛlq'əmɛ́yləm sq^{W}ɛ̓·l ƛ'alsu χɛχɛ́·ylt

'I'm learning the Halkomelem language and I'm writing it.'

lə ləmɛ́lstəx^{W}əs tə sq'ɛ́mɛ́l qəƛ'alsu k^{W}ɛ́l·ɛ́x^{W} 'He threw the paddle to me and I caught it.'

12. ƛ'aʔɛsu lɛ́m (ʔɛ ~ ʔə here) 'then you go'

mɛ́x^{y}ɬɛ tɛ st'alɛʔaléstəl qəƛ'aʔɛsu k'^{W}écləx^{W} 'Take off your eyeglasses, and then you can see it.'

13. k^{W}ú́təs tə ləpɛ́l ƛ'əsu k'^{W}aq^{W}əθɛ́x^{y}əs 'He took the shovel and hit me.'

ƛ'asu tɛ́s tə smɛ́·lt qəsu lɛ k^{W}ətx^{W}í·ləm yuƛ'áləm 'and so they got to the mountain and (they) went inside (into a cave)'

ƛ'əsu lə tɛ́s k'^{W}ə səmɛ́θ tə q'əχ^{W}ɛ́wəɬ 'Then the big canoe

got to Sumas.'

mók'ʷ slɛ́t k'ʷəs ʔəmí(s) tə lɛlə́mcət tə ʔisɛ́lə spɛ́·θ ƛ'asu ʔɛ́ɬtəl(s) tə qʷəʔáp 'Every night two bears come to our house and eat apples.' (parenthesized -s possibly errors).

qəƛ'asu mɛ́ytə̀mə̀t túƛ'a 'and so he was helped'

(x̣ɛ́yət, həwθ'ɛ́t) qəƛ'əsu x̣ɛ̀·ms '(fight him, teasing him) till he cries'

14. ƛ'asʔə́su xʷəlmə́xʷqəl lí tə θɛ́ 'Then they spoke Indian language there.'

ƛ'asə́su ʔá·təs tə məstíyəxʷ 'and so he called the people'

ƛ'asə́su ʔəmí tə stəqá·yə 'then the wolf came'

(AC, hyper-slow) [lə ʔiyá·təl qə́-ƛ'á-sʔÍs-su x̣ǽ·m] 'they had a fight and he/she cried'

lə ʔiyá·qθət tə smíməx̣ə̀ɬ qəƛ'asʔə́su xʷə (ɬaliqʷát, smímayə̀θ) 'The caterpillar changed itself into a (moth, butterfly).' (lit. "and so it became a moth/butterfly")

lə ɬí·c'ətəm qəƛ'asʔə́su calə́x̣ʷəm 'he was cut and he bled'

qəƛ'asə́su lə xʷə́ (hyper-slow xʷɛ́) məstíyəxʷ 'and so he turned into/became a person'

lə θək'ʷə́təs qəƛ'asə́su x̣əθ'ə́təs qəƛ'asə́su cə́lq 'He pulled it and then pushed it and it fell.'

xʷámxʸələm qəƛ̓asə́su ɬə́k̓ʷxʸəl qəƛ̓asə́su (wəc̓ə́ƛ̓, cə́lq) qəƛ̓asə́su lək̓ʷxʸɛ́l 'He was running and he tripped and fell and broke his leg.'

15. ƛ̓asə́ctu wəlɛ̀m sq̓əq̓á 'so we'll go together'

ʔə́wə lís ʔí qəƛ̓asə́ctu ʔɛ́ɬtəl 'He wasn't here and so we ate (without him).'

16. ƛ̓acɛ su q̓ʷəyíləxʸ qɛ t̓í·ləm təl siyɛ́·yə 'my friends will sing and dance'

17. qəƛ̓a θ̓ɛ sə́su (lɛ̀m, kʷútəm) 'and then they say he (went, was grabbed)'

18. wɛ́s ƛ̓ás tə mə́ləs qə ƛ̓ás tə ʔí·məθs 'if it's not his son, (then) it's his grandson'

7.3. Modals. Some particles have meanings associated with English modal auxiliaries (probability of action, obligation to perform action, etc.). A few words also have such meanings but can be used otherwise as inflected Vi's (yáswə 'maybe, perhaps', ʔiyá·ləm 'can, could; (be) right, correct, okay', sk̓ʷɛ́(·)y 'can't, be impossible; be wrong', and sƛ̓í 'want'); these may be words used both as Vi's and particles (they will be marked as possible particles). The modal particles include:

θ̓ɛ ~ c̓ɛ 'it is said, they (impersonal) say, so they say'

t̓wə ~ t̓wɛ 'must, should', also in combinations like: ʔət̓wəwɬ 'must have', lí t̓wə 'I guess (uncertain)'

(probably contains interrogative lí), and ʔéy t'wə 'it's better if, s-o had better'

kʷé 'anyway' (perhaps adverbial)

(related: yáswə, skʼʷé·y, sƛʼí, and ʔiyá·ləm (but cp. lí ʔá·lə 'Is that right?', ʔiyá·ləm probably < ʔiy- (affixed version of ʔéy 'good'), ʔá·lə 'right, correct', -əm 'middle voice' or < ʔéy + ʔàl as in tusʔéyʔàl 'gently, softly' and lícxʷ wəʔéyʔàl 'Are you doing alright?')(modal but verbs not particles).

Some examples:

1. cʼɛ 'so they say' (in a story by Mary Peters)(EB θʼɛ)

(EB) θʼɛ lèm 'they say he went'

(EB) θʼɛ χʷétʼəstəm kʷsəs kʼʷécləm 'they say he was seen' (χʷétʼəstəm also means 'it is said')

2. tʼwɛ ʔí·təṯ 'he must be sleeping'

qéχ tʼwə kʼʷɛ téɬé 'you must have a lot of money'

spaləqʷfθʼɛ tʼwɛ 'it must be a ghost'

lí·ɬ tʼwə 'must have been'

ʔí·ɬcəl tʼwe ʔí·təṯ 'I must have been asleep'

yáswə tʼwɛ 'maybe it was' (?)

skʼʷéy tʼwə kʼʷəs léms θú·ƛʼà 'It might be impossible for her to go.'

skʼʷéy tʼwe kʼʷəs léməṯ 'We might not go.'

3. ʔétʼwəwɬ lèm 'He must have gone.'

yáswə ʔétʼwəwɬ há·yθəl 'They may be finished eating.,

Perhaps they're finished eating.'

4. lí t'we 'I guess.' (only attested in isolation)

5. ʔéy t'^{W}ə k'^{W}əls lèm 'I'd better go.' (lit. "it must be good that I go")

6. lém k^{W}é 'he went anyway'

stém k^{W}é k'^{W}ə q^{W}álstəs 'What is he boiling (anyway)?'

k^{W}ək^{W}cé·m k^{W}é "serves her right she's screaming now", probably 'she's screaming anyway'

7. yá(·)swə (wəlémèl, wəlémex^{W}, wəlémət, wəlémələp, wəléməs tú·ɬ'a/θú·ɬ'a/yuɬ'áləm) '(I, you, we, you folks, he/she/they) might go.'

yá·swə wəlémèl 'I don't know if I could go.'

yá·swə wəlís ʔiyáləm k'^{W}əls lém 'I don't know if it is/would be alright for me to go.'

yáswə k^{W}əs ʔiyáləm k'^{W}s lém tú·ɬ'à 'I don't know if it's alright/okay for him to go.'

yáswə wəsk'^{W}éyəs k'^{W}əls lém 'I don't know if I'm able to go., I might not (be able to) go.'

yáswə wəsk'^{W}éyəs (k'^{W}əs lém, k'^{W}əs lém θú·ɬ'à, k'^{W}əs lémcət, k'^{W}əs lémələp) '(You, she, we, you folks) might not be able to go., It might be impossible for (you, she, we, you folks) to go.', (probably also 'I don't know if (you, she, we, you folks) are (un)able to go.')

8. ʔí·ɬ ʔiyá·ləm (k'^{W}əls, k'^{W}əs) ʔéɬtəl '(I, you)

could have eaten.'

?í·ɬ ?iyá·ləm k'^{W}s (?éɬtəls, ?éɬtəlcət, ?éɬtəlélép)
'(He/etc., we, you folks) could have eaten.'

9. For other examples of yá(·)swe 'perhaps', ?iyá·ləm 'can', sk'^{W}é·y 'can't', and sƛ'í 'want' see pronoun chapter, 4.8 and 4.9.

7.4. Adverbials. The following morphemes, listed as adverbial Vi's, are unstressed and uninflected and so may be particles: wəɬ 'already', yɛɬ 'just, now', x^{W}əl 'still, yet', ?əl 'just, simply', k^{W}əɬtu 'really', and tu '(intensive)'. For examples of these adverbial particles or Vi's see the chapter on verbs, section 6.2.4.

CHAPTER 8. NOMINALS

8.0. Nominals include many morphemes which are underived nouns, plain and simple (such as q'^{w}ə́·l 'ear', θ(ə)qɛ́t 'tree', etc.). But even more common are words which have verb roots and a nominalizing prefix, s- or sx^{w}-. These function in every way like true nouns, but they are formed from verbs and are nominalized by the prefix just as even inflected verbs, verb phrases and sentences can be nominalized by the same prefix. So it seems best to call the whole class (including underived nouns) "nominals".

In addition to the s- and sx^{w}- prefixes, nominals can also be derived from other nominals or verbs by some lexical affixes (see Chapter 5). Verbs can also be relativized (nominalized?) by preceding them with a demonstrative article (təl s?ɨ·k'^{w} 'what I lost', tə q'ɛ́q'ət'əm 'something sweet'), but that is a matter for syntax; pronoun sets 4.3 and 4.11 are nominalized in this way too from the pronominal verbs of 4.1 and 4.2. Some interrogative verbs are also nominalized by affix or article to form the indefinite nominals. Numerals are nominalized by lexical affix, s- prefix, or article pre-position. Particles are the only inflectional class which cannot be nominalized by any means.

With some nominals, once the s- or sx^{w}- nominal-

izer is removed the root cannot be identified as a verb or anything else; the root is no longer attested elsewhere. With other nominals the s- or sx^{w}- nominalizers are present in some dialects or idiolects and absent in others; in these cases the unprefixed form is still a nominal and is a synonym with the s- or sx^{w}- prefixed form (or nearly so). Here are some examples of nominal derivation:

sp'á·ƛ'əm 'smoke' < p'á·ƛ'əm 'to smoke'

st'í·ləm 'a song' < t'í·ləm 'to sing'

s?íθ'əm 'clothes' < ?íθ'əm 'get dressed, dress oneself'

sq'ə́p 'a gathering' < q'ə́p 'gathered'

smə́k'^{w}əm 'something second-hand' < mə́k'^{w}əm 'use second-hand'

sk^{w}əx^{y}ə́·m 'number' < k^{w}əx^{y}ə́·m 'count'

sx^{w}qə́yqəχ̌áθət 'sled, toboggan, ice skate' < qə́yqəχ̌áθət 'slide oneself, make oneself slip or slide'

sx^{w}θá·yəlcəp 'fire poker' < θə́·y 'making, fixing' + Aa· + -əlcəp 'firewood'

(Chill.) sc'ə́·ləctəl - (Tait) sx^{w}c'ə́·ləctəl 'bench, chair' < c'ə́· 'be on top of', -ləc 'rump, bottom', -təl 'device'

sqələ́·w 'beaver' (root unattested elsewhere)

ləx^{w}s-t'í·ləm 'a person that always sings' < t'í·ləm

cack^{w}á·les 'goatsbeard plant' < cák^{w} 'be distant, far'

+ R_1- 'continuative'? + -á·les 'in the eyes' ɬq'é·c-éle 'five people' < ɬq'é·ces 'five' + -éle 'people'

s-ɬq'é·ces-s 'five o'clock' (/sɬq'é·ces/) < ɬq'é·ces

tɛléwe 'you' < léwe 'it's you'

s?ɛyí·ws 'the right side' < ?ɛyí·ws 'be on the right' (in turn < ?éy 'good' + -í·ws 'on the body')

stɛméstwe ~ k^wstémes 'something' and stámcele 'someplace, somewhere' < stém 'what is it?, what?'

swátle 'somebody' < (te)wét 'who?, who is it?'

Nominals cannot be inflected for case in Upriver Halkomelem; here case does not exist, not even the relative case found in some other Coast Salish languages. Syntax, prepositional verbs and co-ordination with pronoun affixes on the verb do the job of case. However, nominals can be inflected for possessive, diminutive, plural, and past tense. The sections to follow will treat derivation of indefinite nominals, then the inflections of possessive, diminutive, plural, and past.

8.1. Indefinite nominals.

1. k^w stéməs, k^wəe stéməs, k'^we stéməs 'something'
2. təwétəs 'someone, somebody (unknown)'
3. stéméstwe 'something' (probably 'something unspecified')
4. təwétəstwe 'somebody' (probably 'somebody unspeci-

fied')

5. k'^{W}iléstwe 'unstated how many, "it doesn't say how many", an undetermined number'
6. swátle 'so-and-so, somebody known (whose name is not known), what's-his-name'
7. stámcəle 'someplace, somewhere' (EB only)
8. təwétəsà 'anybody'
9. k^{W} stémés 'anything'
10. yə lí·k'^{W} (AC) ~ yə k'^{W}í·lès (EB) 'a few, several (people or animals)' (contrast ?əmímel 'a little bit, a small amount, a few')
11. mək'^{W}stém 'everything'
12. mək'^{W}(ə)wét(əs) 'everybody'

From following examples it will be seen that the above are all nominals. They are all derived from interrogative verbs (stém 'what?, what is it?', (tə)wét 'who?, who is it?', and k'^{W}í·l 'how many?, how many is it?'). Those deriving from stém and təwét could be said to be nominalized by s- and tə- (though these are already present on the original verbs) because stém and təwét do have a nominal flavor as well and because tém (in təmtém 'when?') and wét 'who is it?' are also found.

Indefinites 2, 3, 6, 7, 11, and 12 above are all attested following demonstrative articles. 1, 9 and 10

are not attested following demonstrative articles because they include the articles: 1 is really k^W, k^Wəə or k'^Wə + stémés, but is not an indefinite without the article; the citation form is k^Wstémés. The same is true of 9 and 10; 10 includes the plural demonstrative article, and AC's form apparently has a metathesis of consonants deriving it from k'^Wí·l. In addition to these features 1, 2, 3, 4, 5, 8, and 9 have the suffix -es which seems derivational but is otherwise unclear. 3, 4, and 5 have the suffix -twə which seems to mean something like 'unspecified, unstated'; possibly it means 'uncertain' and relates to t'wə as in lí t'wə 'I guess so'. 6 and 7 have Aa (ablaut of root vowel ɛ to a) as well as -cələ and -lə suffixes of uncertain significance; -cələ could be a metathesis of lécɛ, EB's variant of ʔɛlécɛ 'where?'. 8 ends with -à 'just' (see adverbial Vi's), and a similar variant of 9 may exist too. 11 and 12 both have either prefixed or preposed mək'^{W} 'all, every' or use stém and wét(es) as suffixes.

Examples:

1. cəl hék'^{W}ələs k^W stémés 'I remembered something', sétqctəs k'^{W}ə stémés 'he lights something, he set something on fire' (cp. sétqctəs k'^{W}ə píp̓ə 'he lights paper (on fire)'), yéq^{W}t k'^{W}ə (stémés, sísq') 'burn (some-

thing, kindling)', c'q'^{W}ét k^{W}ə stémés 'poke something, pick something up by spearing, spear something', ləwəx^{y}əs k^{W} stémés lí tə sx^{W}átk^{W}əwəl 'he/she sticks something into something hollow', χ^{W}éylémt k^{W} stémés 'measure something, weigh something' (χ^{W}éylémt 'weigh/measure him/her/it/them' < χ^{W}éylém 'rope, string, thread').

It may be good to retain abbreviation of transitive third person objects as "s-th/s-o" which really stand for "him, her, it, them" and to contrast these with "something" and "someone" (written out in full) which are only impersonal (and indefinite) as in k^{W} stémés and təwétəs.

2. c'éc'əq'^{W}ləm k'^{W} təwétəs 'someone got shot', lə télstəm k^{W} təwétəs wəls yə?f·məx^{y}s 'somebody stumbled while he was walking' (wəls appears to be an adverbial Vi or adverbial particle), lə q^{W}əlq^{W}əléses təwétəs 'he's telling on somebody' (sic lack of article)

3. k^{W}əlétəs tə stéméstwə 'he's holding something', lɛcx^{W} k^{W}ét tə stémést(')wə 'let go of something', and stéméstwə ?ɛyá·ə χéyp'ət k'^{W}əl ?áq^{W}əlɛc 'something sharp scraped/scratched my back' (it would seem χéyp'ət followed by an article should begin this sentence; the syntax seems unusual)

4. təwétəstwə sq^{W}eméy 'somebody's dog' (cp. təwét

sq^{w}əmə́y 'whose dog?')

5. ƛ'asə́su lə ƛəpí·l k'^{w}iləstwə yuƛ'ə́lem swáwələs 'And so the young men went down, it doesn't say how many of them' (perhaps smoother in English: 'and so an unstated number of young men went down/descended')

6. c'ə́c'əq'^{w}lem k'^{w} swátlə 'so-and-so got shot, what's-his-name got shot', cəl wawistéləqmət tə swátlə 'I'm jealous of somebody', sθiyə́p tə swátlə 'somebody (who I know) is wearing a loincloth' (sθiyə́p 'wearing a loincloth' > or < sθíyə́p 'loincloth, dog hair cloth aprons'), (tə) sk^{w}í·x^{y}s tə swátlə 'somebody's name'

7. lémcəl k'^{w}ə stámcələ 'I'm going someplace, I'm going somewhere'

8. təwə́təsà k'^{w}ə θíyəm 'Anybody can do the baking.', təwə́təsà k'^{w}ə ?əmí sq'á 'Anybody can come along.', təwə́təsà k'^{w}ə ƛ'í·ls k^{w}s məs yəsq'á 'Anybody that wants to can come along.' (without preceding article təwə́təsà may be a verb in these examples)

9. No examples in sentences, just the citation form k^{w} stə́məs 'anything'

10. (AC) ?əsu lèm yə lí·k'^{w} 'and so a few (people) came', (EB) s?í·k'^{w} yə k'^{w}í·lès 'several people were lost (and presumed dead)' (k'^{w}í·lès 'several (people, animals)(exact number unknown)' as in k'^{w}í·lès t'wə tə músməs 'there must be several cows'. Incidentally

the latter example within this parenthetical note contrasts t'wə with -twe quite clearly), (EB) ʔəxʷəθáxʸcəxʷ kʼʷ ʔəmíməl 'give me a few (berries for ex.), give me a little bit (water for ex.)'

11. líqʷəl tə məkʼʷstém 'all is calm, everything is calm', téwəl tə məkʼʷstém 'all is bright', məkʼʷstém ʔéy kʼʷɛs θíyém 'you cook (fix/make) everything nice (good)' (syntax is a little odd), məkʼʷstém sxʷʔéys 'good for everything' (cp. ʔəwétɛ sxʷʔéys 'good for nothing'), mékʼʷà sxʷlís tə qáˑ 'There's water everywhere.' (sxʷlís 'where it is'). (mékʼʷ - (AC) mókʼʷ seems to be an adjectival verb '(be) all, (be) every' as seen in the following: mékʼʷ slét 'every night', ləmlémətcxʷ mékʼʷ təl θʼɨʷəlwétəm 'fold all my laundry!', skʼʷéy kʼʷɛs mókʼʷləp lém 'you can't all go', qəkʼasésu ʔáˑɬ mókʼʷ yukʼéləm 'and so they all got in the canoe/got aboard')

12. skʼís kʼʷə məkʼʷəwétəs 'he likes everyone', wəɬ ʔiyáˑləm kʼʷə məkʼʷəwétəs 'enough for everybody', məkʼʷəwét lém ~ mékʼʷ lém 'everybody went', məkʼʷəwétəs kʼəkʼéxʸəltəs 'he/she/they invited everybody', məkʼʷəwét lə ʔéyələs 'everyone left him'. Apparently məkʼʷstém and məkʼʷ(ə)wét(əs) have some syntactic features still to be figured out.

13. Although they formally resemble indefinites,

relativized interrogatives do not belong here as they are clearly verbs: wəstémescɛ k'^{W}es ?éɬtəlcət 'what we'll eat, what it will be that we eat', ?éwəɬ lə θét yuʌ'álem wəstémes tə qá· 'They didn't say what the water was (fresh or salt water)', (EB) cuɬ ɬq'éləx^{W} (wəstémés, wətəwétəs, wə?ís lécɛ, wəx^{W}cé·ləs, wə?ís təl·écɛ k^{W}səs x^{W}ə?í·) 'I know (what it is, who it is, where it is, where he's going, where he came from).'

14. ?əwéte 'none, nobody, nothing' either belongs here or with negative verbs ('be/have none/nobody/nothing'); its class is unclear as yet. Thus ?əwéte mə x^{W}ə?í· 'Nobody came.', ?əwéte ?í· 'He's not here.', ?əwéte-l-s ɬí·m 'I didn't pick anything.'

8.2. Possessive Inflection. Possessive inflection has already been described in the chapter on pronouns; see 4.6 and 4.7. The third person possessive suffix is used instead of a genitive case: tə sléx^{W}əɬs tə swíyəqə 'the man's canoe' (lit. "the canoe-his the man"). Partitives use prepositional Vi təlí 'from': tə láləc'ə təlí tə swáwələs 'one of the young men' (lit. "the one-person from the young men"), or láləc'ə təlí ʌ'ɛɬíməɬ 'one of us'.

8.3. Diminutive Inflection. Diminutive inflections of nominals is done by several types of reduplication: most often by R_4 (C_1í-), but also by R_1 (-C_1ə-

after V_1), R_3 (C_1eC_2-)(once), R_5 (C_1e-), R_6 (-eC_2 before V_1) and R_7 (C_1é-). Since this has been treated in detail in the morphophonemics (2.5) only a few examples need be given here; 'pet name' belongs here as a morphosememic variety of 'diminutive'. There are also diminutive lexical affixes (for example -iyɛ in Chapter 5), but they are clearly derivational. Examples:

R_1: q'éq'əmi 'little girl' < q'é·mi 'adolescent girl', stáɬəlo(w) 'creek' < stá·lo(w) 'river', χ́éχ́cɛ 'little lake' < χ́á·cɛ 'lake', húɬheliyɛ 'small-sized humpback salmon' < hú·liyɛ ~ hó·liyɛ 'humpback salmon', tétel 'Mom (pet name)' < té·l ~ tè·l 'mother', sísələ 'granny (pet name)' < sí·lə 'grandparent'

R_3: sχ́əq'χ́éq'ət 'a little bluff' < χ́əq'ét 'a bluff, cliff'

R_4: sqíqəwèθ 'small rabbit' < sqəwéθ 'big rabbit, rabbit', θíθqət 'little tree' < θ(ə)qét 'tree', sq^{W}íq^{W}əmɛy 'puppy' < sq^{W}əmé(·)y 'dog', mímχ́^{W}ayɛ 'little navel' < móχ́^{W}ayɛ 'navel, belly button', x^{W}íx^{W}əlməx^{W} 'little Indian' < x^{W}élməx^{W} 'Indian', líɬɛk'^{W}wì·l 'small cross' < lɛk'^{W}wì·l 'cross (grave or rosary)', θ'iθ'χ́éyt 'bead' < θ'éχ́ət 'gravel (smaller than pebbles)', sqíqəməl 'puberty hut' < sqémél 'pit house', sƛ'íƛ'əleqəm 'little supernatural creature' < sƛ'é·ləqəm

'supernatural creature (generic)'

R_5: q^{w}eq^{w}ɛ́·l 'small (singed cedar) float for nets', sχ^{w}eχ^{w}iyɛ́m 'story, fable' < (E + S) sχ^{w}eyɛ́·m 'myth'

R_6: spəlá(·)l 'small crow' < spá·l 'crow', χ^{w}eχ^{w}iyɛ́·yə 'housefly' < χ^{w}eχ^{w}ɛ́·yə 'big fly, blowfly'

R_7: mèməlehá·lɬ 'bird egg' < méłə 'child', -há·lɬ 'young'

Only R_4 and R_1 are still productive diminutive inflections.

8.4. Plural Inflection. Plural inflection of nominals involves a great variety of processes and affixes, most of which have already been dealt with in the morphophonemics (2.3 and 2.5, q.v.). Nominals can be pluralized by reduplication (R_2, R_3, R_5, R_6, R_7, and R_8), by ablaut (Ai·, Aɛ·, Aɛy, Aa, Aə) and by plural infix -əl- ~ -lə-.

Inflected plurals usually imply ['many'] not just ['more than one'] or ['a few'] (even with paired body parts). Since this is true, they are seldom used with the lower numbers -- for example, ɬx^{w}ɛ́·lə siyá·lex^{w}ə 'three old people' uses the singular rather than the plural sí·yá·lex^{w}ə 'old people'. Further, not all nominals can be pluralized; those that cannot can be preceded by the plural demonstrative article yə or modified by qɛ́χ 'many' or some other verb or

context implying multiplicity. If the nominal is not pluralized by inflection, modification or context it can be assumed to be singular.

Diminutives with R_4- are almost always pluralized by Aə on the vowel /i/ in the reduplication; diminutives with other types of R tend to have plurals made with the -əl- ~ -lə- infix rather than an additional reduplication. Nominals with reduplication for other purposes (derivational, continuative, etc.) sometimes replace that R with R_3 plural reduplication. All these adjustments reflect a dissimilation of processes. Inflection (if possible) is preferred to other ways of indicating plurality of nominals. But AC had noticeably fewer inflected plurals than speakers of Tait and Chehalis dialects; it is unclear whether that is idiolectal or dialectal.

Following are some examples of nominals inflected for plural:

R_2: syéq'yəq' 'a lot of logs' < syéyəq' 'a log', possibly st'élt'əl 'person that sings all the time (any song), a singer' (probably pluralized action)

R_3: qəlqélém 'lots of eyes' < qélém 'eye', cəlcélɛ́x^y 'hands' < cɛ́lɛ́x^y 'hand', st'əlt'flém 'songs' < st'f•lém 'song', səwsəwálem 'games' < səwálem ~ s?əwálem 'game', x^{w}əyx^{w}iyθiyásəm 'movies, motion pic-

tures' (//əy// → /iy/ here) < sx̌^{w}íyθi 'image, picture, photo', sɬəlɬé·lí '(lots of) women' < sɬé·lí 'woman, female', smətmétəx^{w}təl 'husband's brothers, wife's sisters' < smétəx^{w}təl 'husband's brother, wife's sister', sp'əq'p'íq' 'white spots on skin' < sp'íq' 'white spot on skin', sθ'ək'^{w}θ'ík'^{w} 'lots of sores' < sθ'əθ'ík'^{w} 'a sore', sq^{w}əmq^{w}á·mx^{w} 'lots of lumps (any size); anthills' < sq^{w}á·mx^{w} ~ sq^{w}á·mθ' 'lump', məx^{y}méx^{y}c'əl 'lots of lice' < méx^{y}c'əl 'louse', θəqθéqət 'trees, timber' < θ(ə)qét 'tree' + Aθ, smɛlmé·lt 'rocks, mountains' < sné·lt 'rock, mountain', s?əm?amélɛ 'Thompson Indian people' < s?amélɛ 'Thompson Indian'

R_5: sx̌əx̌éyle 'legs, feet' < sx̌éle 'leg, foot' + Aɛy, spəpelá(·)l 'bunch of small crows' < spelá(·)l 'small crow', q'əq'əlé·mi 'lots of little girls' < q'éq'əmi 'little girl' (diminutive R_1 → R_5 and infix -əl- is added), sk'^{w}ək'^{w}flwəs 'child's in-laws, in-laws from any side' < sk'^{w}élwés 'child's in-law, in-law from any side' + Ai

R_6: sc'iyáyə 'twins', selélec' 'two different things' < selé·c' 'different (thing)'

R_7: mémələ 'children (kinterm)' < méle 'child (kinterm), offspring', tex^{w}méməlem 'stepchildren' < tex^{w}méləm 'stepchild'

R_8: stɛtí·wəl 'sibling's children' < stí·wəl 'sibling's child (nephew, neice)', (EB only) lɛlélém 'houses' ~ AC qéx̌ tə lélém 'houses, a lot of houses' < lélém 'house'

Ai·: sí·yá(·)lex^{W}ə (possibly ~ sí·yaléx^{W}ə) 'old people' < siyá(·)lex^{W}ə 'old person; old', sí·yé·m 'high people, chiefs, leaders' < siyé·m 'chief, leader, high person', sí·yé·yə 'lots of friends' < siyé·yə 'friend', sí·wíyəqə 'men' < swíyəqə 'man, male', sci·wətéɬ 'sons-in-law, daughters-in-law' < sciwtéɬ 'son-in-law, daughter-in-law', θ'əlí·p'ayəq^{W} ~ θ'əθ'í·p'ayəq^{W} 'great great grandparents or -children' < θ'ép'ayəq^{W} 'great great grandparent/-child' + additional -əl- or R_5-

Aɛy: sx̌əx̌éylə 'legs, feet' < sx̌élə 'leg, foot' + R_5

Aɛ·: sk'^{W}é·ɬo ~ sk'^{W}élə́ɬo 'in-laws' < sk'^{W}íɬo 'in-law (parent-/child-/sibling-in-law)', sx^{W}əmlé·lək^{W} 'parent's siblings' < sx^{W}əmlí·k^{W} 'parent's sibling' (both this and the previous example have an additional -lə- plural infix), sé·ƛ'ètəl 'older siblings, older cousins (children of older siblings of parent, etc.)' < sé·ƛ'ètəl 'older sibling, older cousin'

Aa: swáwələs 'adolescent boys' < swíwələs 'adolescent boy'

Ae: θəqθéqət 'trees, timber, forest, thicket' <

θ(ə)qέt 'tree' + R_3, q^{w}ə́q^{w}əɬəy 'lots of little pieces of driftwood' < q^{w}ɬέ·y 'driftwood' or more likely from an R_4 diminutive of q^{w}ɬέ·y so far unattested

Aə + diminutive: x^{w}ə́x^{w}əlməx^{w} 'little Indians' < x^{w}íx^{w}əlməx^{w} 'little Indian', sq^{w}ə́q^{w}əmεy 'puppies' < sq^{w}íq^{w}əmεy 'puppy', sq^{w}əq^{w}əmέycəs 'pussy willow (lit. "puppies in the hand")' < sq^{w}íq^{w}əmεy, mə́mələqəl 'small containers (a number of them)' < míməleqəl 'small container', mə́məstíyəx^{w} 'kids (slang)' < míməstiyəx^{w} 'little person', sc'ə́c'əsəm 'small plants' < sc'íc'əsəm 'plants, things growing', qə́qəmlà 'lots of minnows' (singular unattested yet)

-əl- ~ -lə-: q'έ(·)ləmi 'adolescent girls' < q'έ·mi 'adolescent girl', sqəlέ·q 'younger siblings' < sqέ·q 'younger sibling', sx^{w}əmlέ·lək^{w} 'parent's siblings' < sx^{w}əmlí·k^{w} 'parent's sibling', (AC) sc'áləməq^{w} ~ (Tait) sc'əlá·məq^{w} ~ (Tait) sc'əc'əlá·məq^{w} 'great grandparents, great grandchildren' < sc'á·məq^{w} 'great grandparent, great grandchild', θ'əlí·p'ayəq^{w} 'great great grandparents/-children' < θ'ə́p'ayəq^{w} 'great great grandparent/-child', sk'^{w}έləɬo ~ sk'^{w}έ·ɬo 'in-laws' < sk'^{w}íɬo 'in-law', sqəlέ·qələ 'babies' < sqέ·qələ 'baby' (< sqέ·q 'younger sibling' + -ələ 'lacking'), (Tait) cέ·ləx^{w}(s) 'wives' < cέ·x^{w} 'wife', swέ·ləqəθ 'husbands' < swέ·qəθ 'husband', sx̣^{w}aləx̣^{w}iyέ·m 'ancient

people (over a hundred years old, can't move, just lay there in pit house, take liquids; in spring they dig out the roof to get them out into the sun)' < sx̣^{w}ex̣^{w}iyé·m 'story, legend', slélex̣ces 'fingers' < slélex̣ces 'finger', slélex̣x̣^{y}el 'toes' < slélex̣x̣^{y}el 'toe', stəliqíw 'horses (like a herd or bunch)' < stiqíw 'horse', stəlqáyə 'wolves' (used of as few as four in one story) < stqáyə 'wolf', ƛ'əlqtéłə 'deer (lit. "long legs")', ƛ'əlqtéłəc 'pheasant (lit. "long tails"), ƛ'éləqtx̣^{y}el 'long legs, long-legged' as in ƛ'éləqtx̣^{y}el q'ésq'əsəcəl 'daddy long legs, long-legged spider' and ƛ'éləqtx̣^{y}el q^{w}é·l (~ spəlwéɬ q^{w}é·l) 'leatherjacket, long-legged mosquito (not actually a mosquito)' (spəlwéɬ q^{w}é·l is lit. "last year's mosquito")

-əl- ~ -lə- + diminutive or other R:

q'əq'əlé·mi 'little girls' < q'éq'əmi 'little girl' ($R_1 \rightarrow R_5$ 'diminutive'), sc'əmc'á·ləməq^{w} 'eldest great grandchildren' < sc'əmc'á·məq^{w} 'eldest great grandchild', čəlič̓k^{y}əlsá·lɬ 'baby chicks' < *čič̓k^{y}əlsá·lɬ 'baby chick' (so far unattested) < čé́k^{y}əl(s) 'chicken', həhəlé́wt or həhəlé́wt 'a few little rats' < hihé́wt 'little rat, small rat' < hé́wt 'rat', təlíləqsəl 'baby ducks' < təlé́qsəl 'duck' (< tá·l 'go to the river' + Ae + -é́qsəl 'nose', i.e. "nose goes to the river" or "river-nose")

8.5. Past Inflection. Nominals can be inflected with the same past tense suffix used with some verbs and auxiliaries, -ɨ̀ ~ -əɨ̀ ~ -ɛɨ̀. Here it seems to have allomorph -ɛ̀·ɨ̀ also, but this is probably from morphophonemic rules of vowel combination as it replaces final schwa in several vowel-final words (ə + ɛ̀ → ɛ̀·). The past morpheme has the alloseme ['deceased'] in the affixed environment of animate nominals (and demonstrative independent pronouns); with inanimate nominals it has the alloseme ['former']; it seems sometimes to combine a past tense meaning first with the verbal root of nominals which have clear verbal roots, rather than the adjectival meaning 'former' with the resultant nominal.

The past inflection seems to be used with nominals mainly for deceased animates; there it is optional, implying respect and reverence just as the words 'late' and 'deceased' do in English. However it is obligatory with three or four kinship terms where it has become derivational as a lexical affix (see Chapter 5). The past suffix also occurs on some nominals for time which can also be used as adverbial Vi's (i.e without an article). Its use with inanimate nominals is only attested in two examples and seems rather rare; more frequent is the interposition of ʔɨ̀·ɨ̀ between the

demonstrative article and the nominal (and its possessive, if present)(see 6.1.8.4.2 examples).

Examples of past inflection of nominals (and of some demonstrative pronouns)(all examples from AC unless noted):

kʷθəl sí·lè·ɬ 'my late/deceased grandfather' (CT gives the same forms and also gives kʼʷəl sí·lè·ɬ 'my late/deceased grandfather')

kʷθəl sí·səlè·ɬ 'my late/deceased grandmother' (CT gives instead kʷsəl sí·səlè·ɬ 'my late/deceased grandmother' with feminine article kʷsə; AC used kʷθə for both sexes at times and used sí·lə for 'grandfather' and sí·sələ for 'grandmother' at times).

kʷθəl səlsí·lè·ɬ 'my late/deceased grandparents'

kʷθəl mə́lè·ɬ 'my late/deceased child'

kʼʷɬí·ƛʼà·ɬ 'that was him (deceased)' (demonstrative, q.v.)

kʷsɬí·ƛʼà·ɬ 'that was her (deceased)' (demonstrative)

kʷθɬí·ƛʼà·lèmèɬ 'that was them (deceased)' (dem.)

swəlméyɬ (possibly sic for swəlméɬ ?) 'child of deceased sibling' (< wə́ləm 'orphan')

smətiyéɬ 'sibling of deceased parent'

sxʷəmθiyé·ɬ ~ (Tait) qɛyé·ɬ 'deceased uncle/aunt/grandmother/s-o who is responsible for you directly

or indirectly'

(EB) sq^wɛ̀·ls tɛʔ syuwɛ́·ləɬ 'words of your ancestors'

when used as nominals : spəlwɛ́ɬ 'last year' and

cəlɛ́qəɬ(əɬ) 'yesterday'

lí mə k'^wɛ́k'^wəɬ tə stálo lí tə sx^wlísəɬ 'Is the river flowing (spilling) into the old riverbed (former place where it was)?'

(CT) təl sx^wʔí·məx^yɛ́ɬ 'where I used to walk, my former place of walking' (EB, EL, and others from Cheh. have θə nɛ instead of təl as if the person who sings this song had lived downriver and learned downriver or island Halkomelem dialects).

8.6. Internal Syntax. From the examples and the nature of their inflections it can be concluded that if all nominal inflections were to occur within a word 'diminutive' would be first, then 'plural', then 'past', then 'nominalizer', and finally possession. The reasons for this conclusion are: 1. Plural inflections sometimes bisect and sometimes ablaut the diminutive inflection itself, but the reverse is not true, 2. Diminutive and plural are usually infixed or prefixed and when suffixed they are reduplication; past is only suffixed and suffixes occur after internal processes like reduplication and ablaut, 3. Nominalizers s- and sx^w- are added after diminutive and plural,

and if past is a verbal tense nominalization must follow it too, 4. Possessive inflection must be physically attached after nominalization because it precedes it in several persons and even attaches to nominalizing articles.

CHAPTER 9. DEMONSTRATIVES

9.0. There are six types of demonstratives in Upper Stalo Halkomelem: 1. Demonstrative Articles (required before every nominal but expressing sex gender, proximity, visibility, indefiniteness, genericness, and sometimes plural human or absent human), 2. Demonstrative Conjunctions (used to conjoin verbs and verb phrases but clearly related to the indefinite/abstract/distant article k'^{w}ə), 3. Nominal Demonstratives (demonstrative morphemes with preceding articles, used as nominals such as 'this thing here' and 'that person (nearby)'), 4. Adverbial Demonstratives (demonstratives which modify verbs and can be conjugated like adverbial Vi's, these are compounded mostly of verbs ʔí· or lí·, followed by the nominal demonstratives (article + demonstrative morpheme)), 5. ƛ'á 'that's ___, it's/he's/she's ___' (doesn't fit any of the other categories of demonstratives; it seems verbal but is not clearly a verb; however, it has a clear demonstrative translation), and 6. Pronominal Demonstratives/Demonstrative Pronouns (used as independent personal pronouns but derived from ƛ'á + demonstrative articles and used to express sex gender, number, proximity, past (deceased), and diminutive of 3rd person personal pronouns). Each of these types

of demonstratives will be dealt with in a section of this chapter. The demonstrative system discussed is that of AC with confirmation by EB (Chehalis) and CT (Tait) in most cases.

Halkomelem demonstratives are hard to translate because most are indefinite and incomplete without a context. Furthermore, the context is seldom expressed within the sentence containing the demonstrative; it is often completed in other places in a text or conversation or by gestures or not at all. Most of the examples cited here of demonstratives in sentences or phrases are not from texts but were elicited as independent sentences. However, translations of the demonstratives were possible because, in addition to textual sentences, some of the sentences do contain the semantic context, and in other phrases or single-demonstrative elicitations the speaker gave parenthetical explanations of the semantic context. Especially helpful were demonstratives given in sets and contrasted with each other or in sentences identical except for changing demonstratives. Such examples will be given wherever possible.

9.1. Demonstrative Articles. These are used as articles in the true sense of the word: obligatory before nominals, translated by 'the', 'a', 'some', etc.

But the Halkomelem articles also express the following semantic components: masculine sex gender, feminine sex gender, gender unspecified, human, inanimate, present (in proximity), near, distant, proximity unspecified, visible, not visible, indefinite, generic, deceased, abstract or hypothetical, and plural. These components are combined into semantic bundles which are inflectional categories and can be indicated as follows (using abbreviations similar to those in Suttles[1]): m. = masculine sex gender, gender unspecified, or inanimate; f. = feminine sex gender; h. = human and gender unspecified; p. = present and visible, or proximity unspecified; n. = near and not visible; r. = remote, distant (and not visible), abstract (or hypothetical), indefinite, generic, or past (perhaps also deceased); pl. = plural. These categories are combined paradigmatically in the demonstrative articles as seen in the following table:

	m.	f.	h.
p.	tə	θə	---
n.	k^{w}θə	sə,k^{w}sə	ƛ'
r.	k'^{w}ə	k'^{w}θə,k^{w}sə	ƛ'
pl.	any m.	any f.	yə

1. Wayne Suttles: op. cit.

Thus tə, for example, means 'the (masculine/gender unspecified/inanimate + present and visible/proximity unspecified)'. When appearing before a nominal which is already masculine (like swíyəqə 'man' or swéqəθ 'husband') the masculine component is merely in agreement; when appearing before an animate nominal which is not marked for sex otherwise (like siyálex^{w}ə 'old person' or sx̌'íx̌'əqəɬ 'child'), tə can specify the sex clearly (tə siyálex^{w}ə 'the old man') or remain ambiguous depending on the context and specificity of the speaker (tə siyálex^{w}ə 'the old person'). Again depending on the context and specificity or focus of the speaker, any of the preceding examples could be either present and visible or proximity unspecified. When used with an inanimate nominal (like sməé·lt 'rock, mountain'), tə may also mean either present and visible or proximity unspecified, depending on the context or specificity desired. In some cases the context conflicts with either masculine or present and visible components and yet tə is still used; in these cases the unspecified alternates are called for (tə stá·ləs 'the wife', lí tə cá·k^{w} 'far away'). tə can also be used with human plurals though yə is the article for that especially (tə stə́·x^{w}əɬ 'the children'). Since tə can be either specific or unspecific it is some-

times ambiguous when the context is incomplete.

k^{W}ɵə means 'the (masculine/gender unspecified/inanimate + near but not visible)'. With k^{W}ɵə, m. works the same way as it does with tə. The contrast is with 'near but not visible'. A few examples will illustrate: lí ʔí· k^{W}ɵɛ mə̀·l 'Is your father here?', lí, sk^{W}ətə́x^{W} k^{W}ɵəl mə̀·l 'Yes, my father's inside.', ʔɛlə́cɛ k^{W}ɵəl χ^{W}ə́ylɵm 'Where's my thread?', lə lí tə s^{ʔ}ə́·ƛ'q k^{W}ɵəl mə́le 'My child is outside.', cəl sɬə́q^{ʷ}ələx^{W} k^{W}ɵɛ sí·lə 'I know your grandfather (absent).', k^{W}ɵəl sí·lə̀·ɬ 'my deceased/late grandfather' (AC also uses k^{W}ɵə with 'deceased (past time) human').

k'^{W}ə, like tə, can also be interpreted in a number of ways: 'the (masculine/gender unspecified/inanimate + distant (and not visible)/abstract (or hypothetical)/indefinite/generic/past), some, a'. (EB has k'^{W}ə ~ k^{W}ə). With respect to m., k'^{W}ə works much like tə. With respect to r., k'^{W}ə also depends on the context and the specificity or focus of the speaker. k'^{W}ə can imply 'distant (and not visible)' with subjects or objects of verbs (especially prepositional verb lí 'at, to, in'): lí(yə) qə́χ k'^{W}ə siyə́ɬ lí k'^{W}ɛ lə́ləm 'Is there a lot of wood at your house?' ("Is it lots, the (distant) wood at your (distant) house?"), ƛ'alsu tə́s k'^{W}ə ɬq'ə́·ləc 'So I reached Vancouver',

lə qɛ́·ltəm k'^{W} Bill 'Bill was robbed.' k'^{W}ə is used for abstract nominals (and especially for conjoining dependent verb phrases and clauses, see 9.2): stém k'^{W}ɛ sʌ́'í 'What do you want?', stém k'^{W}ə sk^{W}íx^{Y}s tə ʔí·lə 'What is the name of this?, What is this called?'. When desired, k'^{W}ə can be used as an indefinite article, translated by 'some', etc.: l sʌ́'í k'^{W}ə qá· 'I want water., I want some water.', lə θíyq^{W}təs k'^{W}ə sθ'éɬk^{W} 'He dug for worms.', lícx^{W} θɛ́·yt k'^{W}ə p'á·θ'əs 'Are you making a baby basket/cradle?', məcx^{W} ʔí· k'^{W}əlét k'^{W}ə s?ɛ́ɬtəl 'Come here and bring some food!', lɛ hɛ́·we k'^{W}ə spɛ́·θ 'He went hunting for bear.' (EB: k^{W} stémés 'something', k^{W} s?ɛ́ɬtəl 'some food', as well as examples with k'^{W}ə). k'^{W}ə also seems generic at times (some of the preceding examples could be so interpreted as can the following): stɛ?ɛ́ k'^{W}ə sθ'á·q^{W}i 'It's like a fish.', stɛ?ɛ́ k'^{W}ə sq^{W}méy 'like a dog', tə?á·mex^{Y} k'^{W}ə swíyeqə 'looks like a man', stɛ?ɛ́ k'^{W}ə stá·lo 'like a river'. k'^{W}ə used for 'past' can be seen before some adverbial words which otherwise seem like adverbial Vi's: k'^{W}ə cəlɛ́qəɬ(əɬ) 'yesterday', k'^{W}ə spəlwɛ́ɬ 'last year' (EB: k^{W} spəlwɛ́ɬ, k^{W} cəlɛ́qəɬ(əɬ)); the k'^{W}ə (or k^{W}) can be omitted with no change in meaning or syntactic position but perhaps with more of a verbal function. At any rate, tə and

k^{W}ɵɵ are not attested before these words. k'^{W}e 'past' also turns up in yewélmels k'^{W}e 1910 'before 1910' and yewélmels k'^{W}e sx̱éx̱eɬèt 'before Sunday'. Wayne Suttles reports that k'^{W}e is used in the Musqueam dialect (at Vancouver) to show that a following human nominal is deceased[2]; CT has such forms in variation with k^{W}ɵɵ (k'^{W}ɵl/k^{W}ɵɵl sí·lè·ɬ 'my deceased/late grandfather'), though my notes for AC show only k^{W}ɵɵ with such past tense nouns (possibly more elicitations of past nominals would have turned up a k'^{W}e). When referring to deceased persons without using the past tense suffix AC, EB, CT, and others seemed to freely use any of the other articles. Perhaps k'^{W}e ~ k^{W}ɵɵ ~ k^{W}sɵ are only required in Upper Stalo dialects when the nominal has the -èɬ (etc.) suffix (compare the pronominal demonstratives in 9.6 which shed additional light).

The f. articles are used only with animate nominals and are less complex. p. works with them as it does with tɵ. There are few examples of the n. and r. forms, but it seems that sɵ ~ k^{W}sɵ for n., and k'^{W}ɵɵ ~ k^{W}sɵ for r. Examples:

---

2. Wayne Suttles: op. cit.

k'ʷə́mət θə sƛ'íƛ'əqəɬ 'raise a girl child', mɛyθáxʸəs θə Mə́lí 'Mary (present and visible) helped me.', lə xʷcákʷəl θə Mary 'Where is Mary going? (she's present)', cəl sɬə́q'ələxʷ θɛ stá·ləs 'I know your wife (present or absent).', lə lí k'ʷə sθ'á·məs θəl mə́lə 'My daughter is in Victoria.', cəl k'ʷə́cləxʷ θə sɬəlɬə́·lí ʔɛ (mə́mələ, ƛ̓ə́kʸəl) 'I saw your (daughters, hens).'; lí ʔí· səl tɛ̀·l 'Is my mother there (sic here)?', lí ƛ'ələ́xʷ səl tɛ̀·l 'Is my mother (at) home?', líyə skʷətə́xʷ sə Mary 'Is Mary inside?'; cəl k'ʷə́cləxʷ kʷsɛ (sí·sələ, stá·ləs, sxʷəmlí·kʷ, stí·wəl) 'I saw your (grandmother, wife, aunt, neice).', (CT) kʷsəl sí·səlɛ̀·ɬ 'my deceased grandmother'; sɬə́·lí (k'ʷ)θə mə́ləs 'her/his child is a girl', lə́mcəl k'ʷθə scí·yə́·ɬp 'I'm going to the strawberry patch.'

ƛ' means 'human, gender unspecified, absent'; it is attested in 17 examples (AC and EB) but only before proper names. Some of the examples are: mɛy(-θáxʸəs, -tálxʷəs, -θàm, -tàlə̀m)-cɛ ƛ' Bill wəxʷəʔí·s 'Bill will help (me, us, you, you folks) when he gets here.', lə ʔəmə́t k'ʷə Albert stətís ƛ'ə Amy 'Albert sat beside (near/next to) Amy.', lə θíytəs ƛ'ə Oliver Wells qə Casey Wells tə sqʷə́ltəls ƛ'ə Daniel Milo qɛ Bob Joe lí tə machines tə xʷəlítəm

'Oliver Wells and Casey Wells made the voices of Daniel Milo and Bob Joe on the white man's machines.', ƛ'á te θé les ʔiléqeɬctes ƛ' Bill te sqʷəmé·y 'That's what Bill bought for the dog.', méyθéxʸes ƛ' Bill 'Bill (absent, even if in next room) helped me.', méyθéxʸes ƛ' Mélí 'Mary (absent, even if in next room) helped me.', méyθà·m ƛ' Mélí 'Mary (absent) helped you.'

ye means 'human, gender unspecified, plural' but in a few cases may be used with non-humans. It is apparently used quite sporadically. Sometimes it appears as yi, and sometimes as yé with stress at a higher pitch than any high stress on the following nominal (a feature shared with the other articles, see Chapter 1, section 1.2.19). Examples include: q'epéθət ye xʷélməxʷ 'the Indians gathered', qél yé xʷèlmèxʷ 'bad people, the people are bad' (Indian people but at a time before other races were known, therefore also 'people'), ɬéq'eɬ χét'e yé xʷèlmèxʷ 'the (Indian) people used to say', χét'estəxʷes ye xʷelítəm "cave" 'White people call it "cave".', (NP) ɬí·m ye sɬelɬé·lí 'the women are picking (berries)', qéχ ye qʷé·l 'lots of mosquitoes', ye lí·kʼʷ kʼʷe Kamloops 'some (people) from Kamloops', ʔesu lèm ye lí·kʼʷ 'and so a few (people) came',

s?í·k'^{W} yə k'^{W}f·lès 'several people were lost (and presumed dead)' (EB), yi θέ ~ yə θέ 'those people, them' (see 9.3), méyt yi θέ (or yə θέ) 'help those people', lícx^{W} k'^{W}éclex^{W} (yiθέ, yi ?í·mex^{y}) 'Did you see (them, them walking (those people))?', yuƛ'élem 'they, them (gender unspecified)' (see 9.6)(contrast ?é·ɬtel 'they, them (known to speaker)(gender unspecified)'), qéχ yi ?á·ytəl 'many people fighting', ?é·y yə q^{W}áq^{W}əl 'the speeches/talking went on (and on)', (EB) lə q'ep'láx^{y}es wiyáθə k^{W}su héléms yə mímeɬɛ 'He got me addicted to always going to spirit dances.'. (From the examples seen it appears yi may be an allomorph before words beginning with /?/ and in free variation with yə before θέ.)

Before presenting some final examples contrasting the articles, a few more comments should be made about some uses of articles in general. Articles are seldom fully translated, especially in regard to proximity and visibility. They are not translated at all before proper names. Before nominals inflected by possessive pronouns the sex reference is translated when it is not redundant (təl sí·le 'my grandfather'), but the proximity is usually just implied, and of course an English article cannot be used (*'the my grandfather'). Similarly in constructing numerals

over ten and not even multiples of ten, the articles are required but are not translated (ʔápəl qɛs tə ʔisé·lə - ʔápəl qɛs k'^{W}ə ʔisé·lə 'twelve', etc.); it is not clear yet whether they retain any implications of proximity (see Chapter 10). Hours are felt to be nominals and so are nominalized by s- and require an untranslated article (tə s-ɬíx^{W}-s 'three o'clock').

k'^{W}ə is the article used to nominalize (relativize) verb phrases and sentences (which are probably considered abstract or not visible). But rarely tə can be used also, perhaps when there is a concrete object or person which is present and visible which the verb phrase is semantically equivalent to:

ə'áθ'əq^{W}ətəs tə q'éq'ət'əm 'he's sucking something sweet'

stém tə ʔí·x^{W} θé·yt 'What are you making?' (cp. təwét k'^{W}ə ʔí·x^{W} θé·yəɬcət tə swéltəl 'Who are you making the net for?')

stém tə ʔí·x^{W} k^{W}əlét 'What is it you're holding?' (cp. təwét swíyəqə k^{W}θə ʔíx^{W} sé·wq't 'What man are you looking for?', ƛ'á· k'^{W}əl méləl k^{W}θə ʔíx^{W} hé·yθət 'Is that my child you're talking about?', ƛ'á k^{W}θə x^{W}ƛ'á·qtəs 'That's the one with a long face.', and cəl k'^{W}θcləx^{W} k^{W}θə luɬ lém 'I saw the one who went.')

(Notice how the syntactic structure differs when it is the object from when it is the subject of the subordinate verb that is nominalized/relatived:

main verb k'^{W}ə/tə(-4.8) verb = subject of subordinate verb is relativized/nominalized

main verb k'^{W}ə/tə lí·/ʔí·(-4.9b) verb = object of subordinate verb is relativized/nominalized.

The second construction however is only in questions. See syntax chapter.)

qíq'ətəs tɛ ʔíɬ lɛ ƛ'í·w 'He caught the one who escaped.'

k^{W}ə́k^{W}əlx^{y}əs tə sqé·ls 'He's hiding what he stole.'

cəl tatí·lt tɛ sq^{W}ə̀·l 'I'm thinking of what you said (your words).'

Another point that might be mentioned here is that adjectival verbs can modify nominals in the following order: article adj.verb nominal. This means that articles can precede adjectival verbs; however the adjectival verb is never inflected for subject or tense in this position -- it behaves more like a traditional English adjective. For example: tə hík^{W} spé·ɵ 'a big bear', tə hík^{W} x^{W}ə́təs məstíyəx^{W} 'a big heavy person', tə qə́l sq'áq'əy 'a bad sickness', ɵə ʔiyá·məx^{y} sƛé·lí 'the good-looking woman', sƛ'í·cət k'^{W}ə qə́χ tə́lə 'We want lots of money.'

Contrastive examples of demonstrative articles:

1. líye sk^{W}etéx^{W} k^{W}θɛ swíyeqe ʔɛ méle 'Is your son inside?'

líye sk^{W}etéx^{W} se Mary 'Is Mary inside?'

2. me stetís k^{W}θe yewé·l 'He came close to the first.'

3. cel ƛ'í·ls tel (mél, swéqeθ) 'I love my (father, husband).'

cel ƛ'í·ls θel (téł, stá·les, q'é·mi) 'I love my (mother, wife, girlfriend).'

4. cel k'^{W}éclex^{W} te (méməles te spé·θ, swéləqeθs) 'I saw the (bear's children, husbands).'

cel k'^{W}éclex^{W} θe (stelté·les, sɬélí spé·θ, sɬélí ʔɛ stí·wel, sɬelɬé·lí ʔɛ méməle, sɬelɬélí ʔɛ čék^{y}el) 'I saw (the wives, a female bear, your neice, your daughters, your hens).'

cel k'^{W}éclex^{W} k^{W}θɛ (sí·le, swéqeθ, k^{W}iyá·s, sx^{W}emlé·lek^{W}, selsí·le, méməle, stetí·wel) 'I saw your (grandfather, husband, uncle (ceremonial usage), parent's siblings, grandparents, children, sibling's children).'

cel k'^{W}éclex^{W} k^{W}sɛ (sí·sele, stá·les, sx^{W}emlí·k^{W}, stí·wel) 'I saw your (grandmother, wife, aunt, neice).'

5. cel sɬéq'elex^{W} (tɛ sí·le, k^{W}θɛ sí·le, tɛ méməle, θɛ stá·les) 'I know your (grandfather (present),

grandfather (absent), children (present or absent), wife (present or absent)).'

6. ʔí·ɬcəl lí k'ʷə sc'əlxʷiyəqʷ 'I was at Chilliwack.'

cəl ʔí· tə sc'əlxʷíyəqʷ 'I'm here at Chilliwack.'

7. lə xʷələ́m tə Agassiz 'He went to Agassiz instead (speaker is at Agassiz).'

lə xʷələ́m k'ʷə Agassiz 'He went to Agassiz instead (Agassiz is far away).'

8. lə xʷcák̓ʷəl k'ʷ Mary 'Where is Mary going? (she's not here) '

lə xʷcák̓ʷəl θə Mary 'Where is Mary going? (she's here with speaker)'

9. mɛyθáxʸəs ƛ' (Bill, Mélí) '(Bill, Mary), absent even if in next room, helped me.'

mɛyθáxʸəs (tə Bill, θə Mélí) '(Bill, Mary), present, helped me.'

10. lém k'ʷə (cúcu, ʔɛhíw) 'go (toward the water, upstream)'

9.2. Demonstrative Conjunctions. There are several conjunctions derived from the m.r. demonstrative articles k'ʷə and kʷ(ə). All of them end with an -s which nominalizes the phrase that follows and is related to the s- nominalizer; all of them use pronoun set 4.8 to express the personal pronoun subject of the verb phrase nominalized. So the verb

phrase is first nominalized, then possessed by its subject pronoun. The k'^{W}e forms alternate freely with k^{W} forms in the third person. In addition the k^{W} forms (which seem to occur only in the third person) have another free variant, k^{W}ses, with the possessive pronoun -s attached to the conjunction after the -s nominalizer, instead of being suffixed to the verb following the conjunction. This produces the following set:

1st person sg. k'^{W}ə-l-s 'that I'

2nd person sg. k'^{W}-ɛ-s 'that you'

3rd person k'^{W}ə-s ___-s $\overset{f}{\sim}$ k^{W}s ___-s $\overset{f}{\sim}$ k^{W}səs 'that he/she/it/they'

1st person pl. k'^{W}ə-s ___-cət 'that we'

2nd person pl. k'^{W}-ɛ-s ___-ələp 'that you folks'

The demonstrative conjunction 'because' is formed by prefixing ƛ'a- or ƛ'ə- to the above set (ƛ'ak'^{W}əls, ƛ'ak'^{W}ɛs, ƛ'ak^{W}səs, etc.).

The set glossed above as 'that I', etc. really has many glosses depending on the English syntax of the translation: 'that, to (infinitive), for, when (simultaneous), while, as' and sometimes not translated at all (especially after adverbial Vi's). (The 'when' is simultaneous, not conditional like that of wə- 'subjunctive'; it is more synonymous with 'while'

or 'as'.) Besides the examples below, examples can be found in 4.8.

1. cəl ʔéclex^{W} k'^{W}əs q'é·ylex^{W}əs tə swíyeqə tə spé·ə
'I heard that the man killed a bear.'

ʔəwétɛl sɬéq'əlex^{W} k'^{W}əs q'épscɛ k'^{W}ə ʔí·k'^{W}əlà 'I didn't know there was going to be a gathering here.'

sk'^{W}é·y k'^{W}əls q'é·l k'^{W}əs lέwəs 'I couldn't believe it was you.'

2. lí ʔɛ sx̌'í k'^{W}ɛs x^{W}iyéθəqəθáx^{y} 'Do you want to interpret for me? ("Is it your wish that you interpret me?")'

scəwát k^{W}θəl mél k'^{W}əs k^{W}élέx^{y}s 'My father knows how to shoot.'

lə ʔí·wəsθáx^{y}əs k'^{W}əls t'í·cəm 'He showed me how to swim.'

3. lə síwəlmeθàx^{y}əs k'^{W}əls lə téməmet 'He heard (sensed) me when I hollered at him.'

lícx^{W} wə?éy ʔəl q^{W}áq^{W}əl k'^{W}əs mə[s] k^{W}ətx^{W}íləm tə x^{W}əlítəm 'Were you still talking softly when the white man came in?'

4. wiyéθ k'^{W}əs ʔí·wáləms tə stέ·x^{W}əɬ, t'ít'əlem k'^{W}əs ʔí·wáləms 'The children are always playing, singing as they're playing.'

5. wiyéθ k'^{W}əs ɬéx̣^{W}əɬcɛs 'He's always spitting.'

sk'^{W}é·y k'^{W}əs k'^{W}éclex^{W}cət 'We can't see it.'

sk'^{W}ɛ́·y k'^{W}ɛs k'^{W}ɛ́clex^{W}ələp 'You folks can't see it.'

lí ʔiyɛ́·ləm k'^{W}ələs k'^{W}ɛ́clex^{W} lí tə θɛ́ 'Can I see it from there (in that place)?'

s(ə)lɛ́ k'^{W}ɛs q'ɛ́ysəɬ tə χ^{W}ɛ́yləm ~ q'ɛ́yəsɬ tə χ^{W}ɛ́yləm k'^{W}ɛs s(ə)lɛ́ 'tie the rope tight' (no subject)

χ^{W}ɛ́m (k'^{W}ɛls, k'^{W}ɛs, k^{W}səs, k^{W}səct, k^{W}s(əs)ələp) mə ʔɛ́yələx^{W} '(I, you, he/she/etc., we, you folks) got well fast.' (the k^{W}səct and k^{W}s(əs)ələp forms may be errors of AC or alternate forms)

6. cəl sɬɛ́q'ələx^{W} k^{W}səs spɛ́·θ ~ cəl sɬɛ́q'ələx^{W} k^{W}s spɛ́·θəs 'I know it was a bear.'

(EB) (ə)l sq^{W}ɛ́ləwəl k^{W}s məs ɬɛ́məx^{W} tlàwɛ́yɛ́l 'I think it's going (lit. "coming") to rain today.'

(EB) ləcx^{W} cəsɛ́·t k^{W}s ləs k^{W}ɛ́l·əm k^{W} s?ɛ́ɬtəl 'Send him to get food!'

(EB) ?í·cɛ k'^{W}ə là k^{W}s q'ələ́mcət 'This is where we'll camp., It will be here that we camp.'

7. lə hɛ́·k^{W}əx^{Y}əs θəl tè·l tə χ^{W}ɛ́yləm k^{W}səs p'əwíytəs təl s?í·θ'əm 'My mother used the thread to patch up my dress.'

ɬɛ́məx^{W} k^{W}səs wəɬ hɛ́y tə slɛ́x^{W}əɬs 'It rained when their canoe was done (completed).'

x^{W}əlmɛ́x^{W}qəl k^{W}səs q^{W}ɛ́q^{W}əl 'he's speaking in Indian' (cəl x^{W}əlmɛ́x^{W}qəl 'I spoke Indian, I spoke in the Indian language')

təmtə́m kʷsəs lə́m 'When did he go?'

ƛ'asə́su tsə́·s kʷsəs q'ə́y θe stə́·les 'and so he was heartbroken/he felt really bad when his wife died'

xʷlís kʷsəs cə́lq tə qə́· 'where (it is that) the water is falling'

c'í·tcəl mə́kʷ yuƛ'ə́lem kʷsəs ʔí·wəsθəàxʸəs xʷelə́·m tə sxʷelmə́xʷəɬ s?i·wəs 'I thank them all for teaching me about (toward) the Indian way of teachings.'

cəl xʷlɛlə́·məɬ tə siyálexʷə kʷsəs t'í·lə́mt tə swə́s syúwə́l 'I listened to the old man (or old person) sing his (own) spirit song.'

8. lɛcəl t'ə́·k'ʷ ƛ'əkʷsəs ʔə́·k'ʷ təl tə́lə 'I'm going home because my money ran out.'

(The remaining examples in number 8 here are from Mamie Cooper and Susan (Mallowey) Jimmie, both speakers of Chilliwack Halkomelem originally from Sardis but now living near Deming, Washington.)

lɛcəl ʔə́·yəl (ƛ'ək'ʷəls, ƛ'ək'ʷɛs, ƛ'əkʷsəs) ʔə t'ə́t'iyəq' 'I left because (I was, you were, he was) mad.'

cət lɛ (or lɛcət) ʔə́·yəl ƛ'əkʷcət t'ə́t'iyəq' 'We left because we were mad.'

cəp lɛ (or lɛcəp) ʔə́·yəl ƛ'əkʷsəlep t'ə́t'iyəq' 'You folks left because you were mad.'

lɛ ʔə́·yəl ʔə́·ɬtəl ƛ'əkʷsəs t'ə́t'iyəq' 'They left

because they were mad.'

Q. x^{w}ʔít k'^{w}ɛs ʔéwə líx^{w} lém 'Why didn't you go?'

A. ƛ'ak^{w}səs łéməx^{w} 'Because it was raining.'

Q. stém k'^{w}ə t'ét'iyəq'émətəx^{w} 'What are you mad at?'

A. ƛ'ak'^{w}ɛs qé·lsəàx^{y} təl swíwə 'Because you stole my oolicans (eulachons).'

9.3. Nominal Demonstratives.

tə ʔí·lə 'this thing here, this one, this'

tə là 'this (person here), this' (> tlà- or tlá- with temporal words)

θə là 'this (female person here)'

k'^{w}ə là 'this (abstract thing, manner or place), here (after mí 'come')'

tə θé (EB often has [t^{+}θé]) 'that thing there, that one (usually inanimate)'

k^{w}ə θé or k^{w}θé 'that person (near, perhaps visible)'

yə θé ~ yi θé 'those people (there), them (human)'

tə lí· tí 'that one (yonder), that one over there (probably inanimate)'

From the articles present and the nominal translations it is easy to see why the above are called nominal demonstratives. They are used as nominal subjects and objects of verbs; occasionally they are used as adjectives syntactically, but then nominals can be so used anyway (θə sɬé·lí spé·θ 'the female

bear', etc. -- see syntax). The core of these expressions seems to be a small group of demonstrative words: ʔí·lə, là, θé and lí· tí. Only lí· tí 'over there' can appear without a demonstrative article (see 9.4), though all four words (without the articles) seem somewhat like Vadv's or Vaj's and both lí· tí and ʔí·lə seem to derive from demonstrative verbs (ʔí· 'be here' and lí· 'be there'). It may be less difficult to account for the demonstrative words separate from the articles when more examples are obtained; right now it is difficult to explain why tə ʔí·lə, tə θé, and probably tə lí· tí are inanimate and tə là is animate; with more examples too perhaps all the articles would turn up before each of the four demonstrative words. At present it seems safest to treat (article + demonstrative word) in these cases as a single unit, a nominal demonstrative.

Examples:

1. təwét tə ʔí·lə 'Who owns this?, Whose is this?', əl sƛ̓'í tə ʔí·lə 'This is the one I want.', ƛ̓'á tə ʔí·lə 'It's this one., That's this one.', stém $k'^{w}ə$ $sk^{w}íx^{y}s$ tə ʔí·lə 'What do you call this?, What is the name of this thing?', stém tə ʔí·lə 'What's this?', təwét $k'^{w}ə$ θíyt tə ʔí·lə 'Who made this?'

2. tə là swíyəqə 'this man', tə là məstíyəx^{w} 'this

person', tə là 'he's here (present)', ƛ'á· ʔɛ mə́lə tə là 'Is that your child there (present + visible)?' ('that' probably sic for 'this'), tlaqɛ́·ys 'right now (this moment)', tlà(ʷ) xʷəlɛ́·lt 'tonight, this evening', tlàwɛ́yə́l ~ tláwɛ̀yə̀l 'today (this day)'

3. θə là sɬɛ́·lí 'this woman (near the speaker)', ƛ'á· θə là sɬɛ́·lí 'Is it this woman? (pointing)'

4. lə x̣ə́t'əstxʷəs k'ʷə là lí tə sqəlxʷɛ́·ləs 'He was doing this in his throat (sticking a twig down it', Q. How do you pick hops? A. x̣ə́t'əstxʷəs k'ʷə là 'One does like this (gesturing).' (in both sentences so far x̣ə́t'əstxʷəs is I believe an error for x̣tɛ́stxʷəs 'he does s-th'), (EB) st'ɛ́ k'ʷə là 'like this' (vs. st'ɛ́ tə θɛ́ 'like that'), (EB) ƛ'á· k'ʷə là 'Is this it?', (AC) míɬɛ k'ʷə là 'come here! (to s-o farther away who can see the speaker)', mícəl k'ʷə là 'I'm coming here.', (EB) cəl mí k'ʷə là kʷ cəlɛ́qəɬəɬ qə ʔə́wəcxʷ ʔíxʷ xʷəʔí· 'I came here yesterday and (= but) you weren't here (you didn't get here).'

5. (EB) st'ɛ́ t(ə) θɛ́ 'like that', ɬə́ltəl tə θɛ́ 'that's a bailer', ƛ'á· tə θɛ́ 'Is that the one?', ƛ'á tə θɛ́ 'That's the one.', (EB) ƛ'á tə θɛ́ ləs ʔilə́qəɬctəs ƛ' Bill tə sqʷəmɛ́·y 'That's what Bill bought for the dog.', (AC) ƛ'á· tə θɛ́ lɛ ʔɛ́·ystəxʷ təl sqʷmɛ́·y 'Is that the one (a cow) that was chas-

ing after my dog?', stém tə θέ 'What's that (visible)?', sméɬt tə θέ 'That's a rock.', tə θέ lí· tí 'that thing yonder', qéx̌ tə téləs tə θέ swíyəqə 'That man has lots of money.'

6. ƛ'á k^{W}ə θέ 'It's him (right out there, visible?)', ƛ'á· k^{W}θέ 'Is that the one?', ƛ'á k^{W}θέ 'That's the one.', stém k^{W}θέ 'What's that?' (the context given for this is "you've got a fish caught in front of you" (near but invisible?)), k^{W}ə θέ 'that's him (a person)' (cp. tə θέ 'that's it (a thing)')

7. lɛ x^{W}əhíwel yi θέ 'Those people are going upstream.', ƛ'á yə θέ 'that's them (if you see them)', yuƛ'á·ləm yə θέ 'That's them there.', méyt yə θέ 'help them (those people)', ƛ'á téls yi θέ 'That's their mother.', stətís yi θέ 'She's near/close to them.', lícx^{W} k'^{W}ɔ́clɛx^{W} yi θέ 'Did you see them?'

8. tə lí· tí 'that's the one, that one over there (motioning)', stém tə lí· tí c'íc'əsəm 'What's that growing (over there)?'

9.4. Adverbial Demonstratives.

ʔí· k'^{W}ə là 'here, in this place' (often written ʔí·k'^{W}əlà and ʔík'^{W}əlà)

lí ƛ'á là 'way over there'

lí tə θέ 'there (close), over there, in that place'

lí k'^{W}ə θέ (EB lí k^{W}ə θέ) 'there (distant)'

tí 'over there' (?)

ʔí· tí 'over here'

lí· tí 'over there'

possibly χtɛ́ tí 'over there, around there' (?)

ʔí· 'be here' and lí· 'be there' belong here too but have already been considered as verbs (see 6.2.7).

Adverbial demonstratives modify verbs and can be conjugated like adverbial Vi's (by inflecting the demonstrative verbs they contain, ʔí· and lí·). They are compounded mostly of verbs ʔí(·) and lí(·), followed by the nominal demonstratives (9.3); an exception to such derivation is tí which seems to be adverbial on its own account as well as in combination with ʔí· and lí·. Another exception may be lí ƛ'á là because ƛ'á, though demonstrative, is not a demonstrative article, and ƛ'á là is not independently attested as a nominal demonstrative. It is interesting that combinations like *ʔí· tɛ là, *lí· k'^{W}ɛ là, *lí· tɛ tí, etc. have not been attested. With adverbial demonstratives the articles do not always express proximity in the same way as they do with nominals (the use of k'^{W}ɛ 'distant' with ʔí· k'^{W}ɛ là or ʔí·k'^{W}ɛlà 'here' is a case in point). At any rate, adverbial demonstratives behave as adverbial phrases and are so positioned syntactically too.

Examples:

1. ɬéq'ət ʔík'ʷelà 'lay/put it down here', cəl ʔí· k'ʷə là 'I'm here' (cp. cəl ʔí· ~ ʔí·cəl 'I'm here', cəl ʔí· tí 'I'm over here', cəl lí· tí 'I'm over there'), cəxʷ ʔí k'ʷə là t'íɬ'ələm 'You're here singing.' (cp. ʔí·ɬcəxʷ lí· tí k'ʷɛs t'íɬ'ələm 'You were there singing.'), líye ʔí·k'ʷelà 'Is it here?', lə ʔí·k'ʷelà 'He's over here.', ʔí·ɬcəxʷ (ʔík'ʷelà, lí· tí) 'You were (here, there).', sk'ʷéy k'ʷɛs k'ʷéclexʷ ʔík'ʷelà 'You can't see it here.', mə ɬák'ʷ təlí k'ʷə cákʷ ƛ'əsu ʔík'ʷelà kʷsəs θiyéltxʷəm 'He flew from far away and he makes his home here.', ʔəwétɛl sɬéq'əlexʷ k'ʷəs q'ʷépscɛ k'ʷə ʔí·k'ʷelà 'I didn't know there was going to be a gathering here.'

2. ʔí·cɛ k'ʷə là kʷs q'ʷelémcət 'It will be here that we camp., This is where we'll make camp.', ʔícəl ʔà k'ʷə là 'I'm staying right here.' (ʔà ~ ʔè ~ ʔəl 'just'), ʔí·cəlcɛ ʔè k'ʷə là qə xʷəʔí·cəxʷcɛ 'I'll stay right here till you get here.', ʔí·cəlcɛ ʔè k'ʷə là qə téscɛ ʔè tə slé́c'əs 'I'll be here till one o'clock.'. But ʔík'ʷelà tə sc'á·k'ʷəls 'This is a fork. (sic? 'The fork is here.') and ʔík'ʷəla léləm 'this house'; the latter seems ungrammatical (probably an error), and the former was probably a mistranslation.

3. No examples was obtained of lí ƛ'á là in a sentence, just a citation as 'way over there'.

4. lí tə θé 'over there, there close' (cp. lí· tí 'there (a little farther), yonder, over there', and lí k'^{W}ə θé 'there (far away)'), ləc'ó·mex^{W} lí tə θé, ləc'ó·məx^{W} lí k'^{W}ə θé 'a different tribe here (lit. 'there (near)'), a different tribe there (far)', ʔí·ɬcəl lí tə θé 'I was there.', cəl mélqeles lís k'^{W}í·l swéyəl k^{W}ses sk^{W}ətéx^{W} lí tə θé yuƛ'á·ləm 'I've forgotten how many days they were inside there.', lí ʔiyá·ləm k'^{W}əls k'^{W}óclex^{W} lí tə θé 'Can I see it from there (in that place)?'

5. See 4. above for examples of lí k'^{W}ə θé. EB has lí k^{W}ə θé as follows: lí k^{W}ə θé tlaqé·ys 'He's there now (speaker at Sardis, subject at Seabird Island, 20 miles away or so and not visible', lí k^{W}ə θé k^{W}ses ƛ'əléx^{W} 'He's living there.', təwét k'^{W}ə lí k^{W}ə θé 'Who's there?' (and cp. lí tə cák^{W} 'way far, far away' and təlí k'^{W}ə cák^{W} 'from far away')

6. lə hél·əm tí 'They're on their way there.'

7. cəl ʔí· tí 'I'm over here.'

8. cəl lí· tí 'I'm over there' (farther than lí tə θé, close than lí tə cák^{W}), lə lí· tí 'It's over there., He's over there., etc.', líyə tí 'Is it over there?', tə θé lí· tí 'that thing yonder', ʔí·ɬcex^{W}

lí· tí 'you were (over) there', ʔí·łcəx^{W} lí· tí k'^{W}ɛs t'íɬ'eləm 'You were (over) there singing.', lə q'əq'íp lí· tí 'They're together over there.', lí· tí tə sc'éləctəl 'The chair's over there.'

9. məcx^{W} χətέ· tí 'come around there!', χətέ· tí 'over there' (cp. x^{W}ʔíɬ k^{W}səs χtέ t(ə) θέ 'Why did he do that?' which implies that χtέ means 'do', cp. also χtéstəx^{W}əs 'he did s-th').

9.5. ƛ'á 'that's ___, it's/he's/she's ___'.

This word is used to refer to animate things according to EB but even in her speech is sometimes used to refer to inanimate things. This seems true of AC and NP as well. In the semantic frame, 'That's a bailer.', łéltəl tə θέ must be used and *ƛ'á tə łéltəl is not allowed. But at the same time, ƛ'á tə θέ 'that's the one, it's that one (inanimate)' and similar phrases are allowed, and ƛ'á seems to conjoin abstract concepts and verb phrases as well (see chapter on particles). In addition to such examples, the following are typical examples, and show the kind of verbal demonstrative character which ƛ'á has:

ƛ'á sélƛ'a 'that's/he's/she's the older (sibling)'
ƛ'á sáseq^{W}t 'that's/he's/she's the younger (sibling)'
ƛ'á sélƛ'ɛtəls 'that's her older sister'
ƛ'á téls yi θέ 'that's their mother'

ƛ'á ʔɛ swé 'that's yours'

ƛ'á (ʔɛ swé, ʔɛ swéʔəlép, sʔáɬ) tél 'that's (your, you folks's, our) mother'

ƛ'á túẃƛ'à 'that's him, it's him'

ƛ'ál (séƛ'ɛtəl, sqé·q, stá·les) 'that's my (older sibling, younger sibling, wife)'

ƛ'á ʔíɬ mɛmíyət 'that's the one that was helping s-o'

ƛ'á tə sʔɛyí·wcəs 'it's his right hand'

ƛ'á tə (Bill, músmes, χ^wəχ^wéyə) 'that's (Bill, a cow, a fly)'

Notice that ƛ'á is always first in a sentence, and that it can allow the demonstrative article to be omitted before following nominals. ƛ'á can receive possessive pronoun inflection for the following nominal. Other examples have been given of ƛ'á inflected for future tense as well (ƛ'ácɛ Bill 'it will be Bill').

9.6. Pronominal Demonstratives (or Demonstrative Pronouns). These words function as independent pronouns (several have been discussed already in 4.3 and in 8.5). Some of the less common ones are added here, showing inflections for 'absent', for 'deceased', and for 'diminutive'. I have not obtained any of these less common types in sentences, but I think they can be presumed to function syntactically like the more common ones, túẃƛ'à, θúẃƛ'à, yuƛ'á·lem, tuƛ'álem and θuƛ'áləm. They

are listed as demonstratives or demonstrative because they change their demonstrative article prefixes (or roots?) to reflect sex gender, proximity and number. They begin with demonstrative articles which have their ə → ú^{ω} (u in plural forms); these articles are prefixed to demonstrative root ƛ'à ~ ƛ'á. In the plural and diminutive a final -m is added as part of the root, and then the plural infix -lə- ~ -əl- is added, or diminutive reduplication -R_1- is added, or both. The past (deceased) forms are suffixed with -ɬ ~ -əɬ past tense suffix. AC readily produced all these forms, but I suspect they are reserved for formal usage (perhaps in speeches or texts) rather than being used in normal conversation.

	m.	f.	h.pl.
sg.	tú^{ω}ƛ'à	θú^{ω}ƛ'à	-----
pl.	tuƛ'álem	θuƛ'álem	yuƛ'á(·)ləm
absent	k^{W}θú·ƛ'à	k^{W}sú·ƛ'à	k^{W}θú·ƛ'àlem
deceased	k'^{W}ú·ƛ'à·ɬ	k^{W}sú·ƛ'à·ɬ	k^{W}θú·ƛ'à·lèmèɬ
diminutive	tú·ƛ'àƛ'əm	(?)	ƛ'ə́ƛ'əlà·m

(also diminutive pl. (m.?) tuƛ'ə́ƛ'əlà·m)

These are translated:

tú^{ω}ƛ'à 'that's him, he, him'

θú^{ω}ƛ'à 'that's her, she, her'

tuƛ'álem 'that's them (male), they (male), them (male)'

θuƛ'ə́ləm 'that's them (female), they (female), them (female)'

yuƛ'ə́(·)ləm 'that's them (gender unspecified), they, them'

kʷθú·ƛ'à 'that's him (absent), that's her (absent), it's him (absent), it's her (absent)'

kʷsú·ƛ'à 'that's her (absent)'

kʷθú·ƛ'àləm 'that's them (absent, not present)'

kʼʷú·ƛ'à·ɬ 'that was him (deceased)'

kʷsú·ƛ'à·ɬ 'that was her (deceased)'

kʷθú·ƛ'à·ləmèɬ 'that was them (deceased)'

tú·ƛ'àƛ'əm 'that's a little one (male, about one to five years old)(insulting to use for old person)'

ƛ'ə́ƛ'əlà·m 'that's them (little kids), they're little kids' (not used much says AC)

tuƛ'ə́ƛ'əlà·m 'that's them (little ones)(male?)'

CHAPTER 10. NUMERALS

10.0. Introduction. The paragraph on numerals in Chapter 3 (pp. 134-135) serves as the best introduction to Halkomelem numerals and should be reread at this point. The lexical suffixes added to numerals as classifiers have been discussed, with their distributions, in 5.2.2 (pp. 190-194). Morphophonemic changes are numerous in the stems and even in some of the suffixes of numerals. Most have been mentioned in the morphophonemics chapter: stress shift (2.3.3.3), vowel deletion (2.3.3.4), ablaut (2.3.4)(é· → ə, é· → á·, ə → á·, í· → ə, á· → ə, some of it triggered by specific lexical suffixes), ʔ-insertion (2.3.5.1), vowel combination (2.3.5.2), suffix allomorphy with vowel alternation (2.3.6). What remains in this chapter is to give the basic numeral system with analysis and derivation (10.1), the rules of allomorphy of the numeral roots when affixed (10.2), and samples of the sets of numerals for illustration.

10.1. The Basic Numeral System. The basic system could be called cardinal numbers, if there is any use for such a term here, or perhaps better, unclassified numerals. These are the numerals which are used to refer to anything not covered by the numeral classifier lexical affixes. Thus this set contains the

unmarked forms, used to refer to animals, mountains, leaves, days, years, etc.; these forms can even be used to refer to classified things like houses, garments, etc. when the nominal for house, garment, etc. follows or when a person wants to be less specific or emphatic. This is typical of unmarked forms. These forms also contain the base forms which yield the allomorphs and input to the morphophonemic rules.

léc'ə 'one'

ʔisɛ́·lə 'two'

ɬí·x^{w} ~ líx^{w} 'three'

x̣əʔáθəl ~ x̣əʔá·θəl 'four'

ɬ(ə)q'ɛ́·cəs 'five' (< ɬ(ə)q'ɛ́·t 'be wide', -cəs '(in) the hand')

t'x̣ə́m 'six' (probably < the root in s-t'əx̣-lɛ́c 'fork in a tree, fork at the bottom' and t'x̣-ə́θət 'forks in a stream')

θ'á·k^{w}s 'seven'

təqɛ́·cɛ 'eight' (possibly related to təqɛ́·t 'close s-th')

tú·x^{w} 'nine'

ʔá·pəl ~ ʔápəl 'ten'

θəm- is a root for 'two' which appears in θəmɛ́ 'twice, two times' and sθəmə́lts 'Tuesday'

mós is a root which appears in the Tait dialect of SP

and AD, but only in s-mós, a rare alternate form for sχəʔá(·)θəls 'Thursday'; SP and AD reported that their parents used smós for 'Thursday' sometimes).

ʔápəl qɛs tə/k'^{W}ə lɛ́c'ə 'eleven' (ten and the one)

ʔápəl qɛs tə/k'^{W}ə ʔisɛ́·lə 'twelve' (ten and the two)

etc. 'thirteen' through 'nineteen'

c'k'^{W}ɛ́x^{Y} 'twenty' (possibly c'- lexical prefix + k'^{W}əx^{Y}- 'count'; the word for 'number' is s-k'^{W}əx^{Y}-ɛ́·m, from the same root)

c'k'^{W}ɛ́x^{Y} qɛs tə/k'^{W}ə lɛ́c'ə 'twenty-one'

etc. 'twenty-two' through 'twenty-nine'

łèx^{W}əlsx^{Y}ɛ́ '30'

łèx^{W}əlsx^{Y}ɛ́ qɛs tə/k'^{W}ə lɛ́c'ə '31', etc.

χèθəlsx^{Y}ɛ́ '40'

χèθəlsx^{Y}ɛ́ qɛs tə/k'^{W}ə lɛ́c'ə '41', etc.

łèq'əcəlsx^{Y}ɛ́ (~ (NP) łq'ècəlsx^{Y}ɛ́) '50'

łèq'əcəlsx^{Y}ɛ́ qɛs tə/k'^{W}ə lɛ́c'ə '51', etc.

t'χèməlsx^{Y}ɛ́ (~ (NP) t'χèməłsx^{Y}ɛ́) '60'

t'χèməlsx^{Y}ɛ́ qɛs tə/k'^{W}ə lɛ́c'ə '61'

θ'èk^{W}əcəlsx^{Y}ɛ́ '70'

θ'èk^{W}əcəlsx^{Y}ɛ́ qɛs tə/k'^{W}ə lɛ́c'ə '71'

tèqəcəlsx^{Y}ɛ́ '80'

tèqəcəlsx^{Y}ɛ́ qɛs tə/k'^{W}ə lɛ́c'ə '81'

tù·x^{W}əlsx^{Y}ɛ́ '90'

tù·x^{W}əlsx^{Y}ɛ́ qɛs tə/k'^{W}ə lɛ́c'ə '91'

lé·c'əwəc '100' (< lé·c' 'different', -əwəc 'in the back')

lé·c'əwəc qɛs tə/k'^{w}ə léc'ə '101', etc.

lé·c'əwəc qɛs tə tù·x^{w}əlsx^{y}é qɛs tə tú·x^{w} '199'

?isé·lə lé·c'əwəc '200'

etc. '300' through '900'

?ápəl k^{w}s lé·c'əwəc '1000'

The system is a decimal system. Traces of a quaternary system can be seen in the facts that 'one' through 'four' are not analyzable at present but 'five', 'six', and 'eight' can be derived, and that 'eight' may signify a 'closing' from its derivation and since it is two cycles of four, the sacred number. (Things are often done four times in religious ceremonies, etc.) Many of the most fluent speakers could not count much above ten in Halkomelem; I believe this reflects the pre-contact situation too, since q̓éχ was and is used to replace any higher numbers the person does not know or doesn't want to specify; q̓éχ 'many, lots' is especially used (even by those who know the forms) to replace classified numbers over 40 people, over five times, etc.

The use of qɛs is explained in the chapter on particles (see section on conjunctions). The use of tə or k'^{w}ə has been explained in the chapter on

demonstratives (see demonstrative articles). The function of k^{W}s in '1000' is unclear but it looks like a demonstrative (q.v.). It is also unclear why 'twenty' has the form and root it does (instead of ʔisé·lə or θəm-).

10.2. Allomorphy of Numeral Roots.

1. lə́c'ə → slə́c'ə/ ___-əɬp
2. ʔisé·lə → θəm/ ___-é́ɬ
   → θəmélt/ s-___-s
   → yə́ys/ ___-élə
   → ʔisə/ ___-əɬp (which later → -é́·ɬp)
   → ʔisl/ ___-V́C (related to rule 2.3.3.5)
3. ɬf·x → $ɬx^{W}$/ ___-V́ ... (but not before -má·t)
   (related to rule 2.3.3.4; perhaps all that's needed here instead of rule 3 is a statement that $ɬix^{W}$má·t is an exception to rule 2.3.3.4)
4. χəʔá(·)θəl → χəθílə/ ___-élə, -$íq^{W}$, -əɬp, -əs
   → χəθl/ ___-é́ɬ, -ówəs, (prob. -é́·wtx^{W}, -élwət)
5. θ'á·k^{W}s → θ'ək^{W}əc/ ___-əlsx^{Y}é́
   → θ'ək^{W}s/ ___-élə, -é́ɬ
6. ʔá(·)pəl → ʔəpé́·lə/ ___-əs
7. c'k'^{W}əx^{Y} → c'k'$^{W}x^{Y}$é́/ ___-élə, -əs
8. əl, əs → ø/ ___-əlsx^{Y}é́, -élə
9. əs → ø/ ___-əs
10. #C(C)V → #C(C)V́/ ___-əlsx^{Y}é́ (in addition to

unrounded vowel → ə/ ___-əlsx^{y}é (see rule 5, p. 83, under ablaut triggering))

(Two additional rules are needed for affix allomorphy not involving vowel alternation and not mentioned in 2.3.6:

11. -éle 'people' → R_{12}- 'person'/ léc'ə___

12. -éɬ 'times' → -éx^{w}/ léc'ə___

→ -é/ əəm___)

10.3. Numeral sets with lexical affixes (or classifiers). The lexical affixes for these sets include: -əs 'dollars', -éle 'people', s- -s 'o'clock', s- -s 'day of the week', -ówəs 'canoe paddles, paddlers', -éɬ 'times', -íq^{w} 'fish (heads)', -əlsx^{y}é 'times ten, -ty', -əɬp 'trees', -mé·t 'piles', -élwət 'garments', -é·wtx^{w} 'houses', -ówəɬ 'canoes', -éyiws 'pants', -á·ls 'spherical objects, fruit', -eqəl 'containers', -á·lɬ 'young', -é·ltəx^{w} 'wives', -émec' 'poles, upright', possibly -í·ws 'birds'.

Counting dollars: léc'əs 'one dollar', ʔisá·ləs 'two dollars', ɬí·x^{w}əs 'three dollars', χəθíləs 'four dollars', łəq'á·cəs 'five dollars', t'χémés 'six dollars', θ'ák^{w}səs 'seven dollars', tqá·cá·s 'eight dollars', tú·x^{w}əs 'nine dollars', ʔəpá·ləs 'ten dollars', ʔəpá·ləs qəs k'^{w}ə léc'əs 'eleven dollars', c'k'^{w}ɨ^{y}á·s ~ c'ək'^{w}x^{y}á·s 'twenty dollars', łəx^{w}əlsx^{y}á·s 'thirty

dollars', x̣ə̀θəlsxʸá·s 'forty dollars', ƚə̀q'ecəlsxʸá·s 'fifty dollars', t'x̣ə̀məlsxʸá·s 'sixty dollars', θ'ə̀kʷecəlsxʸá·s 'seventy dollars', tə̀qəcəlsxʸá·s 'eighty dollars', tù·xʷəlsxʸá·s 'ninety dollars', lέ·c'əwəc 'one hundred dollars', x̣ə?áθəl lέ·c'əwəc 'four hundred dollars'. The count of cents is also interesting: ckʷí·m tέlə 'penny' (literally "red money", tέlə 'money' < English "dollar" via Chinook Jargon), lə́cə ckʷí·m tέlə 'one penny', ?isέ·lə ckʷí·m tέlə 'two pennies, two cents', ckʷə́kʷəlì·m tέlə 'lots of pennies' (lots of little red money), číkməl tέlə 'silver money' (číkməl 'iron, silver' < Chinook Jargon)(cp. lə́c'əs pípə tέlə 'one paper dollar'), mí·t 'dime, ten cents' (< Chinook Jargon < English "bit" in "two bits"), ƚsə́q' mí·t 'a nickle, five cents' (lit. "half dime"), mí·t qεs k'ʷə ƚsə́q' mí·t 'fifteen cents', ?isέ·lə mí·t 'twenty cents', ƚí·xʷ mí·t 'thirty cents', etc., and kʷá·tə 'quarter, twenty-five cents' (< English "quarter").

Counting people: lálec'ə 'one person', yέysələ 'two people', ƚxʷέlə 'three people', x̣əθílə 'four people', ƚq'έcέlə 'five people', t'x̣ə́mələ 'six people', θ'əkʷsέlə 'seven people', təqέcέlə ~ təqέcε?έlə 'eight people', tuxʷέlə 'nine people', ?əpέlə 'ten people', ?əpέlə qεs tə lálec'ə 'eleven people', c'ək'ʷxʸέlə

'twenty people', ɬèxʷelsxʸéle ~ ɬxʷèɬsxʸéle 'thirty people', χèθelsxʸéle 'forty people', ɬèqʾəcelsxʸéle 'fifty people', tʾχèməlsxʸé·le 'sixty people', θʾèkʷselsxʸé·le 'seventy people', tèqəcelsxʸé·le 'eighty people', tù·xʷelsxʸé·le 'ninety people', lé·cʾəwec 'one hundred people'.

Counting hours: (all nominals, preceded by demonstrative article tə or kʾʷə) tə slécʾəs 'l:00, one o'clock', tə ʔisé·les (s- unexplainably missing) '2:00', tə sɬí·xʷs '3:00', tə sχəʔá·θəls '4:00', tə sɬəqʾé·cəs '5:00', tə stʾχéms '6:00', tə sθʾá·kʷs '7:00', tə stəqé·cəs '8:00', tə stú·xʷs '9:00', tə sʔá·pəls '10:00', tə sʔá·pəls qəs tə slécʾəs ~ tə sɬéms (root unclear) '11:00', tə sʔá·pəls qəs tə ʔiséləs '12:00' (also təxʷswéyél 'mid-day, noon' and təxʷslét 'midnight'), some people say the half hour and quarter hour were indicated respectively by qəs tə/kʾʷə ɬséqʾ ('and a half') and qəs tə/kʾʷə kʷá·tə ('and a quarter') but more people maintain that the most precise it ever got was yiyəlɛw tə sɬí·xʷs 'a little after 3:00' and wəcʾíməl tə sɬí·xʷs 'a little before 3:00, nearly 3:00'. There are no words for minutes or seconds.

Counting days of the week: yilé·wəɬèt 'Monday' ("after day"), sθəmélts (or sθəmélc) 'Tuesday', sɬí·xʷs 'Wednesday', sχəʔá·θəls ~ (SP, AD) smós 'Thurs-

day', sɬq'é·cɛs 'Friday', t'áq'^{W}təm ~ (Deming) t'q'^{W}átem 'Saturday' ("broken (of rope or string)(on purpose)"), sχéχəɬèt (AC) ~ sχéχəɬèt (CT, NP, etc.) 'Sunday' ("sacred day"). (Of the moons or months, only one was named with a numeral, ʔəpáléstəl 'July'; the new year began with the first sliver of moon appearing after the black moon in October, thus making the tenth moon begin in July). There is no word for a week.

Counting canoe paddles: (all of these forms are also used to refer to 'canoe paddlers' as well) ləc'é·wəs 'one paddle', ʔisłé·wəs 'two paddles', ɬx^{W}ó·wəs 'three paddles', χəθlé·wəs 'four paddles', ɬq'écəsó·wəs 'five paddles', t'χəmó·wəs 'six paddles', ʔəpélowəs 'ten paddles', ʔəpélowəs qɛs tə léc'ə 'eleven paddles' (the number on the largest racing canoe).

Counting times: ləc'éx^{W} 'once', θəmé 'twice', ɬx^{W}éɬ 'three times', χəθléɬ 'four times', ɬq'écəséɬ 'five times', t'χəméɬ 'six times', θ'ək^{W}séɬ 'seven times', təqécéɬ 'eight times', tú·x^{W}éɬ 'nine times', ʔapeléɬ 'ten times'.

Counting fish (probably dead ones, lit. counting heads): léc'ə 'one (fish)', ʔisɛlíq^{W} 'two fish', ɬíx^{W}eq^{W} 'three fish', χəθílóq^{W} 'four fish', ɬq'ɛcəsíq^{W} 'five fish', t'χəmíq^{W} 'six fish', θ'ak^{W}síq^{W} 'seven

fish', təqɛcíq^{W} 'eight fish', tux^{W}íq^{W} 'nine fish', ʔápel 'ten (fish)'.

-əlsx^{y}ɛ́ isn't really a classifier at all since it has been attested with the 'dollars' and the 'people' classifier suffixes. Its forms have already been given in 10.1.

Counting trees: slə́c'əɬp 'one tree', ʔisɛ́·ɬp ~ s?isɛ́·ɬp 'two trees', ɬx^{W}ɛ́·ɬp 'three trees', χəθíyəɬp 'four trees' (note the same l → y/ ___-əɬp operating here as with plant terms)(2.4.1), ɬq'ɛcəsɛ́ɬp 'five trees'.

Counting piles: ləc'əmá·t 'one pile', ʔisɛ́ləmá·t 'two piles', ɬix^{W}má·t 'three piles', χəʔáθəlmá·t 'four piles', ɬq'ɛ́cəsmá·t 'five piles'.

Counting garments: ʔislɛ́lwət 'two garments', ɬx^{W}ɛ́lwət 'three garments', χəθlɛ́lwət 'four garments', ɬq'ɛ́cəsɛ́lwət 'five garments'.

Counting houses of one person: ʔislɛ́·wtx^{W} 'two houses (of one person)', ɬx^{W}ɛ́·wtx^{W} 'three houses (of one person)', χəθlɛ́·wtx^{W} 'four houses (of one person)', ɬq'ɛ́cəsɛ́·wtx^{W} 'five houses (of one person)' (all Tait).

Counting some other things (fragmentary sets): ɬq'ɛcəsówəɬ 'five canoes (of one person)' (contrast ɬq'ɛ́cəs slɛ́x^{W}əɬ 'five canoes (of different people)'), ɬq'ɛcəsɛ́yiws 'five pants', ɬq'ɛcəsá·ls 'five spherical

objects, five fruit, (five rocks, five balls, etc.)' łq'éc(s)eqəl 'five containers', łq'écəs?á·lɬ 'five young (animates)', ?islé·ltx^{w} 'man with two wives', ?iséléməc' 'two poles standing', łq'é·cəsí·ws '5 birds'.

Ordinals: there are none; only yewé·l 'first', stetís 'next' and łiyá·q^{w}t 'last'.

(The numerical interrogative verb k'^{w}í·l can be inflected with the same lexical suffixes; see the examples in 6.2.5, although they are verbs not numerals.)

CHAPTER 11. SYNTAX

11.0. Introduction. Considerable syntactic data (in the neighborhood of 700 sentences) and a moderate amount of syntactic analysis has already been given in the chapters on morphology (Chapters 3 through 10). Inflectional classes have been divided into syntactic classes. Some independent pronoun sets have been found to be syntactically nominal, some verbal, some either. Verbs have been divided into syntactic classes such as intransitive, transitive, adjectival, prepositional, adverbial, interrogative, auxiliary, etc. Particles were found to be syntactic interjections, conjunctions, and adverbials (modal particles are found in this chapter to be syntactically adverbial). Demonstratives were found to be syntactic articles, conjunctions, adverbials, nominals, pronouns which function like nominals, and semi-verbal ɬ'á. Numerals were found to include syntactic adverbials, adjectivals, or nominals. In this chapter we will also see how nominals can be used as verbs and adjectives, as well as how verbs can be nominalized and relativized.

This chapter will deal first with syntactic classes and abbreviations (11.0), then with nominal phrases and how they are expanded (11.1). 11.2 deals

with verb phrases and clauses and how VP's are expanded with subject and object NP's (11.2.1), how VP's are expanded with internal modifiers (11.2.2), how clauses and sentences are expanded with appositives and non-conjoined VP's (11.2.3), how clauses are expanded with dependent or subordinate VP's or clauses (11.2.4), how clauses are conjoined with co-ordinate conjunctions (11.2.5), and concludes with a discussion of comparatives and superlatives (11.2.6). 11.3 mentions interjections, and 11.4 discusses syntactic limits and how much phrases, clauses, and sentences can be expanded.

Syntactic classes, abbreviations, and cross references to syntactic information in the morphology:

Pron = pronoun (usually cited by number of the set)

Vpron = 4.1, 4.2, 4.7 (as Vaj)(verbal pronoun)

Npron = 4.3, 4.11, 4.7 (nominal pronoun)

-Pron = -4.4, -4.5, -4.6, -4.8, -4.9, -4.10 (pronoun suffix)(also shown as -S, -0, -Pass, -Poss)

-X = lexical affix (whether prefix, infix, or suffix) (Chapter 5)

V = verb

Vi = intransitive verb

Vi plain = plain intransitive verb (6.2.1)

Vaj = adjectival verb (6.2.2)

Vprep = prepositional verb (6.2.3)

Vadv = adverbial verb (6.2.4)

Vneg = negative verb (6.2.4)

Vq = interrogative verb (6.2.5, 6.1.7)

Vpron = verbal pronoun or pronominal verb (6.2.6, 4.1, 4.2, 4.7)

Vdem = demonstrative verb (6.2.7)

Vaux = auxiliary verb (6.2.8)

-Intr = intransitivizer (6.1.2.2)

Vt = transitive verb

-S = subject suffix (4.4)	S = subject NP
-O = object suffix (4.5)	O = object NP
$-S_3$ = 3rd person subject suffix	S_3 = 3rd person subject NP
$-S_{1,2}$ = 1st or 2nd person subject suffix	$S_{1,2}$ = 1st or 2nd person subject NP (from 4.1 for ex.)
$-S_{pl}$ = plural subject suffix	S_{pl} = plural subject NP
$-S_{2pl}$ = 2nd person plural subject suffix	S_{2pl} = 2nd person plural subject NP

$-S_c$ ... S_c = subject corresponding in person + number

$-S_{-c}$ or $-O_{-c}$ = subject or object not corresponding in person and number

similarly with $-O_3$, $-O_{1,2}$, $-O_{pl}$, $-O_{2pl}$, $-O_c$ ... O_c and with O_3, $O_{1,2}$, O_{pl}, O_{2pl}

-Pass = passive (4.10)

-Sbjn = subjunctive (6.1.7, 4.9)

Other V inflections can be abbreviated as on p. 316

P = particle

Interj = particle interjection (7.1)

Pconj = particle conjunction (7.2)

Pmod = modal particle (7.3)

Padv = adverbial particle (7.4)

N = nominal

Nindef = indefinite nominal (8.1)

-Poss = possessive inflection (8.2, 4.6)

-Dim = diminutive inflection (8.3)

-Pl = plural inflection (8.4)

-Past = past tense inflection (8.5)

D = demonstrative

A = demonstrative article (9.1)

A-4.6 = article carrying possessive inflection for following NP

A-4.8-s = article carrying subordinate subject inflection for following VP

Dconj = demonstrative conjunction (including A-4.8-s)(9.2)

A D = nominal demonstrative (9.3)

Dadv = adverbial demonstrative (9.4)

ʔ'á = semi-verbal demonstrative ʔ'á (9.5)

Dpron = pronominal demonstrative or demonstrative pronoun (9.6, 4.3)

Num = numeral (Chapter 10)

NP = nominal phrase (see 11.1 below)

VP = verb phrase (see 11.2 below)

11.1. Nominal Phrases (NP's).

11.1.0. NP's begin with a demonstrative article and end with something serving as a nominal. Unexpanded NP's include: A N, A D, A Num, A V, Dpron, Npron (4.3, 4.7, 4.11). With the pronouns the A is prefixed to the word in forming it, and so the A is not shown as a separate word. No examples of A P occur.

Except for 4.11 (which can only be object of a Vprep), all of these NP's can serve as subject or object of a verb without further modification. Syntactic position and agreement in person and number determine whether S or O is intended.

NP's are expanded by adding things either after the A or after the element serving as the nominal or after both.

11.1.1. NP Expansion With Modifiers. NP's which consist of A N can be expanded in a number of ways:
1. A (Vaj,N,D,Num) N (D is acting as N > Vaj; the first N and Num each are > Vaj. Also when a lower numeral (1, 2, or 3) modifies an N, the N need not be inflected for plural; the N is inflected for plural, if possible, after numerals 'four' and above.)
2. A (Vaj,D,Num)(Vaj,N) N (Note that an N acting as Vaj must immediately precede the original N of the NP,

also that the D must remain immediately following the A to retain its N > Vaj status; Num probably precedes N as well as Vaj before N. There are no examples of A Vaj Vaj Vaj N to date.)

3. A Vadv Vaj N (In superlatives like: l sƛ'í tə wə?ál c'ɛc'íc'əƛ' x^{w}éyləm. 'I want the shortest rope.' (AC), θə yəléwəl ?iyá·məx^{y} q'é·mi 'the prettiest girl', tə yəléwəl k'^{w}ámk'^{w}əm swíyəqə 'the strongest man'.)

4. A-4.6 N-4.6 (4.6 is shown attached to both A and N because it is suffixed to the word before the N or to the N or to both, depending on the person and number of the possessor.)

5. A N-4.6 N-4.6 and probably A (Vaj,D,Num)-4.6 N-4.6

6. A 4.7 N (for emphasis of possession)

7. A N-4.6$_{3}$ A N (4.6$_{3}$ = 3rd person possessive -s. This construction is used to indicate when one A N (the first one) is possessed by another (the second). Apparently təwét and təwétəstwə do not require -4.6 in this construction, and the A of the second N is then also omitted: təwét sq^{w}eméy 'Whose dog?' and təwétəstwə sq^{w}eméy 'somebody's dog'.)

8. A N-4.6$_{3}$ A-4.6 N-4.6 (For example, tə lélém-s təl mè·l 'my father's house'.)

9. A N təlí NP (Partitive, as in tə láləc'ə təlí tə swáwələs 'one of the young men' or tə láləc'ə təlí

ƛ'ɛɬɬímeɬ 'one of us'.)

If the NP begins as A V, other expansions are possible, but they are covered in 11.2 because such constructions are nominalized VP's (see especially 11.2.4). A more favored way of adding Vaj's to an NP (after one or two have already been added) is adding them as dependent verb clauses (k'^{W}-4.8-s Vaj-4.8 after the NP).

11.1.2. NP Expansion With Apposition.

1. 4.3 N

2. N 4.3 N

3. A N N (where the second N is a proper name)

Each of the three above can function as NP in several different contexts. For example in insults like ʔó tɛléwə héwt 'Oh you rat!', ʔó tɛléwə spiypíyx^{y}el 'Oh you crooked-leg!', etc.; in sentences like ƛ'asósu lə ƛ'epí·l k'^{W}iléstwə yuƛ'áləm swáwələs 'And so an unstated number of them, young men, went down/descended.' (k'^{W}iléstwə = Nindef used as Vaj; it cannot follow A because the A is included within yuƛ'áləm; swáweles follows in apposition), su mə c'ƛ'ém θuƛ'à sá·seq^{W}t 'So/Then the youngest girl jumped.' (literally "So she came to jump, the youngest girl.')(CT), lɛ t'ék'^{W}stx^{W}es yúƛ'à·lə̀m q'é·ləmi tə swí·wələs 'They, the girls, took the

young man home.' (CT), ʔɛɬtélstéx^{W}cet k'^{W}ɛ sísele sc'íq'^{W} 'We'll feed your grandfather Sc'íq'^{W}.' (Sc'íq'^{W} is the name of the grandfather)(CT).

11.1.3. NP Expansion With Conjoining.

1. A N qe N : the A can be omitted after qe in conjoining NP's. For example, le leméltex^{W}es te Bill te sq'éméł x^{W}elém te Jim qe Bob 'Bill threw the paddle to Jim and Bob.', lí lém k'^{W}e Bill qe Bob 'Did Bill or Bob go?'

2. -O qe N : the A can also be omitted after qe in conjoining object pronoun suffix and object NP. For example, cel k'^{W}ecláme qe Bob 'I saw you and Bob.' (Presumably Vi-S could have its -S conjoined with an N in a similar fashion, Vi-S qe N. Vt-O-S could not conjoin its -S with an N however by adding qe N because the N (even with omitted A) would be interpreted as an O.)

3. A (4.7)(Num) N qɛs A Vaj N : the A is not omitted after qɛs in conjoining NP's or Num's. For example, ƛ'á swés ʔiséle sq^{W}eméy qɛs te qéẋ pús. 'He has two dogs and lots of cats.' (A usually omitted after ƛ'á).

4. A Num(-X) qɛs A (Num-X, Num N) : conjoining numerals which are nominal or adjectival. For example, te ʔəpéle qɛs te lálec'e 'the eleven people'.

5. A N qɛs 4.3 : conjoining NP and independent Npron.

For example, cet ʔíɬtəl tlaqɛ́·ys tə Bill qɛs tɛʔɛ́ʔɛlθɛ 'Bill and I are eating right now.' (probably permitted also are (Dpron,Npron,A(N,D,Num,V)) qɛs (Dpron, Npron,A(N,D,Num,V)), i.e. NP qɛs NP.)

6. A N-4.6$_3$ A N qə N : conjoining NP possessors of a single NP. For example, lə θíytɛs ƛ' Oliver Wells qə Casey Wells tə sqʷéltəl-s ƛ' Daniel Milo qə Bob Joe lí tə machines tə xʷelítəm 'Oliver Wells and Casey Wells made (or fixed) the voices of Daniel Milo and Bob Joe on the white man's machines.'

11.1.4. Omission of the Article in NP's. The A is omitted before nominals (N, or D or Num or V functioning as N) with nominal status retained only in a few contexts:

1. A is omitted after conjunction qə 'and, but, or' (as seen just above).

2. A is omitted before NP's used vocatively. For example, lémcxʷ ʔay ʔɛ́·y siyém 'Keep on going (away), chief!' (said to a wolf), lɛcɛp ʔay ʔɛ́·y siyém 'You folks keep on going, chief!', lɛ́w sí·lə 'Hello grandmother/grandfather!', míɬ kʷətxʷí·ləm l siyéyə 'Come inside, my friend!'

3. A is omitted after ʔəwéɬɛ 'be none, nothing, nobody, have no', ʔəwéɬɛɬ 'be nobody' (AC only), and ʔəwɛ́(·)tɛ 'is it none?, are they none?'. These words

nominalize what follows (frequently verbs) because the -tɛ acts as an A, ʔəwé- acts like negative verb ʔéwə, and ʔəwé(·)- is really negative verb ʔéwə plus interrogative suffix -ə ~ -é. Examples: ʔəwétɛ kapú kʷsəs xʷəʔí· 'He came without a coat (The coat was none when he came).', lə ʔéƛ'qəl qə ʔəwétɛ ʔà kapús qə yíyəq 'He went outside without a coat and it was snowing.' (lit. 'He went outside and it was just none, his coat, and it was snowing.'), qéχ tə ƛ'ik'ʷíyəɬp qə ʔəwétɛ ƛ'ík'ʷəl 'There's a lot of bean vines but no beans.', ʔəwétɛ mə xʷəʔí· 'Nobody came.', (ʔə)wétɛ ʔí· 'He's not here.', ʔəwétɛ-l s-ɬí·m (or) ʔəwétɛ-l-s ɬí·m 'I didn't pick anything.' ('My picking is none.'), ʔəwétɛ-l sɬéq'əlɛxʷ k'ʷəs q'épsɛɛ k'ʷə ʔí·k'ʷəlà 'I didn't know there was going to be a gathering here.', (Cheh.) (ʔə)wétɛ-l ɬq'élɛxʷ 'I don't know' (lit. 'My knownledge of it is none., I have no knowledge of it.'), ʔəwétɛ sɬéq'əlɛxʷ wətəmtémɛsɛɛ k'ʷəs ʔéɬtəlcət qəlét 'No-one knows when we'll eat again.' (lit. 'The knowledge of it is none when it will be our eating again.'), ʔəwétɛ skʷíyəχtèmèt 'Nothing could be done.', ʔəwétɛɬ sɬəq'éləmət tə skʷíxʷs 'Nobody knows his name.', wé·tɛ ʔɛ sméyéθ 'Do(n't) you have any meat?' (lit. 'Is it none, your meat?'), wé·tɛ st'élməxʷ 'Isn't

there any medicine?' (lit. 'Is it none, the medicine?').
4. A is omitted after demonstrative semi-verb ƛ'á 'that's ___, that's him/her' and verb x^{W}é ~ x^{W}ó ~ x^{W}e 'become' (probably because both involve existence, perhaps calling for N > V (stative) and leaving the syntactic analysis as ƛ'á V and x^{W}é V instead of ƛ'á N and x^{W}é N. For example: x^{W}ewécəl ʔí·l x^{W}é siyá·ləx^{W}e 'I'm not old yet., I haven't become old yet.', qəƛ'asésu lə x^{W}ó (hyper-slow x^{W}é) mestíyəx^{W} 'And so he turned into/became a person.', lə ʔiyá·qθət tə smíməχ̌ɬ qəƛ'asésu x^{W}e ɬaliq^{W}át 'The caterpillar changed itself into a moth.' (lit. 'The caterpillar changed itself and so it became a moth.'), selcí·m k^{W}s hiθes qə yɛɬ sʔəs mə x^{W}ɛ syémyəm 'How long before she came to be(come) pregnant?', lə x^{W}ó swíyəqə 'He became a man.'; ƛ'á sθƛ'ɛtəls 'That's her older sister.', ƛ'á téls yi θé 'That's their mother (the mother of those people).', ƛ'á ʔɛ swé 'That's yours.', ƛ'á ʔɛ swé tél 'That's your (own) mother.', ƛ'á tú·ƛ'à 'That's him., It's him.', ƛ'él sté·ləs 'That's my wife.', ƛ'á tə (Bill, músməs, χ̌^{W}əχ̌^{W}éyə) 'That's (Bill, a cow, a fly).', ƛ'á ʔíɬ məmíyət 'That's the one that was helping s-o.' (Note that even the A can be omitted which is the only marker nominalizing or here relativizing a VP!)

5. A related case follows where A is omitted and the words following are inflected as nominals for possessive, but the words function as verbs. This occurs when A is omitted before nominal verbs sƛ'í(·) 'want; like' and sq^{w}έləwəl 'think; thoughts, feelings'. These words function as regular nominals in some examples and follow a demonstrative article. However both words can also appear without the demonstrative article and are then translated as verbs 'want' and 'think'. The thing that makes them unique is that their subjects are indicated only by possessive pronouns of 4.6 without an article and never by 4.4. When not following an article (when not regular nominals), they also can (and must) take an object (NP or A-4.8-s V-4.8 for example) though neither is inflected for transitivity; in this respect they resemble Vprep's (see 11.2). sƛ'í has allomorph sƛ'íy before -əlәp, -l, and -ʔε.

Examples as nominals: ʔέy təl sq^{w}έləwəl 'I'm glad., My feelings/thoughts are good.', θəhítcəx^{w} tε sq^{w}έləwəl 'Concentrate!, Keep your mind (thoughts) on what you're doing!', (Tait) cέcε tə sq^{w}έləwəls 'He (or She) is emotional.' (lit. 'His/Her thoughts/feelings are tender.'), x^{w}əʔí·t tε sq^{w}έləwəl 'What are you thinking about?' (lit. 'Where are they going, your thoughts?'), stέm k'^{w}ε sƛ'í 'What do you want?'.

As nominal verbs with omission of A (4.6a, 4.6b and 4.8a, 4.8b indicate possessive pronoun suffixes attached to word before and/or word possessed, depending on person and number):

1. 4.6a (sƛ'í, sq^{W}éləwəl)-4.6b k'^{W}-4.8a-s VP-4.8b
2. sƛ'í k'^{W}-4.8a-s VP-4.8b
3. 4.6a sƛ'í-4.6b NP
4. Vadv-4.6a sƛ'í-4.6b-4.6a NP-4.6b
5. 4.6a sƛ'íyɛ-4.6b NP
6. lí-4.6a (sƛ'í, sq^{W}éləwəl)-4.6b (4.3) k'^{W}-4.8a-s VP -4.8b
7. ?ə́wə lí-s-4.6a (sƛ'í, sq^{W}éləwəl)-4.6b (4.3) k'^{W}-4.8a-s VP-4.8b
8. ?ə́wə-4.4 lí-4.9b-4.6a sƛ'í-4.6b
9. ?ə́wə-4.6a sƛ'í-4.6b k'^{W}-4.8a-s VP-4.8b
10. ?ə́wə sƛ'íses k'^{W}-4.8a-s VP-4.8b
11. ?əwə́-s lí-s-4.6a sƛ'í-4.6b, VP-4.4
12. ?əwə́-?ɛ sƛ'íyes k'^{W}-4.8a-s VP-4.8b (sƛ'íyes sic? for sƛ'í?)
13. V-4.4 wə-lí-s-4.6a sƛ'í-4.6b k'^{W}-4.8a-s VP-4.8b
14. 4.4 (Vaux) V-0 A ?í·ɬ-4.6a sƛ'í-4.6b (The A is added to relativize the VP.)

These 14 structures represent over 80 elicited sentences with paradigmatic variations and also expansions of NP and VP. Many others are surely possible. An example of each type follows:

1. sƛ'ís k'^{W}əs ƛ'ás (yúƛ'à·lèm, k^{W}ax^{W}iɬát, θə stá·ləs)

k'^{W}əs k'^{W}ə́cləx^{W}s 'He wants (them, K^{W}ax^{W}iɬát (Dorothy Wealick), his wife) to see it.'

sq^{W}éləwels k'^{W}əs ƛ'ás túƛ'à lém 'He thinks he's the one to go.'

2. sƛ'í k'^{W}əls lɛ yəwé 'I want to go along.'

3. l sƛ'í k'^{W}ə qá· 'I want some water.'

4. wə?álwə-l sƛ'íy-l siyé·yə 'I like my friend a lot.'

5. ?ɛ sƛ'íyɛ k'^{W}ə qá· 'Do you want some water?' (less common structure than lí ?ɛ sƛ'í k'^{W}ə qá· 'Do you want some water?')

6. lí ?ɛ sƛ'í k'^{W}ɛs x^{W}iyə́θəqəθə́x^{y} 'Do you want to interpret for me?' (lit. 'Is it your want that you interpret/translate/repeat me?')

lí ?ɛ sq^{W}éləwəl k'^{W}əs məs x^{W}ɛθtéləm wə́yə́lə́s 'Do you think it will be cloudy tomorrow?'

7. ?ə́wə lí-s-l sƛ'í k'^{W}-ɛ-s líyə́m 'I don't want you to laugh.'

?ə́wə lí-s-l sq^{W}éləwəl k'^{W}-ɛ-s lém 'I don't think you should go.' (lit. 'It's not my thought that you go.')

8. ?ə́wəcx^{W} lí-x^{W}-l sƛ'í 'I don't want you.'

9. ?ə́wə sƛ'í-s k'^{W}əs məytálx^{W}-s wəlémət sə́wq'tàlə 'He doesn't want to (or won't) help us find you folks.'

10. ?ə́wə sƛ'ísəs k'^{W}əls lɛ k'^{W}ə́cəθàmə 'He doesn't want me to go see you.'

11. ?əwə́s lís (?ɛ) sƛ'íyələp lɛɛəl k^{W}ú·t 'If you folks

don't want it, I'll take it.'

12. ʔewé ʔɛ sƛ'íyəs k'^{W}əs k'^{W}éclex^{W}cət 'Don't you want us to see it?'

13. lémcəl wə-lí-s-l sƛ'ʔ k'^{W}əls lém 'I'm going when I want to go.'

14. cəl mə méstex^{W} tə ʔí·ɬ ʔɛ sƛ'ʔ 'I brought what you wanted.'

11.2. Verb Phrases (VP's), Clauses, the Sentence.

11.2.0. A verb phrase consists of an inflected verb plus its subject and/or object NP's, if any (see 11.2.1), plus its internal modifiers if any (11.2.2). A VP can also consist merely of an inflected verb, if no subject or object NP's or modifiers are present. A VP which can stand by itself as a sentence is called an independent clause if it has subordinate VP's (11.2.4, 11.2.3), co-ordinate VP's (11.2.5), or words in apposition (11.2.3) attached within its sentence. A subordinate VP usually cannot stand by itself as a sentence because it is nominalized or subjunctivized.

11.2.1. Types of VP, Subject NP and Object NP, Vi and Vt. Unless noted, all VP's follow the next rules on subject and object placement:

.1. Vi-S S. Vt-O-S S O. Vt-O-S O. Vt-O$_{-c}$-S$_{c}$ S$_{c}$. Vt-Pass C (S). Vt-Pass$_{-c}$ S. In other words, a single NP after a Vi is the subject; a single NP after a Vt

is the object unless it corresponds in person and number only with the subject suffix, in which case the NP is the subject; if two NP's follow a Vt, the first is the subject and the second is the object; this order is reversed to indicate an agent after a passive Vt (Vt-Pass O S 'O was V-ed by S'); a single NP after a passive is the object if corresponding if corresponding in person and number with the passive object suffix, otherwise the NP is interpreted as agent (i.e. subject); a single NP after a passive can also be interpreted as agent (S) if the O has been defined differently as an NP in the preceding context.

.2. With benefactives, the O is the beneficiary (indirect object) when animate and the direct object when inanimate. In addition, when V-Ben-$O_{1,2}$-S is followed by NP, the NP is the direct object when inanimate; when V-Ben-$O_{1,2}$-S is followed by an animate NP (4.3) which does not correspond in person and number with the -O, the NP is the subject. (If two NP's follow V-Ben-O-S the order is V S O as expected; O is the beneficiary if animate, the direct object if inanimate. I was unable to elicit sentences with both direct and beneficiary objects, but I seem to remember having heard one with the direct object preceding the beneficiary object.)

.3. When Vi is a Vprep, Vi-S O (S) occurs; in fact Vprep's must have an O even though Vprep's are inflectionally Vi's. (An alternate analysis could class Vprep's as almost the only Vt's without a contol suffix and object suffixes, the only Vt's to take 4.11 as pronoun object, and nearly the only Vt's to have V O S; ʔəmí, lém, sx̌'í, and sq^{w}élewəl might be the other Vt's having V O S order and lacking control and object suffixes.)

.4. (ʔə)mí 'come (to), coming (to)' and lém 'go(ing) (to)' also allow Vi-S O (S) order when the NP following is a place (semantically). These verbs have allosemic rules that read: (ʔə)mí /'come (to), coming (to)'/ → ['come to, coming to'] and lém /'go(ing) (to)'/ → ['go(ing) to'] (both) in the environment before A N where N contains the semantic element ['a place']. As a result, a prepositional element becomes obligatory, and the A N following becomes the object of that preposition. A second NP following the A N becomes the subject of (ʔə)mí or lém because both verbs are inflectionally Vi's.

.5. As mentioned in 11.1, sx̌'í 'want' and sq^{w}élewəl 'think; thoughts, feelings' when not preceded by A must be followed by an O (either NP or subordinate clause k'^{w}-4.8-s V-4.8), and this in spite of

the fact that they are inflectionally intransitive. With an NP subject the order is almost certainly V S O since sʌ'f-s and sq^{w}élewel-s would have to be followed by their NP possessors if present; but I have no examples to quote on this.

.6. In addition, some Vi's suffixed with -əm intransitivizer (6.1.6 Group D) or -əls ~ -é·ls intransitivizer (6.1.2.2) can take O as well, and the syntax is then Vi O (no examples are attested of S with Vi O). The O always seems to be inanimate or dead, and the Vi always seems to be one requiring an animate or alive subject. Thus for semantic reasons an O is possible here. If the NP after these verbs is animate it is interpreted as the subject. There is a further refinement with -é·ls ~ -əls verbs (and some -əm verbs): a following O is often translated generically (without an article in English) thus joining V and N in a single activity repeated many times with accent on the activity ('burn food at a ritual', 'barbecue salmon', 'carve wood', 'fry bread', 'fetch wood', 'pick blackberries', 'chew gum', etc.).

.7. In all the above formulae -S may instead be preposed to the V (the ambiguous past tense) without otherwise changing the syntax.

.8. Though more examples and further work are

necessary, some tentative statements about the syntax of words like 'everything' and 'nothing' can be made here. These words include mék'^{W} ~ mók'^{W} 'all, every; everybody, everything', mək'^{W}stém 'everything', mək'^{W}(ə)wét(es) 'everybody, everyone', mék'^{W} təwét(es) 'everybody, everyone, (possibly) anyone', ?əwétɛ '(it is, there is) none, nobody, nothing', ?əwétɛ k^{W}stém 'nothing', and ?əwétɛ təwét 'nobody'. All these words are translated as pronouns and serve as NP subject or NP object of verbs but precede the verb (O Vt S or S V (O)). The situation can be summed up as follows (E_1 = mək'^{W}stém, mək'^{W}əwét ~ mék'^{W} təwét, ?əwétɛ k^{W}stém, ?əwétɛ təwét; E_2 = mék'^{W} ~ mók'^{W}; E_3 = ?əwétɛ):

.8.1. E_1 (underlined) can occur as subject or object of a verb while preceding that verb; when E_1 is the object, the verb (or auxiliary ?í or lí before it) takes a subject suffix which appears to be subjunctive (O (?í, lí)-4.9b Vt-O. O Vt-O-4.9a (S). O-es Vt-O-4.9a. are three sentence structures attested); when E_1 is the subject, the verb is lacking a subject suffix (S Vt-O O. S Vi. S lɛ Vt-O. are attested). E_1 can also be preceded by an article and both then follow the verb (sk'í-4.6 A O-es.); the -es is unclear, perhaps the same -es as derives Nindef's in Chapter 8.

.8.2. E_2 (underlined in this section) can occur preceding a verb as a sort of Vpron, or it can occur following a verb as part of the NP subject or object. mə́k'^{W} (and for some speakers ʔəwə́tɛ) can be inflected with 4.4$_{pl}$ (and -4.8$_{pl}$ in a subordinate clause), and somewhat like a pronominal verb (4.1 or 4.2) modify the subject or object of the verb that follows (Vpron-4.4$_{pl}$ V or k'^{W}-4.8-s Vpron-4.8 V as a subordinate clause); an alternate structure is allowed, Vi-4.4 mə́k'^{W} Vadv (instead of mə́k'^{W}-4.4 Vi Vadv) and is used interchangeably. mə́k'^{W} can also serve as Vaj modifying the N in an NP, and then it precedes anything else in the NP, including the article (Vt-4.4 Vaj A-4.6 N-4.6. or Vt-4.4 Vaj A Vaj 4.6 N-4.6. or Vt-O-S A N Vaj A N. or Vi Vaj 4.3$_{pl}$. or Vt-O-S Vaj 4.3$_{pl}$ k^{W}səs V-O-S Vprep A Vaj N.). An alternate structure is allowed here too with Vi's: mə́k'^{W} Vi A N where mə́k'^{W} is a Vaj modifying the N and really part of the NP but even so preceding the verb.

.8.3. E_3 can occur as an independent verb all by itself (3rd person only): ʔəwə́tɛ 'It/There is nothing/nobody., There is/are none.' It can also occur inflected for interrogative, (ʔə)wə́(·)tɛ 'Is it none?, Is there none?, Is there nobody/nothing?' (see Chapter 6). In either form E_3 only occurs first in the sen-

tence or independent clause. It can be followed immediately by an N with no A before the N; this N can be possessed or otherwise modified (E_3-4.6 N-4.6, etc.) and serves as syntactic subject of E_3 (or it can be viewed as a nominal without A serving as a main verb which is modified adverbially by ʔəwétɛ); the translation is rarely 'The N is none.' (for E_3 N) or '4.6's N is none.' (for E_3-4.6 N-4.6) but usually is 'There is no N.' (for E_3 N) or '4.6 has/have no N.' (for E_3-4.6 N-4.6). Subordinate clauses can of course expand these sentences further: E_3 N $k^wsəs$ V for example, 'There was no N when he V-ed., He V-ed without an N.' More common are: E_3-4.6 s-V-4.6 '4.6 didn't V., 4.6 V-ed nothing.' (where E_3 is translated as a simple negative or as a negative object if the V is transitive), and E_3 k'^we V 'Nobody V-s.' (where k'^we V is syntactically a relative clause 'the one who V-s' as in 'The one who V-s is nobody.' > 'Nobody V-s.'). Even E_3 V occurs (where the V is expandable into an expanded VP, for example, E_3 mə V); here the E_3 is translated as subject, 'Nobody V-s.' Finally E_3, ʔəwétɛ that is, also has partitive constructions: ʔəwétɛ k'^we V təlí 4.11_{pl} ~ ʔəwétɛ təlí 4.11_{pl} k'^we V 'None of (us, you, them) V(-ed).' and ʔəwétɛ k'^we V təlí Á(-4.6) N(-4.6) ~ ʔəwétɛ təlí A(-4.6) N(-4.6)

k'^{W}ə V 'None of (my, your, etc.) N's V(-ed).' (the N is inflectionally plural if possible).

Here are some examples of each of the sentence types above (the numbers correspond with the paragraph numbers above):

1. ʔiwálem tə mémələ 'The children are playing.'

k'^{W}ə́c-l-əx^{W}-əs tə swíyəqə tə spé·θ 'The man saw a bear.'

məy-θ-áx^{y}-əs təl siyéyə 'My friend helps me.'

tə́s-l-əm θúẋ'à tə swíyəqə. 'She was bumped into by the man.' and tə́s-l-əm θúẋ'à tə kár. 'She was hit by a car.' (cp. tə́slex^{W}əs θúẋ'à tə swíyəqə 'She bumped into the man.' and tə́slex^{W}əs θúẋ'à tə kár 'The car hit her.')

ʔí·wəs-t-əm (θúẋ'à, tə swíyəqə) '(She, The man) is being taught.'

k^{W}ə́·lx^{y}-t-əm θúẋ'à 'She was hidden., They hid her away.'

lə k^{W}ə́·lx^{y}-t-əm yə síyé·yə-s 'She was hidden away by her friends.' (The NP is interpreted as agent S because the O has already been specified previously as θúẋ'à).

k^{W}ə́·lx^{y}-əɬc-t-əm θúẋ'à 'It was hidden for her.'

c'ə́c'əq'^{W}-l-əm k'^{W} (təwétəs, swátlə) '(Someone, So-and-so) got shot.'

2. θiy-ə́ɬc-t-əs tə sq^{W}əmé·y 'He made it for the dog.'

ɬíc'-əɬc-ət-cəl-cɛ tə sméyəθ 'I'll cut off the meat for someone.'

qá·-ɬc-əθ-áxʸ-əs tə qá· 'He brought me the water.'

kʷɛ́·lxʸ-əɬc-θ-áxʸ-əs θúẋ'à 'She hid it for me.'

píxʷ-əɬc-t-əs θə sɬélí tə swíyəqə 'The woman brushed it off for the man.'

3. kʼʷɛ́cətəs lí kʷθɛ léləm 'He saw it in your house.'

cəl θíyt tə swóqʼʷəɬ təlí tə sé·ys tə pʼqʼélqəl 'I made the blanket from the wool of the mountain goat.'

cəl yə-ɬə?é kʼʷə sqʼéwləc 'I went/travelled through/via Scowlitz.'

lə lí tə s?é·ẋʼq kʷθəl méle 'My child is outside.'

lə lí kʼʷə sə́·á·məs θəl méle 'My daughter is in Victoria.'

lí tə xʸéɬ təl méle 'My child is in the road.'

stʼé kʼʷə spé·θ tə Bob 'Bob is like a bear.'

4. lém tə smélt 'He went to the mountain.'

lém tə stəqtéq túẋ'à 'He went to the jampile.'

?əmí tə ləlémcət tə ?isé·le spé·θ 'Two bears come to our house.'

5. l sẋʼí kʼʷə qá· 'I want some water.'

?ɛ sẋʼíyɛ kʼʷə qá· 'Do you want some water?'

lí ?ɛ sẋʼí kʼʷɛs yáys 'Do you want to work?' (lit. 'Is it your want that you work?')

?éwə lísl sqʷéləwəl kʼʷɛs lém 'I don't think you

should go.' (lit. 'It's not my thought/feeling that you go.')

6. (All EB) q'^{W}ə́lə́mcətcɛ k^{W} sə́'áq^{W}i 'We'll barbecue salmon.'

q'^{W}eq'^{W}ə́lə́m tə sə́'áq^{W}i 'barbecuing salmon'

k'^{W}ɬém tə k^{Y}ápi 'pour coffee (lots, as a function or activity)'

lə́mtɬ k^{W}ə́l·əm tə siyáɬ 'Go fetch (some) wood!'

ləcx^{W} cəsə́·t k^{W}s ləs k^{W}ə́l·əm k^{W} qá· 'Send him to get water!'

cəl ɬí·m tə sk'^{W}ó·lmex^{W} 'I'm picking blackberries.'

θíyə́m tə səplí·l 'to bake bread'

c'ə́m tə k'^{W}fx^{W} 'to chew gum'

ɬək'^{W}ə́·ls tə sə́'áq^{W}i 'He went hooking salmon (gaffing)., He gaffed a fish.' (cp. ɬək'^{W}ə́·ls tə swíyəqə 'The man went gaffing/hooking.')

híyəq^{W}əls tə s?éɬtəl 'He was burning food at a ritual., He was performing a burning.' (cp. híyəq^{W}əls tə swíyəqə 'The man was performing a burning.')

χət'k'^{W}ə́ls tə siyáɬ 'He carves wood.' (cp. χət'k'^{W}ə́ls tə swíyəqə 'The man carves.')

cəl c'ək^{W}χə́ls tə sə́'áq^{W}i 'I fried (the) salmon (there is lots).' (cp. cəl c'ə́k^{W}χt tə sə́'áq^{W}i 'I fried the salmon.')

?í·ɬcəl c'ə́k^{W}χəls tə səplí·l 'I was frying bread.'

lɛ ɬc'é·ls (~ ɬíɬec'əls) tə siyáɬ 'He's gone cutting wood.'

cəl ʔɛlqéls tə səplí·l 'I bought (the) bread.' (cp. cəl ʔiléqət tə səplí·l 'I bought the bread.')

(cp. k^{W}áx^{W}ət tə q'éwət 'beat the drum' but *k^{W}x^{W}é·ls tə q'éwət; x^{W}ək'^{W}átəs tə Bill θə Mélí 'Bill drags Mary.' but *x^{W}ək'^{W}é·ls tə Bill θə Mélí; x^{W}áy-məɬ-əs túɬ'a tə sθ'áq^{W}i 'He sold the fish.' but *x^{W}áyəm túɬ'a tə sθ'áq^{W}i.)

7. See examples in past tense treated in Chapters 4, 6, and later in 11.

8.1. məɬ'^{W}stém ʔíl k'^{W}éclex^{W} 'I saw everything.'

ʔəwétɛ k^{W}stém ʔíl k'^{W}éclex^{W} 'I saw nothing.'

ʔəwétɛ təwét (líl, ʔíl) k'^{W}éclex^{W} 'I saw nobody.'

ʔəwétɛ təwét k'^{W}éclex^{W}əs tə swíyəqə 'The man saw nobody.'

məɬ'^{W}əwét k'^{W}éclex^{W}əs tə swíyəqə 'The man saw everybody.'

məɬ'^{W}stém k'^{W}éclex^{W}əs yi siwíyəqə 'The men saw everything.'

méɬ'^{W} təwét (~ məɬ'^{W}əwét) k'^{W}éclex^{W}əs 'He saw everybody.'

məɬ'^{W}əwét léɬp'ɛx^{Y}ɛs tə χɛyɬ'élθ 'The grizzly bear ate everybody.'

(léɬp'ɛx^{Y}əs tə χɛyɬ'élθ məɬ'^{W}əwétəs 'The grizzly ate

everybody (that was there).' and lə́p'əx^{y}əs tə x̣ɛyƛ'ɛ́lθ mə́k'^{w} təwɛ́təs 'The grizzly ate anybody (that came along).' show normal V S O order is an alternative and also show a possible semantic distinction between mək'^{w}əwɛ́t(əs) and mə́k'^{w} təwɛ́t(əs).)

mək'^{w}əwɛ́təs ƛ'əƛ'ɛ́x^{y}əltəs 'He/She/They invited everybody.'

mək'^{w}əwɛ́t k'^{w}ə́cləx^{w} tə swíyəqə 'Everybody saw the man.'

mək'^{w}əwɛ́t lɛ́m ~ mə́k'^{w} lɛ́m 'Everybody went.'

mək'^{w}əwɛ́t lɛ (or lə ?) ʔɛ́yələs 'Everyone left him.'

ʔəwə́tɛ k^{w}stɛ́m slí·w 'There's nothing in(side) it.'

sƛ'ís k'^{w}ə mək'^{w}əwɛ́təs 'He likes (wants) everyone.'

wəɬ ʔiyá·ləm k'^{w}ə mək'^{w}əwɛ́təs '(It's) enough for everybody.'

8.2. mə́k'^{w}cət lɛ́m 'We're all going.'

mə́k'^{w} (q'áy, wə́q'^{w}, t'it'əc'əm) '(They're) all (dead, drowned, swimming).'

mə́k'^{w} slɛ́t k'^{w}əs ʔəmís tə lɛlə́mcət tə ʔisɛ́·lə spɛ́·θ 'Every night two bears come to our house.'

mə́k'^{w} swɛ́yəl k'^{w}əls lɛ́m 'Every day I go.'

yəlɛ́wəl lás təlí k^{w}s mə́k'^{w}s 'He's fattest of all.'

sk'^{w}ɛ́y k'^{w}ɛs mə́k'^{w}ələp lɛ́m 'You can't all go.'

lɛcət mə́k'^{w} ʔɛ́yəl ƛ'ək^{w}cət t'ɛ́t'iyəq' 'We all left because we were mad.'

ləmlə́mətcx^{w} mə́k'^{w} təl θ'x̣^{w}əlwə́təm 'Fold all my laundry!'

ləmlə́mətcx^{w} mə́k$^{'w}$ yəl ʔɛ́·wk$^{'w}$ 'Fold all my clothes (lit. belongings).'

ləmlə́mətcx^{w} mə́k$^{'w}$ yə ck^{w}ɨ́·m-l ʔɛ́·wk$^{'w}$ 'Fold all my red clothes!'

k$^{'w}$ə́cləx^{w}əs tə swɨ́yəqə mə́k$^{'w}$ yi sɬəlɬélí 'The man saw all the women.'

qəƛ'asə́su ʔá·ɬ mə́k$^{'w}$ yuƛ'áləm 'And so they all got aboard.'

c'ɨ́·tcəl mə́k$^{'w}$ yuƛ'áləm k^{w}səs ʔɨ́·wəsθàx^{y}əs x^{w}əlɛ́·m tə sx^{w}əlmə́x^{w}əɬ s?ɨ́·wəs 'I thank them all for teaching me (about) the Indian (way of) teachings.'

mə́k$^{'w}$ ʔi (tə)l mémələ 'My children are all here.'

8.ɔ. wɛ́·tɛ st'ə́lməx^{w} 'Is(n't) there any medicine?'

(ʔə)wə́tɛ q$^{'w}$ə́·ls 'He has no ear(s)., They have no ears.; It has no handle (especially of a cup).'

wɛ́·tɛ ʔɛ sméyə́θ 'Do(n't) you have any meat?'

qə́x̣ tə ƛ'ik$^{'w}$ɨ́yəɬp qə ʔəwə́tɛ ƛ'ɨ́k$^{'w}$əl 'There's a lot of bean vines but no beans.'

ʔəwə́tɛ kapu k^{w}səs x^{w}əʔɨ́· 'He came without a coat.' ('He had no coat when he arrived.')

lə ʔɛ́ƛ'qəl qə ʔəwə́tɛ ʔà kapús qə yɨ́yəq 'He went outside without a coat and it was snowing.'

(Chill.) ʔəwə́tɛ-l sɬə́q'əl·əx^{w} ~ (Cheh., Tait) wə́tɛ-l ɬq'ə́l·əx^{w} 'I don't know.'

ʔəwə́tɛ-l sɬə́q'əl·əx^{w} k$^{'w}$əs q'ə́psɛ k$^{'w}$ə ʔɨ́·k$^{'w}$əlà

'I didn't know there was going to be a gathering here.'

ʔəwə́tɛ sɬə́q'əl·əxʷ wətəmtə́məscɛ kʼʷəs ʔə́ɬtəlcət qələ́ɬ 'Nobody knows when we'll eat again.'

ʔəwə́tɛ-l s-ɬɪ́·m 'I didn't pick anything.'

ʔəwə́tɛ s-kʷɪ́yəχtèmèt 'Nothing could be done.'

ʔəwə́tɛ-l sxʷʔə́y 'I'm good for nothing.'

ʔəwə́tɛ sxʷʔə́ys 'He's good for nothing.'

(cp. məkʼʷstə́m sxʷʔə́ys 'He's good for everything.')

ʔəwə́tɛ kʼʷə lə́m 'Nobody's going.'

ʔəwə́tɛ kʷs kʷətə́xʷəmət 'Nothing was inside (a building, esp. a house).'

ʔəwə́tɛ kʼʷə lə qʷə́lsθà·m 'Nobody spoke to you.'

ʔəwə́tɛ kʼʷə lə qʷə́lsθà·m 'Did nobody/Did(n't) anybody speak to you?'

ʔəwə́tɛ kʼʷə lə méyθà·m 'Weren't you helped?, Did(n't) anybody help you?'

wəχʷə́mè·l wə́tɛ tʼwə kʷ kʼʷə́clàxˀ 'If I hurry, nobody will see me.'

(ʔə)wə́tɛ ʔɪ́· 'He's not here., Nobody's here.'

ʔəwə́tɛ mə xʷəʔɪ́· 'Nobody came/arrived.'

(cp. ʔə́wəcəl lɪ́l kʼʷə́clexʷ təwə́t 'I didn't see anybody.' and ʔə́wə ʔɪ́s ʔɪ́ kʼʷə́clexʷəs kʷstə́məs ʌ̓ Bill 'Bill didn't see anything.')

ʔəwə́tɛ kʼʷə lə́m təlɪ́ ʌ̓ɛɬlɪ́məɬ ~ ʔəwə́tɛ təlɪ́ ʌ̓ɛɬlɪ́məɬ

k'^{w}ə(s) lém 'None of us went.'

(One speaker of the Chehalis dialect also gives

?ewétɛcɛp lém 'None of you folks went.' and

?ewétɛcət lém 'None of us went.' as alternatives.)

?ewéte k'^{w}ə lém telí tel mémele 'None of my children went.'

In addition to the eight rules above, it is also necessary here to make some statements about Vi's, Vt's, and types of Vi's which have their own syntactic properties. Excluded from these will be statements about syntactic properties of Vadv, Padv, Pmod, Dadv, Vaux, Vneg, auxiliary past, and lí questions; all of these will be treated in 11.2.2.

Other types of verbs and syntactic classifications:

9. Pronouns of set 4.7 can occur as verbs; 4.7 can be a complete sentence as can 4.7-cɛ; 4.7 is more nominal in the sentence type ƛ'á 4.7. Vpron's are those in sets 4.1 and 4.2. They can be used syntactically like other Vi's but are limited to 3rd person subject when inflected for subject by the other pronouns (4.4_{3} (unmarked), 4.6_{3} -s, 4.8_{3} -s, and 4.9 -s). Vpron can be inflected for future (-cɛ) as well as subjunctive (wə-___-4.9a). Examples in sentences show that no k'^{w}-4.8-s ___-4.8 is needed to conjoin

Vpron to a following VP; the VP is merely added without subject pronoun and the Vpron becomes the subject of the following VP. Thus łwélәp-cɛ lém 'It will be you folks that go.', lә sƛ'í·-s k'^{W}ә-s ?élθә-s k'^{W}éclex^{W} 'He wants me to see it.', lә stә?é·wәl túƛ'à k'^{W}ә-s ?élθә-s-cɛ lém 'He thinks (lit. 'guesses') I'm the one to go.' tәwét can also follow 4.1 in examples such as léwә tәwét 'Who are you?'

10. V-Reflex, V-Recip, and V-Mid function syntactically as Vi's.

11. V-Ppl functions as Vaj.

12. ƛ'á 'that's ___, it's/he's/she's ___' is mainly verbal in syntax,but it also functions with particles to conjoin abstract concepts and VP's as well (see 11.2.5). ƛ'á always occurs first in the sentence; it allows A to be omitted before N or even before V > N; it can receive possessive inflection for the following N when A is omitted; it can also receive -cɛ 'future', -ә 'interrogative' and we-___-s 'if/when, subjunctive, 3rd person'.

13. Numerals behave syntactically like N's, Vaj's, or Vadv's depending on the affixes added to them, i.e., -éɬ 'times' on numerals produces Vadv's, -әlsx^{y}é is only used internally within the class to produce more numerals (multiples of ten), and A can precede numerals

with all other affixes, yielding N's when no other N follows the Num. If A Num-X N is found, the Num is acting like a Vaj. Num + -éle 'people' is attested affixed with 4.4 and also with wə- 'if,when' + -4.9a 'subjunctive', in both cases as an N > V (a nominal being used as a verb). Num + s- -s 'o'clock, hour' or s- -s 'day of the week' are clearly N's with the s- nominalizing them. Numerals between 10 and 100 but not multiples of ten are formed like N's, using Num qɛs A Num, but they may be used as V's in the ways mentioned, without omitting the A after qɛs (?əpéləcət qɛs tə láləc'ə 'We are eleven people., There are eleven of us.'). Num + -əs 'dollars' is sometimes attested as an N without a preceding A; and two examples have been found of Num N acting together as a main verb before conjunctions (similar to the way mék'^{W} slét 'every night' is used); the Num N is translated as an adverbial phrase. Since no examples of numerals in sentences were given in Chapter 10 the following are quoted:

méx^{y}cəx^{W} k'^{W}ə léc'ə. 'Take one off!', cəl θíyt k'^{W}ə (?isé·lə, léc'ə). 'I made (two, one).', q^{W}è·l tə láləc'ə. 'One person spoke/speaks.', lém tə láləc'ə. 'One person went.', mətɬ ?éx^{W}əsθàx^{y} tú·x^{W}əs! 'Give me nine dollars!', Num-éle-cət. 'There's Num of us.',

lálec'əcəl.'I'm alone., I'm one person.', sk'^{W}éy k'^{W}əs k^{W}íys wəlaləc'é·s ʔə k'^{W}ə θək'^{W}ét. 'He couldn't climb/ get up if there was only one person to pull him.', lálec'ə mestíyəx^{W} təlí k'^{W}ə north. 'There was one person from the north.', ƛ'á yáswə lís χəʔáθəl lé·c'əwəc məstíyəx^{W} lí tə θé. 'There were maybe four hundred people there.', lə x^{W}lí·l səs θə siyá·ləx^{W}ə, lí ɬx^{W}é·lə siyá·ləx^{W}ə, ʔá·məɬ qə sk'^{W}é·y k^{W}s k'^{W}éclex^{W}. 'He got there to the old people, is it three old people?, sitting, and they couldn't see.' (CT), ɬíx^{W} swéyəl k^{W}səs yá·yəs túƛ'a 'He was working three days.' (CT), lé́c'ə x^{W}elé·lt su ʔəmí tə stəlqá·yɛ, l sq^{W}éləwəl k'^{W}əs χəʔá·θəl tə stəlqá·yɛ q'é·ləmi. 'So one night (the) wolves came, I think it was four wolf girls (adolescent)' (lit. 'my thought is that the wolves adolescent virgin girls were four')(CT), ʔáx^{W}estəm túƛ'à tə χəʔá·θəl sθ'á·m. 'He was given four bones.', mók'^{W} slét k'^{W}əs ʔemís tə lɛlémcət tə ʔisé·le spé·θ. 'Every night two bears come to our house.', cət ʔéx^{W}ət tɛ sq^{W}eméy tə lé́c'ə sθ'á·m. 'We gave your dog one bone.'

Some syntactic requirements due to inflection:

14. Reflexives: 4.4 usually precedes V-lá·məɬ and often precedes V-(ə)θəɬ in forming the present tense.

15. Reciprocal: V-təl almost always requires S_{pl} if an S is present.

16. Pluralized verbs: agreement in number between verbs with pluralized subjects or pluralized objects and their -S, -O, S, and O is obligatory when these occur, but only as shown in the following formulae: $V_{pl}\ S^{-O-S_{pl}}\ A\ N\ (A\ N_{sg,pl},\ 4.3_{pl})$
$V_{pl}\ O^{-O_{pl}-S}\ (A\ N_{sg,pl},\ 4.3_{pl})$
$V_{pl}\ S^{-S_{pl}}\ (A\ N_{sg,pl},\ 4.3_{pl})$
(As usual, items separated by commas within parentheses are alternatives, one of which must be chosen. $V_{pl\ S}$ and $V_{pl\ O}$ stand for verbs pluralized (as in 6.1.9) for plural subject and plural object.)

17. Interrogative inflection (with the one exception noted in 26 below) does not change normal syntactic order or syntactic requirement, whether the V so inflected is lém, sk'^{w}éy, sƛ'í, ʔéwə, ʔéwəɬ, ʔəwétɛ, ƛ'á, 4.1, 4.2, or N > V. Thus, léme still behaves as a main verb, sk'^{w}éyə still requires k'^{w}-4.8-s V-4.8, sƛ'íyə still requires NP or k'^{w}-4.8-s V-4.8, ʔəwé still requires (lí, ʔí)-4.9b V or V-4.9a (or 4.6 sƛ'í-s k'^{w}-4.8-s V-4.8, etc.), ʔəwéɬ still can be followed by a non-subjunctive verb (as ʔéwəɬ can) despite being a Vneg, ʔəwétɛ still can be followed by N or V > N or the other constructions outline above

in 11.2.1.8.3, ƛ'á· still can be followed by N without an article, and (4.1, 4.2, N)-e still stand as main verbs requiring k'^{W}-4.8-s V-4.8 for subordinate verbs following.

Syntactic properties of Vq:

18. Vq are mainly sentence-initial (except ?étɬ '(tag-question)' which is sentence-final).

19. Some Vq are only attested sentence-initially: ƛ'ak^{W}selcí·ms, lí, and láyéx^{W}ɛ.

20. When sentence-initial, all Vq but ƛ'ak^{W}selcí·ms, x^{W}?ít and láyéx^{W}ɛ are attested followed by -4.4 and -cɛ.

21. A few Vq can also occur after preposed 4.4 (x^{W}ə?í·t, ?ɛlécɛ, x^{W}cé·l, x^{W}?ít) or after Vaux-4.4 (selcí·m, k'^{W}í·l, x^{W}ə?í·t, x^{W}cák^{W}əl)(Vaux here includes lɛ, ?ə, and ?í·ɬ).

22. Some Vq can follow Vadv (or Padv)(as in weɬ k'^{W}í·l or yɛɬ x^{W}cák^{W}əl), and təwét can follow ?əwétɛ (a Vadv?) or 4.1 verbal pronouns.

23. Some Vq can be inflected for subjunctive and then used as relative interrogatives (as discussed in Chapter 6); these include: təl·écɛ, x^{W}(ə)cé·l, x^{W}(ə)cák^{W}əl, ?ɛlécɛ, təwét, and stém; of these, ?ɛlécɛ, təl·écɛ, and x^{W}(ə)cák^{W}əl are made subjunctive by following the subjunctivized auxiliaries ?í and lí, that

is, wə-(ʔí, lí)-4.9b (ʔəlécɛ, təl·écɛ, x^{w}(ə)cák^{w}əl).

24. səlcí·m and k'^{w}f·l can be inflected with lexical affixes.

25. Vq occur almost exclusively before A (either in NP, subordinate VP, or relative clause), but exceptions include: təmtém and səlcí·m before V-Sbjn, lí before declarative verbs, ʔəlécɛ before wéyələs (a Vadv), and k'^{w}f·l and tewét before N in constructions like 'how many snows/years?', 'what man?', 'whose dog?'.

26. When a Vq or interrogatively inflected verb is followed by a relative clause containing a Vt, and it is the object of the Vt which is relativized ('What is it <u>that</u> you're holding?'), the subject of the Vt is indicated by (ʔí, lí)-4.9b inserted between the A and the Vt. The marking of subject and object in relative clauses is discussed fully in 11.2.4, but the preceding construction is noted here because it is triggered by the interrogative (Vq or V + -ə 'interrogative').

27. There are no examples of Vq in a subordinate clause other than those put into the subjunctive and tés tə sk'^{w}f·ls 'What time/hour is it?' where k'^{w}f·l is inflected with the lexical affixes for 'hour' and nominalized or relativized ('It approaches/gets up to what hour?').

Examples of everything discussed in 18. through 27. above are quoted in 6.2.5.

Syntactic properties of Vdem:

28. Vdem's have special characteristics in the way they combine derivationally with other demonstratives to form new demonstratives. This has been described in Chapter 9. Their only other special syntactic characteristic is that a Vprep, lí 'in, at, to', is omitted following a Vdem. Otherwise Vdem's behave syntactically just like ordinary Vi's: Vdem-4.4 (NP) is declarative, 4.4 Vdem (NP) is ambiguous past, ʔí·ɬ Vdem (NP) is auxiliary past, lí-4.4 Vdem (NP) is interrogative, Vdem-4.4-cɛ is future, we-Vdem-4.9b is subjunctive, etc.

11.2.2. Expansion of the VP With Internal Modifiers: Vaux, Vadv, Padv, Pmod, Dadv, past tenses, Vneg, lí questions. A maximally-expanded VP would look like the following, showing the positions of the various possible modifiers (M.V. = main verb): (see chart on next page)

A maximally expanded VP:

$$\left.\begin{array}{l}\text{(ʔí,lí)-Past(-Interrog)-4.4}\\ \text{ʔɛ́-4.4}\\ \text{4.4}\\ \text{Vneg(-Interrog)(-Tense)-4.4(-Tense)\ \ (ʔí,lí)-4.9b}\\ \text{lí-4.4(-Tense)}\end{array}\right\}\text{Vadv Vadv Vadv Pmod}\left\{\begin{array}{l}\text{lɛ}\\ \text{mə}\\ \text{mí}\end{array}\right\}\text{M.V. Pmod Dadv Vadv}\left\{\begin{array}{l}\text{S}\\ \text{O}\\ \text{S O}\\ \text{O S}\end{array}\right\}$$

Notice how the VP is defined by putting its -4.4 pronoun subject inflection at the beginning and its S or O at the end. If nothing is present before the first Vadv then the first Vadv that is not a Padv can receive the -4.4 and -cɛ. If no Vadv is present before the M.V., the lɛ or mə ~ mí auxiliaries can accept the -4.4, as well as -4.8, -Tense (but with lɛ), -Imper, and (with mí only) -Sbjn.

This formula is not a complete one for all constructions and inflections; it would have to be modified in some cases discussed below, and alternate constructions exist which are not shown (especially for Vneg). But it is a good rough outline. Each type of modifier will now be discussed, from those added

closest to the verb to those added furthest.

11.2.2.1. Vaux: lɛ and mə ~ mí; ʔí(·), lí(·), ʔś. Vaux's divide into two groups syntactically. The first group, lɛ and mə ~ mí, directly precedes the main verb of a phrase and receives some of its inflections: -4.4, -4.8, -cɛ 'future', -ɬ 'past' (only with mə ~ mí), -tɬ ~ -ɬ 'imperative', wə- 'when, if' + -4.9b 'subjunctive' (with mí only). lɛ and mə ~ mí add either an inceptive sense, a directional sense, or a future sense (auxiliary future) to the VP.

ʔí(·) and lí(·) are both used a.) to form an auxiliary past tense (as is ʔś) but suffixed with -ɬ 'past' before -4.4 is added, b.) in an alternate method of forming the subjunctive after negative verbs and some Vadv's of uncertainty (like yáswə), and c.) to carry the pronoun subject suffix in the structure (Vq, V-ə) A __-4.9b Vt-0, where the object of the Vt (in the relative clause) is relativized to serve as the subject or object of the interrogative verb (main verb). ʔś is used only in the auxiliary past tense so far as attested.

With lɛ and mə ~ mí the following are also attested (as well as other structures):

Vaux-Imper V (A N). (Imperative)

4.4 Vaux V. (Ambiguous past)

lí·ɬ-4.4 lɛ V. (Allowed even though it is Vaux Vaux V; this construction establishes clearly the division of Vaux's into the initial group and the group immediately before the main verb.)

Vaux-4.4 Vq. (Where Vaux = lɛ, ʔə́, and ʔí·-ɬ, and Vq = səlcí·m, kʾʷf́·l, xʷəʔí·t, xʷcə́kʷəl.)

Vadv (lɛ, mə) V (NP).

(lɛ, mə) Vadv V (NP). (A departure from the order listed above, either exception or error.)

(lɛ, mə) V Vadv.

4.4 Vadv Vadv mə V.

lí-4.4 Vadv lɛ Vadv. (lɛ is either Vaux or M.V. here; if it is Vaux, the last Vadv is the M.V.)

11.2.2.2. Vadv. When a Vadv is the main verb it can be expanded for tense, interrogative, subjunctive, and so on, like any plain Vi. When Vadv is modifying a main verb it usually precedes or follows it directly. In this section ten types of structures have been identified with Vadv's, based mainly on over 80 sentences cited in 6.2.4.

.1. Vadv as M.V.: Vadv-4.4 and 4.4 Vadv (ambiguous past) occur, as do 4.4 Vadv A N., Vadv-4.4$_3$ A N., and yə-Vadv-4.4$_3$ A N.

.2. Vadv as M.V. but in expanded VP:

lí·-4.4 Vadv (A N). (Interrogative)

ʔéwə-4.4 ʔí·-4.9b Vadv. (Negative)

(wə-Vadv-4.9a A N. (Subjunctive); not the main verb but expanded subordinate VP.)

3. Vadv modifying a V:

Vadv-4.4(-cɛ) V (NP). (The Vadv can take the subject and tense inflection from the verb it modifies but not the object or other inflections.)

V-4.4(-cɛ) Vadv (NP).

V-Imper Vadv.

4.4 Vadv V (NP).

4.4 V Vadv (NP).

if V = sƛ'í : Vadv-4.6 sƛ'í-4.6 NP.

if V = V-Sbjn: wə-V-4.9a Vadv is attested.

From the examples in 6.2.4 it can be seen that Vadv's can be grouped into those which occur before the verb they modify and those which occur after the verb they modify (and perhaps a few that can occur in either place).

Those attested only before the verb they modify are: c'éc'el(-ew) 'very', kʷəɬtu 'very', ʔéθ'əl 'really', c'íməl 'almost, near(ly)', xʷɛ́·lq ~ xʷɛ́·lqi 'almost', yɛɬ 'just, now' (only before subordinate conjunction s?es which precedes the verb modified), qé·ys 'lately, recently', ʔíɬuɬàɣ 'the last time', ɬéq'eɬ 'used to', hí·θ 'a long time' (only before

subordinate conjunction k^{W}s V-4.8), lɛ́c 'sometimes' (only before subordinate conjunction k'^{W}-4.8-s V-4.8 so far as attested), ɬɛ́q' 'sometimes', x^{W}ə́l 'still, yet', wə?ál(-əw) 'too (overly)', wiyáθ 'always' (with or without a following subordinate conjunction k'^{W}-4.8-s V-4.8), yáswə 'possibly, perhaps, might, maybe', wəɬ 'already', θə?í·t 'truly, for sure', tx^{W}ə́m 'early', x̌^{W}ə́m 'fast' (only before subordinate conjunction k'^{W}-4.8-s V-4.8), yələ́wəl 'just past, over, more'.

Those attested only after the verb they modify are: yəwɛ́·l 'first', ɬiyɛ́·q^{W}t 'last, after, behind', x^{W}əhíwəl '(go,come) upriver', woq'^{W}ə́yləm '(go,come) downriver', tɛ́·l ~ cúcu 'toward the river, (if on a river) away from shore', cɛ́·m 'away from the water', t'ɛ́(·)k'^{W} '(go) home, homeward', qəlɛ́t 'again', tlaqɛ́·ys 'now (this instant), right now', cəlɛ́qəɬ 'yesterday', tlàwɛ́yɛ́l 'today', wɛ́yələs 'tomorrow', ?əl ~ ?à(l) 'just, simply', yəwɛ́ 'along, also', sq'əq'ɛ́ 'along, together', ?ɛ́k'qəl '(go) outside'.

Those attested both before and after the verb they modify: several numerals + -ɛ́ɬ 'times' are attested after and (when followed by subordinate conjunction k'^{W}-4.8-s ___-4.8) before the verb they modify, and s(ə)lɛ́ 'tightly, tight' is attested before and after the verb it modifies but in either case only conjoined

to it by subordinate conjunction k'^{w}-4.8-s (as in s(ə)lé k'^{w}-4.8-s V-4.8 and V k'^{w}-4.8-s sélé).

It is possible that semantic groups determine which Vadv's occur before and which occur after the verb they modify. Those occurring before seem to be adverbials of degree ('very', 'very', 'really', 'almost, nearly', 'almost', 'too (overly)'), of indefinite or uncertain time periods (especially in the past) ('just, now', 'lately, recently', 'the last time', 'used to', 'a long time', 'sometimes', 'sometimes', 'early'), and of degree of certaintly (or uncertainty)('possibly', 'truly'; possibly 'always', 'still, yet', and 'already')('fast' alone does not fit these categories). Those Vadv's occurring after the verb they modify seem to be adverbials of direction ('upriver', 'downriver', 'toward the river, away from the shore', 'away from the water', 'homeward', 'outside'), of precise time ('right now', 'yesterday', 'today', 'tomorrow'), of sequence ('first', 'last', 'again'), and of accompaniment ('along, also', 'along, together') ('just, simply' alone does not fit).

A VP with Vadv V or V Vadv can be expanded thus:

with Vaux: Vadv V → (lɛ,mə) Vadv V (NP) or
Vadv (lɛ,mə) V (NP)

V Vadv → (lɛ,mə) V Vadv

with Vq lí: lí-4.4 V Vadv or lí-4.4 Vadv V

with Vneg (so far): ʔəwə́tɛ V Vadv

wə́-cɛ V-4.9a Vadv

ʔə́wə-4.4 ʔí-4.9b Vadv V (This latter example may negate the Vadv rather than the main verb ('It's not too hot.' for example), but see the last chapter for more discussion of this.)

4. Some Vadv's can or must be followed by k'^{W}-4.8-s ___-4.8 when occurring before a V. This may be either a syntactic requirement or alternative for these verbs or it may be a process of focus, to emphasize the Vadv by making it the main verb of the clause and subordinating the following verbs to it. Not enough examples have been obtained yet to establish whether the present examples (in 6.2.4) show a syntactic requirement, a syntactic alternative, or syntactically expressed semantic emphasis. It seems alternative or emphatic with Num-ə́ɬ and yə-ɬiyə́·q^{W}t because both can also appear directly after the main verb (the latter as ɬiyə́·q^{W}t). It also seems alternative or emphatic (though more common) with wiyə́θ because wiyə́θ can also (rarely) precede the main verb without k'^{W}-4.8-s. It may be a requirement with yəɬ, hí·θ, lə́c, and χ^{W}ə́m, since these are not attested otherwise as Vadv's syntactically; nevertheless, these could also be cases

of an alternative structure or emphasis if these Vadv's were to be attested without k'^{W}-4.8-s __-4.8 in later data or following the main verb. s(ə)lé is a peculiar case from the single attestation; it can either precede or follow the main verb but only conjoined to it with k'^{W}-4.8-s; it may well be a Vaj rather than Vadv.

5. In some cases a Vadv requires (lí, ʔí)-4.9b between it and the main verb that follows, or requires ƛ'á-4.9b where ƛ'á is the main verb. This is often the case with yáswə 'possibly, perhaps, might, maybe', x^{W}é·lq 'almost', and ɬíθ 'all along, long ago' (probably short for wəɬí·θ < wəɬ hí·θ 'a long time ago'). As explained in 4.9 and elsewhere the subjunctive is used where there is doubt, uncertainty or negation. This is clear after yáswə, and yáswə is attested in the following: yáswə-cəl lí-l wə-lèm ~ yáswə wə-lèm-él 'I might go.', yáswə wə-sk'^{W}éy-əs k'^{W}əls lèm 'It may be impossible for me to go.', yáswə (wə-)ƛ'á-s tə mè·ls 'Maybe it's his father.' The same explanation may be possible for x^{W}é·lq found in the following example: x^{W}é·lqcəl líl lém 'I almost went.' (but cp. x^{W}é·lqcəx^{W} lém, ʔétɬ 'You almost went, didn't you?'). It is so far unclear why ɬíθ requires the subjunctive, but several examples show it: ɬíθ lí-s sɬéq'əl·əx^{W} 'She

knew all along (long ago?).', ɬíθ lí-x^{W} sɬéq'əl•ex^{W} lí-s ʔɛléɛɛ k^{W}θel léləm 'You knew all along where my house was.', líθ lí-s háy 'It was finished long ago'.

6. Vadv + Vadv + V: The same rules seen above also apply to cases where the VP is expanded by two Vadv's: those Vadv's which precede the main verb still do, and those that follow still follow; VP with two Vadv's are expanded by negation, interrogation, and lɛ and mə auxiliaries just as the single Vadv VP's are; those Vadv's which require k'^{W}-4.8-s before the main verb still require it; and those Vadv's needing subjunctive on following (lí, ʔí, ƛá) still use it. The following constructions are attested in 6.2.4:

Vadv V Vadv (as in c'éc'əl k'^{W}ák'^{W}es tlàwéyél)

Vadv Vadv V (as in wəɬ c'íməl ƛ'ék'^{W}el or c'éc'əl wəl θəʔí•t)

Vadv(-cɛ) Vadv k'^{W}-4.8-s V-4.8 (as in ʔéθ'el-cɛ wəhíθ k'^{W}ɛs hák^{W}ex^{y} or wəɬ híθ k^{W}səs míq')

Vadv-4.4 Vadv V ~ Vadv Vadv-4.4 V (as in yáswəcəl x^{W}é•lq(ʔelí) məlqí•wsəm ~ yáswə x^{W}é•lqcəl məlqí•wsəm (ʔelí is possibly sic for -él-i or lí•l))

4.4 Vadv? Vadv (mə) V (as in cəl k^{W}é wəɬ lém or cəl k^{W}é wəɬ mə χè•m)

lí-4.4 Vadv V(or Vaux) Vadv (as in lí wəɬ lɛ ʔé•yəl)

Presumably either the first or second verb in each

of the above has a subject pronoun inflection (-4.4), but since -4.4 in the 3rd person is unmarked on Vi's one cannot be sure which verb is so inflected. When both modifying Vadv's occur before the verb, some may be required first and some second. There are too few examples in my data so far to say much, but those attested first are ʔéθ'əl, wəɬ, c'éc'əl, yáswə, probably ɬéq'əɬ, and $k^{W}\acute{\varepsilon}$ (if a Vadv); those attested second are híθ, c'ímel, $x^{W}\acute{\varepsilon}$·lq, probably wiyáθ, and wel (if a Vadv). (For ɬéq'əɬ and wiyáθ see 7. below).

7. Vadv + Vadv + Vadv + V: Three examples of this construction have been attested so far, and everything said in 6. just above appears to apply here as well. Vadv Vadv V A N Vadv. (As in: ɬéq'əɬ wiyáθ c'í·yəɬ yó x^{W}ələmèx^{W} k'^{W}uɬíθəɬ 'The people used to pray all the time long ago.'

Vadv Vadv Vadv k'^{W}-4.8-s V-4.8. (in 3rd person k'^{W}-4.8-s V-4.8 can be replaced optionally with k^{W}s V-s or k^{W}səs V, as noted in Chapter 9). (As in the example: wəɬ (wə)ʔál-əw híθ k^{W}s ʔítət-s 'He's already slept too long.')

Vadv Vadv Vadv Vaj. (As in: c'éc'əl wel θəʔí·t sʔú·məɬ 'He's really truly lazy.')

Again there are not enough examples to be definitive about whether certain Vadv's must occur first,

others second, others third when all three precede the main verb. In the examples found here wəɬ and c'éc'əl come first, (wə)él-əw and wəl come second, and híθ and θəʔí·t come third. The first example shows an additional example of the order of two Vadv's before a verb and ɬéq'əɬ and wiyéθ should be added to the statement of order in 6. just above.

8. Vadv's modifying verbs can occur also in dependent or subordinate VP's. Examples include:

ʔəwétɛ V Vadv k'^{W}-4.8-s V-4.8 Vadv: ʔəwétɛ sɬéq'əl·ex^{W} wətəmtémətsɛ k'^{W}əs ʔéɬtəlcət qəlét 'No-one knows when we'll eat again.'

l sq^{W}élewəl k^{W}s mə-s V Vadv: l sq^{W}éləwəl k^{W}s məs ɬémex^{W} tlàwéyél 'I think it's going to rain today.'

4.4 Vadv V k^{W}səs Vadv V: cəl θəʔí·t sɬéq'əl·ex^{W} k^{W}səs wəɬ lèm 'I know for sure he's gone.'

sx̌'í k'^{W}-4.8-s V-4.8 Vadv: sx̌'í k'^{W}əls lɛ yəwé 'I want to go along.'

All the examples show V Vadv in the subordinate VP except for one example of Vadv V; the same rules apply here as above regarding expansion with mə and which Vadv's precede or follow the verb they modify. The first verb in the subordinate VP (whether Vadv or Vaux or Vt, etc.) receives a -4.8 suffix as expected if the subordinate VP has a third person or a plural subject

(i.e. k'^{W}-4.8-s V-4.8)(as usual -4.8 is only realized on the word preceding the first verb in singular 1st and 2nd persons, k'^{W}-əl-s and k'^{W}-ɛ-s).

9. Some Vadv's can be preceded by an article and still function adverbially: the A Vadv acts as a unit Vadv, occurring where its Vadv would occur and modifying the main verb of the VP. This combination of A Vadv never functions as an NP and can never be the subject or object of a verb except after Vprep where A Vadv can be the NP object. The best explanation may be to say that the A is prefixed and loses its function; the resulting Vadv would be treated as a variant of the original Vadv. Examples found so far include: ʔɛhíw, cúcu, cá·leq^{W}, cá·k^{W}, wəɬí·θ(əɬ), cəlέqəɬ(əɬ), and wέyələs. ɬàwέyέl functions in the same way at times but already has its A prefixed (tə-là-wέyέl, see Chapter 9). Examples in sentences include:

lémcəl k'^{W}ə ʔɛhíw 'I'm going upriver.'

lém k'^{W}ə cúcu 'He's going toward the river (or away from the shore).'

lə yέq^{W} k'^{W}ə cá·leq^{W} 'The backwoods are burnt.'

k'^{W}έcləx^{W}əs tə lélém lí tə cá·k^{W} 'He saw a house in the distance/far away.'

ɬέq'əɬ wiyέə c'í·yəɬ yé x^{W}ə̀lmə̀x^{W} k'^{W}ə-wɬíθəɬ 'The people used to pray all the time long ago.'

cɛp ʔéɬtəl (k'^{W}ə) cəléqəɬ(əɬ) 'You folks ate yesterday.'

ʔíɬcəl lí k'^{W}ə cəléqəɬ(əɬ) 'I was there yesterday.'

ləmcəlcɛ k'^{W}ə wéyələs 'I'll go tomorrow.'

yələwəl χéyλ' tlàwéyól təlí k'^{W}ə cəléqəɬ(əɬ) 'Today is colder than yesterday.' or better (and lit.) 'It is colder today than yesterday.'

10. A few adverbial elements are affixes, namely -q^{W}ɬɛ 'how ___!, really ___!', and -à 'simply, just' (< ʔəl ~ ʔà(l) with same meaning). These are merely affixed onto the verb they modify (whether it be Vadv, Vt, or the like); they are word-final. Examples can be found in 6.2.4.

11.2.2.3. Padv. Padv's function syntactically just like Vadv's (where they are described as Vadv's, see Chapters 6, 7, and 11.2.2.2 just above); the only difference is that Padv's cannot be inflected.

11.2.2.4. Pmod. Pmod's function syntactically like Vadv's but cannot be inflected. They modify the main verb and occur adjacent to it like Vadv's. Like Vadv's some Pmod's occur before the verb they modify, some after. θ'ɛ and ʔɛ́t'wəwɬ occur before the verb they modify, while t'wə ~ t'wɛ and k^{W}ɛ́ occur after (there is one attestation of t'wɛ before, either an error or showing t'wə ~ t'wɛ can occur in both places).

ʔə́tʼwəwɨ is a compound, but within it tʼʷə may be seen following a verb: ʔə́ is an auxiliary verb used with past tense (see Chapter 6); wəɨ is left to precede the verb which follows the compound. Regarding the possibility that semantic groups help determine membership in groups of Vadv's (and Pmod's) which occur before and which occur after the verbs they modify, θʼɛ and ʔə́tʼwəwɨ express "a degree of (un)certainty" and precede their verbs just like the similar group of Vadv's. But tʼwə ~ tʼwɛ fits this semantic area too and yet follows its verb. kʷɛ́ 'anyway' is semantically similar to ʔəl 'just, simply' (both expressing intention or attitude) and like ʔəl follows the verb it modifies. So three of the Pmod's confirm and one denies the idea of semantic determination of membership in classes which precede or follow the verb modified. If the single attestation of tʼwɛ before its verb is multiplied in later data then it too would tend to confirm.

11.2.2.5. Dadv.

1. Dadv's modify V's and can be conjugated like Vadv's (by inflecting the Vdem's they contain). For example, Dadv-4.4-cɛ ʔà is really Vdem-4.4-cɛ ʔà (A) D since all Dadv's are really adverbial phrases consisting of Vdem (A) D. The one exception is tí, which is

unfortunately not attested with any suffixes yet (-cɛ or -4.4 for example). It is best to treat Dadv's as single syntactic units because they are positioned syntactically like Vadv's. Dadv's can be the M.V. or can modify other V's.

2. Some Dadv's are followed by k'^{W}-4.8-s V-4.8 where the V is the V they modify. For example:
mə ɬáḱ'^{W} təlí k'^{W}ə cáḱ^{W} ƛ'əsu ʔík'^{W}əlà k^{W}səs
θiyéltx^{W}əm 'He flew from far away and he makes his home here.'
lí k^{W}ə θé k^{W}səs ƛ'əléx^{W} 'He's living there.'

3. Sometimes Dadv's are nominalized and continue to function adverbially (like some Vadv's). For example: ʔewétɛ-l sɬéq'əlex^{W} k'^{W}əs q'épscɛ k'^{W}ə ʔí·k'^{W}əlà 'I didn't know there was going to be a gathering here.' and təwét k'^{W}ə lí k^{W}ə θé 'Who's there?' (this may be relativized instead and not functioning adverbially, i.e., 'Who is it <u>that is there</u>.'))

4. Sometimes A D is used adverbially (like some cases of A Vadv), as in k'^{W}ə là after mí. For example: mí-lɛ k'^{W}ə là 'Come here!', mícəl k'^{W}ə là 'I'm coming here.', and cəl mí k'^{W}ə là k^{W} cəléqəɬəɬ 'I came here yesterday.'

5. Like Vadv's some Dadv's occur before the verb they modify, some occur after, and some (when M.V.'s)

don't modify another verb. However the only Dadv's which precede the verb modified are those followed by k'^{W}-4.8-s V-4.8 (i.e., ʔí·k'^{W}elà and lí k^{W}e θé); when Dadv's are not followed by k'^{W}-4.8-s V-4.8 they can only modify a verb by following it. For example:

ɬéq'ət ʔík'^{W}elà 'lay it/put it down here'

sk'^{W}ɛ́y k'^{W}ɛs k'^{W}ɛ́clex^{W} ʔík'^{W}elà 'You can't see it here.'

ləc'ɔ́·məx^{W} lí tə θé, ləc'ɔ́·məx^{W} lí k'^{W}ə θé 'It's/There's a different tribe here (lit. 'there (near)'), a different tribe there (far).'

cəl mélqələs lís k'^{W}í·l swéyəl k^{W}səs sk^{W}ətéx^{W} lí tə θé yuk'á·ləm 'I've forgotten how many days they were inside there.'

lí ʔiyé·ləm k'^{W}əls k'^{W}ɛ́clex^{W} lí tə θé 'Can I see it from there (in that place)?'

lə hél·əm tí 'They're on their way there., He's on his way there., She's on her way there.'

lə q'əq'íp lí· tí 'They're together over there.'

məcx^{W} χətέ· tí 'Come around there!'

6. Since all Dadv's occur after the verb they modify and all have meanings having to do with direction (or location), they confirm the idea that semantic groups help determine which adverbials occur before and which after the verb they modify. All the Vadv's

attested with the idea of direction or location occur after the verb they modify.

11.2.2.6. Past Tenses. This is the place to mention the syntactically formed past tenses: a.) preposing 4.4 at the beginning of the VP, b.) ?ə́-4.4 VP c.) (?í(·), lí(·))-ɨ-4.4 VP, d.) lí·-ɨ-ɛ-4.4 V, (and ?í·-ɨ-4.4 Pmod V). These have already been discussed and exemplified in Chapters 4 and 6 (q.v.). The main point to be made here is that all these past tenses are expansions to the VP, added at the beginning of the VP and modifying it. There are several syntactic complications that should be mentioned also:

1. The ?í·ɨ past tense when found in subordinate clauses usually has lə replacing ?í·ɨ in any person (not just third), i.e., k'^{W}-4.8$_{1,2,3}$-s lə V. This is attested after Vq, after ?í·ɨ-4.4 Vadv, and in numerous other examples. One example where ?í·ɨ is retained is the example in 4.2 on p. 305.

2. The ?í·ɨ auxiliary past can also separate Vadv and the following main verb, as in ?í·ɨ-4.4 Vadv k'^{W}-4.8-s V-4.8 (examples also in 4.1 and 4.2 on pp. 304 and 309. The ?í·ɨ doesn't separate them itself but causes the k'^{W}-4.8-s subordination, apparently.

3. Even Vq can follow ?ə́-4.4 and ?í·ɨ-4.4 as well as preposed 4.4 past tenses.

11.2.2.7. Vneg. ʔewɔ́tɛ as explained earlier in this chapter can serve in several capacities and before a nominal without A can be seen either as an adverbial verb or as a main verb (see 11.2.1.8.3). ʔewɔ́tɛ seems to be a negative verb (perhaps only used in the 3rd person with -4.4$_3$ which is unmarked), but its status is still unclear. It is tentatively considered here with Vneg's. Negative verbs are also discussed and exemplified in 6.2.4. Inflection of negative verbs is discussed in 6.1.7 (subjunctive, imperative, and interrogative all are possible, as well as declarative), 6.1.8 (present, past, and future all appear with Vneg's), and 6.1.10 (internal syntax). The syntax of those constructions has been dealt with to some extent in the sections mentioned and will not be reviewed here. Instead, this section will concentrate on how Vneg's fit into the VP and the sentence and will round up whatever syntactic observations have not been made so far about negatives.

In most cases negative verbs modify a main verb, much like Vadv's do, but preceding any Vadv by occurring at the beginning of the VP. As discussed in the chapter on pronouns (4.9 especially), negative verbs for the most part take -4.4 subject inflection and require subjunctive subject inflection on the verb

following; the verb following can be the main verb or an auxiliary, ʔí(·) or lí(·). When Vadv's are present before the main verb the auxiliary ʔí(·) or lí(·) is obligatory; it, rather than the first Vadv, takes the subjunctive inflection; semantically this negates the Vadv, but in Halkomelem this negation also carries over the whole VP too. Double negatives are not used in Halkomelem.

Further indications that double negatives are not used are sentences like ʔəwə́tɛ-l s-ɬí·m 'I didn't pick anything.', and ʔə́wəcəl lí̓l kʼʷə́clexʷ təwə́t 'I didn't see anybody.'

Like most Vadv's, Vneg's take the -4.4 subject inflection of the VP and require no kʼʷ-4.8-s __-4.8 to be attached to the verb following, though they require the subjunctive -4.9 to be attached to the verb following. These observations are true even of ʔə́wə-Imper which is merely ʔə́wə-4.4$_2$ V-4.9. However, there is one case in which -4.9 is not applied to the verb following a Vneg. ʔə́wə-4.4-ɬ or ʔə́wə-ɬ-4.4 can be followed by V without -4.9a on the V and without preceding the V with (lí(·), ʔí(·))-4.9b. Examples can be found in 6.1.8.4.6.

11.2.2.8. lí Questions (Yes-No Questions). lí can be added in front of almost any independent verb

phrase to form yes-no questions; lí receives the -4.4 subject inflection. lí-4.4 of course cannot interrogate imperatives or subjunctives because they are mutually exclusive moods. It is unnecessary before other Vq's. And lí-4.4 is not found before negative verbs or sk'^{W}ɛ́y 'can't, impossible' or ƛ'á 'that's __, it's him/her', each of which can only be made interrogative by the interrogative suffix -ə ~ -ɛ. (When sk'^{W}ɛ́y is used as Vaj meaning '(be) wrong' however it can be made interrogative by lí-4.4.) Other verbs which can be inflected for interrogative with -ə ~ -ɛ are also attested with lí-4.4 interrogatives; this includes lɛ́m, sƛ'í, and N > V. lí-4.4 interrogative is also absent before past tense VP's; past interrogatives are formed inflectionally as follows: (ʔí·, lí·)-ɬ-ɛ-4.4 VP. ʔí· and lí· are auxiliaries which accept the past tense suffix -ɬ; then the interrogative suffix -ɛ is added and then subject suffix. So it seems that interrogative verb lí is not used otherwise in the past tense. Another way to form a yes-no question (even in past tense) is by using ʔɛ́tɬ '(tag-question)' at the very end of the sentence.

Returning to lí-4.4 questions, they are only attested inflected further with -cɛ 'future' (lí-cɛ sp'ɛp'ɛ́k^{W} 'Will it float?', líy-ə-cɛ lɛ́m 'Will he

go?', etc.). But lí-4.4 can also interrogate VP's beginning with Vadv (lí wəɬ lə́m 'Is he (already) gone?') or VP's beginning with Vaux lɛ or mə (lí lɛ hə́wə 'Is he going hunting?' (or 'Did he go hunting?' with ambiguous past translation) and lí(yə) mə k^{w}etx^{w}fləm tə sq^{w}emə́y 'Did the dog come in (into the house)?'). When lí interrogative is used with a VP it questions the whole phrase not just the word it precedes. Thus the answer can be affirmative (lí. or ʔə́·ʔɛ., etc.) if the hearer agrees with everything in the VP question; the answer can be negative (ʔə́wə. or some other Vneg) if the hearer disagrees with anything in the VP question.

11.2.3. Expansion of the Sentence With Appositives and Non-conjoined VP's (Prepositional phrases, Subjunctive phrases).

11.2.3.1. Apposition of N (Vocative) and VP (Parenthetic). Not many vocative constructions have been elicited, but a fir number have been heard at gatherings where Halkomelem is spoken (Elder's Meetings at Coqualeetza, spirit dances, funerals, banquets, etc.). On these occasions, as well as in the sentences recorded in field work, an N (usually proper name or kin-term) can be used vocatively by placing it without an article at the very beginning or end of any sentence.

The N may also be possessed, i.e. 4.6 N-4.6. Naturally an N can be so used as an entire utterance when calling someone, as well. Examples: ʔiyéseq, méstexʷ tə skʷ'áwəs 'Son (or Male friend), bring over/fetch the pail.' (méstexʷ is often used as an imperative without any imperative inflection), ʔéy təl sqʷélewəl kʷ'əls sq'əq'á· ƛ'ɛɬwéləp l siyéyə 'I'm glad to be with you, my friends.', lέw, sí·lə 'Hello, grandmother/grandfather.'

Parenthetically a VP may rarely be appended to the end of a sentence as the following examples show: wiyáθ kʷ'əs ʔí·wáləms tə sté·xʷəɬ, t'íɬt'ələm kʷ'əs ʔí·wáləms 'The children are always playing, singing as they're playing.' and cəxʷ ʔí kʷ'ə là t'íɬt'əlem 'You're here singing.' (cp. ʔí·ɬcəxʷ lí· tí kʷ'əs t'íɬt'əlem 'You were (over) there singing.' which shows the more usual method of conjoining the parenthetical VP), and perhaps stém tə lí· tí c'íc'əsem 'What's that (over there) growing?'.

11.2.3.2. Prepositional Phrases. The composition of prepositional phrases has been mentioned in 11.2.1.3 (Vprep-4.4 O (S)). Vprep must be followed by an NP object (4.11 if pronominal) even though it is inflectionally a Vi; the syntax with an NP subject is Vprep-4.4 O S. Vprep-4.4 O (S) can be a complete

sentence or a main VP; as such it can be expanded like any other VP with a Vi. Prepositional phrases (when the Vprep is not a main verb) are attached at the end of another VP. They have the shape Vprep-4.4$_3$ 0 (4.4$_3$ is unmarked after Vi's). Such a phrase is a dependent VP attached after the main VP without any conjoining k'^{w}-4.8-s ___-4.8. Vprep-4.4 0 (S) cannot be a dependent VP.

łəʔé 'via, through' often has yə- 'travelling by' prefixed to it; it remains a prepositional verb when so prefixed however and occurs in Vprep-4.4 0 (S) or 4.4 Vprep 0 (S) (past tense). The latter constructions have Vprep as a main verb.

One additional peculiarity of Vprep's is that of lí 'in, at, to', which forms a dependent prepositional phrase but then is deleted after demonstrative verbs, leaving the Vdem to carry the obligatory object. Thus sentences like cəl ʔí· tɛ lélém 'I'm here at your house.' and lə lí· tɛ lélém 'He's there at your house.'

11.2.3.3. Subjunctive Phrases. Subjunctive phrases consist of wə-V-4.9 plus the remainder of the VP. The first V in the VP receives the subjunctive affixes whether it is a modifier or the central verb of the phrase. Subjunctive phrases are always dependent; they can either precede or follow the main VP

without further modification. When the main VP (independent clause) is followed by a prepositional phrase , the subjunctive phrase follows the prepositional phrase or precedes the main VP. Most types of verbs and VP's can be made into subjunctive phrases (even N's serving as V's). With Vq's however this subjunctive inflection makes them into relative constructions (as seen in 6.2.5, p. 349, q.v.); such relativization is attested for ʔɛlécɛ, təl·écɛ, xʷəcé·l, xʷəcékʷəl, təwét, and stém. Of these, ʔɛlécɛ, təl·écɛ, and xʷəcékʷəl are made subjunctive with auxiliaries, i.e. wə-(ʔí·, lí·)-4.9b precedes them. These subjunctive relatives function as NP subjects or objects of the main verb according to the regular rules of subject and object placement, but they lack the article which relative clauses otherwise begin with. ʔéwə can be made subjunctive too, as ʔəwés (lí·,ʔí·)-4.9b preceding the verb in its VP. Thus a few examples like the following were found: ʔəwés lís (ʔɛ) sx̌'íyelep, ləcəl kʷú·t 'If you folks don't want it, I'll take it.', and yəθəstálxʷəscɛ wəlémət ʔəwés mélqələsəs 'He'll tell us when to go if he doesn't forget.'

A few more examples will illustrate the placement of subjunctive phrases:

yáswə wəlémèl 'I might go., I don't know if I'm going.'

yáswe wəsk'^{W}éyəs k'^{W}əls lém 'I don't know if it's impossible for me to go.'

(?éwe sʌ'ís, sk'^{W}éy) k'^{W}əs məytálx^{W}s wəlémət sówq'tàlə '(He won't/doesn't want to, He can't) help us when we go find you folks.'

lícx^{W} sɬéq'əl•əx^{W} wəléməscɛ 'Do you know if he'll go?'

təmtémcɛ wəlémax^{W} t'ák'^{W} 'When are you going home?' (lit. 'When will it be when you go home?')

wəlís-l sʌ'í k'^{W}əls lém, lémcəl 'If I want to go, I will go.'

wəmí•p c'ɛhéyəɬ, ?éwəcəp mí•p hák^{W}əx^{y} tɛ s?íθ'əm 'When you come to pray, don't come to use your clothes.'

wəlémax^{W} ?éʌ'qəl, ?éwəcx^{W} lémax^{W} qəlqəlí•ləət 'When you go outside, don't go get yourself dirty!'

ʌ'ácɛ Bill k'^{W}ə méyθəx^{y} wəx^{W}ə?í•s 'It will be Bill that helps me when he gets here.'

(EB) cuɬ ɬq'éləx^{W} (wətəwétəs, wə?ís lécɛ, wəstéməs k'^{W}ə lə k^{W}ú•təs) 'I (already) know (who it is, where it is, what he took).'

(EB) wəlíx^{W} x^{W}əcák^{W}əl 'wherever you're going'

11.2.4. Expansion of the Sentence With Subordinate Conjunction of VP's. VP's can be made into relative clauses (preceded by A or by A-4.6a and the first word followed by -4.6b) or into regular subord-

inate clauses (preceded by k'^{w}-4.8a-s and the first word followed by -4.8b). In both cases the VP is nominalized and can be possessed by the pronoun suffixes to show its pronominal subject. The A also can be considered as a conjunction (for example see 9.2 where it is considered as a demonstrative conjunction or Dconj).

11.2.4.1. Relative Clauses. When a VP is relativized by a preceding A without -s nominalizer (k^{w}θə luɬ lə́m or tə q'ə́q'ət'əm for example), it is interpreted as subject or object according to the usual rules for VP's (given in 11.2.1). Thus VP can take the place of N in the formulae such as: Vi-S A N (A N is subject, except after Vprep and a few other verbs noted in 11.2.1 when A N is object), Vt-O-S A N_1 A N_2 (A N_1 is subject, A N_2 is object), Vt-O-S A N (A N is object unless the person and number differ between -O and -S; in the latter case A N becomes either subject or object depending on which it agrees with in person and number (the -S or the -O)), Vt-Pass A N_1 (A N_2) (A N_1 is object, A N_2 is agent, i.e. "A N_1 was Vt-ed by A N_2"), Vt-$Pass_{-c}$ A N (where the passive object pronoun suffix does not correspond with the person and number of A N, the A N can be the agent). When VP substitutes for N, VP's subject (shown by -4.6) must agree in number and person

with the -S or -O.

Now, within the VP which is so relativized, the V can be a Vi or a Vt. If it is a Vi (including middles, etc.) there is no further syntactic adjustment required: cəl k'ʷə́cləxʷ kʷθə luɬ lə́m 'I saw the one who went.' or θ'ə́θ'əqʷətəs tə siyáləxʷə tə q'ə́q'ət'əm 'The old man is sucking something (that is) sweet.' Thus the subject of the Vi is relativized. The relative pronoun in the English translation refers to the grammatical subject of the Vi in the relative clause. (Even təl s?í·k'ʷ 'what I lost', tə sqə́·ls 'what he stole', and tɛ sqʷɛ̀·l 'what you said, your words' probably work the same way. They appear to be loose translations, probably more accurately translated as 'my thing that was lost', 'his stealings', and 'your words, your talk'.)

If the V within the relativized VP is a Vt instead, the subject of the Vt is relativized with the added loss of the 3rd person possessive suffix which would normally show 3rd person subject. For example, ƛ'á (tə) ?íɬ mɛmíyət 'That's the one that was helping her.' (tə usually omitted after ƛ'á). When the object of the Vt is what is relativized, the subject of the Vt is marked by (retained) possessive pronoun suffixes (4.6) when the main clause is not a question.

If the object of the dependent Vt is relativized,

the subject of the Vt (of whatever person) is marked by 4.9b suffixes when the main clause is a question. The 4.9b suffixes are further attached to the auxiliary ʔí(·), and both (i.e. ʔí(·)-4.9b) are inserted between the article and the Vt in the relative clause. For example: stém tə ʔí·x^{W} θé·yt 'What are you making?', stém tə ʔí·x^{W} k^{W}əlét 'What is it you're holding?', təwét swíyəqə k^{W}θə ʔíx^{W} sé·wq'ət 'What man are you looking for?', ƛ'á· k'^{W}əl méłə k^{W}θə ʔíx^{W} hé·yθət 'Is that my child you're talking about?', təwét k'^{W}ə ʔí·x^{W} θé·yəɬcət tə swéltəl 'Who are you making the net for?'.

When the main clause is a question but the relative pronoun refers to the subject of the Vt, the subject of the Vt is shown by possessive pronoun (təwét k'^{W}ə ƛ'í·l-s k^{W}s lém-s 'Who is it that wants to go?') unless the construction is Vt-O_2-S_3. In the latter case (Vt-O_2-S_3) the 3rd person possessive suffix is usually replaced by 4.4 (that is, lə) preposed. For example, wét k'^{W}ə lə yéθəsθàmə̀ 'Who told you?', or təwét k'^{W}ə lə ɬéc'làmə̀ 'Who cut you?'). (This replacement is necessary because it may be recalled that a third person subject acting on a second person object is never realized with Vt-O_2-S_3 but by passives and other circumlocutions.)

In all these relative clauses the relative pronoun refers only to 3rd person S or O so far as I have attestation.

Relative clauses produced with wə-Vq-4.9 or wə-(líˑ,ʔíˑ)-4.9b Vq, as mentioned above, begin without an article. The Vq is intransitive and so the relative pronoun in English refers to the subject of the Vq. Sometimes however, a relative clause as described in this section, is conjoined to the Vq, as in the following sentence: (EB) cuɬ ɬq'ə́ɬəx^{w} wəstə́məs k'^{w}ə lə k^{w}ə́ˑtəs 'I (already) know what he took.' The 'what he took' is actually 'what it is' + 'something he took', and the wəstə́məs could be omitted without altering the translation.

11.2.4.2. Regular Subordinate Clauses. To subordinate a VP to another VP Halkomelem uses a Dconj to introduce the subordinate VP (i.e. the subordinate clause). The pronoun subject of the subordinate clause is never deleted, even if it is the same as that in the superordinate clause. In regular subordinate clauses the conjunction is k'^{w}-4.8-s -4.8 'that, to, for, while, as' or ƛ'ək'^{w}-4.8-s -4.8 'because' (see Chapters 4 and 9). k'^{w}(ə) can be seen as an article nominalizing the VP that follows, and the -s can be seen as a version of s- which also nom-

inalizes what follows. The -4.8 is shown within the conjunction (or attached to the article) and suffixed to the first word of the VP which follows because possessive pronouns of that set occur in either or both places depending on their person and number. The -4.8 suffix(es) substitute for the -4.4 subject suffixes which would occur if the VP were independent rather than dependent (subordinate). In the 3rd person, k^{W}ses or k^{W}s (-s) can substitute for k'^{W}es __-s. This is true for 'because' as well as for 'that, to, for, while, as'. No further modification of the VP is necessary in most cases when it is so subordinated; it may even include a full expanded VP or just a bare verb or anything in between permitted by the rules given for independent VP's. Only in a few cases (mentioned in the next paragraph) are further modifications required.

Dependent VP's with past tense can have structures like (ƛ'ə)k'^{W}-4.8-s ʔíˑɬ-4.8 V ... or (ƛ'ə)k'^{W}-4.8-s ʔéwəɬ-4.8 V ..., but more common is for lə (preposed 4.4$_{3}$) <u>in any person</u> to replace the ʔíˑɬ, i.e., (ƛ'ə)k'^{W}-4.8$_{1,2,3}$-s lə 4.8 V .... For example, ʔíɬcəx^{W} tusʔéyʔəl k'^{W}ɛs lə léyəm 'You were laughing softly.' or təmtém k'^{W}ɛs lə θíyt 'When did you make it?'.

Since the subject marker -4.8 is an integral part of the conjunctions or subordinating nominalizers, the question arises as to what subject markers passives (without subjects) take. It turns out that they have 3rd person 4.8 subject markers: (ʔ'ə)k'^{W}əs __-s ~ (ʔ'ə)k^{W}səs ~ (ʔ'ə)k^{W}s __(-s). Many examples can be seen in 4.10 and some in 9.2. Third person subject for passives is also required after negative verbs; questions with lí and auxiliary past tense construction with passive could be seen as requiring 3rd person subject (unmarked) or as having no subject markers. This is all perfectly consistent with the translation of the passive, often given, with an impersonal 'they' subject; it is also consistent with the use of the passive second person object affixes as a substitute for (and often translated by) a third person subject plus a second person object (which inflectional combination is not permitted).

The k'^{W}-4.8-s __-4.8 subordinate clause is used in the same circumstances as most English subordinate clauses. It is also frequent in some constructions which would not be expected from the English translation. These will be mentioned in the next paragraph. But first a word needs to be said about where k'^{W}-4.8-s ___-4.8 clauses occur syntactically in respect to

non-conjoined VP's and appositives. k'^{W}-4.8-s __-4.8 clauses occur after: the main VP, a prepositional phrase, or another k'^{W}-4.8-s __-4.8 clause. They occur before or after subjunctive phrases, and before appositives, when these occur after the main VP. 'Because' clauses follow everything mentioned as far as attested, probably including appositives.

Subordinate clauses with k'^{W}-4.8-s __-4.8 are frequent after sk'^{W}ɛ́y 'can't', sk'^{W}ɛ́ye 'can't?, is it impossible?', and ʔiyɛ́·ləm 'can, may' unless these are used as Vaj's (respectively 'be wrong; be impossible', 'be wrong?', and '(be) right, alright, okay'); after sƛ'ɨ 'want' (and sq^{W}ɛ́ləwəl 'think'); when infinitives would be used in English with deleted subject; and after some Vadv's and Dadv's. These are a few of the places where English would perhaps not lead us to expect k'^{W}-4.8-s __-4.8 subordinate clauses to be necessary.

11.2.5. Expansion of the Sentence by Co-ordinate Conjunction of Independent VP's. Independent VP's, clauses and sentences can be conjoined by preceding the one to follow with a Pconj (conjunctive particle or particle conjunction). These conjunctions are discussed in 7.2 and include qɛ 'and, but, or' (also means 'then' after an independent VP or clause begin-

ning with (ʔə)wɛ́s 'if not'; thus (ʔə)wɛ́s VPindep qə VPindep 'If not VP then VP'), su 'so, then', qəsu 'and so, and then', ʔəsu '(and) so', suɬ 'so (already)', and qəwɬ 'and (already)', as well as (qə)ƛ'a-4.8-su 'and so/then 4.8 (subject)', ƛ'acɛ su 'then he will, so it will be him that', and qəƛ'aθ'ɛsɛ́su 'and then they say he/she/it/they, and so it is said he/etc.' The last three are not strictly particles but are conjunctions; they contain qə or su which are Pconj's but also contain -4.8 (and in one case -cɛ) inflections within. The -4.8 apparently must be placed entirely within the conjunction and may not be attached to the first word following in 3rd person or plural. However, these inflected conjunctions remove the necessity and possibility of -4.4 inflection and -cɛ inflection and θ'ɛ modification as VP expansion for the conjoined VP. After the inflected conjunction -4.4 is omitted, and -cɛ and θ'ɛ if present in the conjunction needn't be repeated in the VP to follow. Similarly, wəɬ 'already' needn't (and probably can't) be repeated as a verbal modifier after suɬ or qəwɬ.

The uninflected Pconj's quoted first however require normal -4.4 inflection in the VP's which they precede. Many examples have been given in 7.2. qə, su, qəsu, ʔəsu and (qə)ƛ'a-4.8-su are the most common

co-ordinate conjunctions in texts and narratives and are even used to begin every sentence for long passages. Few speakers vary from one to the other for stylistic reasons very much.

11.2.6. Comparatives and Superlatives. Comparatives and superlatives have the syntactic structure of a VP or a VP followed by a prepositional phrase. Also within NP's, the N can be modified by a Vaj which is in turn modified by an augmentative Vadv like c'ɛ́c'əl(əw) 'be very, really' or several others; a bare handful of Vaj's may have inflectional comparatives with reduplication (θíθə 'larger, bigger' and ʔíʔɛxʷíːl 'smaller' -- the latter only because diminutive reduplication can be added to the Vaj ʔɛxʷíːl 'small', making it 'smaller').

Comparative sentence structures found so far are:
yəlɛ́wəl~4.4 Vaj (NP) təlí (4.11, 4.7, A N)
Vaj-4.4 (NP) təlí (4.11, 4.7, A N)
4.4 yəlɛ́wəl Vaj təlí (4.11, 4.7, A N)

Superlative sentence structures found so far:
c'ɛ́c'əl-4.4(-əw) Vaj təlí (4.11, A N, probably 4.7)
Vaj-4.4 kʷsu mɔ́kʼʷcət
Vaj-4.4 wəʔál (~ Vaj-4.4 ʔuʔál (EB))
and even yəlɛ́wəl-4.4 Vaj (A 4.7)
and as an NP: A yəlɛ́wəl Vaj N

(Presumably NP would follow Vaj in the first, Vaj-4.4 in the second, and we?él in the third of the above superlatives.)

Examples:

yəlέwəl qél təlí ƛ'é?ɛlθɛ 'He's worse than me.'

yəlέwəl χέyƛ' tlawèyèl təlí k'^{W}ə cəlέqəɬ(əɬ) 'Today is colder than yesterday.'

yəlέwəl ƛ'éqt təl χéltəl təlí tɛ(?) swé 'My pencil is longer than yours.'

yəlέwəl p'éq' təl swétɛ 'My seater is whiter.'

yəlέwəl ?éy təlí ƛ'é?ɛlθɛ 'He's/She's/It's/They're better than me.'

?éy təlí ƛ'é?ɛlθɛ 'He's/etc. better than me.'

hfk^{W} təlí k'^{W}ə spəlwéɬ 'He's/etc. bigger than last year.'

(hfk^{W}, ?ɛ?ɛx^{W}í·l) təl sc'électəl təlí tɛ swé 'My chair is (bigger, smaller) than yours.'

cəl yəlέwəl lás təlí ƛ'əlέwə 'I'm fatter than you.'

mí·sətɬɛ tə θíθə 'Pick out the larger one(s)!'

mí·sətɬɛ tə θíθə q^{W}ə?ép 'Pick out the larger apple(s)!'

θí·θə tə (q^{W}ə?éps, sθ'áq^{W}i) '(His apple, The fish) is bigger.'

θí·θə tə sθéqi tlaqé·ys 'The sockeye is bigger now.'

yəlέwəl qél 'It's worse.'

c'éc'el qél 'It's real bad., It's the worst.'

qél wə?él 'It's the worst., It's real worse.'

c'éc'əl-əw lás təlí ƛ'ɛɬlíməɬ 'He's the fattest of us.'

?iyé·məxʸ təlí kʷsu mók'ʷcət 'She's the prettiest of all of us., He's the handsomest of all of us.'

yələ́wəl lás təlí kʷs mók'ʷs 'He's fattest of all.'

(NP) ?iyé·məxʸ ?u ?él 'She's (the) prettiest.'

(NP) ?ɛyóm ?u ?él 'He's (the) strongest.'

yələ́wəl p'éq' tə ɬiɬəqəy 'Mt. Cheam is the whitest.'

yələ́wəl qéχ təl swé 'I've got the most.'

yələ́wəl ?iyé·məxʸ q'é·mi '(She's) the prettiest girl.'

yələ́wəl kʷ'ámk'ʷəm swíyəqə '(He's) the strongest man.'

ƛ'á yələ́wəl ?éy 'That's the best., That's better.'

(AC) wə?él ɬəq'ét 'wider (of a person for example)' (probably lit. 'too wide')

(AC) wə?él sásəqʷt 'the youngest sibling'

(AC) l sƛ'í tə wə?él c'əc'íc'əƛ' xʷéyləm 'I want the shortest rope.' (probably lit. 'I want the too short rope.')

It may be that forms with wə?él ~ ?u ?él are the preferred superlative in the Chilliwack dialect but not in the other dialects. Also note the blurring of the distinction between comparative and superlative in some constructions.

11.3. Interjections. Interjections occur in syntactic isolation (as a complete utterance) or followed by a nominal used as a vocative, or in cases of ʔó 'oh!' and ʔɛʔé 'oh-oh!' followed by A N (as attested so far). ʔó 4.3 (N, Vaj) also occurs; other constructions probably occur, but so far are not attested. It seems likely from the examples seen that interjections must be sentence-initial. ʔétɨ '(tag-question)' can occur as a complete utterance and refers to the previous sentence spoken, after a considerable delay; however ʔétɨ is more an interrogative verb than an interjection.

11.4. Syntactic Limits. Many of the processes of syntactic expansion described can be done cyclically. But there are limits on the number of cycles permitted by each process and combination of processes. These limits should probably be described as claiming only that a certain number of cycles for a particular process are rare -- because the line is hard to draw between what is not attested and what cannot occur. None of the following are attested in my data, thus suggesting syntactic limits or cyclic limitation rules:

*A Vaj Vaj Vaj N (Vaj's can be put into subordinate VP's)

*A Vadv Vaj Vaj N

*A Vadv Vadv Vaj N

*A N-4.6$_3$ A N-4.6$_3$ A N

*A N qə N qə N

*-O qə N qə N

*NP qɛs NP qɛs NP

(but Num qɛs A Num qɛs A Num qɛs A Num is permitted as the highest number of conjoined numerals allowed, as in '1999; '2000' and higher are unattested)

*A N qɛs 4.3 qɛs (A N, 4.3)

*A N-4.6$_3$ A N qə N qə N (conjoined possessors of a single NP)

*Vadv Vadv Vadv Vadv (Pmod)(Vaux) M.V. ...

*M.V. (Pmod)(Dadv) Vadv Vadv (Vadv's can be put into subordinate VP's)

*Pmod Pmod either before or after M.V.

*Dadv Dadv after M.V.

*VP, VP, VP (appended parenthetically as appositives)

*VP Vprep O Vprep O Vprep O (though VP Vprep O Vprep O is attested)

*VP wə-VP-4.9 wə-VP-4.9 (perhaps one 'if' and one 'when')

*wə-VP-4.9 VP wə-VP-4.9

*wə-VP-4.9 wə-VP-4.9 VP

*Vt k'^{w}-4.8-s VP$_1$-4.8 k'^{w}-4.8-s VP$_2$-4.8 where k'^{w}-4.8-s VP$_1$-4.8 is S, and k'^{w}-4.8-s VP$_2$-4.8 is O, both for the same verb (Vt)

*No maximally expanded VP attested as given in the first paragraph of 11.2.2.

There has not been time to try to elicit these constructions; some may occur which are not rare, but I believe most will prove to be rare and many non-existant due to syntactic limits. For some (as noted) alternate constructions can be used; it may be that alternate constructions must be used because the unattested construction cannot occur due to syntactic limits. Future field work should shed some light on these limits if they exist in Upriver Halkomelem.

CHAPTER 12. SEMANTICS AND SEMEMICS

12.0. Introduction. This section contains an explanation of the theoretical and analytical approach used in Chapters 12 and 13. It is one I have developed in papers presented to several of the International Conferences on Salishan Languages held in the Northwest[1]. Since it has not appeared in print elsewhere and introduces a few new terms and notations a discussion of it begins this chapter.

Both phonetics and semantics impinge on the real world (using "semantics" in a narrow sense parallel to phonetics from here on and retaining "semology" for the broader field parallel to phonology). Phonetics is the analysis and description of the physical sounds of language, while semantics is the analysis and des-

---

1. Brent D. Galloway: "Some Similarities Between Semology and Phonology (With Illustrations from Chilliwack Halkomelem)," a paper delivered at the Sixth International Conference on Salishan Languages (abbreviated ICSL), Aug. 16-18, 1971, Victoria, B.C.; Brent D. Galloway: "Reduplication in the Chilliwack Dialect of Halkomelem (With a Sketch of Phonemics)," a paper delivered at the Eighth ICSL, Aug. 13-15, 1973, Eugene, Oregon; Brent D. Galloway: "Two Lessons in Time in Upriver Halkomelem," a paper delivered at the Tenth ICSL, Aug. 14-16, 1975, Ellensburg, Wash., printed in Lektos, Fall 1975, University of Louisville, Ky., Robert St. Clair (ed.), pp.56-66; Brent D. Galloway: "Anatomy in Upper Stalo Halkomelem, A Morphosememic Study," a paper delivered at the Eleventh ICSL, Aug.12-14, 1976, Seattle, Wash.

cription of the physical meanings of language. In both cases the linguist is faced with a continuum with a myriad of possible gradations. No matter how narrow a transcription he makes, a narrower one is always conceivable.

For example, Chilliwack [sx̣^{w}ó$\underset{\circ}{s}$m] is glossed as 'soapberries, Indian ice cream' with notes that they are red berries, ripen in late June (late July in the mountains), last about a month or two, grow on the roadside from Hedley to Penticton, B.C. (the nearest spot from Chilliwack), taste like bitter cranberries, can be beaten with water to form a white lather (for soap in the old days and for "Indian ice cream" made by adding sugar to the foam or in the old days sweet berries). To this could be added their size and shape, shape of leaf, size of bush, and the botanical name Shepherdia canadensis (L.) Nutt., not to mention the type of terrain they prefer, how they are harvested, how they are stored, and more details on how the "ice cream" is made (what was used to whip it with and in, how no grease can be present and how wooden paddles were used to eat them), etc.

So the semanticist, like the phonetician, must set operational limits on how narrow a transcription (in general) is useful in the field. Then he should

use this narrowest semantic transcription, making careful inquiry into the meanings of each morpheme in its semantic context. This gloss is the semantic version of the phonetic symbol.

The similarity of distinctive features in phonology and semantic components (from componential analysis) in semology is fairly well known. All speech sounds can be described in terms of a finite set of articulatory or acoustic features. The success of semantic features or components has only been limited because the method has only been applied to a small number of tight semological sets (domains), such as kin terms, plant terms, color terms, classifiers, verbal paradigms, etc. But the domains are similar across languages to a certain degree, and the semantic features used in a given domain are often much alike across languages. This is very encouraging.

Perhaps the first step should be taking a complete inventory of the domains in a given language. In doing this, good anthropological descriptions (if available) can provide insight and many clues to the culturally relevant domains and probably also to some semantic distinctive features. A domain (like kinship terms, for example) may be analogous to the set of all stops or all spirants in a language. It also seems

to contribute its label ('plant term', 'kinship term', etc.) to the semantic components of each member.

Next each domain could be subjected to a componential analysis if allosemic patterns cannot be seen without it. Domains with semantic features in common could be compared, and perhaps some domains could be combined (similar to categories like obstruent?). Or the division into domains may be comparable to the phonetic divisions of stress, pitch, length, consonant, and vowel (except more numerous). The features involved in these phonetic divisions can only be combined into a single unified set (if at all) by somewhat ad hoc means. So it may also be that we will have to be satisfied with largely domain-specific semantic components.

There are probably several reasons why linguists have been reluctant to tackle componential analysis of all the domains in a language. There appear to be a very sizable number of domains and semantic components involved, although the number is surely finite and probably not as large as it seems. It seems to me that we could use semantic features as we use phonetic features: in rules only when they are economical and called for, and in grids showing members of domains when necessary (like phones in phonetic grids), other-

wise using the semantic symbols or glosses (parallel to the phonetic symbols). In other words, it is uneconomical and profitless to over-use features, either of sound or of meaning.

Componential analysis sometimes helps us to see patterns in allosemes and sememes. But first, what is an alloseme or a sememe? Allosemes of a single sememe are meanings which are in complementary distribution in the semantic environment and are semantically similar. (An alloseme may also be the only meaning of a sememe.) Allosemes are narrow glosses (in the sense of narrow transcription), while sememes are the broad glosses from which the narrow glosses are predictable. The following notation seems best to distinguish these glosses and levels:

semantic ['narrow gloss'] or ['alloseme']

sememic /'broad gloss'/ or /'sememe'/ (or the sememe can be shown as /'alloseme; alloseme'/ or /'alloseme, alloseme'/)

morphosememic //'morphosememe'// or //'sememe'-'sememe'//

Several clear examples are the following: /q'^{w}ə́l/ has allosemes ['cooked'] and ['ripened'], /x^{w}ɛ́yləm/ has allosemes ['rope (any kind, native or white)'] and ['string (any kind, native or white)'] and ['stringy fiber from plant'] and ['thread (any

kind, native or white)'], and /sméyəθ/ has allosemes ['animal'] and ['meat']. With each of the three words the allosemes are in complementary distribution: ['ripened'] occurs only with 'plants' (harvested or not), ['cooked'] occurs with some of the same 'plants' when harvested and also with any other 'food caught or gathered' (including 'fish', 'meat', 'fowl', etc.); ['rope ...'] occurs with 'large objects that can be tied (like a canoe, an animal, a log or pole, etc.)', ['stringy fiber from plant'] occurs only with 'certain plants such as dogbane, cow parsnip, Indian rhubarb (dock), etc.', ['string (...)'] occurs with 'smaller objects that are tied or wrapped', and ['thread'] occurs with 'things that are sewn, actions of sewing, needles'; ['animal'] occurs with 'living or dying mammals', ['meat'] occurs with 'dead mammals intended for food'. If these semantic environments are not provided within the sentence or speech event and cannot be inferred, the word in question remains ambiguous; if it is important to find out which alloseme is intended, the hearer must either ask the speaker about it or wait to see if the necessary environment occurs before the end of the speech event. On the speaker's part there are also cases of intentional ambiguity: conversations where the exact meaning is unnecessary

or undesired, puns, songs, normal conversation where implications of all allosemes are desired, etc.

Part of the information in allosemic rules is the distinctive combinations of meanings which each language groups together ('cooked' and 'ripened' for example are grouped together by Halkomelem but not by English). The other part is the semantic environments required to distinguish allosemes. In semantic domains patterns and pattern congruity can be seen in such combinations and environments.

A single morpheme can have several sllosemes, but can several morphemes also be allosemes of a single sememe? The answer is unclear. With χéyχ' 'cold (of water, weather)' and θ'á±əm 'cold (of mammal or bird), chilled' the language keeps separate two similar and complementary meanings. If there are sememic or morphological reasons for this separation (such as pattern congruity with other animate vs. inanimate divisions) the two morphemes could be separate sememes related morphosememically. If there are no such reasons, they could conceivably be allosemes of a single sememe or merely unrelated sememes with similar meanings. More work needs to be done to determin which is the case here, as well as whether several morphemes can be allosemes of one sememe.

The criterion of semantic similarity for allosemes allows one to separate homophonous morphemes. Semantic similarity of allosemes probably extends to the same extent as phonetic similarity of allophones. For English /t/ we have allophones such as [t^h], [t], [r] (voiced flap r), and even [ʔ]. The examples of Halkomelem allosemes above seem to show similar distance. In both cases too the speaker feels the "allo's" to be part of a single unit (the "eme").

Morphosememics forms a very important part of the semological description of a language. It is the chapter (or level) in which meaning changes as a result of derivational processes or inflectional processes should be described. These are often systematic, applying to large classes of morphemes and showing a high degree of structuring. All other systematic alternations of sememes resulting from combination with other morphemes, other lexemes (words), or taxemes (meaningful arrangements of order, meaningful transformations if the syntax is described with transformations) should be described here. Notice the word systematic. Small piecemeal alternations showing no pattern or structure are probably best left to the lexicon (just as some allomorphs are).

Thus when morphemes are attached to one another

to make up lexemes (words), either derivationally or inflectionally, the meaning changes (where they occur and especially where they are systematic) should be described. When words are combined into phrases, idioms, metaphors, etc., the meaning changes should be described (especially where systematic). When morphemes, words or phrases are combined with meaningful arrangements of order (taxemes, transformations, etc.), the meaning changes (especially where systematic) should be described. Morphosememics is the place for these descriptions.

For example, when {-ə$\dot{\text{t}}$p} 'tree, plant' is removed from any words for 'fruit-bearing plant', the resulting word refers to the fruit (derivational morphosememics). When Vq's are inflected with the subjunctive we- + -4.9 they lose their 'interrogative' feature and become relativized (relative verbs or relative clauses) (inflectional morphosememics). A number of verbs (at least nine) combine with a following A-4.6 sq^{w}ɛ́ləwəl-4.6 to form idioms which express 'attitudes'; these are systematic shifts of meaning exemplified by ʔɛ́y təl sq^{w}ɛ́ləwəl 'I'm glad.' (< 'My thoughts or feelings are good.'), χɛ́$\dot{\text{t}}$ təl sq^{w}ɛ́ləwəl 'I'm sorry.' (< 'My thoughts or feelings hurt.'), hɬk^{w} təl sq^{w}ɛ́ləwəl 'I'm conceited or proud.' (< 'My thoughts or feelings are big.'),

and me qəlqéyl təl sq^{w}éləwəl 'I'm discouraged., I've lost heart.' (< 'My thoughts or feelings have come to be destroyed.')(these exemplify phrasal morphosememics). The change to 'ambiguous past tense' when 4.4 pronouns are preposed rather than suffixed to the verb, the change to 'object' of the verb when NP_1 is exchanged with the following NP_2 after a Vt, and the 'emphasis' of a Vadv or Vaj when it subordinates the verb or nominal it precedes (respecively) and modifies--all these how syntactic morphosememics.

It is interesting to notice the many parallels between morphophonemics and morphosememics. We can almost take statements about morphophonemics, substitute "sem-" for "phon-", "meaning" for "shape", "shape" for "meaning", and "sememic alternant" for "allomorph" and have workable statements about morphosememics.

> The branch of grammar which deals with the phonemic shape of morphemes, words, and constructions, without regard to their meaning, is morphophonemics. (2)
>
> The difference in the phonemic shape of alternants of morphemes are organized and stated; this constitutes morphophonemics. (3)

---

2. Charles F. Hockett: "A System of Descriptive Phonology," in Language vol. 18, 1942, pp.3-21, reprinted in Martin Joos (ed.): Readings in Linguistics I, fourth edition, 1966, Chicago; the quote is on p.107 of the reprinted article.

3. Charles F. Hockett: "Problems of Morphemic Analysis," in Language vol.23, 1947, pp.321-343, reprinted in Joos: op. cit.; the quote is on p.230 of Joos.

> Morphophonemics ...[covers] every phase of the phonemic shape of morphemes: the typical shapes of alternants, the types of alternation, and the various environmental factors (phonological or grammatical) which elicit one alternant or another of those morphemes which appear in more than one shape. (4)
>
> Many of the morphemes have parallel sets of allomorphs with similar conditioning. It is, therefore, possible to make certain general morphophonemic statements which apply quite universally in the system. (5)

Within morphophonemics, processes such as assimilation, consonant or vowel merger, loss of consonant or vowel after an identical consonant or vowel, vowel harmony, affrication, and ablaut are described. Some of these have parallels in morphosememics: assimilation of sememes, merger of two sememes into one (common in derivation), loss of redundant sememes within phrases or sentences, and concord (agreement in gender or number) are parallel respectively to the first four morphophonemic processes mentioned.

Also within morphophonemics is the phonotactics or phonemic canon (treating permitted clusters of phonemes, phoneme distribution, and word and syllable structure). Within morphosememics similarly are found

---

4. Charles F. Hockett: "Peiping Morphophonemics," in Language vol.26, 1950, pp.63-85, reprinted in Joos: op. cit.; the quote is on p.315 of Joos.

5. H.A. Gleason, Jr.: An Introduction to Descriptive Linguistics, revised ed., 1961, New York, p.116.

sememic co-occurrence restrictions, sememic structure of phrase and sentence, and distribution of sememes or classes of sememes within domains (showing what sememes are grouped into classes and domains, what sememic distinctions are made and emphasized, and how the world is divided up into sememes).

Some additional elements can be described in the semology: sound symbolism and onomatopoeia directly link semantic elements with phonetic ones. For example Upriver Halkomelem has: /q'á·w/ 'howl', /yé·t/ 'vomit', /pá·t/ [p^{h}á·t^{h}] 'blow' and /hésəm/'sneeze' (all four are verbs), /x^{w}ét·əs/ 'heavy' beside /x^{w}éx^{w}ə/ 'lightweight', and sound symbolic tastes: /sésəχəm/ 'bitter', /q'éq'ət'əm/ 'sweet', /t'ét'əθ'əm/ 'sour, fermenting', /c'éc'əsəm/ 'tasty, good tasting but not sweet', etc. When these links are systematic they should be described in the grammar (when not systematic they can be mentioned in the lexicon). Also providing a direct link between phonetics and semantics are intonation and rhythm (for example super-lengthening 'really').

Meaning is also affected by things like "tone of voice", style-switching, and other sociolinguistic effects. Irony is the communication of a meaning opposite from the literal statement, through use of

such sociolinguistic effects. These could be described in the semology or in a chapter on sociolinguistic phenomena.

The semological system of a language clearly has effects on the other major levels of a language's structure: syntax (via meaningful changes in clause, word or morpheme order and via sememic co-occurrence restrictions), morphology (via semologically determined classes and allomorphs and via morphosememics), and phonology (via sound symbolism and lexical shapes). These effects have almost always been described in levels or chapters other than that of semantics and sememics or morphosememics. This is probably one reason why many grammars which lack semological chapters are nevertheless serviceable. There is enough semological information scattered throughout and of course in the dictionary or lexicon (where it is sometimes partially systematized) to enable the linguist and student to begin to comprehend the language.

The present grammar has much semological information scattered throughout previous chapters. Chapters 12 and 13 will organize some of it but not all. Chapters 12 and 13 will also be surveys of the semantics and sememics and the morphosememics of Halkomelem, rather than complete treatments. More in-depth treat-

ment of Halkomelem semology will follow this grammar along with a lexicon, but for now there is only time for a survey of the semology.

12.1. Semological Domains in Halkomelem. Some of the semantic areas which appear to be domains are listed in this section. They can usually be seen as domains more clearly in their morphosememic features than in their allosemic patterns. The word "functions" in the list below means actions or processes which the nominal members of that domain do as members in the domain (the examples will illustrate). Some domains have been listed together under headings combining them because they share semantic components; this is analogous perhaps to combinations like obstruents or front vowels in phonology. At the end of the list are some inflectional categories which also seem to be domains. The following list is tentative and is bound to be incomplete:

1. Land features and functions ('to rockslide', 'to cave off', etc.) and place names.

2. Weather features (of air, sky, sun, moon, stars) and functions ('to rain', 'stop blowing (of wind)', etc.).

3. Water features (mainly of rivers) and functions ('be turbulent', 'subside (of high water)', etc.).

4. Fire and its functions ('burn', 'go out', etc.).

5. Time periods and tense.

6. Flora (names, parts, functions).

7. Fauna (names, parts i.e. anatomy, somatic affixes, pésq^{w}tel 'body insults', body functions and dysfunctions).

8. Categories of humans (age terms, kinship terms, status terms (social, occupational, tribal, national), proper names, functions ('raise a child', 'marry spouse's sibling', etc.).

9. Religion and the spirit (spirits and powers, ceremonies, spirit dancing, Christianity, Indian doctoring, functions ('train to be shaman', 'give a burning', 'pray', 'cross oneself', 'cast a spell on s-o', 'blow on patient', 'to spirit dance', etc.).

10. Man-made things (Indian and non-Indian), their parts and names, how to make them, their functions: buildings, constructions other than buildings, household goods (for furniture, food, grooming, misc. (such as 'flashlight' (< 'lantern being squeezed'), 'purse', 'umbrella')), clothing and ornaments, musical instruments; devices and their parts and functions: for hunting + processing the catch (including even weaving and tanning), for fishing + processing the catch, for gathering + processing the harvest (including 'digging stick', 'tumpline', 'picking (fruit or leaves)', etc.), tools for making things ('hammer', 'awl', 'needle',

'net measure and shuttle', etc.), baskets (types, parts, how to make them, functions), canoes and boats (types and parts, how to make them, equipment, how to repair them, how to use them, etc.), modern transportation.

11. Food (types, how to cook).

12. Games and play (including 'make a point in slahal (the bone game)', 'the feather game', 'footraces', 'doll', etc.).

13. Conversation and speech.

14. Emotions and feelings, attitudes and mental processes.

15. Senses and perceptions: visual and qualities of light, tactile perceptions, sounds, tastes, smells.

16. Other qualities (Vaj): descriptive, value judgements.

17. Directions and qualifiers (adverbials).

18. Demonstratives and Vaux's.

19. Personal pronouns.

20. Numerals.

21. Transitivizers, intransitivizers, benefactive.

22. Moods: interrogative, subjunctive, imperative, declarative.

23. Voice: active, middle, reflexive, reciprocal, passive.

24. Continuative and plural.

25. Vprep's.

26. Interjections.

27. Pconj's.

28. Perhaps verb domains like: travel and motion, acting toward, act on inanimates, act on animates, change physical state (inanimates).

Some words may have memberships in several domains, just as in phonetics an [n] can be classified as a sonorant, resonant, nasal, etc. There are perhaps as many alternate ways of dividing Halkomelem words into domains as there are sets of words with semantic components in common. All may be relevant to our thinking processes and therefore valid. I have tried in the above list to find those which also share morphological features. I am sure many domains have been omitted because more words have yet to be gathered, and much work remains to be done on those already gathered. My files contain 8000 to 9000 words at present, but Bloomfield[6] estimates at least 20,000 to 30,000 words in the speech of the adult speaker of English and many more if the speaker knows technical and learned words.

---

6. Leonard Bloomfield: Language, 1933, New York, p. 277.

Jespersen[7] cites a number of figures: for English, 25,000 to 35,000 and some as high as 50,000 words are used by the average speaker without college; one professor had his students use dictionaries to estimate words they could define without context, and the majority reported a little below 60,000 words; another professor counted all the words he knew in Webster's Dictionary and found his vocabulary was 33,456 words; linguists investigating speech of Swedish peasants and Danish and French dialects agreed that 26,000 is probably too small a figure in each case; and a missionary in Tierra del Fuego compiled a dictionary of 30,000 words in the Yaagan language. I have estimated that Kuipers has about 9600 words (excluding inflections) in his two volumes on Squamish[8], and this is all from one speaker in a matter of a few years of field work.

Halkomelem had and has many technical and learned words, and a dictionary of 50,000 words might have been compiled a hundred years ago. But today even the most fluent speakers seldom get a chance to speak and

---

7. Otto Jespersen: Growth and Structure of the English Language, 9th ed., 1938, New York, pp.224-227 of Doubleday Anchor Books edition.

8. Aert Kuipers: The Squamish Language, vol. 1, 1967, The Hague, (dictionary pp.245-400) and vol. 2, 1969, The Hague, (lexicon pp.32-96).

hear their language more than several times a week, and the old crafts which required many technical and learned words have nearly died out, though some are being revived with non-speakers as students. I have been fortunate in having the weekly assistance of the Coqualeetza Elders Group (a majority of the fluent speakers of Upriver Halkomelem) and tapes of their weekly meetings since 1972 to gather vocabulary and texts. Through this group's efforts and the tapes of Oliver Wells who gathered vocabulary, ethnography and some stories, and my own field work, we may be able to preserve 30,000 words or so, eventually. This all goes to show that the list of domains above is bound to be incomplete and in need of later revision.

12.2. Allosemic Patterns of Several Domains.

12.2.1. Categories of Humans. Kinship terms show the clearest structure of the domains within this group. The following terms have been found:

sc'á· /'relative of any kind'/(Cheh.)

yá(·)yətəl /'blood relative'/

mè·l ~ mé·l /'father'/

tè·l ~ té·l /'mother'/

(méməl /'father (vocative), Dad (pet name)'/)

(tétəl /'mother (vocative), Mom/Mum (pet name)'/; tét can also be used, short for tétəl; tə́? /'Mom, Ma

(slang)(pet name)'/)

mél(·)ə (~ mél(·)ɛ ~ méł(·)ə in some idiolects, less common) /'son, daughter, child (kinship term)'/

(mímələ /'pet name for son or daughter'/)

sí·lə /'grandparent, grandparent's sibling, grandparent's cousin'/

(síselə /'grandparent (pet name), grandparent's sibling or cousin (pet name)'/)

(sí·si /'grandparent (pet name, perhaps baby talk)'/)

ʔí·məθ /'grandchild'/

sc'á·məq^{w} /'great grandparent, great grandchild'/

(sc'á·c'əməq^{w} /'great grandparent (pet name), great grandchild (pet name)'/, sc'əmc'á·məq^{w} /'eldest great grandchild'/, sc'əmc'á·ləməq^{w} /'eldest great grandchildren'/)

ʔók^{w}iyəq^{w} (Chill.) ~ ʔék^{w}iyəq^{w} (other dialects) /'great great grandparent, great great great grandchild'/

ə'ép'iyəq^{w} (~ ə'ép'ayəq^{w}) /'great great great great grandparent, great great great great grandchild'/ (Note: a minority of speakers of Upriver dialects exchange the glosses on ʔók^{w}iyəq^{w} and ə'ép'iyəq^{w}.)

támiyəq^{w} /'great great great great great grandparent, great great great great great grandchild'/

syəwé·l /'ancestors, lineage'/

sx^{w}əwélí /'parents, (ancestors)'/

ʔéləx^{y} /'sibling (Chill.), brother (Tait, prob. Cheh.)'/

sélƛ'a /'eldest child, (prob. also child of parent's eldest sibling)'/

sə́ƛ'ɛ̀təl /'elder sibling, child of parent's elder sibling'/

sqé·q /'younger sibling, child of parent's younger sibling'/

(k^{y}é·k^{y} pet name for sqé·q; sqiqé·q /'little younger sibling, little child of parent's younger sibling'/)

sá(·)seq^{w}t /'younger sibling, child of parent's younger sibling'/

wəʔá·l sáseq^{w}t /'youngest sibling, (prob. also child of parent's youngest sibling)'/

sx^{w}əmlí(·)k^{w} /'parent's sibling, (possibly also parent's cousin)'/

k^{w}iyá·s /'uncle or aunt (used in respect, especially in the longhouse)'/

stí·wə́l /'sibling's child, (possibly also cousin's child)'/

swéqəθ /'husband'/

stá·les /'wife'/

(Tait) cé·x^{w} /'wife (slightly disrespectful)'/

sk'^{w}fɬo(w) or sk'^{w}fɬəw /'spouse's parent, parent-in-law, (wife's brother also?)'/

sciwtə́·ɬ /'child's spouse, son-in-law, daughter-in-law,

sister's husband'/

səx^{w}sí·le /'grandparent-in-law'/

sméṯəx^{w}təl /'spouse's sibling, sibling's spouse'/

sx^{w}ʔélé́x^{y} /'husband's sister, woman's brother's wife'/

x^{y}céṗθ /'spouse of parent's sibling (i.e. uncle or aunt by marriage)'/

sk'^{w}élwés /'(relative's/sibling's spouse's relative), in-law's relative, in-law from any side'/ (Cowichan dialect has 'parent/sibling/grandparent of child-in-law' for this word)

sləc'élé́q /'spouse's sibling's spouse (for ex. husband's brother's wife), mothers-in-law of two sisters'/

syé́(·)təl /'widow, widower'/

wélé́m /'orphan'/

smestiyéɬ /'sibling of deceased parent'/

swelmé́(·)yɬ /'child of deceased sibling'/

ɵ·é́·yɛ /'relative of deceased spouse'/ (for example, mother, sibling, cousin or other relative of deceased wife)

c'ɬχè·m /'deceased son or daughter'/ (root is χè·m 'cry' because "your brother or sister is mourning along with you for your lost child", c'ɬ- means something like 'along with' as in c'eɬ(-)ʔé·y 'sweetheart, someone you keep going with' and c'eɬ(-)x^{w}élməx^{w} 'neighbor')

sx^{W}əmθiyə́·ɬ, (some use) qɛyə́·ɬ /'deceased uncle/aunt/ grandmother/someone who is respondible for ego directly or indirectly'/

cɬilə́·m /'step-parent'/

təx^{W}mə́ləm /'step-child'/

sk'^{W}əmíɬəm /'child raised by someone other than parents'/

sləc'ə́wəyəɬ /'half-sibling'/

sx^{y}ə́·yɛ /'co-wife, female rival of wife'/

sx^{y}ay̓ə́·səq /'ex-wife's husband, wife's ex-husband, male rival of husband'/

ʔislə́·ltəx^{W} /'man with two wives'/

There are plurals for most of these and diminutives for some (indicated in parentheses), but they are inflections.

A number of allosemic patterns can be seen here. 1. Of the above 58 kinterms, 44 have ['male'] ~ ['female'] allosemes. The ['male'] alloseme occurs after a 'masculine' article or swíyəqə 'male'; the ['female'] alloseme occurs after a 'feminine' article or sɬélí 'female'; some other semantic environments can also determine which alloseme is present, for example gender-marked words in another phrase referring to the kinterm (such as 4.3 pronouns, sex-marked proper names, etc.). stí·wə́l /'sibling's child, (prob. also cousin's child)'/ → tə (swíyəqə) stí·wə́l 'the nephew' and θə

(sɬélí) stí·wél 'the niece'. The 14 kinterms which have only one gender are mè·l, tè·l, méməl, tétəl, tét, té?; swéqəθ, stá·ləs, cé·x^{w}, sx^{y}á·yɛ, sx^{y}ayé·səq, ?islé·ltəx^{w}; sx^{w}?élέx^{y} and Tait dialect ?éləx^{y}; these are all various words for 'father', 'mother', 'husband' or 'wife' except the last two words.

2. Words for ancestors more than two generations above ego each have an alloseme three or more generations above ego and an alloseme the same number of generations below ego; thus for each alloseme like 'great grandparent' there is one like 'great grandchild' for the same word. Since one alloseme is three, four, five or six generations above the other it is usually quite clear from the semantic context which alloseme is meant; such semantic factors as relative age, tense, actions which could be done only by a mature person or ancestor or by a child or descendant, matching reference to a person whose age is known to the hearer, etc. are diagnostic. This rule applies, of course, to sc'á·məq^{w}, ?ók^{w}iyəq^{w}, θ'ép'iyəq^{w}, támiyəq^{w} and their derivatives or inflections.

3. The word for 'grandparent', sí·le, has an alloseme 'grandparent's sibling' which is predictable from features in the semantic environment such as: gender of the article if the grandparent and the sibling are

of different sex (the gender of the article indicates the gender of the sibling), who the descendants, family, and associates of the person in question are, whether the person lives where the grandparent does or where the grandparent's sibling does; present or future tenses can even bear on the determination of allosemes if the grandparents are dead but a grandparent's sibling lives (or vice versa). The mind of the hearer searches all such aspects of the semantic environment and makes an interpretation the moment the relevant information is found.

4. The words for siblings and 'grandparent, grandparent's sibling' (with the possible exception of ʔέləx^{y}) each have an alloseme which refers to a 'sibling' and an alloseme which refers to the 'child of parent's sibling'; the sibling is modified in both allosemes by 'elder', 'younger', 'eldest', 'youngest', 'grandparent's' or whatever the gloss calls for. This applies then to: sə́lƛ̓a, sə́ƛ̓ʔὲtəl, sqέ·q, k^{y}έ·k^{y}, sásəq^{w}t, wəʔá·l sásəq^{w}t, and sí·lə and inflected versions of these words. (It may also apply to stí·wə́l and sx^{w}əmlí·k^{w} as it does in the Cowichan dialect.) By the rules given, sqέ·q has allosemes ['younger brother, younger sister, son of parent's younger sibling, daughter of parent's younger sibling'] for ex-

ample. The semantic environments determining which alloseme is meant would be similar to those seen in 3. just above. With sqé·q for example a preceding feminine article, θə, would limit the allosemes to ['younger sister'] or ['daughter of parent's younger sibling']. The precise alloseme could then be selected if the hearer knew or could detect from the semantic environment of the speech event, for example, that no 'younger sister' existed, or that since the 'son of the parent's younger sibling' had just been discussed it must be the 'daughter of the parent's younger sibling' now being discussed.

5. There are nine terms for in-laws. One alloseme is reported by Elmendorf and Suttles[9] but not yet attested in my data, ['wife's brother'] for sk'^{W}íłow. But a pair of in-law words follow one allosemic pattern: sméθəx^{W}təl and sx^{W}ʔélə́x^{y} both refer to sibling-in-law with two allosemes ['spouse's sibling'] and ['sibling's spouse']. It seems that sx^{W}ʔélə́x^{y} has the same allosemic pattern as sméθəx^{W}təl and even has the same gloss except that sx^{W}ʔélə́x^{y} also has a required ['female'] component (thus /'husband's sister,

9. William W. Elmendorf and Wayne Suttles: "Pattern and Change in Halkomelem Salish Dialects," in Anthropological Linguistics, vol.2, no.7, 1960, pp.1-32.

woman's brother's wife'/). The allosemes of slec'élέq seem to require the slec'élέq to be the same sex as ego, i.e. ['husband's brother's wife, wife's sister's husband, daughter-in-law's sister's mother-in-law (ego is female)']. It is unclear whether slec'élέq also has allosemes ['son-in-law's brother's mother-in-law (ego is female)'] or whether ['father-in-law (ego is male)'] can replace ['mother-in-law (ego is female)'] or whether ['child-in-law's sibling's'] can replace ['daughter-in-law's sister's'] in the gloss of the term. Also needing comment is the allosemy of sk'^{w}élwés including ['sibling's spouse's relative'], more generally ['relative's spouse's relative'] or ['in-law's relative'], and ['in-law from any side']. These are not all mutually exclusive terms and not all are clearly attested; some more elicitation seems required. The in-law terms can be divided into three groups: one including spouse's relatives (spouse's parent, spouse's grandparent, relative's spouse's relative, relative of deceased spouse), one including spouses themselves (child's spouse, parent's siblings spouse, spouse's sibling's spouse), and one including both spouse's relatives and spouses themselves (spouse's sibling ~ sibling's spouse, husband's sister ~ woman's brother's wife). This last observation is perhaps

morphosememic rather than allosemic.

6. There are eight kinterms with a 'deceased' component present; in four cases the 'past' suffix is present, but it is derivational rather than inflectional here (as discussed in 8.5). Five of the eight terms refer to a surviving relative of a deceased person and three refer to the actual deceased relative himself. Thus syé(·)təl 'widow, widower' is componentially 'spouse of a deceased person', wélém 'orphan' is componentially 'child of deceased parents', smestiyéɬ is 'sibling of deceased parent', swəlmé(·)yɬ is 'child of deceased sibling' (the root is wélém 'orphan' so the term may have implications of the death of the sibling's spouse as well, i.e. 'orphan child of deceased sibling'), and θ'é·yɛ is 'relative of deceased spouse'. c'ɬχè·m remains as 'deceased son, deceased daughter', but I suspect the gloss is in error and should be more complicated than I have shown; qɛyé·ɬ - sx^{w}əmθiyé·ɬ is 'deceased person (other than parent, such as uncle, aunt, grandmother) who is reponsible for ego'. The Stalo way of viewing the first five of these terms is that you are related to a person who dies or you are related to a person through another person who dies. These terms are looked at as a process, perhaps as a suppletive inflection such as

(swéqəθ, stá·ləs, cé·x^{W}) → syé(·)təl

mél(·)ə → wélém

sx^{W}əmlí·k^{W} → smɔstiyéɬ

stí·wél → swəlmé(·)yɬ

sk'^{W}élwés → θ'é·yɛ

7. sx^{y}á·yɛ and sx^{y}ayé·səq show parallel allosemy: the first has allosemes ['co-wife'] and ['female rival of wife']; the second has allosemes ['wife's ex-husband'], ['ex-wife's husband'] and ['male rival of husband']. Both words combine multiple spouses with rivals.

8. A number of verbs share in some of the allosemic patterns mentioned and belong in the domain of kinterms as functions of the kinterms: θ'ɛyé·m 'marry one's θ'é·yɛ, marry a relative of one's deceased spouse', təx^{W}melé·m 'to adopt', k'^{W}ém̓ət 'raise s-o', qəlá·qtəl 'be siblings to each other, be cousins to each other', x^{y}ix^{y}yá·təl 'two co-wives jealous of each other', qəqəmátəl 'having the same parents (as each other)' (< qəqəmá· 'suckling'), sk^{W}ək^{W}átəl 'separate in marriage', məlyí 'marry', and others.

Age and status terms show more morphosememic patterning than allosemic patterning. I have so far found about 14 age terms ('baby', 'adolescent boy', etc.) and 62 status terms (9 social, 11 nationality or race,

8 tribal, and 34 occupations or roles). Half of the age terms have sememes with only one sex gender possible; the others either are unmarked for gender or more likely have allosemes of each gender, determined by semantic environment as with kinterms (tə siyá·ləx^{w}ə 'the old man', θə siyá·ləx^{w}ə 'the old woman', etc.). siyá·ləx^{w}ə, swíyəqə, and sɬé·lí all have adjectival allosemes as well, respectively 'old person; old (with animate or inanimate nominals)', 'man; male (with human or other animates, even plants)', and 'woman; female (of human, animate, plant)'. Social status terms show no particular allosemic patterning, but siyé·m has an adjectival alloseme as well as its nominal ones, 'chief (a leading person in the community, generous, wise, sought for decisions and advice), upper-class person; boss (since coming of the whites); rich'. The terms of racial or national status all also have allosemes both nominal and adjectival, as with pélcməl 'Frenchman; French'. It is not certain yet whether tribal status terms also show nominal and adjectival allosemic patterning, but I believe they do. Occupational or role terms do not show any allosemic patterns that I can detect, though a few show interesting allosemes (x^{y}aɬəmíɬ 'baby-sitter; "baby-sitter" of new spirit dancer during the dancer's initiation and

first winter dancing season, any of the workers who help initiate a spirit dancer').

Many verbs are related to the terms of social status and role or occupation. A verb like yéyətəl 'make friends' seems to belong in the same domain as social status terms siyé·yə 'friend' and sx^{y}əmé·l 'enemy'. But many occupational or role terms belong in domains with the activities (as təwít 'expert hunter' and lex^{w}shé·wə 'a person that always hunts' appear to be grouped more productively with the domain of hunting than with that of occupations). Personal names (other than nicknames) may belong in the domains of categories of humans since they are usually marked for sex gender as seen in Chapter 5, q.v.); but this would include proper names of some fauna which are characters in stories and texts.

12.2.2. Flora. This domain shows patterning of allosemes as well as morphosememic patterning. The following plant terms each show allosemes of a native plant and of a plant brought in by the white man or non-Indian: q^{w}ə?á·pəɬp 'crabapple tree (native), apple tree', sk'^{w}ó·lmex^{w}əɬp 'wild trailing blackberry (rubus ursinus)(native), evergreen blackberry (rubus laciniatus)(native), Himalaya blackberry (rubus procerus)(all three refer to the whole plant with -əɬp)',

má·lsəm 'big marsh blueberry (native or commercial)', x^{y}éwéq 'wild carrot (native), domestic carrot', ƛ'ik'^{w}fyəɬp 'kinnickinnick plant (native), pea vine, bean vine', sqé·wθ 'arrowleaf or wapato (sagittaria latifolia)(native), domestic potato (solanum tuberosum)' (but the 'arrowleaf or wapato' is also called by an exclusive name, x^{w}oq'^{w}ó·ls), s?á·yθəq^{w}əɬp 'raspberry plant (rubus pedatus perhaps)(native), domestic raspberry', t'əmá·sc 'wild rhubarb (dock, rumex occidentalis)(native), domestic rhubarb', qé·lqəɬp 'wild rose bush (rosa nutkana)(native), domestic rose', and scí·yè·ɬp 'wild strawberry plant (fragaria glauca or fragaria virginiana)(native), domestic strawberry plant'. This pattern doesn't apply to all plants however because st'éx^{y}ət 'wild onion (esp. nodding onion, allium cernuum)' and ?ényəls 'domestic onion', c'á·k'^{w}ə 'skunk cabbage (lysichitum americanum)' and képəc 'domestic cabbage' exist as pairs.

Further allosemy exists in that several terms include several varieties of native plant as does sk'^{w}ó·lməx^{w}əɬp: t'é·mx^{w}əɬp 'gooseberry (ribes divaricatum, ribes lobbii)', sá·x^{w}əl 'grass (any kind)', x̌ómx̌əm 'horsetail reed (equisetum arvense, equisetum fluviatile)', sƛ'óləq'^{w} 'chocolate lily, rice root', méθəɬ 'dogbane, also a kind of grass used as hemp (as

dogbane is)', ʔəlflɛ̓·ɬp 'salmonberry plant (with yellow berries as well as one with red berries)', χ̓əχ̓q'əlɛ́·ɬp 'False Solomon's seal (smilacina racemosa), Twisted-stalk plant (streptopus amplexifolius), Hooker's fairy bells (disporum hookerii)' (the latter two varieties of χ̓əχ̓q'əlɛ́·ɬp are also known as sθ'ɬ·ms tə ʔɛ́ɬqəy 'snakeberries').

Another feature is that several plants are prepared as food or craft material or medicine, and the preparation (an alloseme) is called by the same term as the plant. Thus: sχ̓^{w}ɔ́sem 'soapberry, Indian ice cream', θ'ɛ́·χ̓əy 'white straw grass for basket designs (probably bluejoint reedgrass (calamagrostis canadensis))(used for both the growing grass and the scalded bleached product)', θ'əlʔɛ́·ltəl 'juniper, heart medicine', sq^{w}əlíp 'beard moss, black moss bread (baked underground till it forms a licorice tasting black bread)', θ'ɛ́χ̓θ'əχ̓ 'stinging nettle (the plant and the cooked shoots with stingers poured off; these shoots are sometimes called Indian spinach)', st'ɛ́x^{y}ət 'wild nodding onion (plant or bulbs)', and perhaps others.

12.2.3. Fauna. As with flora this domain has a great deal of morphosememic structure. There are no large-scale patterns of allosemy in the names of fauna except that almost all terms have both male and female

allosemes; in all but a few cases these can be preceded by sɬé·lí 'female' or swíyeqe 'male' to disambiguate; kinship and age category words can be used too where applicable (for example, stá·les 'wife', q'élemi 'adolescent virgin girls', etc.).

Some allosemy is shown by q'ayéƛ'iyɛ 'snail, slug (rarely)', sɵ'ók'^{w} 'worm, bug (rarely)', spapəleq^{w}íθ'ɛ 'screech owl, saw-whet owl, pygmy owl', smóq'^{w}e 'heron, crane', χemχímóls 'large hawk, chicken hawk', sq^{w}iq^{w}eyá·θel 'big older rabbit, jackrabbit', hé(·)wt 'rat, large vole', spé·θ 'bear (generic), black bear, (probably excludes the grizzly which has separate names)', sméyeθ 'animal; meat'. If there is any pattern in these it is in χemχímóls, sq^{w}iq^{w}eyá·θel, and hé(·)wt which link allosemes of 'large (generic)' fauna with those of (large) 'specific varieties'.

Within the area of fauna anatomy (including human anatomy) and functions and dysfunctions of the body there are several systematic features of allosemy. With somatic suffixes, there are at least three allosemes for each suffix: ['(body part)'](usually subject of the verb root they are attached to) in body function words and many place names, ['of the (body part)'] partitive in independent words for body parts, and locative ['on or in the (body part)'] elsewhere.

In addition to this overall pattern further allosemic patterns exist for sets of somatic suffixes.

In 'place names' or 'geographical features' the following suffixes take their figurative (and geographical) allosemes: -í·ws ['on the covering'], -əq^{W} ['head'] of a river, -qəl ['at head or source'] of a river, and also ['head'] of an island, and also in ['inlet of river'] < ['the inside'] + ['at the head (of the river)'], -əs ~ -á·s ['face'] of a mountain, -ɛ́(l)qsəl ['point or end'] of land/island/mountain, -á·θəl ~ -(ə)θəl ['mouth'] of a river, -əpsəm ['neck'] of land, -əqəl ['throat'] of a cliff or mountain, -(ə)ləc ~ -lɛ́c ['bottom'] of island, river, etc.

Some somatic suffixes have figurative allosemes with a number of other nominals (-á·s, -ɛ́(l)qsəl, -əlɛ́χəl, and -í·wəl have such allosemes, as do -á·yθəl and -əqəl). The latter two are systematic in this; -á·yθəl ~ -əyɛ́θəl ~ -əyθ(íl) has allosemes ['in speech'] and ['in music'] with language and music environments, and -əqəl has allosemes ['language'] in the environments of 'nationalities' or 'tribes' and ['voice'] in the environment of 'descriptive' words.

Some somatic suffixes have allosemes for more than one part of the body: -í·ws ['on the body, on the skin'], -əq^{W} ['on top of the head, on the hair'],

-á·ləs ['on/in the eye(s), on the eyelids'], -á·yə́əl ['on the lip, on the jaw'], -əpsəm ['on the back of the head and back of the neck'](either a continuous area or ['on the back of the head, on the back of the neck']), -cəs ['on/in the hand, on/in the finger(s)'], -é·q ['on the genitals, on the penis/male'](['on the penis'] may be subsumed under ['on the genitals']), -í·wəl ['in the rump, in the anus, on the inside(s)'], -x^{y}əl ['on/in the foot, on/in the leg']. Sometimes semantic compatibility determines which of these occur (χ́éym-ləq^{w}-t 'grab + on hair + on purpose + s-o' > 'grab s-o by the hair' since one is not likely to grab s-o by the top of the head), sometimes either one or both would fit (qət-i·ws-əm 'take a sweatbath'), and sometimes one is chosen over another for derivational purposes (to produce the word for a given thing). It should be noted that although these are lexical suffixes functioning derivationally so that one would expect morphosememic phenomena, the above rules are sememic to determine allosemes. When all the allosemes are selected and combined a new meaning sometimes results from morphosememic rules (qət-í·ws-əm ['warm up (by fire or steam)'] + ['on the body, on the skin'] + middle voice/'oneself' → 'take a sweatbath').

I can find little systematic in the allosemy of

independent terms for body parts (human or other fauna) and pə́sq^{W}təl (body insult) words, unless it is the few words for body parts which can apply to different types of fauna (human, fish, animal, bird, insect and reptile, sx̌'ə́ləqəm (supernatural creature)) and are translated by different words in different cases. For example, k'^{W}ə́l·ə́w 'skin, hide', q'^{W}x̌^{W}ə́ləcəs 'fingernail, claw', mə́lq^{W} 'human uvula, fish heart'. A few pairs of terms also behave systematically such as x^{W}əθ'ə́q'^{W}cəs 'wrist joint, sprained wrist' and x^{W}əθ'ə́q'^{W}x^{W}əl 'ankle joint, sprained ankle'. But otherwise all the patterning in these areas are morphosememic and will be covered in the next chapter where anatomy is treated in detail.

Functions and dysfunctions of the body show a little more systematic allosemy. Allosemes are listed with all the terms in Chapter 13. One of the most systematic is the use of many of these terms with animals, birds, and less often fish, insects and reptiles, as well as with humans. The terms are divided in Chapter 13 into the five categories of fauna mentioned but more for convenience (though some terms belong exclusively to one type of fauna). Many of the words are glossed the same way in some or all of the five categories of fauna; the creatures may perform the func-

tions in different ways (especially from humans), but we have no terms in English or Halkomelem to express this. With some of the words English does have separate words and these may be allosemes. Examples include: q^{W}è·l 'talk (of human), talk (of animal) (no better term applies in English), chirp/twitter/cheep/coo/caw/cluck/quack/etc. (of bird), croak (of frog)', q^{W}ó·lq^{W}el 'talking together (humans), warning (birds such as ravens and owls, a different cry than q^{W}è·l)', q^{W}elayθí·ləm 'make music (of humans), sing (of birds), croak melodically (of frogs)', t'í·ləm 'sing (of humans, birds), buzz (of insects, for ex. bee, mosquito, fly)', ɬéqəm 'whisper (of humans), hiss (of snake)', k^{W}elóx^{y}t 'shoot s-o or s-th (of human actors), sting s-o (of reptile or insect actors)'. Another systematic feature of allosemy in this domain is seen with terms of health or sickness: ʔé·yelex^{W} 'alive, in good health', mə ʔé·yəlex^{W} 'come alive, come back to life (literally and figuratively); get better, get well', q'áq'ey 'sick; dying', sq'áq'ey 'sickness; dead for awhile'. These terms join the allosemes of life and health together, and those of death and sickness together. q'á·y also joins 'die, dead; paralyzed'.

12.2.4. Land features, Weather features, Water

features. These domains show small bits of allosemic patterning mainly in pairs of words. For example, téməx^{w} has allosemes 'dirt, earth, land (in any quantity from a clump to a continent), world' and smé·lt similarly covers 'rock (any size larger than a pebble), mountain' (the pattern includes plural and diminutive inflections of smé·lt, i.e., smelmé·lt 'rocks, mountains' and smémələt 'little rock, pebble, little mountain'). There are no smooth grassy hills in the Upper Stalo area, all hills and mountains are basically 'rocks'. Perhaps in similar fashion swéyəl has allosemes 'sky, weather, day'. Other than such bits of patterning there is little allosemic patterning observable yet; most of the semological patterning in these domains occurs in morphosememics.

12.2.5. Religion and the Spirit. There is morphosememic patterning in this domain aw well as a little allosemic patterning. One allosemic pattern is for the following group of words to have secular and spiritual allosemes, that is secular words are used also for a number of spiritual things or actions where one might expect special terms: smestíyəx^{w} 'conscience, one's soul or spirit (which can be lost and recaptured)', spaləq^{w}fə'ɛ 'corpse, ghost', ɬé·wət 'chase s-th away from s-o, cure s-o by Indian doctoring', s?éliyɛ 'a

dream (ordinary type), a spirit vision in which one's spirit power or guardian spirit comes to him or communicates', q'ə́wə 'cane, staff (of s-o old or infirm for example), long staff or pole of a new spirit dancer (fashioned in special ways and decorated)', k'^{W}ə́x^{W}ə 'box (ordinary type), grave box (pre-white), coffin', x^{y}aɬəmɬ 'babysitter (ordinary), babysitter or worker in the initiation of a new spirit dancer', sqə́qələ 'baby (ordinary), new spirit dancer during his/her first dancing season'. Of course there are also many special terms which only have religious, spiritual, or ceremonial allosemes.

Another pattern is for the following words to have allosemes referring to different spiritual roles or functions: k'^{W}ək'^{W}ɬyəθət 'training oneself to be an Indian doctor (shaman), training oneself to be an Indian dancer (spirit dancer)', hɛywíləq^{W} 'a burning ceremony song, a sχ^{W}ə́yχ^{W}ɛy song', syuwí·l 'power to do witchcraft for good or evil, a person with such power (witch)(he or she can shoot power or objects into people or remove these), ritualist (one who does burning ceremonies at funerals, purifies the longhouse or smokehouse upon its opening, etc.); an evil spell'. Perhaps similar is the word ɬíχəsəm 'paint one's face red or black (for spirit dancing, Indian doctoring,

etc.)' since red paint implies a different power or strength of power or manner of obtaining power than does black paint. The word syuwí·l also shows a third pattern, words having both allosemes referring to a power or role or object and allosemes referring to a song, dance or spell done with same: syuwí·l (as glossed above), syúwél 'spirit power or guardian spirit; spirit song', and sχ^{W}éyχ^{W}ɛy 'sχ^{W}éyχ^{W}ɛy costume (with pegged-eye mask), sχ^{W}éyχ^{W}ɛy dancer, sχ^{W}éyχ^{W}ɛy dance or ceremony' (inherited, done on special occasions by groups of dancers as a chorus of women (or men) sings a special song).

12.2.6. Man-made Things and Their Functions. This collection of domains is very extensive, and most of the domains contain a number of morphosememic patterns as well as some allosemic patterns. I will just give a sampling here from some of the domains.

With household goods (and other domains as well) non-Indian things or functions of things are sometimes expressed by new derivations coined specially, by words borrowed from other languages (especially English, French, and Chinook Jargon), and sometimes by new allosemes of a familiar pre-white word. The former two methods will be discussed in morphosememics, the latter method is a case of allosemic patterns.

For example: sc'é·ləctəl had alloseme 'bench' and now also has 'chair'; sk'^{w}ʃytəl 'notched cedar pole ladder (to enter pit house, etc.), rope ladder' now also has 'wooden ladder, step ladder', q'^{w}ə́·l 'ear' now also has alloseme 'handle of a cup', sɛk^{w}elɛ́x^{y} has 'arrow' and 'gun', x^{y}ɛ́t has 'sinker (for net)' and 'lead weight, lead, bullet', x^{w}áq'^{w}ələcəm has 'big high-bow canoe (lit. 'drags its behind')' and 'horse-car, streetcar, trolley'.

Among a number of words (of various derivations) for non-Indian man-made things (and their functions) are a number of words with multiple allosemes reflecting changing technology (since they were borrowed). These include for example: sk'^{w}əcá·stəl 'mirror, window', (s)x̌'əpí·wəl 'shirt, undershirt', sqəmé·lɛ́ 'bra, nursing bottle (lit. 'container of breast or milk')', ə'q^{w}á·ləcə 'gloves, mittens', sx̱^{w}áq'^{w}elɬəɬ 'necklace, scarf, neckerchief', pəpá·təm q^{w}elá·yəətəl 'flute, wind instrument' (lit. 'blown musical instrument'), q'^{w}áq'^{w}i 'fishing pole, fishing rod', sx^{w}qéyqəx̱áəət 'sled, toboggan, ice skate', sx̱^{w}ʃə́i ~ sx̱^{w}éyəi 'likeness, portrait, statue, photo, (can include also 'mask' and 'totem pole (of other tribes))', x̱éltəl 'pencil, pen, anything one writes with', t'alɛ́stəl 'blinders on horse, blinds, window shades', yəq^{w}ʃ·l 'lamp, lan-

tern, electric light', sx^{w}θ'ex̣^{w}əwí·ls 'sink, dishpan', sx^{w}θ'éx̣^{w}əlwətəm 'washtub, washing machine', ʔitətéwtx^{w} 'hotel, bedroom', lɛméwtx^{w} 'bar or pub, liquor store' (< lém 'liquor' < English "rum").

Another pattern is seen in the domain of canoes and boats, where words for positions in a canoe and even numbers for counting canoe paddles all also have allosemes referring to paddlers (especially in racing canoes). Thus: q'ɬál 'bow of canoe or boat, bowman, strokesman (in race)', ʔélwəɬ 'middle of canoe (on inside), middle paddler(s)', ʔilé(·)q 'stern of canoe or boat, sternman, skipper (in race)', ləc'é·wəs 'one paddle, one paddler', ʔislé·wəs 'two paddles, two paddlers', etc.

A number of terms of no particular semantic domain all have allosemes '(pattern in basketry design)' or '(pattern in weaving design)'. Perhaps this is a sign that they form a separate domain or category in basketry to so mark them. Some that have been attested for basketry patterns are: t'ex^{y}əlé 'arrowhead, arrowhead pattern in basketry design', sk'^{w}íytəl 'ladder, ladder pattern in basketry design'; for weaving goat-wool/dog wool blankets (swóq'^{w}əɬ): q^{w}sí·cəl 'swallow (bird), swallow pattern in blanket weaving', smímayèθ 'butterfly, butterfly pattern', smɛlmé·lt

'mountains, rocks, mountains pattern', x̣ə́ləq't tə sxʷəxʷá·s 'lightning (lit. 'thunder(bird) opens his eyes'), lightning pattern in blanket weaving'.

<u>12.2.7. Feelings and Emotions, Attitudes and Mental Processes.</u> Allosemic alternation is fairly extensive in this domain. The allosemes seem to follow a systematic pattern of variation which I can only characterize as "slightly different in degree" or having "slight emotional differences". The following words show this variation: sx̣ɛ́x̣ɛs 'got one's mind made up, determined', q'ə́lmət 'believe s-o, trust s-o', x̣ɬə́m·ət í ɬcí·wsmət 'tired of s-th, bored with s-th', xʷayíwəlstəxʷ 'make s-o happy, cheer s-o up', wawistə́ləqmət 'jealous of s-o, envy s-o', səčəlɛ́c 'eager, enthused' (Tait), (s)ɬaɬək'ʷíwəl 'dumbfounded, speechless, overwhelmed, overpowered', ɬək'ʷí·wəl ~ ləwɛ́·ɬ 'surprised, shocked', t'ɛ́t'eyəq' 'angry, stirred up, roused', q'eʔí·lə́s 'wise, sensible', títeyəx̣ʷ 'getting carried away doing s-th, keep doing s-th in a hurry to finish', (Chill.) stəkʷtɛ́kʷ ~ (Tait) stəktɛ́k 'in a daze, day-dreaming', sqəlwíɬ(mət) 'hate (s-o), hold a grudge (against s-o)', sxʷúxʷə 'ambitious, willing', sx̣áyƛ'θət 'hot-headed, violent', (s)xʷ(ə)ʔɛ́ywəɬ 'good-hearted, generous, kind; easy-going, good-natured', qʷax̣ʷlámə́t 'get offended, get irritated' (qʷáx̣ʷləxʷ

'offend s-o'), łəq'əlámət 'know oneself, be confident', híq^{W}t 'coax s-o, persuade s-o, invite s-o (to go for a trip)' (not 'invite to gathering'), ʔéy tə sq^{W}élewəl 'glad; grateful, thankful', lép 'learn a lesson, give up'.

12.2.8. The Senses: Visual Qualities, Tactile Feelings, Sounds, Tastes, Smells. I do not have extensive data yet on visual qualities, tastes, or smells (about 20 terms, 8 terms, and 11 terms respectively), but they show similar allosemic variations and morphosememic patterns to those shown by tactile qualities and sounds. Most of the words in these domains are verbs whose allosemes are clearly selected by their nominal subject. This selection by nominal is much clearer here than in many domains. The allosemes of a given sememe here seem to differ usually in onset or duration of action, in quality, or in intensity.

With sounds these differences and their selection by the nominal are shown in the following: θ'é·cəm 'toll or peal (of bell), ringing (of ear), jingle (of money, bells, etc.), rattle (of dishes, metal, a ceremonial rattle or deer-hoof rattle, etc.)', k^{W}á(·)tx^{W}əm 'roar (of waterfall for ex.), rumble (of thunder, a quake, a slide), banging noise (of hammering or other banging, of waterfall)', x̌épk'^{W}əm and

ƛ'ɛ́mq'^{W}əls both glossed as 'make a crunching or cracking noise (of s-o chewing apple, of ice breaking, for example)', q'ɛ́tx̌əm 'rattling (of dishes, metal pots, wagon on ground, for ex.), scraping sound (like food being scraped off dishes)', q'^{W}ɛ́t'c'əm 'sound of water sloshing around inside (bottle, canoe, etc.), gurgling', c'ɛ́tx̌əm ~ θ'ɛ́tx̌əm 'clinking, tinkling (of glass, ice in glass, glasses together, dishes together, metal together)' (perhaps used of shells before the white man brought glass, dishes and metal), ƛ'ɛ́ləq'^{W} 'a pop, a shot' (ƛ'ɛ́lƛ'əlɛq'^{W} 'continuous shooting or popping shounds (of guns, firecrackers, etc.)' and wəƛ'ɛ́ləq'^{W} 'a shot, explosion'), lɛ̀tɛ́m 'a blast or boom (and the earth shakes after)', k'^{W}pɛ́x^{W} 'make sudden noise when s-th falls to the ground (and the sound echoes from the ground), to thump, make a bang (when s-o falls)'.

With tactile sensations the following are attested (allosemes differ mainly by quality here): smɛƛmɛ́ɬq^{W} 'lumpy (of ground, stick, etc.), rough (of wood, opposite of smooth)', pɛ́·pɛ 'woolly, fluffy', θɛ́tk^{W}əm 'tingle (like arm waking up), stinging', θ'ɬθ'əkʷəm 'prickly (from s-th one is allergic to like fir bark, wool, etc.), irritated (tactilely)' (cp. sθ'ɬk^{W}əm 'tiny slivers of fir bark'), tɛ́x^{W}əm 'beating (of heart), throbbing (of pain), throbbing pain',

θ'ƒθ'əqəl 'muddy, soft and rotting (of fish)' (cp. sθ'ƒqəl 'wet mud').

With smells: pápəq^{w}əm 'getting mouldy in taste or smell', pépəθ'əm ~ pépəc'əm 'animal smell (of bear, skunk, dog, etc.), human smell'.

With tastes: t'ét'əθ'əm (sometimes t'ét'əc'əm) 'sour (like berries or fruit), fermenting', c'éc'əsəm 'tasty, good-tasting but not sweet (of meat, nut, etc.)', cƒcəx^{y}əm 'bitter (of dried fish, anything), rancid (of butter, other things)' (unclear how this contrasts with séseχəm 'bitter (of rancid peanuts, of roots like cascara, medicines)').

12.2.9. Personal Pronouns. A number of allosemic patterns are found in this domain, and most have already been mentioned in Chapter 4. Pronouns of set 4.1 each have four allosemes, as exemplified by the first person singular member {?élθɛ} 'it's me, I do, I'm the one that ___, I'm the one to ___'. The semantic environments distinguishing each of these are not yet completely catalogued (see 4.1, 9.5, 11.1.4.4, and 11.2.9), but the first two allosemes can occur as independent sentences (in answer to interrogative sentences with təwét for example), while the latter two cannot. The fourth alloseme is found mainly with semantic 'future' (in preceding VP, following in VP,

or attached inflectionally to 4.1); the third is found more with 'present' and 'past'; both must have a following VP, while a following VP is optional after the first alloseme; the second alloseme cannot apparently have a following VP attached within its sentence.

Pronouns of set 4.3 have both subject and object allosemes (for tɛʔélθɛ 'I, me'), which can be distinguished by syntactic placement which has semantic significance and by co-occurrence in the VP with either 4.4, 4.5, 4.9, or 4.10 of the same person and number (4.4 and 4.9 members are marked semantically as 'subject pronoun' and 4.5 and 4.10 members as 'object pronoun').

Pronouns of set 4.7 have two allosemes as seen in 1 swɛ́ 'mine, my own', etc. The first alloseme cannot occur before a nominal, but the second can occur either before a nominal or not. (Syntactic categories are semantically marked.)

Each third person personal pronoun, except those in 4.3, have six allosemes including the following combinations of features: 'male sg.', 'female sg.', 'gender unspecified sg.', 'male pl.', 'female pl.', and 'gender unspecified pl.'. This is seen in pronoun sets 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, and 4.10 (4.2 and 4.11 have no third person members of their own); with

4.1 the six allosemes are divided up between ƛ'á (singular allosemes) and ƛ'á(·)ləm (plural allosemes). These are disambiguated only if there are co-referential words with number and gender features marked (θə stá·ləs 'the wife' for example, or 4.3 pronouns like θuƛ'á(·)ləm 'they (female)'). Actually it should be noted that the third person pronouns of sets 4.1 and 4.3 can also be considered (simultaneously) as members of pronominal demonstratives (see 9.6 and even 9.5).

12.2.10. Demonstratives. Demonstrative articles have been componentially analysed in 9.1. All the "m." articles (tə, k^{W}θə and k'^{W}ə) have allosemes with 'masculine sex gender' and 'gender unspecified' and 'inanimate'; all the "p." articles (tə and θə) have allosemes with 'present and visible' and 'proximity unspecified'; all the "r." articles (k'^{W}ə, k'^{W}θə, k^{W}sə, ƛ') have allosemes with 'remote', 'distant (and not visible)', 'abstract (or hypothetical)', 'indefinite', 'generic', and 'past (perhaps also deceased)'. So the "m.p." article tə has allosemes: 'the (present and visible and masculine sex gender), the (proximity unspecified and masculine sex gender), the (present and visible and gender unspecified), the (proximity and gender both unspecified), the (present and visible and inanimate), the (proximity unspecified

and inanimate)'. 'The' is omitted (leaving the other features) in the environment of proper names or possessive pronouns. The other semantic features are shared with or transferred to the nominal which the article modifies. The semantic environments of these allosemes are given and discussed in 9.1 for each article and will not be repeated here.

Nominal demonstratives in 9.3 show the same allosemy to a certain extent since they contain demonstrative articles. Thus tə là has allosemes 'this (person here (masculine or gender unspecified)), this (present and visible)(inanimate)', k'^{W}ə là has 'this (abstract thing, manner, or place)', and k^{W}əɛ́ has 'that person (masculine or gender unspecified, near, perhaps visible)'.

Two of the adverbial demonstratives in 9.4 also share the "p." vs. "r." distinction (lí tə əɛ́ versus lí k'^{W}ə əɛ́), but they do not share the allosemy.

The pronominal demonstratives in 9.6 also share the distinctions of m., f., h., pl., absent (as in r.), and deceased (as in 'past' in r.), but the absent and deceased forms are separate forms and therefore not allosemes. However the m. forms (tú·ƛ'ì, tuƛ'áləm, k^{W}əú·ƛ'à, k'^{W}ú·ƛ'à·ɬ, tú·ƛ'àlèm, and probably also tuƛ'éƛ'elà·m) all share the allosemy described above

with 'masculine sex gender' ~ 'gender unspecified' ~ 'inanimate'.

Demonstrative conjunctions with k'^{W}ə and k^{W}ə have numerous allosemes ('that, to (infinitive), for, when (simultaneous), while, as'), but these allosemes do not pattern with those of other demonstratives, though they are predictable from the semantic environment.

The demonstratives of 9.3 and 9.4 as well as Vdem and Vaux ('be here', 'be there', 'go(ing)(to)', 'come (to), coming (to)') all have semological features of 'here' vs. 'there' which may be the verbal equivalent of "p." and "n." vs. "r." seen in the demonstratives above. However this is an example of morphosememic structrue rather than allosemic structure.

12.2.11. Other Domains. There are allosemes and sometimes allosemic patterns in all the other domains of Halkomelem. For example, within adverbial words (directions and qualifiers) there is the allosemic patterning of tá·l ~ cúcu 'toward the river, away from shore (if on a river)' and cá·leq^{W} 'toward the backwoods, away from the river (if on land)'. The domain of descriptive qualities and value judgements (Vaj's) has many pairs of antonyms which show allosemic pat-

terning as well, but usually just within pairs of word, though larger patterns may turn up. The domain of prepositional verbs has three words with allosemic patterning: sʌ'epá·lwəɬ 'below, under, underneath; the underside', scəɬsá·lwəɬ 'above, over (in the air); the upper side', and sləʔá·lwəɬ 'across, on the other side; the other side'. Similar allosemes are conditioned by the same or similar environments here.

There are surely other allosemic patterns in the domains not discussed yet, and as more data is gathered (additions to glosses, refinement of glosses, more words for the lexicon) more patterns will become apparent. Time does not permit any more analysis here.

CHAPTER 13. MORPHOSEMEMICS

13.0. Introduction. As discussed in the last chapter, morphosememics covers the description of meaning changes as a result of derivational or inflectional processes and the description of all other systematic alternations of sememes resulting from combination with other morphemes, other words, or meaningful arrangements of order. This includes the description of processes like assimilation of sememes, merger of two sememes into one (common in derivation), loss of redundant sememes within phrases or sentences, and concord (agreement in gender or number). Morphosememics also covers sememic co-occurrence restrictions, sememic structure of phrase and sentence, and distribution of sememes or classes of sememes within domains.

This chapter begins with a morphosememic analysis of the domain of fauna (including man), including names of fauna, parts (anatomy), and functions and dysfunctions of the body. This is rather lengthy because it is a fairly large domain and all the data is presented to show what is involved. Excluding fauna names, the domain might be called the domain of anatomy. After this comes brief sketches of most of the other domains (without listing all the data).

Then comes a discussion of the morphosememics of NP's (with and without expansions), VP's (with and without expansions), the sentence (with and without expansions), and the speech event.

13.1. Fauna (including Anatomy). Terms for fauna form the first part of this domain; they include human, animals, birds, fish, insects and reptiles, and supernatural creatures. Anatomical terms are numerous and form a distinct part of this domain. There are at least 120 independent words for parts of the body and nearly one quarter of these have lexical suffix equivalents. The independent words are morphologically and semologically analyzable to a surprising degree. The lexical somatic suffixes have already been listed in 5.2.1 and semantically analyzed in 12.2.3. Also part of the domain (besides terms for fauna, independent somatic words, and somatic suffixes) is a set of insult and joking words called pésq^{w}tel, which describe parts of the anatomy. Another part of the same domain is the set of terms for the anatomy of non-human creatures: fish, birds, animals, reptiles and insects; a game was even played with terms for fish anatomy -- to see who could name all the parts of the fish (there are at least 35). A final part of this domain is the set of functions and dysfunctions of

the body (including body functions, body products, illnesses, curing, and death).

13.1.1. Names of Fauna.

Human:

məstíyəx^{w} 'human, person'
(see also the domain Categories of Humans)

Animals:

sméyəθ 'animal; meat'
(Chill.) p'íp'əθ'eléχəl ~ (Cheh., Tait) sk'^{w}elyéχəl 'bat' (p'íp'əθ' 'squeezing' or 'squeezed', -eléχəl 'on the arm')
sk'^{w}fk'^{w}elyèχəl 'young bat' (Cheh., Tait)
spé·θ 'bear, black bear'
sχé·ylmət 'black bear with white spot on chest (male) (part grizzly)' (χé(·)yl- 'mark, write')
sχéylmà(·)t 'female black bear with white spot on chest'
ck^{w}í·m spé·θ ~ ck^{w}ímeqəl spé·θ 'brown bear' (ck^{w}í·m 'red, reddish-brown', -eqəl 'on throat')
χεyk'élθ ~ k'^{w}í·cəl 'grizzly bear' (χéyk' 'cold', possibly k'^{w}íy 'climb' or k'^{w}éy 'hungry')
syeq^{w}flmət 'name for male grizzly' (< yéq^{w} 'burn' because of burnt color of fur)
syeq^{w}flmətelàt 'name for female grizzly'
sqelé·w 'beaver'
sqec'ámes ~ sqc'àmès 'bobcat, wildcat'
sqelác'emes 'lynx' (regarded as a larger bobcat)
pú·s 'cat' (< English)
χep'í·cəl 'chipmunk' (χεyp'- 'scratch, stripe', -í·cəl 'on the back')("when they come out in winter and shake their mats that's when the last snow has wide flakes")

sχɛχəp'ɬ•cəl ~ χəχp'ɬ•cəl 'chipmunk with more than two stripes'
sx^{w}ówe 'cougar'
músmes 'cow, bull' (< Chinook Jargon)
músmesà•lɬ 'calf'
sləkʼiyép ~ skʼəkʼiyép 'coyote'
ƛʼɛlqtólə 'deer' (ƛʼéqt 'long', -lə- 'plural', -x^{y}əl 'leg' here >-élə)
swíyəqə ƛʼɛlqtélə 'buck, male deer', sɬélí ƛʼɛlqtélə 'doe, female deer', méwəč 'venison' (< Chinook Jargon)
tʼíɬtʼələ 'fawn'
qəwéstəlàt '(another kind of deer, perhaps female)' (possibly < qəwés 'warmed face or side')(-təlàt 'female name')
sq^{w}(ə)mé•y 'dog'
sq^{w}íq^{w}əmɛy 'puppy'
qʼayí•c or qʼayíyəc (sometimes cʼ) 'elk'
sx^{w}ómɛcəl 'fisher, possibly wolverine' (possibly -ɛcəl 'on the back')
sχəwél ~ sχowél 'fox'
pʼqʼélqəl 'mountain goat' (pʼéqʼ 'white', -ɛlqəl 'wool')
sq^{w}íq^{w} ~ sq^{w}í•q^{w} 'groundhog, woodchuck, hoary marmot, whistler'
stiqíw 'horse'
stiqiwá•lɬ 'colt'
χáqəl 'marten'
cɛcí•qʼəl (also in stories: sqéyəχ) 'mink'
spəlówól 'mole' (píl-t 'bury s-thʼ)
sx^{w}iyéx^{y}k^{y}əl 'moose; rack of horns' (prob. < Interior language)
kʼ^{w}ét'əl 'mouse'
sécətɛc (or sétsətɛc) 'jumping mouse'
sqʼóɬqʼəɬ 'muskrat'

sq'é·ƛ' 'otter'
k^{W}əšú 'pig' (< Chinook Jargon < French cochon)
sk'í·l 'pika, rock rabbit' (prob. < Interior Salish)
swətí·yé ~ swət'í·yé 'porcupine' (t' possibly error)
sqəwéθ 'rabbit'
sqíqəwèθ 'small rabbit'
sq^{W}iq^{W}əyé·θəl 'jackrabbit, big older rabbit'
méł(·)és 'raccoon'
hé(·)wt 'rat, large vole'
qélqəl héwt 'packrat' (qélqəl 'thief')
ləmətú· (some speakers have mətú·) 'sheep' (< French le mouton)
sθ'épəq (a few say sc'épəq) 'skunk, striped skunk'
sq'^{W}éθ'əɬ 'squirrel'
sqép'à·θèl ~ qép'aθəl 'flying squirrel' (qép' 'cover an opening', -á·θəl 'on the mouth')
ɬ(ə)c'é·m 'weasel' (perhaps < ləc'- 'cut')
stəqáyə ~ stqáyə (final ə may be ɛ) 'wolf'

Birds:

má·q^{W} ~ (Cheh.) χ^{W}é·yləq^{W} 'big bird, (waterfowl in a few idiolects, especially Cheh.)'
mí·məq^{W} ~ (Cheh.) χ^{W}íχ^{W}ələq^{W} or χ^{W}éyχ^{W}ələq^{W} 'small bird'
q'ələ́q'ɛ 'blackbird (probably Brewer's blackbird)'
k^{W}é·y ~ χɛχəsyúwəs 'bluejay, Steller's jay' (χéχə 'sacred', syúwə 'fortune-teller')
méx^{y}c'əl ~ (Cheh.) sk^{y}íkyək^{y} 'chickadee' ("when lots come you'll have visitors; if you listen to them they'll tell you how many children you'll have")
čékəl 'chicken' (< English)
čələ́čkəlsá·lɬ 'baby chicks'
slí·m 'sandhill crane (taller than heron, some were on

Sumas Lake, make odd sound when flying)'
spá·l 'crow, big crow (Western crow)'
spəlál 'smaller variety of crow (Northwestern crow)'
sməlx^{w}əθ' ~ sməlx^{w}əc' 'dipper (little gray bird seen along creeks)'
tələ́qsəl 'duck (cover term), mallard' (tá·l 'go out in the river', -óqsəl 'nose')
təlíləqsəl 'baby ducks'
ləmə́lwəɬ 'canvas-back duck'
lə́qləqəm 'diving duck of some kind' (ləqəm 'dive')
sése 'pintail duck'
x^{w}ə́·q'^{w} 'sawbill duck, merganser'
q^{w}iwíɬ 'wood duck (has nest in stump)'
yəx^{w}ələ 'eagle (any kind)'
sp'á·q'əs 'mature bald eagle' (p'əq' 'white', -əs 'face')
sk'^{w}ə́·lx 'young bald eagle (before head turns white)'
c'ə́sqəl 'golden eagle'
ʔə́xə 'goose, Canada goose'
ƛ'x^{w}oməlqəl (ə́ ~ ó) 'big Canada honker goose' (ƛ'ə́x^{w} 'stiff, hard', -élqəl ~ -ólqəl 'feather, wool')
ƛ'ə́k'^{w}xəl 'small goose, brant'
mí·t' 'blue grouse'
sk^{w}ə́θ'k^{w}əθ' ~ sq^{w}ə́θ'q^{w}əθ' ~ (Cheh.) sk^{w}ə́θ' 'willow grouse' (possibly cp. k'^{w}ə́θ'əm 'tippy (of canoe)' referring to its flight, or q'^{w}ə́θ'əm 'defecating (of a bird or chicken)')
xəmxə́ymə́ls ~ xəmxímə́ls 'large hawk, chicken hawk (i.e. red-tailed hawk)' (xə́ym-ət 'grab s-o or s-th')
xixəmxə́ymə́ls ~ xixəmxímə́ls 'small hawk'
sxatíx^{y} 'helldiver, pied-billed grebe'
smóq'^{w}e 'heron (great blue heron, yellow-crowned night heron), crane'
pə́sk'ɛ 'hummingbird' (probably < Thompson language)
θ'əc'ə́l·ə ~ c'ə́l·ə 'kingfisher'

swáḵʷəl 'loon'
q'əwq'əwəlá·t 'female (name for) loon' (possibly q'áw 'howl' + R 'plural action' + -elá·t 'female name')
q'əwq'əwəlécɛ 'male (name for) loon' (-əlécɛ 'male name')
ʔélel 'magpie'
pí·q' 'nighthawk, rain crow' (name imitates call, bird is disliked "because it always asks for rain")
θ'éx̣ʷθ'əx̣ʷ 'osprey, fishhawk' (probably < θ'éx̣ʷ 'wash')
cítməxʷ ~ cí·tməxʷ 'horned owl, big horned owl'
spaləleqʷíθ'ɛ (ɛ ~ ə) 'screech owl, pygmy owl, saw-whet owl' (spaləqʷíθ'ɛ 'ghost')
sqʷóqʷəqʷ 'white owl'
ƛ'ɛlqtélec ~ ƛ'əqtélec 'pheasant' (ƛ'éqt 'long', -le- 'plural', -élec 'rump, bottom, tail')
həmá· 'pigeon, wild dove'
kʷéyl 'quail' (< English)
sqéwəqs ~ (Tait) skéwəqs ~ (in story) skʷáwéls 'raven'
skʼʷak'ʷqéq ~ skʼʷokʼʷqéq 'robin (varied thrush)'
sx̣ʷéyk' ~ sx̣ʷík' 'bush robin, winter robin, (probably the "snowbird")'
(Chill.) qʼʷəlítəq ~ (Chill., Tait) ʔé·we ~ (Cheh.) slílowɛ 'seagull'
wíθiyɛ ~ (Tait,Cheh.) wéθwəθ 'snipe (Wilson's or common)'
sx̣ʷéθx̣ʷəθ 'sparrow' (Katzie dialect, Lower Stalo)
qʼʷsí·cel 'swallow'
sxʷó·qəl 'whistling swan'
sƛáƛa 'brown thrush'
sƛaƛex̣ʷélqsəl má·qʷ 'wild turkey' (sƛaƛex̣ʷélqsəl 'snot hanging from its nose')
séwəl 'whiskeyjack, grey jay, Canada jay' (séwəl 'lunch, provisions')
təméƛépsəm and tʼatʼəpʼíqsəlem 'large red-headed woodpecker' (téməƛ 'red ochre', -épsəm 'on back of head

and neck', t'ɛ́t'ɛp'ɛls 'pecking', -ɛ́qsɛl 'on the nose', -ɛm 'middle voice, its own')

θ'í·q 'medium-sized woodpecker with red under wing (probably red-shafted flicker)'

c'í·q (probably same word as the last one) 'small red-headed woodpecker'

t'ɛ́miyɛ 'wren'

t'ɛ́t'ɛmiyɛ 'baby wren'

(Tait) sχ^{W}ɔ́χ^{W}θɛ (Cheh. may replace θ with ɬ) 'type of larger brown wren'

Fish:

smá(·)tχ^{W} 'small bullhead, stickleback' (said to be a tattletale on fishermen)

mɛcá·s and ʔɛ́·yt 'ling cod'

spá·lcɛp 'grayling, gray ling (cod)'

k^{W}átɛwi 'eel'

swí·wɛ 'eulachon, oolachen'

sθáq^{W}i (EB and others sθ'áq^{W}i) 'fish (any kind), salmon (any kind)'

c'ák^{W} 'minnow', qɛ́qɛmlà 'lots of minnows'

k^{W}ɔ́χ^{W}ɛθ ~ k^{W}ɔ́χ^{W}ɛθ 'coho salmon (silver salmon)' (origin of the English term "coho")

sθ'ímiyɛ 'small adult coho' (sθ'í·m 'berry, fruit')

k'^{W}á·lɛx^{W} 'dog salmon, chum salmon'

hɔ́liyɛ ~ (Cheh., Tait) húliyɛ 'humpback salmon'

húhɛliyɛ 'small-sized humpback salmon'

sθɛ́qi 'sockeye salmon' (origin of the English "sockeye")

θíθɛqɛy ~ cɛ́sqɛy ~ sk^{W}ík^{W}ɛx^{y}ɛl 'small sockeye salmon'

q^{W}ɛcíwiyɛ 'Fall sockeye salmon that comes up Chehalis River'

ƛ'ɛ́lχx^{y}ɛl 'spring salmon (all kinds), tyee salmon' (ƛ'ɛlχ- 'spotted', -x^{y}ɛl 'on foot' > 'on tail')

λ'elx^{y}élowəɬ 'jack spring salmon with black nose'

pá·q'^{w} (sometimes pá·k'^{w}) 'big Harrison River or Chehalis River spring salmon'

spəq'é·s ~ sp'əq'é·s (~ spəqé·s rarely) 'white Fraser River spring salmon' (p'éq' 'white')

spá·χəm ~ spéχəm 'March spring salmon, early spring salmon'

sq^{w}éχəm 'silver Harrison and Chehalis River spring salmon'

sθ'aláɬ 'May spring salmon that goes to Chehalis Lake and back to sea'

sx^{w}oq'^{w}ó·ɬ or sx^{w}oq'^{w}ówəɬ 'Silver Creek spring salmon that runs in August'

qéywχ 'steelhead trout'

sk^{w}á(·)wec 'sturgeon'

q'é·χəl 'big suckerfish, elephant sucker'

sk^{w}íməθ 'little roundmouth sucker (many have red stripes)' (c-k^{w}f·m 'red')

q'^{w}é·c 'little suckerfish with big salmon-like mouth'

k'^{w}sí·c 'cutthroat trout (have red gashes by gills), rainbow trout'

(s)θəχá·c 'dolly varden trout'

spípəhè·θ' 'speckled trout' (sp'é·θ' 'berry of red-flowering currant')

slák^{w}ec 'white trout'

q^{w}él·és 'whale'

q'əlɬáləmècəl 'killer whale' (-əcəl 'on back', -ɬéləm 'expelling air' < 'in one's throat')

Fish?:

s?á(·)χ^{w}ə 'clam' (some freshwater clams were had)

?é·yχ 'crab'

?é·sx^{w} 'hair seal' (came up even to Harrison Lake, were hunted with special spears, etc.)

Insects and Reptiles:

x^{y}é·ysəm 'ant'
ɬəɬq'ətíwel 'bedbug' (ɬ(ə)q'ét 'wide', -íwəl 'in the rump')
sx^{w}əlítəmeɬ mɔ́x^{y}c'əl 'bedbug' (s-x^{w}əlítəm-əɬ 'of the white man, in the white man's ways', mɔ́x^{y}c'əl 'louse')
sisəmáyɛ ~ sisəmáye 'bee'
mɔ́k^{w}məkw 'bumblebee' (mɔ́k^{w} 'stout, thick around')
χəχp'ícəl sisəmáye 'yellow-jacket' (χəχp'ícəl 'striped on back, scratched on back')
sə'ɔ́k'^{w} 'worm, bug'
smímayèθ 'butterfly'
smimeχéθ 'caterpillar'
ɬec'íməls tə pítx^{y}əl 'centipede' (lit. 'comb of the salamander', ɬec'íməl 'comb')
tá·ləfiwɛ 'cricket' (tá·l 'go down to the river')
ƛ'éləqtx^{y}əl q^{w}é·l, also spəlwéɬ q^{w}é·l 'crane fly (family Tipulidae), "leatherjacket"' (ƛ'éləqtx^{y}əl 'long-legged', q^{w}é·l 'mosquito', spəlwéɬ 'last year')
ƛ'éləqtx^{y}əl q'ésq'es(ə)cəl 'daddy long legs, harvestman (spider)(order Phalangida)' (lit. 'long-legged spider')
ɬíɬlá·yɛ 'dragonfly'
t'ét'əɬəm 'flea'
χ^{w}əχ^{w}éye 'big fly, blowfly'
səméləc' ~ sméməlɛc 'deer fly'
χ^{w}iχ^{w}iyéye ~ χ^{w}əχ^{w}iyéye 'housefly'
pχ^{w}íqs or pχ^{w}íyəqs ~ (Cheh.) k'^{w}χ^{w}ɾ(yə)qs 'no-see-um fly, sandfly'
pípəhà·m 'frog'
pəhá·mó·ɬ 'bullfrog, big pretty frog'
wəlɔ́k' 'little green tree frog'

wəχ́s '(a kind of frog), (probably sound of a frog)'
pəpəχ^{w}í·qsəl (or pəpəχ^{w}íyəqsəl) 'gnat'
ƛ'əmƛ'ə́mx^{y}əl 'grasshopper' (< c'ƛ'ə́m 'jump', -x^{y}əl 'leg')
q'ə́lq'əlp'í·w 'inchvorm' (q'əl-p' 'tangle on itself', R 'plural action', -í·ws 'on the body')
sɬə́ɬi 'ladybug' (< sɬə́lí 'woman, lady')
cəyí·yəχ 'big gray lizard, alligator lizard'
pítx^{y}əl 'salamander (small, red or brown)'
mə́x^{y}c'əl 'louse' (homophonous with 'chickadee')
ʔə́pəl ~ ʔə́·pəl 'maggot'
q^{w}ə́·l 'mosquito'
ɬaliq^{w}ə́t (Cheh. ɬaləq^{w}ə́t) 'moth'
χə́st'əl 'nits'
k'ə́k'əɬɛ 'pill bug (black and gray, striped, found in drying fish and in meat)'
c'ə́χtəl 'rattlesnake' (c'ə́χ- 'sting', -təl 'device')
ʔɛləqə́·y 'slow-worm ("a slow-moving foot-long snake") (actually a blind, legless lizard, Anguis fragilis)' ("someone related or close to you will die soon after you see it unless you throw it over your shoulder and tell it to go to someone else and you name them")
q'əyə́ƛ'iyə 'snail, slug (rarely)'
ʔə́ɬqəy or ʔə́ɬqɛy 'snake'
q'ə́sq'əs(ə)cəl 'spider' (cp. sx^{w}q'ə́yq'əsəcəl 'netting shuttle (device for making nets)', q'ə́ys-ət 'tie s-th', swə́ltəl-s tə q'ə́sq'əscəl 'spiderweb' < swə́ltəl 'net')
pipəhamá·lɬ 'tadpole, baby frog'
t'pí 'woodtick'
mə́θ'əɬqlwə̀l 'woodtick' (mə́θ'əɬ 'pus', -q 'container', -íwəl '(on) insides')
x^{w}əx^{w}íyɛ 'worm in salmonberry' (x^{w}əx^{w}- 'sudden')

13.1.2. Morphosememic Structure of Fauna Names.

The above list has 58 terms for animals, 73 for birds, 42 for fish, and 45 for insects and reptiles; this list is probably not complete but covers a good proportion of the names and all I have found to date. There are fewer words for fish and sea-life among Upper Stalo dialects than among Lower Stalo dialects because the Upper Stalo had little access to the sea (being about 60 miles away at the closest point).

One feature mentioned in the last chapter was the use of sɨ́élɨ́ 'female' and swíyəqə 'male' as Vaj's to distinguish the sex of most fauna. The suffix -á·lɨ 'young' and several types of reduplication 'diminutive' can be used to indicate young fauna. A few terms have their own forms for male, female, or young, but these are the exceptions. Kinship terms and age categories can also be used with most fauna as with humans. stá·ləs 'wife', swéqəθ 'husband', q'é·mi 'adolescent virgin girl', q'é·ləmi 'adolescent virgin girls', mól·ə 'son, daughter', sqé·q 'younger sibling, child of parent's younger sibling', and even sex^{w}sí·lə 'grandparent-in-law' are all attested with animals such as bears and wolves.

Derivational analyses have been given for over a third of the words for fauna. About ten more words

are borrowed from Chinook Jargon, English, French, Thompson, or another Interior Salish language. The derivations discovered to date show the following morphosememic patterns:

1. Similar patterns are shown in all types of fauna.

2. Thirty-six of the terms are derived with somatic suffixes. The following occur in fauna names: -əlέx̧əl ~ -əlyέx̧əl 'on the arm', -əqəl 'on the throat', -í·cəl ~ -ecəl 'on the back', -ə́le (irregular) ~ -x^{y}əl 'on the foot or leg', -əs (possibly ~ -έs) 'on the face', -ə́lqəl 'wool, feather', -á·θəl (probably ~ -əθ) 'on the mouth', -əqs(əl) ~ -ə́lqsəl ~ -íqs(əl) 'on the nose', -qəl 'in the head', -ə́lec 'on the bottom, rump, or tail', -əpsəm 'on the back of the head and back of the neck', -í·wəl 'on the insides, in the rump', -í·ws (with the s dropped) 'on the body'. Other known affixes used include several for 'proper names', for 'diminutive' and for 'plural': -mət and -əlέcε 'male name', -màt and -mətəlàt and -təlàt and -əlá·t 'female name', -(ə́l)wəɬ ~ -ó·wəɬ ~ -oweɬ 'canoe, vessel', -iyε ~ -áyε 'diminutive', R 'diminutive', R 'plural', derivational K (consonant ablaut without discernable meaning), all these in multiple examples, and -əl '-like, -ish' and -təl 'device, thing for' in one example each. All these sememes merge to form new sememes, the names

of the fauna.

3. Ten terms are compounds of two words (phrasal morphosememics): both terms for 'brown bear', both terms for 'crane fly', and terms for 'packrat', 'bluejay', 'wild turkey', 'daddy-long-legs', 'bedbug', and 'centipede'. All feature a Vaj (or N acting as Vaj) preceding and modifying an N; the sememes change and combine into a single sememe (except perhaps for the terms for 'brown bear').

4. All the currently analyzable terms for fauna are named for a.) roles or habits of the fauna, b.) descriptions of appearance of the fauna, or c.) origin of the fauna; four remaining terms are either borrowed by loan translation or fit into category a. uncertainly.

Thus terms named for roles or habits of fauna are the following: 'grizzly' (k'^{w}f·cel may be k'^{w}íycel < 'hungry' or 'climbs' + unknown affix; χεyλ'élə may < 'cold' + unknown suffix (cold-blooded?, cold-hearted?)), 'mole' ('buries'), 'packrat' ('thief rat'), 'flying squirrel' ('covers the mouth', so called because of the tradition that it will fly down, land on one's mouth and cover it as one walks in the woods at night), 'bluejay' ('sacred fortune-teller'), 'duck, mallard' ('nose goes down to the river'), 'sawbill' (perhaps 'pole a canoe' if that describes its appearance as it

swims and catches fish), 'large hawk, chicken-hawk' ('grabbing many times'), 'osprey, fishhawk' (probably 'washing repeatedly'), 'large red-headed woodpecker' ('pecking with its own nose'), 'whiskeyjack' ('lunch, provisions' because it steals one's lunch or provisions), 'diving duck' ('diving into water many times'), 'killer whale' ('expelling air on the back'), 'frog' ('little blower', referring to blowing up of cheeks), 'bullfrog' ('blower (on a canoe?)', perhaps its canoe is a lily pad), 'no-see-um fly, sandfly' (possibly '(Indian doctor) blows on patient on the nose' since the no-see-um fly bites without being seen), 'grasshopper' ('jumps many times on legs'), 'rattlesnake' ('thing that stings'), 'spider' (perhaps 'net-maker' or 'tying many times'), and 'inchworm' ('repeatedly tangling on its own body').

Terms named for descriptions of appearance of fauna are: 'bat' ('squeezing (on the) arm' or 'squeezed arm'), 'black bear with white spot on chest' (male and female come from 'marked' + 'male name' and 'marked' + 'female name' respectively), 'brown bear' ('red, reddish-brown' + 'bear', second term is 'reddish-brown on the throat bear'), 'grizzly' ('gone burnt' + 'male name' and 'gone burnt' + 'female name', referring to the burnt color of fur), 'chipmunk' ('stripe on back'),

'chipmunk with more than two stripes' ('striped on back'), 'deer' ('long legs'), 'mountain goat' ('white wool'), 'moose' ('rack of horns'), 'canvasback duck' (possibly 'fold in middle of canoe', comparing the duck to a canoe), 'mature bald eagle' ('white face'), 'golden eagle' ('growing in the head' (no longer 'bald')), 'big Canada honker goose' (probably 'stiff feather'), 'screech owl, pygmy owl, saw-whet owl' ('little ghost' since it is tiny, hard to see except eyes, and gives a ghost-like call; this owl also is the bringer of news of impending death of someone close to the hearer), 'pheasant' ('long tail(s)'), 'wild turkey' ('snot-hanging-from-its-nose bird'), 'large red-headed woodpecker' ('red ochre on back of head and back of neck'), 'spring salmon' ('spot or spotted on foot (i.e. tail)'), 'jack spring salmon with black nose' ('spring salmon in canoe'), 'white Fraser River spring salmon' ('white' + 'face?'), 'little roundmouth suckerfish' ('red' + ?, because many have red stripes), 'bumblebee' ('stout, thick around' + 'plural?'), 'woodtick' ('pus container on inside(s)'), 'daddy-long-legs' ('long-legged spider'), 'crane fly, "leatherjacket"' ('long-legged mosquito'), 'bedbug' ('being wide in the rump', due to its flattened-out appearance'), 'slow-worm' ('a kind of snake', derivational consonantal ablaut removes it from being

glossed exactly as 'snake'), 'centipede' ('salamander's comb', from its appearance rather than its role).

Terms named for origins of fauna are: 'small adult coho' ('little berry', so called because of the tradition that this land-locked salmon originates as a berry dropped into the lake or water), 'speckled trout' ('little berry of red-flowering currant', so called because of tradition that it originates from the red-flowering currant dropping into the water), 'crane fly' ('last year's mosquito', because it resembles a giant mosquito), 'bedbug' ('white man's louse', presumably introduced by the white man), and 'yellowjacket' ('striped on back bee', may belong with terms named for appearance).

The term for 'ladybug' is apparently a partial loan-translation ('lady') with consonantal ablaut to shift meaning (sɬé·lí > sɬé·ɬí). The words for 'cricket' ('go down to the river' + ?, so called because "it calls you to go down to the river") and 'worm in salmonberry' ('little sudden thing' (?), possibly because it is noticed with sudden reaction when the berry is about to be eaten) may also be seen as expressing roles, as may the term for 'bee' (possibly 'little thing one is scared of behind one' < sísəm 'scared of s-th behind one').

5. The terms for fauna in Halkomelem divide up the world of fauna in different ways than does English. These differences will be briefly considered here. The terms are divided first into 'animal' (sméyəθ), 'large bird' (má·q^{w} ~ (Cheh.) χ^{w}é·yleq^{w}), 'small bird' (mí·məq^{w} ~ (Cheh.) χ^{w}íχ^{w}ələq^{w}), 'fish' (sθáq^{w}i, some say sθ'áq^{w}i), and 'worm, bug' (sθ'ék'^{w}). There are remainders whose place in this classification is uncertain at present; ʔé·sx^{w} 'hair seal' apparently belongs with fish but ʔé·yχ 'crab' and sʔá(·)χ^{w}ə 'clam' may not. With insects and reptiles there appear to be many types that have few members or go their own way. Thus sθ'ék'^{w} includes five or six 'worms' (q'élq'əlp'í·w 'inchworm', ʔé·pəl 'maggot', łəc'íméls tə pítx^{y}əl 'centipede', x^{w}ex^{w}íyɛ 'worm in salmonberry', sθ'ék'^{w} 'earthworm, any other worm', and perhaps smimeχéθ 'caterpillar'. But it is unclear at present which 'bugs' sθ'ék'^{w} includes and whether all insects are 'bugs' in its definition or just non-flying ones are 'bugs'. ʔéłqəy 'snake' apparently includes ʔələqé·y 'slow-worm' (though zoologists claim it is a lizard), c'éχtəl 'rattlesnake', and all other kinds of snakes. píphà·m 'frog' apparently includes pəhá·mówəł 'bullfrog, big pretty frog', wəlék' 'little green tree frog', pipehamá·lł 'tadpole, baby frog', and all other kinds

of frogs. sisəmáye 'bee' seems also to include χəχp'ícəl sisəmáye 'yellowjacket' and mék^{w}mək^{w} 'bumblebee', while q^{w}é·l 'mosquito' may include both words for the 'crane fly' (ƛ'éləqtx^{y}əl q^{w}é·l and spəlwéɬ q^{w}é·l), and q'ésq'əsəcəl 'spider' includes 'daddy-long-legs' (ƛ'éləqtx^{y}əl q'ʼəsq'əsəcəl). In addition to these classifications, both cəyí·yəχ 'big gray lizard, alligator lizard' and pítx^{y}əl 'salamander' are considered lizards although there is no cover term; also the area of flies is well-elaborated, with terms for 'big fly, blowfly', 'housefly', 'deer fly', 'no-see-um fly, sandfly', and possibly 'gnat', though these lack a cover term as well.

With fish, terms for salmon are especially well developed, including 16 different types (and 18 names) at least. So far I have found two types of coho salmon, one of dog salmon, two of humpback salmon, three of sockeye salmon, and seven types of spring salmon with an eighth term as a cover term for spring salmon; there are likely more terms not yet elicited. Each salmon species (coho, dog (probably), humpback, sockeye, and spring) are divided into large and small (fry, small in size, or kokanee (landlocked)); the spring and sockeye (and perhaps others) have further terms specifying the time of year they run and the river

they spawn in or run up; color is sometimes mentioned in these glosses but is not consistently or diagnostically present. 'Steelhead trout' are sometimes classified as salmon by the Stalo. Salmon for such a substantial part of this sub-domain and the food cycle that the word sƟáq^{W}i is often translated 'salmon' by the Stalo people, though it includes all other types of fish as well (even 'eel' and 'hair seal', 'whale' and 'killer whale'). Other classification and specialization within the sub-domain of fish includes five types of trout (with no cover term) and three types of suckerfish (with no cover term); these are differentiated by description and for the suckerfish also by size and type of mouth. The trout found so far include steelhead, cutthroat or rainbow, dolly varden, speckled, and white trout; the suckerfish so far include big suckerfish or elephant sucker, little roundmouth sucker (with red stripes especially), and little suckerfish with big salmon-like mouth.

With terms for birds, the division into big birds or small birds is most noticeable; there is no term for 'bird (of any size)'. Although diminutive R or -iyɛ can be applied to almost any words for fauna, the following birds have been specifically mentioned with both 'mature large' and 'mature small' varieties:

crow, goose, hawk, owl, robin, woodpecker, wren. From their diminutive inflections the 'chickadee', 'snipe', and '(larger) wren' also seem to be considered as mí·meq^{w} or χ^{w}íχ^{w}ələq^{w} 'small birds'. It seems most likely that baby birds would also be classed as 'small birds' (for example: čəlíčk^{y}əlsá·lɬ 'baby chicks', təlfləqsəl 'baby ducks', and t'é́t'əmiyc 'baby wren'). Also in the area of birds, təlé́qsəl 'duck' includes at least six types of ducks (and more whose Halkomelem names could not be recalled yet): canvasback duck, diving duck, mallard, pintail, sawbill duck, and wood duck. yé́x^{w}ələ 'eagle (any kind)' includes three types of eagles: young bald eagle (before head turns white; this occurs after a year or two), mature bald eagle, golden eagle (often mis-considered an immature bald eagle, thus its derivation). Notice the use of the criterion of maturity or color of head feathers. There are also three types of geese or two types and a cover term ʔé́χə; it is unclear which is the case yet, but the latter seems most likely. There are also five varieties of owls found so far, three varieties named in one case by a single term (spapələq^{w}íθ'ɛ 'screech owl, pygmy owl, saw-whet owl'); but there appears to be no cover term for owls. Loons are given proper names in two cases (in stories), but these don't seem

to be separate varieties of bird from swáḵʷəl 'loon'; the raven is also given a name in stories (sḵʷáwéls), and other birds may also have personal names in stories.

With terms for animals, large and small varieties are only pointed out (by separate terms) in a few cases: sqəlác'əməs 'lynx' is considered a larger variety of sqəc'émməs 'bobcat, wildcat', and there are three sizes of rabbit: sqʷiqʷəyá·θəl 'jackrabbit, big older rabbit', sqəwéθ 'rabbit', and sqíqəwèθ 'small rabbit' (unless sqəwéθ is a cover term). Diminutive R, -iyɛ, and -á·lɬ provide the means of labelling the young of animals (sk'ʷík'ʷəlyéχəl 'young bat', spɛθá·lɬ 'bear cub', pupsá·lɬ 'kittens', músməsà·lɬ 'calf', sqʷíqʷəmɛy 'puppy', stiqiwá·lɬ 'colt', kʷikʷəšú 'little pig', híhèwt 'little rat, little vole', for example). But one suppletive term for young animal exists, t'ɬt'ələ 'fawn'. Bears are especially elaborated. spé·θ covers black and brown bears and black bears with a white spot on the chest (part grizzly) but is said to exclude grizzlies. Black bears with a white spot on the chest (perhaps a special category because of a story which makes them ancestors of the Wealick family) can be named with two proper names (sχé·ylməṯ and sχéylmàṯ) as can grizzlies (syəqʷílməṯ and syəqʷílməṯəlàṯ). But other animals are also given

proper names (qəwéstəlɛ̀t '(kind of female deer)', sqéyəx̌ 'Mink', sc'íq'^{w} 'an old wolf grandfather in a story') as well as birds (as mentioned above). The wolf is also addressed as siyé·m 'chief (of the wild tribe)' when the old-time Stalo see it and tell it to go on its way. Returning to bears, the grizzly bear (which eats humans) and the brown bear (which does not) also have two other names apiece, probably just in free variation. At any rate this makes eight or nine terms for bears. Chipmunks can be differentiated as to how many stripes they (x̌əp'í·cəl vs. sx̌ɛx̌əp'í·cəl ~ x̌əx̌p'í·cəl).

A number of terms for fauna originated as imitations of the noises made by the creatures. Few have been positively identified yet, but several can be mentioned: píq' 'nighthawk, the cry of a diving nighthawk', wəx̌és '(kind of frog?), the noise a frog makes', and probably sq^{w}íq^{w} 'hoary marmot, whistler, groundhog, woodchuck'.

Not mentioned in this section so far are the terms for sƛ'éləqəm creatures, which form a separate subdomain perhaps. The terms are:

sƛ'éləqəm 'supernatural creature (often dwelling in lakes, if you see one you get x^{y}á·lí·s 'go into shock upon seeing a supernatural creature and vomit

till one dies')'

sƛ'íƛ'ələqəm 'a little supernatural creature'

scicí? (Tait: also scí? and cicí?) '(slang term for) supernatural creature, monster'

sɛ́sq'əc 'Sasquatch (hairy giant)' (possibly < sə́q' 'split in half' (half-man, or referring to rocks he splits by throwing))(this term is the origin of the English term)

θ'ɔ́wx̌iyɛ 'Cannibal Woman or Basket Ogress (catches children, puts them in a cedar slat basket, θ'ɔ́wəx̌, on her back, and eats them in her cave)' (< θ'ɔ́wəx̌ 'cedar slat basket' + -iyɛ 'diminutive')

sí·ɬqəy 'supernatural two-headed snake (head at each end, rolls up in the middle, lives in lakes)' (< ?is(ɛ́lə) 'two' with metathesis + ?ɛ́ɬqəy 'snake')

sx^{w}əx^{w}ɛ́·s 'thunder, Thunderbird (giant supernatural bird, when he opens his eyes it produces the lightning, when he urinates it rains, when he shakes his wings it thunders)' (a wind, spatpətəlɛ́x̌əl precedes him and is called 'thunderwind', lit. 'thing that repeatedly blows from the mouth on the arm') (sx^{w}əx^{w}ɛ́·s < s- 'nominal' + x^{w}əx^{w}- 'sudden' + -ɛ́·s 'on the face' or 'in the face' or 'face')

s?ɛ́·lməx^{w} 'dark-skinned water pygmies (about two feet tall, have black hair, lived in a pool just below the little wooden bridge over the Coquihalla River with the sign "to Union Bar", near Hope; when Indian people went to spear fish in that pool on the Coquihalla, the pygmies would grab the spears and hold on to them; thus the pool and river was called k'^{w}iyk'^{w}iyɛ́·lɛ 'Coquihalla; stingy container'; such water babies also live in Chilliwack Lake and have been seen washed up on the beach and crying by

Stalo people now living)' (-mex^{w} 'people', root meaning unknown)

sx̱ex̱amó·ɬ 'huge pretty frog with supernatural powers' (no story or further information has been obtained yet on this creature)(< sx̱éx̱e ~ sx̱éx̱e 'sacred' + pehamó·ɬ or pehamóweɬ 'big pretty frog, bullfrog')

The derivations known of the above terms show 'Sasquatch' may < 'split in half' + ?, 'Cannibal Woman, Basket Ogress' < 'cedar slat basket' + 'diminutive', 'supernatural two-headed snake' < 'double snake', 'Thunderbird, thunder' < 'thing that's sudden in the face', 'water pygmies' < unknown root + 'people', and 'supernatural frog' < 'sacred big pretty frog, sacred bullfrog'. These may all fit into the categories of being named for role, habit, or appearance. They also include members related to most of the sub-domains of fauna: man-animal, woman, baby, bird, snake, frog.

13.1.3. Independent Words for Body Parts. In the following list, {s-} nominalizer is not listed in the analysis after the first few examples, and r.m.u. means root meaning unknown. Morphosememic patterns are described in 13.1.7.

whole body s-lex^{w}-í·ws (s- nominalizer, r.m.u., -í·ws 'of the body')

half of body łq'-í·ws (łsəq' 'half', loss of s unexplained, -í·ws 'of the body')

head sχéy·es, sχáy·əs (s- nominalizer, r.m.u., -es 'of the face')

crown of head, top of head s-q^{w}át-əlq^{w} (r.m.u., -əlq^{w} 'of top of head')

soft spot on a baby's head Tait: s-qə?-éləq^{w}, Chill.: s-qə?-á·ls (qə? from qéyqə 'soft', -əlq^{w} 'of top of head', -á·ls 'fruit; round thing'; the Chilliwack word also means 'juicy fruit' from homophonous qə?-, bound form of qá· 'water')

scalp, top of head s-t'ém-ləq^{w} (t'əm- 'chopped', -əlq^{w} 'of top of head')

hair on head méqəl (possibly mé '(come) off', -qəl 'of the head')

red headed, red hair c-k^{w}f·m-eq^{w} (c- 'color', k^{w}f·m 'red, reddish-brown', -eq^{w} 'of top of head')(rare Indians here were born with reddish-brown hair in pre-contact times)

grey hair s-χá·ləm (compare χá·ləm-θət 'turn grey (of hair)')

curly hair s-q'əlq'élp'-eq^{w} (q'əlq'élp' 'tangled (of its own accord)', -eq^{w} 'of top of head')

sideburns s-χəl-p-élɛ (χəl 'to mark', perhaps -p is

'hair', perhaps -élɛ is 'container', related to -élɛ́ 'container')

a braid s-t'ɛmx^{y}-ɛ́·lc' (t'ɛ́məx^{y} 'to braid something', -ɛ́·lc' 'twisting around')

skull s-θ'á·m-əq^{w} (s-θ'á·m 'bone', -əq^{w} 'of top of head')

forehead s-q'^{w}éḿels (r.m.u. unless q'^{w}ém 'come out at roots (of hair)' and -əls 'intransitive' are involved)

back of head and back of neck tɛ́psəm (-əpsəm 'of back of head and back of neck', r.m.u. or empty morph)

side of head sx^{w}-ʔí·lə (sx^{w}- nominalizer, possibly x^{w}- 'pertaining to head', r.m.u. unless ʔí·-lə 'right here')

eyebrow θá·mél (r.m.u.), eyebrows θəmθá·mél (C_1əC$_2$- reduplication 'plural')

eye qél·ém (r.m.u.)

eyelashes ɬɛ́p-təl (r.m.u. unless related to θ'əp- in θ'ɛ́plɛx^{w} 'blink', -təl 'device' or 'reciprocal')

pupil of eye q'ɛ́yɣ-á·ləs (q'ɛ́yɣ 'black', -á·ləs 'of the eye')

blue eyes c'-məθ'-á·ləs (c'- 'color', məθ' 'blue', -á·ləs 'of the eye')(rarely full-blooded Indians were born with blue eyes)

freckles, spotted face ƛ'əl-ƛ'élɣ-as (C_1əC$_2$- 'plural', ƛ'élɣ- 'spot', -á·s 'of the face')

face s-ʔá·θ-əs (r.m.u. unless -ʔá·θ 'edge, point', -əs 'of the face')

ear q'^{w}é·l

hair in ear s-q^{W}əlq^{W}él-é·lí·yɛ (C_1əC$_2$- 'plural', q^{W}él- 'body hair', -é·lí·yɛ 'of the ear')

nose m-éqsəl (r.m.u. or empty, -éqsəl 'of the nose')

bridge of nose s-θ'ém-qsəl (s-θ'á·m 'bone', -qsəl 'of the nose')

point of nose s-?élqsəl (r.m.u. ?é or ?él, -(l)qsəl 'of the nose' (also used figuratively for 'a point')

nostrils (unattested except by Hill-Tout 1902 who has what could be interpreted as sɬəq^{W}éləqsəl or sləq^{W}él-əqsəl, probably ɬéq^{W} 'wet', -əl- or -lə- infix 'plural', -əqsəl 'of the nose')

hair in nose s-q^{W}əlq^{W}él-qsəl (s-q^{W}əlq^{W}él 'hairs' as above, -qsəl 'of the nose')

cheek s-ɬəq^{W}-élɛ, sx^{W}-?ílə (s-ɬíq^{W} 'flesh', -élɛ 'container', ?ílə r.m.u.), cheeks sx^{W}-?əl?ílə (C_1əC$_2$- 'plural')

mouth θá·θəl (perhaps θ- 'big', -á·θəl 'of the mouth')

upper lip s-cəɬ-á·yθəl (cəɬ 'above, upper', -á·yθəl 'of the lip or jaw')

lower lip s-ƛ'əp-á·yθəl (ƛ'əp 'below, lower', -á·yθəl 'of the lip or jaw')

chin, jaw c'əm-x^{y}-á·yθəl (c'əm ~ c'ɛm 'bite on, close teeth on, put in mouth', possibly the -x^{y} < -əx^{y} 'transitivizer', -á·yθəl 'of the lip or jaw')

tooth, teeth yél·és (r.m.u. or empty, -él·és 'of the tooth')

gums s-łəqʷ-él·és, s-łəqʷ-íl·és (s-łíqʷ 'flesh', -él·és, -əlís 'of the teeth', ə and i metathesized in 2nd word)

tongue t-éxʷθəł (r.m.u. or empty, -éxʷθəł 'of the tongue')

uvula mélqʷ, s-mélqʷ-əqəl (mélqʷ also means 'fish heart', -əqəl 'of the throat')

beard, mustache, hair on face qʷil-iyéθəl (qʷəl or qʷil 'hair', -iyéθəl < -á·yθəl 'on the lip or jaw')

front of neck s-qʷél-łəł, possibly s-qʼʷél-łəł, some say sxʷ-ʔél-łəł (qʷél 'talk', qʼʷél and ʔél r.m.u., -łəł 'of front of neck')

adam's apple s-xʷəh-ámél-łəł (xʷəh r.m.u. unless 'big' or 'upstream', -ámél 'part or member', -łəł 'of front of neck')

throat, gullet s-qəlxʷ-é·lé (s-qél·éxʷ 'greedy, eats too much', -é·lé 'container')

windpipe, air passage s-qʷə-hà·mélθəqʷ (s-qʷé 'hole', possibly -á·mél 'part or member')

shoulder sxʷ-ʔí·lé·m-é·lé (ʔí·lé·m 'carry on one's shoulder', -é·lé 'container')

shoulder-blade kʷakʷéqʼ-təl or kʷəqʼ-tél (r.m.u., citations quite variable, but -tél ~ -təl 'reciprocal' or 'device')

arm tʼé·lów, tʼəltʼé·lów 'arms' (C_1əC$_2$- 'plural')

armpit sxʷ-ʔi-lé·xəl (r.m.u., -əlé·xəl 'of the arm')

elbow s-θʼəm-xʷ-əlé·xəl (s-θʼá·m 'bone', -xʷ meaning unknown, -əlé·xəl 'of the arm')

wrist joint x^{w}əθ'éq'^{w}-cəs (also means 'sprained wrist') (r.m.u., -cəs 'of the hand')

wrist bone, lump of wrist q^{w}éms^{w}-cəs (q^{w}éms^{w} 'lump', -cəs 'of the hand')

hand céléx^{y}

right hand s?ɛyíw-cəs (less common s?ɛyíws-cəs)(s?ɛyíws 'right (side)', -cəs 'of the hand', s-?ɛy-íws itself < s- nominalizer, ?éy 'good', -í·ws 'of the body')

left hand s-θ'ílk^{w}ə-cəs (s-θ'ílk^{w}ə 'left (side)', -cəs 'of the hand')

knuckles and joints of hand Chehalis: q^{w}əmq^{w}éms^{w}-cəs (C_1əC_2- 'plural', q^{w}éms^{w} 'lump', -cəs 'of the hand or fingers')

finger s-léx-cəs (léx 'widen', -cəs 'of the hand'), slélexcəs 'fingers' has -lə- 'plural' infix)

fingernail q'^{w}x^{w}él-cəs (c-q'^{w}íx^{w} 'gray', -əl '-ish', -cəs 'of the hand or fingers')

thumb məlk^{w}-á·mél-cəs (məlk^{w} 'stout (in strength)', -á·mél 'part or member', -cəs 'of the hand')

first finger (index finger) Tait: mét'əs-əmél, Chill. and Cheh.: mát'əs-təl (mát'əs 'point, aim', -á·mél 'part or member', -təl 'device, thing to, instrument')

second finger sx^{w}é·y-cəs (sx^{w}é·yə '(in) the middle', -cəs 'of the hand'or fingers')

third finger mɛlyí-cəs (post-contact coinage)(mɛlyí 'marry, married', -cəs 'of the hand or fingers')

little finger Tait: sasəq^{W}t-álə-cəs, Chill. + Cheh.: sásəq^{W}-cəs (sásəq^{W}t 'youngest child', -álə possibly related to wə?álewə 'most', -cəs 'of the hand, fingers')

palm of hand sx^{W}-?áθəs-cəs (sx^{W}- nominalizer replacing s-, s?á·θəs 'face', -cəs 'of the hand')

hollow of hand x^{W}-t'áx^{W}-əs-cəs (x^{W}- meaning uncertain here, t'áx^{W} 'going downriver', -əs 'on the face', -cəs 'of the hand')

collarbone s-t'ɬ-íləs-təl, t'ɬ-íləs-təl (t'əɬ ~ t'éɬ 'go across', -í·ləs 'of the chest', -təl 'device, thing to')(t' ≈ ƛ' in both citations)

chest s?-í·ləs (s- nominalizer, ? probably empty root to allow suffix to be attached and to erase locative meaning in suffix, -í·ləs 'of the chest')

breastbone θ'χ-éməl (r.m.u. but related to that in θ'χ-í·ləs 'inside brisket of meat' where -í·ləs is 'of the chest', -éməl possibly related to -á·məl 'part or member')

woman's breast, nipple, milk s-qəmá· (qəmá· 'suckle' < qá· or qə(?)- 'water, liquid', possibly relevant is the slang term má?s 'milk' (· < *? before consonants)

woman's breast s-q^{W}əmθ'-í·ləs (q^{W}ámθ' 'lump', -í·ləs 'of the chest')

stomach, belly k'^{W}él·é (r.m.u., -él·é probably related to -é·lé 'container')

navel, belly button mə́x̌^{W}əyɛ, mə́x̌^{W}əyɛ (r.m.u.)

side of body Cheh.: s-łəq'-á·lwəł, Tait: s-ʔí·lwəł (łəq'- as in łəq'ét 'wide' or as in łq'í·ws 'half the body', -á·lwəł ~ ʔí·lwəł 'side')

right side of body s?ɛyí·ws ʔí·lwəł

left side of body sθ'íkʷə ʔí·lwəł

back ʔá·qʷ-ələc, ʔáqʷ-ələc (ʔá·qʷ probably 'comes out above or after', -ələc 'of the rump')

lower back s-łáq'-owəł (łəq' as in łəq'ét 'wide', possibly -owəł 'of a canoe')

good figure, good shape ʔɛy-é:məc' (ʔéy 'good', -é·məc' ~ -é·məθ' 'standing up')

brain s-méθ'-qəl (méθ' 'blue', -qəl 'of the head')

heart θ'é·lə́ (r.m.u. or empty, -é·lə́ 'container')

lungs s-p'ə́lx^{W}əm (r.m.u., probably -əm 'passive')

liver s-cə́l·ə́m

insides s-c'əlx^{W}-íwəl (c'ə́lə́x^{W} 'go into a quieter slough or backwater', -í·wəl 'of the inside of the body')

gall bladder, bile lələ́c' (lə́c' 'full', possibly -əl- 'plural')

kidney smə́lt-élə́qəl (s-mélt 'stone', -élə́qəl 'in the head', 'head' is used in a figurative sense too, like 'head of a river')

intestines, guts q'əq'é́y (r.m.u.)

stomach (inside organ) k'^{W}ə́l·é (as above in 'belly')

bladder sə́χ^{w}ɛ-təl, sə́χ^{w}ə-təl (Jimmy Harris 1966 has k'^{w}ɛ́·səl)(sə́χ^{w}e 'urine', -təl 'device, thing for', sə́χ^{w}ɛtəl also means 'urinal';· -é·lé 'container'; Harris's word is unclear unless root is k'^{w}ɛ́s 'burned (of a person)')

flesh s-ɬíq^{w}

blood s-θéθiyəl (r.m.u.)

fat s-lás (also means 'grease, lard, oil')(lás 'be fat')

bone s-θ'á·m

marrow s-lés-x^{y}əl (s-lás 'fat', -x^{y}əl 'of the leg')

backbone χək'^{w}-áləs, χək'^{w}-aləs-əwíc (χək'^{w} 'narrow, wedged in', -áləs meaning uncertain unless 'eyes', -əwíc 'of the back')

rib lówə́χ (r.m.u. or empty, -ówə́χ 'of ribs or slats')

cord, nerve cord, tendon, muscle ƛ'ə?íməl, ƛ'ə?í·məl (r.m.u.)

vein tə́tɛθ (r.m.u.)

pulse ɬk'^{w}-ém-ə́ws (ɬá·k'^{w} 'to fly', -ém 'strength', -ə́ws 'of the body')

skin, hide k'^{w}él·ə́w, k'^{w}él·ów

hair on body q^{w}il-ə́ws, q^{w}ɛyl-ə́ws (q^{w}il ~ q^{w}ɛyl 'hair', -ə́ws 'of the body'), s-q^{w}əlq^{w}ə́yl-əws 'hairs all over body' (C_1əC_2- 'plural')

hip ɬəq'-léc (ɬəq' 'wide', -léc 'of rump or bottom')

rump s-ɬ-ə́ləc (r.m.u. or empty, -ə́ləc 'of the rump or bottom')

penis s-x^{y}ə́lə (possibly related to -x^{y}əl 'of the leg or foot', possibly root x^{y}- refers to 'genitals' as in 'head of penis', 'have an erection' and 'vulva, vagina', see below)

head of penis (Jimmy Harris 1966 gives s-x^{y}ƛ'-í·q^{w} 'head of penis' and x^{y}á·ƛ' 'have an erection'; the latter is obviously the root of s-x^{y}ƛ'-í·q^{w}, while -əq^{w} 'of the top of the head' is probably the suffix)

foreskin (Jimmy Harris 1966 gives sx^{w}-ʔé·q' 'foreskin', root is related to ʔéq'əɬ 'choke on bone or something solid')

testicles mécəl (may be singular), s-méməcəl (may be plural)(r.m.u.)

vulva, vagina x^{y}é-wəɬ (x^{y}- or x^{y}é- probably 'genital', -wəɬ or -éwəɬ 'canoe or vessel')

pubic hair q^{w}éyl-əq (q^{w}éyl 'hair', -əq 'of the genitals')

womb, uterus s-mélè-təl (mélə ~ mélè 'child', -təl 'device, thing for')

afterbirth s-ʔá·q^{w} (ʔá·q^{w} probably 'comes out above or after')

thigh s-pətɛ́·lép (r.m.u.)

leg and foot s-χél·ə (r.m.u.), sχəχéylə 'legs and feet' (irregular reduplication 'plural')

lower leg θ'əm-í·wéc-x^{y}əl (r.m.u. unless < s-θ'á·m 'bone', -í·wec meaning unknown unless related to -əwíc 'on the back', -x^{y}əl 'of the leg and foot')

knee s-q'ep'á·l-θe-tel (q'ep' 'cover over', -á·l unknown, -θet 'itself' or 'verbalizer', -tel 'thing for, device', compare q'ep'é·lectel 'a cover or lid')

kneecap s-q'ep'ál-eqʷ-tel-xʸel (q'ep' 'cover over', -á·l unknown, -eqʷ 'on top of head', -tel 'thing for', -xʸel 'of the leg')

shin s-θ'ém-xʸel (s-θ'á·m 'bone', -xʸel 'of the leg')

calf of leg q'ɛ́ƛ'el-xʸel (r.m.u. but probably related to q'ɛ́q'eƛ' 'convulsions' via 'being wrung tight' or some such root meaning, -xʸel 'of the leg')

ankle joint xʷeθ'éq'ʷ-xʸel (also means 'sprained ankle') Tait: xʷƛ'-elέc-xʸel (r.m.u. in both cases, -elec 'on the bottom', -xʸel 'of the foot or leg')

lump of ankle qʷémxʷ-xʸel (qʷémxʷ 'lump', -xʸel 'of leg or foot')

joints in foot Cheh.: qʷemqʷémxʷ-xʸel (qʷémxʷ 'lump', C_1eC_2- 'plural', -xʸel 'of the foot')

top of foot cɬ-fcel-xʸel (ceɬ 'top, above, upper', -fcel 'on the back, of the back', -xʸel 'of the foot')

toe s-léx̣-xʸel (léx̣ 'widen', -xʸel 'of the foot'), slélex̣xʸel 'toes' (-le- 'plural')

big toe mekʷ-á·mél-xʸel (mékʷ 'stout', -á·mél 'member or part', -xʸel 'of the foot')

little toes kʷemkʷ-á·mel-xʸel (r.m.u., possibly mékʷ 'stout', unusual reduplication C_2e- 'plural' or 'diminutive', -á·mél 'part, member', -xʸel 'of the foot')

toenail q'^{w}ɤ^{w}ól-x^{y}əl (q'^{w}ɤ^{w}-əl 'grayish', -x^{y}əl)

sole of foot sx^{w}-ʔá·θəs-x^{y}əl (sx^{w}- nominalizer replacing s-, s-ʔá·θəs 'face', -x^{y}əl 'of the foot')

arch of foot x^{w}-t'áx^{w}-əs-x^{y}əl (x^{w}- meaning uncertain here, t'áx^{w} 'going downriver', -əs 'on the face', -x^{y}əl 'of the foot')

heel θ'-əlέc-x^{y}əl (r.m.u., -əlec 'on the bottom', -x^{y}əl 'of the foot'), θ'əcəlέc-x^{y}əl 'heels' (r.m.u., 'plural' by irregular reduplication, -əlec and -x^{y}əl as above)

No words yet obtained for: lines on the hand, waist, spleen, appendix, or clitoris.

13.1.4. Pésq^{w}təl 'anatomical insult'.

This category contains descriptions of the anatomy of people which are used as insults or jokes. Pésq^{w}t means 'to insult someone by referring to his body'. The list below is not complete since new examples are still turning up.

x^{w}θá·q^{w} 'big head' (x^{w}- prefix used only with the head and its parts, meaning unclear, θ 'big', -á·q^{w} ~ -əq^{w} 'in top of head')

x^{w}θá·s 'big face' (x^{w}- m.u., θ 'big', -á·s 'in the face')

x^{w}θá·θəl ~ θəhá·yθəl 'big mouth' (x^{w}- m.u., θ and θə 'big', -h epenthetic intervocalic, -á·θəl 'in the mouth', -á·yθəl 'in the jaws or lips')

sx^{w}θí·qəl 'loud voice' (s- or sx^{w}- nominalizer, perhaps x^{w}- as above, θí· 'big', -əqəl 'in the throat')

θíθəq^{w} 'big heads' (θí· 'big', reduplicative infix -C$_{1}$ə- 'plural', -əq^{w} 'on top of the head')

θíθəcəs 'big hands' (θí· 'big', -C$_{1}$ə- 'plural', -cəs 'in the hand')

θíθəx^{y}əl 'big feet' (θí· 'big', -C$_{1}$ə- 'plural', -x^{y}əl 'in the foot')

θiθəhá·ləs 'big eyes' (θí·, -C$_{1}$ə-, -h as above, -á·ləs 'in the eye')

θiθəhí·ws 'big bodied people' (θí·, -C$_{1}$ə-, -h as above, -í·ws 'in the body')

θəhíwəl 'big rump, big asshole' (θə 'big', -h epenthetic, -íwəl 'in the inside, in the anus')

θəhóləc 'big rump' (θə, -h as above, -ólec 'in the rump')

θé·q 'big penis' (θ 'big', -é·q 'in the genitals' or 'in the male' or 'in the penis')

sméqsəl 'big nose' (s- usually nominalizer but here 'big', méqsəl 'nose')

sk'^{w}él·ɛ́ 'big belly' (s- here 'big', k'^{w}él·ɛ́ 'belly')

q^{w}əmθ'í·ləs 'big breast(s)' (q^{w}á·mθ' 'large lump', -í·ləs 'in the chest')

Hík^{w} tɛ sméləq^{w}əqəl. 'Your uvula is big. = You talk too much.'

qəlá·məx^{y} ~ qələɬá·məx^{y} 'ugly, bad-looking, sloppy in looks, walk or dress' (qəl 'bad', -əɬ m.u., -á·məx^{y} 'in looks, -looking')

yəθéləq^{w} 'pointed head' (ý-á·θ 'point', -éləq^{w} 'in the

top of the head')

sp'íp'əɬəq^{W} 'flat head, flattened head (as with cranial deformation done to babies by some Northwest Coast tribes)' (sp'íp'eɬ 'flat, flattened' < p'íɬ 'flatten' + s- and -C_1ə- participial adjective, -əq^{W} 'in the top of the head')

cíɬəq^{W} 'bushy and uncombed hair' (cíɬ 'high, upper, above', -əq^{W} 'in the top of the head')

x^{W}ƛ'á·qtəs 'long face, morose' (x^{W}- m.u., ƛ'é·qt 'long', ablaut to a· derivational, -əs 'in the face')

x^{W}papá·s 'hair all over the face' (x^{W}- m.u., pé·pɛ 'woolly', -á·s 'on the face', Aa of ɛ vowels before -á·s)

qéləs 'bad face, cross face, bad expression on face' (qél 'bad', -əs 'in the face')

c'épχəs 'dirty face' (c'épχ 'dirty', -əs 'in the face')

sk^{W}awəcá·ləs 'sturgeon eyes = blue eyes' (sk^{W}áwəc 'sturgeon', -á·ləs 'in the eyes')

mapəlá·ləs 'marble eyes = blue eyes' (mápəl 'marble (glass-type)', -á·ləs 'in the eyes')

sɬəlɬəlp'é·lí·yɛ 'sloppy ears' (s-ɬəlp' 'sloppy, flabby', C_1əC_2- 'plural', -é·lí·yɛ 'in the ear')

sɬəlp'á·yθəl 'sloppy lips, flabby lips' (s-ɬəlp' as above, -á·yθəl 'in the lip')(applies mainly to lower lip)

c'əpχélqsəl 'dirty nose' (c'épχ 'dirty', -élqsəl 'in the nose')

ɬí·ɬk'^{W}əlqs 'hook nose' (ɬí·k'^{W} 'to hook', -C_1ə- 'contin-

uative', -əlqs 'in the nose')

sp'ółɬqsəl 'flat nose' (s-p'ół 'flat', -qsəl 'in the nose')

sɬaɬəx̣ʷólqsəl 'snot hanging from nose' (ɬəx̣ʷát 'to spit', s- + -C_1ə- participial adjective (thus sɬáɬəx̣ʷ (with metathesis) could be translated 'spat'), -ólqsəl 'in the nose')

smətmétəqsəl ~ smɛtmétəqsəl 'snotty nose' (s-mətá·qsəl 'snot', C_1əC_2- 'plural')(s-mətá·qsəl < r.m.u., -qsəl 'in the nose')

Cheh.: kʷəmá·yθəl, Tait: kʷamá·yθəl 'round mouth' (kʷəm ~ kʷam must mean 'round', -á·yθəl 'in the lips')

x̣ʷəmóθəl 'eats too fast' (x̣ʷóm 'hurry, be fast', -óθəl 'in the mouth')

sx̣ɛyx̣əθ'á·yθəl 'ugly grin, ugly expression in mouth, disappointed and angry look in mouth' (sx̣óyx̣əθ' 'disappointed and angry looking', -á·yθəl 'in the lips')

sɬómməqəl 'tooth or teeth missing, toothless' (s-ɬóm 'spray or moisture', -əqəl 'in the throat')

ƛ'óqtəpsəm 'long neck' (ƛ'ó·qt 'long', ə ablaut, -əpsəm 'in the neck')

qʷəʔfqʷəpsəm 'small neck, scrawny neck' (qʷəʔfqʷ 'scrawny, thin', -əpsəm 'in the neck')

spíycəs 'crooked hand' (s-píy 'bent, crooked' (< péy 'make a bend or crook'), -cəs 'in the hand')

qəlócəs 'dirty hand' (qəl 'bad, dirty', -ó m.u., -cəs 'in the hand')

sə'ə́mləc 'skinny rump' (sə'á·m 'bone', derivational ablaut to ə, -ləc 'in the rump')

sk'^{w}ʃyləc 'lame (esp. hip from birth)' (s- nominalizer, k'^{w}ʃy 'climb', -ləc 'in the rump')

sƛ'əp'ə́ləc 'tail' (q.v.) and spú? are both used in a slang sense for 'rump'

c'əpí·wəl ~ sc'əpχí·wəl 'dirty asshole' (c'əpχ 'dirty', -í·wəl 'in the anus or insides')

sq'éyχí·wəl 'black asshole' (s- nominalizer, q'εyχ 'black', -í·wəl 'in the anus or insides')

łəq'tíẃə́l 'wide rump' (łəq'ə́t 'be wide', -í·wəl 'in the anus')

spiypíyx^{y}əl 'crooked leg' (spíy 'bent, crooked', C_1əC_2- 'plural'?, -x^{y}əl 'in the leg and foot')

c'ə́lə́lə́c'x^{y}əl 'short-legged runt' (c'ə́ləc-əm 'sit down', possibly derivational glottalization of c, -əl- 'plural', -x^{y}əl 'in the leg, on the leg')

c'ə́pχx^{y}əl, c'ə́px^{y}əl 'dirty foot' (c'ə́pχ 'dirty', -x^{y}əl 'in the foot')

13.1.5. Non-human Anatomy.

In the following lists H stands for "also in human anatomy", A for "also in animal anatomy", B "also in bird anatomy", F "also in fish anatomy", R "also in reptile anatomy", and I "also in insect anatomy".

Fish anatomy:

sχ́ý·əs, sχ́áy·əs 'head' (HABRI)
sχ́pəq^{w} 'gristle and everything else in head of fish'
t'ə́wləq^{w} 'skin of fish head without gristle'
qə́lə́m 'eye' (HABR)
θipə́lə 'fish cheek'
sɬəq^{w}ə́lɛ, sx^{w}ʔílə 'cheek' (HABR)
θá·θəl 'mouth' (HABR)
scəɬá·yθəl 'upper lip or jaw' (HAR)
sʌ'əpá·yθəl 'lower lip or jaw' (HAR)
yə́l·ə́s 'teeth' (HAR)
c'əmx^{y}á·yθəl 'jaw' (HAR)
k'^{w}ə́l·ə́w 'skin' (HABR)
sɬíq^{w} 'flesh' (HABR)
x^{y}è·y 'gills and boot shaped organ attached to gills'
sc'ə́lc' 'scales'
stíx^{y}əm 'slime'
q'ə́tməl 'fin, neck fin, possibly back fin'
θ'ə́tməl 'belly fin'
sχ́əɬχəɬ 'tiny fin above tail'
sθ'á·m 'bone' (HABR)
sθ'əθ'əlá·m 'small bones' (HABR)
χək'^{w}áləs 'backbone' (HAB(R?))
sχ́əwə 'dried fish backbone'
sχ́əpx^{y}əl 'fish tail'
sθə́θiyəl 'blood' (HABR)
sc'əlx^{w}íwəl 'insides' (HABR)
x^{y}íx^{y}x^{w}ələ́wɛ 'air bladder'
q'^{w}ayə́q'^{w} 'stomach, organ with filaments next to air bladder'
mə́səl 'fish gall bladder'
mə́lq^{w} 'fish heart'
k'^{w}ə́l·ɛ́ 'belly' (HABR)

qél·éx̌, qéwx̌ 'salmon eggs'
sc'éməx^{y} 'dried herring eggs (obtained in trade)'
q'^{w}ú·lé 'buried fish eggs, "stink eggs"'
ƛ'ínè 'eulachon oil'
ƛ'əq'^{w}é·y 'fish milt'
no word for 'brain', just sx̌épəq^{w} above

Animal anatomy:

c'í·stəl 'antlers, horn(s)'
sé·y 'fur, animal hair, wool, yarn'
(Hill-Tout 1902 has c'qéycəs or c'q'éycəs 'paw')
words for 'foreleg' and 'hind leg' are said to exist but have not been elicited yet
q'^{w}x̌^{w}élcəs 'claw, fingernail' (HB)
reportedly 'hind leg' is used instead of a word for 'rump'
reportedly 'ribs' (lówéx̌)(HB) is used instead of 'chest'
k'^{w}él·éw 'hide, skin' (HFBR)
sq^{w}əlq^{w}élx^{y}əl 'tufts of hair on horse's legs (like on the Clydesdale)'
sƛ'əp'éləc 'tail' (BR)
spéx^{w} 'animal tripe' (used in some dialects)
The remaining words confirmed in usage for animal anatomy are the same as the following words used for human anatomy (q.v.): head, eye, ear, nose, cheek, mouth, upper lip/jaw, lower lip/jaw, tooth/teeth, tongue, jaw, front of neck, back of head and neck, throat, breast, rib, belly/stomach, back, flesh, blood, bone, marrow, backbone, insides, guts, heart, liver, cord/tendon/muscle, penis, testicles, vulva/vagina; possibly also (but unconfirmed): brain, gums, lungs, bladder, vein.

Bird anatomy:

t'áp'əls 'beak, bill; to peck'
t'át'əp'əls 'beak, bill; pecking'
sq'áyəs 'real fine feathers, down'
sx^{y}élc' 'small feather'
sƛ'p'élqəl 'long feather (from wing or tail)'
sƛ'əq'é·l, sƛ'q'é·l 'wing' (I)
mémələhà·lɬ 'egg'
sƛ'əp'éləc 'tail' (AR)
'claw' not yet confirmed for birds
Also confirmed for birds are the following terms from human anatomy: head, eye, back of head and neck, chest, back, leg, skin, flesh, blood, bone, little bones, heart, stomach, guts; possibly also (but unconfirmed): brain, front of neck, throat, lungs, and backbone.

Reptile anatomy:

sƛ'əp'éləc 'tail' (BA)
Also confirmed for reptiles are the following terms from human anatomy: head, eye, jaw, tongue, back, leg/foot, flesh, skin, bone, blood, insides, stomach; possibly also (but unconfirmed): upper lip/jaw, lower lip/jaw, cheek (esp. for frog), chest, and backbone.

Insect anatomy:

sχéy·əs 'head' (HAFBR)
sƛ'əq'é·l 'wing' (B)
sχél·ə 'leg and foot' (HABR)
qél·ém 'eye' (HAFBR)

13.1.6. Functions and Dysfunctions of the Body.

This semantic area can be subdivided into: human body functions, human body products, human body dysfunc-

tions (living or healthy/dead or sick, symptom/state/illness/disability, accident/injury, and possibly medicine/curing), and non-human body functions and dysfunctions. The following lists and analyses are not exhaustive. For example, emotions are omitted though many harmful ones are treated by Indian doctoring. Smells, sounds, looks, tastes and feelings are omitted because it is unclear that they belong in this domain. A number of grammatical affixes recurr often and can be mentioned here to avoid repetition: -ət ~ -t ~ -ét ~ -át 'action on purpose on third person object(s), him, her, it, them', -l 'happen to, manage to, accidentally', -st 'cause to' (the /t/ in this suffix and the first one listed becomes /θ/ when the object is first or second person singular), -əx^{w} (after -l or -st) 'third person object', -lá·mət 'by oneself', -θət 'oneself', -təl 'each other, reciprocal', -əm 'middle-passive voice', reduplication and ablaut of several types (see Chapter 2) 'continuative', 'plural', 'diminutive', s- + -C$_{1}$ə- reduplication (infixed after first vowel of root) 'participial verb', and -əls ~ -é·ls 'intransitive'.

13.1.6.1. Body Functions.

x^{w}é sémelɛ 'bear a child', θə cméɬɛ 'someone having a baby' (méɬɛ ~ méɬə ~ méɬə 'child')

x^{w}é swíyəqə 'become a man'

x^{w}é sɬé·lí 'become a woman'

q^{w}éc'ət 'belch'

q'ə́lməṯ 'believe s-o, s-th', q'ə́·l 'believing'
qəp'á·səm 'bend or stoop down, bow from waist'
q'ə́yk'^{W}əṯ 'bite into it'
c'ə́məṯ ~ c'ə́məṯ 'bite on it, put it in one's mouth or between the teeth'
θ'ə́pləx^{W} 'blink', θ'ə́fθ'əpləx^{W} 'close one's eyes' (-l-əx^{W}), θ'ə́pθ'əpləx^{W} 'blinking' (reduplicative 'plural')
pá·t 'blow'
k^{W}əmk^{W}ə́méləsəm 'blushing', k^{W}ə́f·məl tə.s?á·θəs 'his face got red' (k^{W}ə́f·m 'be red', -əl 'get, go, come', -əs '(in) the face', $C_1əC_2$- 'plural')
k^{W}ə́l 'be born'
spəx^{W}əɬé·ləm 'breathe' ~ pəx^{W}ɬéləm 'breathe once' and pəx^{W}əɬéləm 'breathing'
q^{W}əlɬé·ləm 'make breathy noise, grumble under the breath' (q^{W}əl 'talk', -ɬé·l ~ -ɬəɬ '(in) front of throat')
?á·t 'call s-o' (s-o = someone, s-th = something)
s?ák^{W}əstəx^{W} 'carry s-o or s-th on the arm (purse, person, etc.)'
cə́məṯ 'carry it on one's back, pack it'
?ə́·lé·mṯ 'carry it on one's shoulder'
θ'ə́m 'chew, chewing', θ'ə́ṯ 'chew it', θ'əθ'ə́ṯ 'chewing it'
χ̌ə́yk'^{W}əṯ 'chew it (s-th hard, apple, candy, pill, etc.)'
χ̌ə́pk'^{W}ṯ 'gnaw it, chew s-th hard', χ̌əpχ̌ə́pk'^{W}ṯ 'chew it up' (χ̌ə́pk'^{W}əm 'make a crunching or cracking noise, crunching, cracking (like chewing apple or ice breaking)' is related; ƛ'ə́mq'^{W}əls is synonymous with χ̌ə́pk'^{W}əm)
θ'ə́fθ'əpləx^{W} 'close one's eyes' (compare 'blink')
(təx^{y}qə́·ylṯ 'comb s-o's hair', təx^{y}qə́yləm 'comb one's hair', tə́x^{y}əlqə̀ylṯ 'comb s-th, card it (of wool)')
q'^{W}ə́m 'come out (of hair)(as in comb, etc.)'
x^{y}ə́lx^{W}əəṯ 'cool off (of a person)'
t'əṯ'ə́səθəṯ 'creeping along', t'əṯ'ə́sx^{y}ələm 'creeping (of more than one)'
χ̌ə̀·m 'cry, weep'

ʔáˑʔ 'defecate'
ʔéliyɛ 'dream, have a vision, have a trance', sʔéliyɛ
'dream, vision, spirit dream'
qáˑqɐ 'drink', qáˑqɐt 'drink it' (< qáˑ 'water')
lép'əxʸ 'eat s-th' (-əxʸ 'transitivizer, 3rd person obj.')
ʔéɬtəl 'eat a meal' (perhaps -təl 'with each other')
háˑyθəl 'finished eating' (blend word of háˑy 'finished'
and -áˑyθəl '(in) lips or jaws' or -əθəl '(in) mouth')
láśθət 'get fat' (-θət may be the verb forming suffix
here instead of the reflexive)
tśqʼ 'to fart'
qśtɣt 'feel s-o or s-th', qśtɣəls 'feeling around'
mélɐ 'forget', méɬɐləxʷ 'forget s-th or s-o', méɬɐləls
'forget, forget s-o or s-th'
xʷəxʷɬéxʸ 'get up with quick motion' (xʷəxʷ probably
'sudden', -íˑi 'go, come, get', -əxʸ 'upright')
cʼíˑsəm 'grow'
kʼʷáˑyɣʷəm 'growling (of the stomach)'
kʼʷəmléxʷəs 'he's grown up' (-l-əxʷ, -əs 'he (subj.)')
(see also 'raise s-o or s-th')
stʼéwəl, Chill.: stəʔéwəl 'guess', stʼéwélmət 'guess or
thinking about s-th' (stəʔé, stʼé 'like, similar to',
-əwəl '(in) the mind')
cʼicʼɬéˑm (some dialects cʼəcʼɬéˑm) 'hear, hearing',
cʼɬéˑməɬ 'hear it'
hék'əɬ 'to hiccough' (imitative)
kʷəlét 'hold s-th (in the hand)'
xʸéʔɛt 'hold a baby in arms'
sxʷáˑxʷəlstəxʷ 'holding s-th up' (xʷáˑxʷə 'be lightweight',
-st 'cause to', -əxʷ '3rd person object')
qəlwíls 'hug', qəlwílst 'hug s-o'
kʼʷéˑy 'hungry', kʼʷákʼʷiy '(being) hungry'
ɣʷiɣʷəʔé(t) 'imitating (s-o)' (-əʔé also in stəʔé 'similar')
θíct 'have intercourse with s-o' (θícəm 'have intercourse')
kʼʷékʼ 'have intercourse'

c'ɬ'ém 'jump'
lemé·t 'kick (s-o)', ləmləmé·t 'kick it around',
lemé?íwɬt 'kick in the rump'
mə́kʷəθ(t), xʷmə́kʷəθ(t) 'kiss (s-o)', (xʷ)mə́kʷəθəl 'kiss
on the lips' (mə́kʷ 'stout, thick', -əθəl '(in) the mouth'
with final -əl lost before -t; xʷ- 'pertaining to head
or its parts')
θ'q'é±x̌ém 'kneel down'
±q'él·exʷ ~ ±é́q'əl·exʷ 'know' (±- meaning unknown, q'él
'believe', -l 'happen to, manage to', -exʷ 's-th, s-o')
líyém ~ lɛyém 'laugh', lé·yəm 'laughing', líyliyəm 'lots
of laughing' (root ?éy 'good')
c'í·mət 'lick s-th' (related to c'émət 'put it in mouth
or between teeth')
k'ʷə?íyəqəl 'lie on one's back'
?é±x̌əθ 'lie down' (?é·x̌əθ 'lying down')
qɛyqəp'əyé·±ə 'lie on one's stomach' (qép' as in 'bend
over, bow from waist')
xʷlɛlé·m 'listen hard', xʷlɛlé·m 'listen', xʷélɛlè·m
'listening', xʷlɛlé·mət 'listen to s-o'
k'ʷécət 'look at s-o or s-th' (cp. 'see it' and 'stare')
lápx̌ʷəmstəxʷ 'make a noise' (lápx̌ʷəm 'noise')
x̌ʷix̌ʷə?é·s 'making a face' (cp. 'imitate')
wəc'é·lámət 'masturbate, bring oneself to a summit (of
a mountain)' (wəc'é· 'get to top or summit of a mt.
< c'é 'top, on top')
xʸix̌ʸq'é·m 'mouth hanging open' (xʸəq'é-əət 'hang s-th
up' (-əət 'verbalizer'), -m or -é·m 'middle-passive',
C₁i- 'diminutive')
səx̌éyləm 'move' (cp. síx̌-ət 'move s-th')(-éyl may < -í·l
'come, go', -əm 'middle-passive')
líqʷəsəm 'nod one's head, bow once from neck', líləqʷəsəm
'nodding (in agreement)' (-əs 'face', -əm)
x̌él·əq't 'open one's eyes' (q' ~ q), x̌élx̌əleq't tə sxʷəxʷé·s
'lightning, thunder(bird) opening his eyes' (note that
'thunder(bird)' is 'sudden' + '(in) face')

(x^{W}mícəsəm 'pass s-th by hand')
(pə́ləq^{W} 'peek over, rise (of sun)' (-əq^{W} 'top of head'))
θ'ɬɛ́k'^{W} 'pinch'
syə́myəm 'pregnant'
θəθíχ^{W} 'girl at puberty'
k'^{W}ə́məɬ 'raise s-o or s-th'
csɛ́cəs 'reach with hand' (csɛ́t 'send it', -cəs 'hand')
tə́l·ɛx^{W} 'realize it, learn it, understand it' (tə́l 'learn', -l (> · after l), -ɛx^{W})
hɛ́k'^{W}ələs 'remember, remember it'
qɛ́·w 'to rest, relax'
yə́ƛ'q't 'rub it, rub s-th or s-o'
χ^{W}ə́mx^{y}ələm 'run' (χ^{W}ə́m 'hurry, be fast', derivational ablaut to /a/, -x^{y}əl 'feet', -əm 'middle-passive'), (χ^{W}əmx^{y}ɛ́ləm 'running, racing (of people, animals, etc.)' shows 'continuative' ablaut even in suffix)
χɛ́yq'ət 'scratch s-th (to itch)' (cp. χɛ́yp'ət 'scrape s-th, scratch s-th (leaving marks)')
k^{W}ɛ́cəm 'scream', sk^{W}ɛ́cəm 'a scream'
k'^{W}ə́cləx^{W} 'see s-th or s-o'
síwə́lmə́t 'sense s-th (that will happen)' (-í·wəl 'inside' or -ə́wə́l 'mind, thought', -mə́t 's-th (object)')
(k^{W}əlcsɛ̀·ls 'shaking hands' (k^{W}əl 'hold in the hand', -cəs 'hand', -ɛ́·ls 'intransitive'), k^{W}əlɛ́cəst 'shake s-o's hand')
(q^{W}ɛyχɛ́ləcəm 'shake or swivel one's hips' (q^{W}ɛyχ 'shake', -ələc 'rump, hips', -əm)
sk'^{W}ɛ́c 'sight'
ʔəmə́t 'sit, sit down (if standing), sit up (if lying), squat'
c'ɛ́ləcəm 'sit down, take a seat' (c'ɛ́ 'on top', -ləc 'rump', -əm)
ʔítət 'sleep; go to sleep', ʔí·tət 'sleeping, asleep', ʔítətəm 'sleepy', ʔitətlámət 'fall asleep'

hé·qʷət 'smell it on purpose', hé·qʷlexʷ 'smell it accidentally, hé·qʷəm 'to give off a smell'

xʷlíyémɔ́s 'to smile' (xʷ- 'pertaining to the head', líyém 'laugh', -əs 'face')

hésəm 'to sneeze' (imitative)

χʷíqʼʷəm 'to snore' (imitative)

χéyχè·m 'to sob' (//χíχè·m//, C_1í- 'diminutive', χè·m 'cry, weep')

łχʷé·t 'spit it out', łéχʷəłcɛ 'spitting' (-əłcɛ 'unclear liquid')

pʼíθʼət 'squeeze it'

łχéylέxʸ 'stand up' (ł- meaning unknown, χéyl- 'feet', -əxʸ 'upright')

kʼʷakʼʷecíls 'staring', kʼʷácəst 'stare or look at s-o's face')

ʔímət 'step on it' (cp. ʔímɔxʸ 'walk')(cp. 'take a step')

(stʼéqsəl 'stick out, protrude' (stʼé 'like, similar to', -qsəl 'nose')(included as it shows one Stalo conception of the function of the nose)

ʔátʼəθət 'stretch oneself' (ʔát' 'stretched')

pʼí·qʷt 'stroke it, pet it'

θʼáqʼʷət 'suck it'

qəmé· 'suckle' (< qé· 'water' or its bound allomorph qə-)

méqʼət 'swallow it' (méqʼ 'full with food (in belly)')

yé·qʼʷəm 'to sweat'

tʼí·c(ʼ)əm 'swim', tʼítʼəc(ʼ)əm ~ xʸíxʸkʼʷà·m 'swimming (of human)' (C_1í- 'diminutive', xʸé·kʼʷəm 'bathe')

tiqxʸélɔ́m 'take a step' (-xʸél is stressed version of -xʸəl)

qʷé·l 'talk, speak' (qʷáqʷəl 'talking, speaking')

tʼét 'taste, taste it, try, try it'

tatílt 'thinking on it, pondering, studying, training' (té·lt 'learn it', -C_1ə- 'continuative', -í·l 'go, come, get', -t '3rd person object purposive')

sɬ·t'ət 'tickle s-o', sɬ́t'x^{y}t 'tickle s-o's feet' (-x^{y}əl loses the əl before -t 'purposive, 3rd person obj.')

tɬ́səlax^{w} 'touch or bump s-o accidentally', tɬ́sət 'touch s-o on purpose'

t'ɬ́c'ləx^{w} 'turn or snap the eyes away (from s-o?) in disgust'

təl·ɬ́·məɬ 'understand' (təl- 'learn', -lɬ́·məɬ 'by oneself') (cp. 'thinking', 'realize')

sɬ́χ^{w}ə 'urinate; urine'

q'^{w}íq'^{w}əlɬ́məɬ '(a boy's) voice is changing' (q'^{w}áq'^{w}əl 'tame', derivational ablaut to /i/, -ɬ́m 'middle-passive' or possibly 'strength', -əqəl 'throat')

x^{w}íy 'wake', x^{w}íyəɬ 'wake up', sx^{w}əx^{w}íy 'awake' (the root is //x^{w}ɬ́y//), x^{w}iylɬ́·məɬ 'wake oneself', x^{w}íyx^{y}ət 'wake s-o up'

ʔíməx^{y} 'walk' (ʔím 'step', -əx^{y} 'upright')

łɬ́qəɬ 'whisper'

x^{y}ɬ́·pəm 'whistle', x^{y}íx^{y}pà·m 'whistling'

θ'ik'^{w}ɬ́·st 'wink at s-o', θ'ik'^{w}ɬ́·stəl 'wink at each other', θ'íθ'ik'^{w}ɬ́·səm 'winking', θ'ik'^{w}ɬ́·lɬ́səm 'to wink' (-ɬ́·s 'face', -ɬ́·ləs 'eye', -təl 'reciprocal')

(θ'ɬ́χ^{w} 'wash', takes many somatic suffixes)

wíqəs 'yawn' (wíqəɬ 'spread or widen it (of a canoe for example)', -əs 'face')

tɬ́·m(ət) 'yell, shout, holler' (-ət is apparently not the purposive suffix here), stɬ́·m 'a shout or yell'

q'ɛyx^{y}əlɬ́m 'to yell' (meaning may be too general)

13.1.6.2. Body Products.

ləlɬ́c' 'bile; gall-bladder' (lɬ́c' 'full')

sθɬ́θiyəl 'blood' (s- + reduplication)

sɬɬ́q^{w}əm 'breath' (s-)

s?ɬ́·? 'excrement' (s-)

stɬ́q' 'a fart'

sχéyltel 'footprints, tracks' (s-, χéyl 'mark, write', -tel 'device, thing for')
slás 'grease, fat, oil, lard' (s-)
sqəmá· 'milk; breast' (s-, qəmá· 'suckle')
má?s 'milk (slang term)'
sqíqew 'menstrual blood' (s-, qíqew 'menstruating')
méθ'eɬ 'pus'
qéyqeyχəlà· 'shadow' (q'éyχ 'be black', derivational deglottalization, reduplication, -əlà· unknown unless related to -é·lé, -élɛ 'container')
smétəqsəl 'snot' (s-, r.m.u., -əqsəl 'in the nose')
sƛ'əlehé·ləqsəl 'dried-up snot' (s-, r.m.u., -qsəl 'in the nose')
sɬéχ^{W}əɬcc(s) 'spit' (-s optional, s-)
syá·q'^{W}əm 'sweat' (s-)
qə?á·les 'tear' (qə(?)- ~ qá· 'water', -á·les 'in the eye')
sq^{W}é·ləwəl 'thoughts, feelings' (s-, q^{W}ə́·l 'talk', sq^{W}ə́·l 'words', -əwəl 'in the mind')
séχ^{W}ə 'urine; to urinate' (s- disappears before s)
syé·t 'vomit' (s-)
(not yet elicited: 'sleep in the eye', 'ear-wax', 'sperm')

13.1.6.3. Body Dysfunctions.

13.1.6.3.1. Living or healthy, dead or sick:

?é·yəlex^{W} 'alive, in good health' (?é·y 'keep on going')
mə ?é·yəlex^{W} 'come alive, come back to life (lit. and figuratively), get better, get well' (mə 'come')
mə ?é·yəlex^{W}stəx^{W} 'keep s-o alive' (-st, -ex^{W})
mə ?é·yəlex^{W}lex^{W} 'bring s-o back to life, save s-o's life' (-l, -ex^{W})
spaləq^{W}íθ'ɛ 'corpse; ghost' (s-, r.m.u., -íθ'ɛ 'clothing', perhaps spaləq^{W} represents a word for 'soul' or 'spirit')
q'á·y 'die, dead'
χ^{W}ə́·y ~ χ^{W}á·y 'died in a group (in epidemic, fire, etc.)'

x^W é·lqcəl 'I almost died' (x^W é·lq 'almost, nearly', -cəl 'I (subject)')

hí·qsəl 'drop dead' (possibly root related to that in hílʔ-əm 'to fall from a height', suffix probably -qsəl 'on the nose')

wóq'^W 'drown'

lícx^W wə?éy (?)a(l) 'how are you feeling?, are you doing good?', lícx^W wətu?éya 'are you feeling a little better?', cəl tu ?éya 'I'm fine'

q'éyʌ'əət 'it healed up' (q'éyʌ' 'heal', -əət 'itself')

q'é·yt 'kill s-th or s-o'

s?í·k'^W 'lost (and presumed dead)' (s-, ?í·k'^W 'get lost')

lə q'ép' 'he passed on a disease, he got addicted (to anything)' (lə '3rd person subject, past tense')

q'ép'ləx^W 'pass on a disease to s-o, get s-o addicted'

k'^Wəmlé·məət 'pull through (an illness), pull through or raise oneself (from childhood through puberty to maturity)' (k'^Wémət 'raise s-o', -lé·məət 'oneself')

(mə) ?i?éyəl 'recover, get better' (mə 'come' optional, reduplication prefix function unclear, ?éy 'good')

q'áq'əy 'sick; dying' (q'á·y 'die', -C_1ə- 'continuative')

sq'áq'əy 'sickness; dead for awhile' (s- nominalizer or participializer)

mə q'áq'əystəx^W 'make s-o sick' (-st, -əx^W)

q'áq'əyx^Yəl 'sick foot or leg' (-x^Yəl 'in foot or leg', just one example of many)

x^W é 'starve (and die)'

13.1.6.3.2. Symptom/state/illness/disability:

(A common suffix is -(ə)təm which seems to mean 'state of (verb)' though it derives ultimately from the -ət transitivizer plus -əm 'middle-passive'.)

sé·yəm 'to ache, be sore, to pain'

χé·p'q^Wtəm təl sə'é·m 'my bones are aching'

χέɬ təl θ'è·lè 'my heart is aching'
sí·si 'afraid, nervous'
sθ'á·q^{W}əleq^{W} 'bald' (s-, r.m.u., -əleq^{W} 'on top of head')
scíyeléχəl 'strawberry birthmark on arm' (scíyɛ 'strawberry', -eléχəl 'on arm')
caléχ^{W}əm 'bleed', cá·lχ^{W}əm 'bleeding'
qéyχəs 'blind' (q'éyχ 'be black', derivational deglottalization, -əs 'in the face')
qá·cá·m 'a blister', qécəm 'be blistered'
sq^{W}ecém 'a boil'
ʔəwéte słék'^{W}əm (k'^{W} ~ q'^{W}) 'breathless, no breath'
st'éyχ^{W} 'brooding' (symptom of spirit sickness)
t'íqəl 'be bruised', t'íqəl tə qél·ém̓s 'his eye is bruised', st'ít'eqá·ləs 'black eye, bruised eye'
q'əwém 'walk with a cane', sq'əwé 'person with a cane' (q'éwə 'cane', s-, -é unclear, -(ə)m or -ém 'middle-passive')
sk'^{W}éy 'can't, unable, impossible'
k^{W}əléx^{W}əs tə sθ'áɬəm 'he caught a cold', k^{W}əléx^{W}əs tə stá·q'^{W}əm 'he caught a cough' (k^{W}əl 'get', -l 'happen to, accidentally', -ex^{W} 'it', tə 'a, the', see below for 'cold' and 'cough')
spél·ex^{W} 'chickenpox'
θ'áɬəm 'chilled', θ'éθ'əɬəm 'being chilled'
(s)θ'éɬəm sq'éq'əy 'a cold' (lit. "chill sickness")
q'^{W}ém 'come out (of hair)'
χɛχək'^{W}íwəl 'constipated' (χéχək'^{W} 'wedged in tight', -í·wəl 'in the anus or insides')
c'iyx^{W}íwəl 'constipated' (c'íyx^{W} 'dry', -í·wəl)
t'ək^{W}íwəl 'constipated' (t'ək^{W} 'mired', -í·wəl)
q'éq'əλ' 'convulsions, fits'
tá·q'^{W}əm 'to cough', stá·q'^{W}əm 'a cough' (s-)
q'élptəm 'to cramp, have cramps', q'é·lptəm 'cramped',

q'éq'əlptəm 'cramping' (p ~ p' in each case)(compare q'élp't 'shrink it', q'élp'θət 'shrink', and q'əlq'elp' 'tangled on its own (of net, hair, etc.)')

sχá·lc'iyəθəl 'to have a crooked jaw (from birth, injury, or from getting bumped by a ghost)' (s-, χé·lc' 'turned the wrong way, twisted', -iyəθəl < -á·yθəl 'in the jaw')

ƛ'ékʷəl·ɛ (kʷ ~ qʷ ~ k'ʷ) 'deaf' (r.m.u.)

ƛ'éxʸtəm 'diarrhea' (possibly < ƛ'éxʸ 'ripped apart'), ƛ'xʸétəm 'continuing diarrhea'

sé·lθ'təm or sé·lc'təm 'dizzy'

séləs 'dizzy; drunk' (səl 'spin around', -əs 'in face')

c'íyxʷəqəl 'dry in the throat', c'íyxʷəqəèlèm 'my throat is dry'

sɬaɬək'ʷí·wəl 'dumbfounded, speechless, stupified, surprized' (s- + -C_1e- participial verb, ɬá·k'ʷ 'to fly', -í·wəl 'in the insides, in the anus, in the rump')

sé·yəm təl q'ʷó·l 'I have an earache, my ear aches'

scəlé·l tə sk'ʷéc 'eyesight is fading'

məlqí·wsəm 'to faint' (məlq 'forget', -í·ws 'in the body', -əm 'middle-passive')

q'θé·mtəm 'forgetful, absent-minded' (q'θé·m 'short (of memory, of reach, of food, etc.)')

ləxʷmélqəwəɬ 'forgetful; passed out if drunk' (ləxʷ- 'always', mélq (~ málq) 'forget', -əwəɬ 'in the mind')

paləqʷíθ'ətəm 'he got ghosted' ('ghost' minus s- > paləqʷ- íθ'ɛ 'to ghost', -ət 'someone, he, etc.', -əm 'passive')

smécɛ 'goiter, lump on person or tree (burl)'

χɛχəlc'əlísəm 'grinding one's teeth' (χélc' 'twist, turn around', -əlís 'teeth' or 'in the teeth', -əm)

?á·lθət 'to groan', ?i?á·lθət 'groaning' (compare ?á·-t 'call s-o', -θət 'oneself')

ɬsáq' q'á·y 'half dead, half paralyzed'

χɬè·lóqəl 'headache' (` ~ ´)(χəɬ 'ache, hurt', -è·lóqəl 'in the head')

tsá·s 'heartbroken, poor, destitute'
yəqʷ́íləs 'heartburn' (yəqʷ 'burn', -í·ləs 'in the chest')
θ'k'ʷíwəl 'hemmorhoids, open sores in rump or genitals' (compare s-θ'əθ'íkʼʷ 'open sore', -í·wəl 'in the rump, anus, insides, genitals')(loss of vowel length seems to be due to speed of pronunciation and dialect; Tait dialect speakers seldom omit length even in rapid speech while Chehalis dialect speakers do much more readily, sometimes even in slow speech)
t'émiyɛ, t'émíyɛ 'hermaphrodite baby'
k'ʷák'ʷəs 'hot' (k'ʷəs 'get burned (of a person)')
sqʷ́ém̓cəl 'hunchback, lump on the back' (s-qʷá·m 'lump', -c̓əl < -í·cəl 'on the back')
χ́ɬ 'to hurt, ache (of head, ear, stomach, etc.)'
sxʷ́á·xʷθ' 'to be insane, crazy', sxʷixʷá·xʷθ' 'a little crazy, stupid'
sk'ʷéy kʷs ʔí·təɬ 'have insomnia, can't sleep'
χ́éyχ̓əc'əm 'to itch', χ̓ɛyχ̓əc'ém̓əəɬ '"real itching"'
lelé́c' 'jaundice, bile trouble; bile; gall-bladder' (lé́c' 'full')
sk'ʷíylec 'lame (of hip, esp. from birth)' (s-, k'ʷíy 'climbs', -lec 'on the rump (or hip)')
slé́kʷelec 'lame hip or leg; to limp; cripple(d)' (s-, lé́kʷ 'broken (bone)', -elec 'in the rump (or hip)')
qʷá·m̓θ' 'lump', sqʷəmqʷá·mχ̓ʷ 'lots of lumps (any size); anthills')
qí·w 'menstruate', qíqəw 'menstruating', sk'ʷxʸá·s sq'áq'əy 'menstruation' (sk'ʷxʸá·s 'moon', sq'áq'əy 'sickness')
sk'ʷéy kʷs qʷè·ls 'mute, he can't talk'
héyɛtélméɬ 'nauseated' (héyɛt or héyət 'vomiting', -élméɬ 'in the mind')
sí·si 'nervous, afraid'
xʷǵák'ʷəltəm 'numb' (xʷák'ʷel 'get numb' (-el < -í·l 'get, go, come')), xʷák'ʷelxʸel 'numb in the foot, one's

foot is asleep'

pq^{w}í·les 'out of breath, overtired and overhungry (simultaneously)' (peq^{w} 'split in half by hand (like of an apple)', -í·les 'in the chest')

t'éq'^{w} tə sɬék'^{w}əm (k'^{w} ~ q^{w}) 'run out of breath, break one's breath' (t'éq'^{w} 'break (of a rope)')

k'^{w}əsé 'overheated' (k'^{w}əs 'burned (of a person)')

t'əq'^{w}éɬəɬ 'pass out, faint' (t'əq'^{w} 'break or split (of a rope)', -ɬəɬ 'in the throat')(see also 'faint' and 'forgetful')

q'é·y 'paralyzed; dead, die'

syélθtəm 'poisoned' (s-, yélθ 'to poison', -t-əm)

χé·p'q^{w}təm 'rheumatism, aching (of bones)'

θ'éq'^{w}əm 'to rot'

ɬχ^{w}élqsəl 'runny nose' (ɬəχ^{w} 'to spit', -élqsəl 'nose' or 'in the nose')

sq'éyƛ' 'a scar' (s- nominalizer, q'éyƛ' 'heal')

ɬétχtəm 'to shiver, shivering, trembling' (see 'tremble'), ɬétχθé·ləm 'I'm shivering'

x^{y}é·lí·s 'fatal shock (with vomiting)' (upon seeing a supernatural sƛ'é·ləqəm creature)

sx^{y}iyí·ws 'smallpox' (s-, root possibly x^{y}è·y 'fish scales', -í·ws 'on the body')

p'éɬ, mə p'éɬ 'to sober up', sp'əp'íɬ 'sober, sobered up' (s- + -C$_{1}$ə- participial verb)

sθ'əθ'íkʼ^{w} 'open sore', sθ'əkʼ^{w}θ'íkʼ^{w} 'open sores'

χt'éls 'put/cast/throw a spell', χt'ét 'put or cast a spell on s-o'

yəwí·lt 'cast an evil spell on s-o', syəwí·l 'an evil spell; power to do witchcraft and predict future', syó·wə 'witch, seer' (s-, yəw ~ yó·w 'supernatural power', -í·l 'get, go, come')

syéwəl sq'áq'əy 'spirit sickness' (s-yéwəl 'guardian spirit, spirit power, possession by spirit')(symptoms

of spirit sickness are: depression, insomnia, hearing songs and drumming not physically present, pain in the chest, and some others)

xéysel 'get spooked, fear something behind one'

sp'íq' 'white spotted skin' (s-, p'éq' 'white', + ablaut for derivation), sp'əq'p'íq' 'many white spots on skin'

t'á 'to sprain', t'at'é təl s?í·lwəɬ 'sprain my side'

c'ɬéq'^{w}x^{y}əl 'sprain one's ankle' (r.m.u.)

x^{w}əθ'éq'^{w}x^{y}əl 'ankle joint; sprained ankle', x^{w}əθ'éq'^{w}cəs 'wrist, hand joint; sprained wrist' (r.m.u.)

téɬstəm 'get staggered', (yi)té·lstəm and x̌^{w}əx̌^{w}elá·ystəm 'staggering' (r.m.u., -t-əm)

x^{w}ɛ́ 'to starve, starving'

x̌əɬé·lwəs 'have a stomach-ache' (x̌əɬ 'hurt', -é·lwəs 'in the stomach')

q'é·y tə ɬq'í·ws 'a stroke, half the body paralyzed'

s?éc?ec 'stuttering', ?éc?ec 'to stutter' (compare ?éc-l-əx^{w} 'hear about it')(imitative reduplication)

cx^{w}éstəm 'swelling (of infected sore, of balloon, etc.)', cəcíx^{w} 'swollen'

Cheh.: ɬqá·le, Chill.: cqá·lə 'thirsty' (ɬ- ~ c- verb-forming, qá· 'water', -lə unknown)

k'^{w}əmé0ət 'throw a tantrum, throw oneself on ground in a tantrum, drop oneself into a seat angrily' (k'^{w}q^{w}əm 'to club', -0ət 'oneself')

téx^{w}əm təl 0'è·lə̀ 'my heart is thumping'

ɬcí·ws, x̌ɬém 'tired' (-í·ws 'in the body', x̌éɬ 'hurt', -ém 'strength'), q'ayí·ws 'tired' (q'á·y 'dead or paralyzed', -í·ws 'in the body')

memé (or mə mé) tə yél·és 'the tooth came out' (mé 'come out, come off', mə- reduplication or mə 'come')

yélyeləsəm 'a steady toothache' (reduplication is 'plural' or 'continuative', yél·és 'tooth', -əm verb-forming)

sɬéməqəl 'tooth/teeth missing, toothless' (s-, ɬəm 'rain

or spray' as in ɬémɛ́x^{W} 'to rain', ɬəmɬémɛx^{W} 'rain-showering off and on', and sɬémx^{y}əl 'dew'.("rain on the feet"), -əqəl 'in the throat'; "rain in the throat" would refer to the juicier sound of speech by people with missing teeth)

ɬétχtəm 'to tremble', ɬétχtəm 'trembling, shivering' ('shiver(ing)' is to tremble more than once)

q'^{W}əlɛ́qəl 'trenchmouth' (q'^{W}él 'cooked; ripe', -éqəl 'in the throat')

tatəq'^{W}á·məstəm 'tuberculosis' (tátəq'^{W}əm 'coughing', ablaut or -á·məs (meaning unknown) or -əs '(in) the face', -t-əm)

yé·t 'to vomit', héyɛt or héyət 'vomiting'

sc'épx^{W}əl 'wart' (s-, c'épχ 'dirty', χ > x^{W} derivational?, -əl unknown)

qəlé·m 'weak' (qəl 'bad', -é·m 'strength', ʔɛyém 'strong' < "good strength")

p'əq'éyl tə s?á·θəs 'the face got white' (p'əq' 'white', -éyl < -í·l 'go, come, get')

sp'íq' 'white spotted skin' as above

13.1.6.3.3. Accident/injury:

Most of the verb roots below can be used with most of the somatic suffixes. What follows is merely a cross-section. Analysis is evident from suffixes already listed previously.

sq'éyk'^{W} 'a bite' (s-)

ləkʷát 'break a bone', slí·k^{W} 'broken (of a bone)', ɬékʷɬəkʷ 'all broken up (of all or many bones, also of sticks)', ləkʷəlɛ́χəl 'break an arm', ləkʷx^{y}é·l 'broke a leg', ləkʷépsəm 'break one's neck', ləkʷəwíc 'break one's spine or back; have a hunchback'

k'^{W}és 'get burned, got burned', k'^{W}sí·ws 'singe hairs off

skin', k'ʷəsá·yθəl 'burned on lips', k'ʷə́s(ə)qəl 'burned in the mouth' (it appears from this that -əqəl 'in the throat' includes the inside of the mouth too), k'ʷə́scəs 'burned on the hand', etc.

ʔέq'əɬ 'choke on bone or s-th solid'

t'kʷí·lə́s ~ t'əkʷíləs 'choke on food', t'ə́kʷələs 'choking on food' (t'əkʷ 'mired', -í·ləs 'in the chest')

ləxʷsɬέm 'choke on water or liquid' (ləxʷs- 'always', ɬέm < ɬəm 'to rain or spray')

p'iθ'ɬέlt 'choke s-o' (p'iθ' 'squeeze', -ɬέl ~ -ɬəɬ 'in the front of the neck', -t 's-o')

t'ə́mxʸəl 'chop one's foot' (as with an ax), similarly t'ə́mcəs, t'ə́mqsəl, etc.

k'ʷəqʷəlέx̣əl 'club on the arm', many others (see exx. of somatic suffixes)

ɬíc'ət 'cut s-th or s-o', lə́c'ləxʷ 'cut s-o accidentally', lə́c'cəs 'cut a hand or finger', sxʷɬə́c'cəs 'a cut on the hand or finger', ɬəc'əlέx̣əl 'cut one's arm'

c'ə́q'ʷ 'hit (with bullet, arrow, s-th shot), wounded, poked', c'əq'ʷlə́xʷ 'hit (with arrow, etc.) accidentally'.

xʷmə́lk'ʷəs 'get hit in the face by s-th falling'

tə́ɬcəs 'hit on the hand with a hammer, hammered on hand'

lá·mət 'hit s-th with s-th thrown', lá·m li tə tə́psəm 'hit in the neck with s-th thrown'

mέ·kʷɬ 'to get hurt, be hurt'

θq'ə́t 'poke, prick, or stab s-o, spear s-th (for ex. fish), pierce s-th'

θ'íq'ʷəst 'punch s-o in the face'

ƛ'íq' 'run over (by car, train, etc.), get wedged (by falling tree), stuck in a trap'

x̣έyp'ət 'scrape s-o or s-th, scratch it (and leave mark)'

ʔíx̣ tə məqsəl 'scratched on the nose, the nose is scratched'

kʷələ́xʸt 'shoot s-o or s-th, sting s-o'

c'á·l təl célex^{y} 'skin my hand, peel the skin on my hand'
sx^{y}ác'x^{y}əl 'splinter or sliver in the foot', sx^{y}ác'cəs 'splinter or sliver in the hand or finger'
t'á 'to sprain'
sx̌ɛ́ɬ 'a wound' (s-)

13.1.6.3.4. Medicine/curing:

q'ép'ət 'bandage it up, tie it up' (the latter meaning is the basic one--there is no specific word just meaning 'to bandage')
q:ówe 'a cane'
ɬɛ́·w 'cured, healed', ɬɛ́·wət 'cure s-o by Indian doctoring; chase s-th away from s-o', ɬɛ́·wətəm 'cured by Indian doctoring', ɬɛ́ɬəwəls 'curing by Indian doctoring, a medicine man "working"'
sx^{w}lɛ́·m 'Indian doctor, medicine man, shaman'
k'^{w}ək'^{w}fyəθət 'training oneself to be an Indian doctor or spirit dancer' (k'^{w}ək'^{w}fy 'climbing', -əθət 'oneself')
tálktə 'non-Indian doctor'
q'éyx̌'θət 'it healed up' (q'éyx̌' 'heal', -θət 'itself')
c'ɔ́lx^{y}ətəl 'looking for lice in s-o's head' (perhaps 'looking for lice in each other's head')(mɔ́x^{y}c'əl 'louse' + metathesis (derivational) > c'ɔ́lx^{y}, -təl 'reciprocal')
cəl x̌ɛ́·yləs 'I made it (if laxative finally works)'(r.m.u.)
st'ɔ́lməx^{w} 'medicine' (r.m.u., unless st'í·ləm 'song')
st'əlməx^{w}á·ləs 'eye medicine'
st'əlməx^{w}í·wəl 'love medicine' (-í·wəl 'in genitals or insides')
x^{w}əq'^{w}ələ?éltəl 'hangover medicine' (possibly x^{w}əq'^{w}élə 'scouring rush, horsetail', -?éltəl 'medicine' (incl: -təl 'device, thing for'))
θ'əl?é·ltəl 'heart medicine, juniper' (θ'élə 'heart',

-ʔɛ́·ltəl 'medicine')
syɛ́·ttəl 'throw-up medicine' (s-yɛ́·t 'vomit', -təl 'device or thing to')
x^{y}ɛ́x^{y}əɬməṯ θə cmɛ́lɛ 'looking after s-o having a baby, midwifing' (also without the reduplication)
nɛ́rs 'nurse' (< English)
sqíqəməl 'puberty hut' (sqəmɛ́l 'pit house', C_1í- 'diminutive')
mɛʔɛ́l·ɛ́səm 'pulled out (of a tooth or teeth)' (mɛ 'take out, come out', -ʔɛ́l·ɛ́s 'tooth', -əm 'passive')
mɛ́x^{y}əs tə yɛ́l·ɛ́s 'he took out or pulled the tooth' (mɛ́ 'take out', -əx^{y} '3rd person object', -əs '3rd person subject')
Tait: mí ck'^{w}ɛ́c, Chill.: mí sk'^{w}ɛ́c 'recover sight, sight came' (mí 'come')
sɛ́k'^{w}əm 'outer cedar bark splint' (the word may also mean 'outer bark')
qətí·wsəm 'take a sweatbath' (qə 'water', -t unknown here, -í·ws '(on) the body', -əm 'middle-passive')
x^{y}ɛx^{y}t'ɛ́·ləs 'trillium' (cataract medicine, possibly < x^{y}ɛ́t'-əm 'swim (of a fish)', $-C_1$ə- 'continuative', -ɛ́·ləs 'in the eyes'; this may also be the word for 'cataracts')

13.1.6.4. Non-human Body Functions and Dysfunctions.

Fish:

c'ʌ'ɛ́m 'jump' (HABRI)
t'iléqəl 'a spawning salmon with eggs loose and dangling'
k^{w}ɛ́məx^{w} 'salmon after spawning (no eggs left)'
χɛ́yqɛyɛ 'old salmon ready to die'
cəwɛ́ɬəm 'spawning'
x^{y}ɛ́t'əm 'swimming (of fish)'
probably plus some verbs also used for humans like k'^{w}ɛ́cləx^{w} 'see it', lɛ́p'əx^{y} 'eat it', etc.

Animals:

-ə́ləc 'animal or bird droppings' (< -ə́ləc 'in the rump')
k^wá·θət 'to gallop'
x̣ə́ylə́m 'to growl (of an animal)' (cp. x̣ə́ytəm 'to growl (of humans, under the breath)')
q'ə́·w 'howl'
q^wɛ̀·l 'talk' (HB and perhaps of frog also)
q'^wáq'^{w}əl 'tame'
ƛ'ɛp'ə́ləcəm (ɛ may ~ ə) 'wagging its tail' (sƛ'əp'ə́ləc 'tail', possible ablaut may be 'continuative', -əm is verb forming suffix or 'middle voice')
sk^wík^wəx^y 'wild'
plus many verbs also used for humans such as q'ə́yk'^{w}ət 'bite into it', c'ə́mət 'bite on it, put in mouth', lə́p'əx^y 'eat s-th', k'^{w}ə́cləx^w 'see it', təl·á·mət 'understand', q'á·y 'die', etc.

Birds:

-ə́ləc 'animal or bird droppings'
ɬá·k'^{w} 'to fly'
ƛ'x^wə́·yɬəm 'hatch eggs, brood, incubate or sit on eggs' (ƛ'əx^w 'cover over', -ə́·yɬ unknown unless related to -ʔá·lɬ 'young', -əm 'middle-passive')
q^wəlayθí·ləm 'make music' (q^wəl 'talk', -á·yθəl 'in lips', -í·l 'go, come, get', -əm 'middle-passive')
smíməlәhá·lɬə́·lə́ 'little bird's nest' (s-, C_1í- 'diminutive', mɛməlәhá·lɬ 'egg' (< mə́mələ 'children', -há·lɬ 'young'), -ə́·lə́ 'container (of)')
t'áp'əls 'to peck'
t'í·ləm 'sing'
q^wɛ̀·l 'talk', q^wó·lq^wəl 'warning (a different cry)'
plus many verbs also used for humans such as lə́p'əx^y, k'^{w}ə́cləx^w, etc.

Insects:

q'ɛ́yk'^{W}ət 'bite s-o' (HAFBR)
ɬɛ́·k'^{W} 'to fly' (B)
c'ʌ'ɛ́m 'to jump' (HAFBR)
t'f·lom 'to sing (used in place of a word 'to buzz')
k^{W}əlɛ́x^{y}t 'sting s-o, shoot s-o or s-th' (k^{W}əlɛ́x^{y} 'shoot (with arrow, gun, etc.)' < k^{W}əl- 'hold in hand', -əx^{y} 'upright')
probably plus other verbs also used for humans like k'^{W}ɛ́cləx^{W}, lɛ́p'əx^{y}, etc.

Reptiles:

sq'əlɛ́·w 'coiled (of snake)' (s-, q'əl as in q'əlq'él-p' 'tangled (on itself)' or q'əlq'él-q' 'tangled on s-th, snagged', -ɛ́·w unknown), sq'əlq'əlɛ́·w 'coiling (of a snake), ready to strike' (reduplication 'plural/continuative')
q^{W}ɛ̀·l 'talk, croak (of frog)' (HAB)
c'ʌ'ɛ́m 'jump' (HAFBI)
ɬɛ́qəm 'hiss, whisper' (H)
probably plus other verbs also used for humans like k'^{W}ɛ́cləx^{W}, lɛ́p'əx^{y}, etc.

13.1.7. Morphosememic Patterns of Anatomy.

In 5.2.1 the somatic suffixes were presented, showing that about a third of them have a suppletive relationship to their equivalent independent words; the remainder are etymologically related to the independent word equivalents. The somatic suffix system is extensive in that about a quarter of all the independent words for body parts have somatic suffix equivalents. The systematic morphosememic feature shared by these somatic suffixes is that they are morphosememically locative ('on

or in the (body part)') except when used in independent body part words; in the latter case the meaning shifts to become partitive ('of the (body part)').

In section 3 the independent words for body parts were presented and morphosememically analyzed. There are several systematic features that can be seen in the analysis. 1. As with somatic suffixes (for ex. -cəs 'on the hand or finger', -x^{y}əl 'on the foot or leg'), the division of the body by the Halkomelem words is sometimes different from English divisions (tə́psəm 'back of the head and back of the neck', sχə́l·ə 'leg and foot', etc.).

2. The independent words are extremely analyzable compared to the English equivalents.

3. There is marked morphosememic parallelism in the treatment of the parts of the hands and feet, of the knuckles, ankles and wrists, of the elbow and shin, of the hair (other than on top of the head), and of the genitals. Thus in both hands and feet: the fingers and toes 'widen' the limb, the thumb and big toe are the 'stout member' or 'stout part' of the limb, the palm and the sole are the 'face' of the limb, the hollow of the hand and arch of the foot are 'going downriver on the face' of the limb, and the nails of both hands and feet are the 'grayish' parts. The knuckles, ankles and wrists are 'lumps' and the joints of the ankle and wrist can both

be named by a root that also means they are sprained. The elbow and shin are both called the 'bone' of their limbs (arm and leg), while the penis, head of the penis, and vagina/vulva all begin with the same root, x^{y}, and prefix s-. The hair other than on the top of the head is differentiated by the somatic suffixes and pluralized by reduplication.

4. All the independent body part words can be fit within ten derivational types: a. unanalyzable at present (no suffixes detectable, about 22 cases), b. root meaning unknown (suffixes segmentable, about 22 cases), c. root semantically empty (with somatic suffixes whose locative meaning is cancelled out; examples include the nose, mouth, tooth, tongue, back of head and neck, chest, belly, rib, rump, and possibly heart and heel--with roots m-, θ-, y-, t-, t-, ʔ-, $k^{\prime w}$-, l-, ɬ-, and possibly θ'- and θ'-, respectively), d. verb roots describing an action or function of the body part (about 21 examples including: 'chop, mark, braid, come out (of hair), bite on, talk, greedy/eat too much, carry on shoulders, club, widen (2 cases), point/aim, marry, suckle, come out above (2 cases), go into quieter backwater, wedged in, fly strength, have an erection, and cover over'), e. adjectival verb roots of descriptive nature (about 15 examples including including: 'soft, red, tangled, black, blue (2 cases), spotted, wet, stout (3 cases), wide (3 cases),

good, full), f. adverbial verb roots (nine examples: 'above (2 examples), below, right, left, middle, down-river (2 cases), across'), g. body part roots (16 examples including only multiple examples of 'bone', 'hair', 'flesh', and 'face'), h. descriptive noun roots (about nine examples including five of 'lump', and one each of 'hole', 'half', 'stone' and 'fat'), i. noun kinterm root (one or two examples include 'youngest child' in 'little finger' and 'child' in 'womb'; if s-ḿélɛ is 'have a child' then this latter example ('womb') belongs in group d.), and j. noun root to describe function (one example 'bladder' < 'urine container' < 'urine' root).

5. The suffixes used in the independent body part words are mostly somatic; the few that are not include: -á·ls 'round thing; fruit', -élɛ ~ -é·lɛ́ 'container', -é·lc' 'twisting around', -təl 'device, thing to' or 'reciprocal', -ámél 'part, member', -owəɬ ~ -éwəɬ 'canoe', -é·məc' 'standing upright', -ém 'strength', possibly -θət 'itself'.

In section 4 we examined the pésq^{w}təl, the anatomical insult, and discovered 50 examples. These consist of an adjectival verb, a verb of another type or a noun, followed by a somatic suffix, with three exceptions ('big nose' and 'big belly' have prefixes on the independent body part word instead, and 'ugly' uses the suffix -á·mex^{y} '-looking, in looks, in appearance' which is not somatic but is close). The verb and noun roots have a morpho-

sememic pattern: they describe size and shape (32 examples including: 'big, sloppy, pointed, high, flat, long, hooking, round, scrawny, crooked, boney, wide, and short'), looks (nine examples including 'bad', 'cross' (< 'bad'), 'ugly' (< 'disappointed and angry looking'), 'dirty', and 'black'), anatomy (two examples, 'hairy' and 'snotty'); four examples use analogies (sturgeon eyes, marble eyes, climbing rump, and tail (> 'rump')), and three examples describe miscellaneous actions (fast mouth, spray or moisture in the mouth (> 'toothless, teeth missing'), and something spit out of the nose). The largest number of examples found with one root have the bound root θí· 'big', modified in several ways. θ ~ θəh 'big' sometimes appears (reduced ablaut grades), sometimes prefixed with x^{w}- 'pertaining to the head or part of the head', sometimes reduplicated for 'plural', θíθə ~ θíθəh. θí· only appears once (in 'loud voice') and is prefixed by x^{w}- 'pertaining to the head or part of the head' and then by s- 'nominalizer'. Still another variant exists for 'big' within the pésq^{w}təl, shifting the meaning of s- nominalizer to 'big' and prefixing it to two independent body part words (méqsəl and k'^{w}ə́l·ɛ); this could be like calling someone 'The Nose' or 'The Belly' with the implication of huge dimensions. A final variant uses the normal word for 'big', hík^{w}, and applies it in a sentence to someone's uvula; the implication is that the person's

mouth is open so much that his uvula appears huge.

Section 5 listed terms of non-human anatomy, along with some words that apply to human as well as non-human. For the fish there are 21 terms that apply only to fish plus 17 which can also refer to other living creatures. The 17 words have already been analyzed under human anatomy; the 21 words of exclusively fish anatomy contain two parallels: s-χ́ép-əq^{w} 'soft gristle and insides of fish head' and s-χ́ép-x^{y}əl 'fish tail (including soft gristle)' both have the root s-χ́ép- which apparently means 'soft edible gristle of fish'; q'ə́tməl 'fin, neck fin, possibly back fin' and θ'ə́tməl 'belly fin' both have a rare lexical suffix which may mean 'fin'. The other thing to note about the set of 38 words is that they include the following somatic suffixes, all semantically extended to apply to the fish: -əq^{w} 'of the top of the head', -á·yθəl 'of the jaw or lip', -x^{y}əl 'of the foot or leg', and possibly -əs 'of the face' (in 'head').

Of animal body terms 32 apply to humans as well, while only eight or so do not: 'tuft of hair on horse's leg', 'fur, animal hair', 'horn, antler', 'animal tripe', 'tail', 'paw', 'hind leg', 'foreleg'. The total 40 words include the following somatic suffixes: -x^{y}əl 'of the foot or leg', -cəs 'of the hand or fingers', -íwəl 'of the insides', -əlec 'of the rump', -əwíc 'of the back', -á'yθəl 'of the jaw or lip', -ə́l·ə́s 'of the tooth or teeth', -ə́x^{w}θəɬ 'of

the tongue', -ɬəɬ 'of the front of the neck', and -ǵwəχ 'of the ribs'--all extended semantically to apply to animals.

There are about 24 words found so far for bird anatomy, eight of which do not also apply to human anatomy: 'egg', 'down, real fine feathers', 'small feather', 'long feather (of wing or tail)', 'wing', 'tail', and two words for 'beak, bill'. The sizing of feathers is a morphosememic feature of interest, as is the analysis of 'egg' as 'children' + 'young'. The somatic suffixes used in the set of 24 words are: -eləc 'of the rump', -ɬwəl 'of the insides', -ǵpsəm 'of the back of head and neck', -ɬ·ləs 'of the chest', and possibly -ǵlqəl which could mean 'of the wing' or just 'feather'.

Terms for reptiles found so far include 12 terms also applicable to humans and just one that is not, sƛ'əp'ǵləc 'tail' (applicable to humans however as a slang term). Somatic suffixes used are: -ələk 'of the rump', -ǵ·yθəl 'of the jaw', -ǵx^{w}θəɬ 'of the tongue', and -ɬwəl 'of the insides'. Confirmed parts of insects include only three words, of which only sƛ'əq'ǵ·l 'wing' cannot also apply to humans. Neither the reptile nor the insect sets show anything systematic in semantic design.

In non-human anatomy there are a few interesting omissions: no word for brain of fish (just sχǵpəq^{w} 'gristle and insides of head' is used), no word for rump

of an animal (just the word for 'hind leg' is used), and there is probably no word for chest of an animal (just the word for 'ribs' is used).

Section 6 covers functions and dysfunctions of the body. Most of these words are verbs; the main exceptions are body products, some illnesses and some medicines--these and a few other body dysfunctions are nominals. Body products include those resulting from both functions and dysfunctions. Body dysfunctions include the following subdivisions: living or healthy/dead or sick, symptom/state/illness/disability, accident/injury, and medicine/curing. One interesting semantic feature of these subdivisions is that words relating to living and healthy are semantically linked (ʔé·yəlɛxʷ 'alive, in good health', mə ʔé·yəlɛxʷ 'get better, get well, come alive, come back to life'), as are words relating to dying and sick (q'áq'əy 'dying, sick', sq'áq'əy 'sickness; dead for awhile'). Another interesting feature is that what non-Indian doctors might regard as symptoms, dysfunctional body states and even psychological states are usually regarded as illnesses by the Upper Stalo and are treated by Indian doctors and by Indian medicines. Some of the psychological states are also treated by initiation into spirit dancing. The subdivisions of accident/injury and medicine/curing have been only sketched in outline here by very incomplete lists of words.

With the extensive use of somatic suffixes elsewhere one would expect much heavier use of them in the body function words than one finds. It seems there are a goodly number of body function roots which do not need (and do not allow) somatic suffixation. Those body function words which do use somatic suffixes show a clear morphosememic shift in the meanings of the somatic suffixes. The suffixes lose their locative meaning and become very nearly subjects of the verb root (for example, c'éləcəm 'sit down, take a seat' < c'é- 'be on top' + -ləc 'rump' + -əm 'middle-passive'). In some cases it is difficult to tell whether the somatic suffix has a subject or an object function (for example, mék^{w}əθ 'kiss' --is it < 'the mouth gets thick' or 'get the mouth thick'?). With body dysfunctions this same shifting occurs except when the somatic suffixes are attached to roots that can also be used without somatic suffixes; this latter set needs the locativeness to specify the location of the dysfunction (for ex., q'áq'əyx^{y}əl 'sick in the foot', q'áq'əy 'sick'; lək^{w}épsəm 'break one's neck', s-lík^{w} 'broken (of a bone)'). Somatic suffixes are used with almost all the accident/injury words and are there distinctly locative.

Morphosememic analysis of analyzable body function words shows several types of morphosememic derivation: 1. imitative, as in 'hiccough', 'sneeze', 'snore' and

possibly in 'blow', 'call s-o', 'cry, weep', 'defecate', 'growl (of stomach)', 'spit', 'whisper' and 'yawn'.

2. descriptive of appearance, as in 'stand up' < 'legs upright', 'walk' < 'step upright', 'yawn' < 'widen or spread face', 'kiss' < 'mouth thickens' or 'thicken the mouth', 'shake hands' < 'hold a hand (in one's hand)', 'smile' < 'laugh on face', 'stick out, protrude' < 'like a nose', 'make breathy noise' < 'talk in breath or throat', 'finished eating' < 'finish in lips or jaws', 'get up with quick motion' < 'suddenly go or come upright', and 'blushing' < 'getting red in face'.

3. description of function, as in 'swallow' < 'fill it with food', 'run' < 'feet hurry' or 'hurry the feet', 'thinking or pondering s-th' < 'go learning it on purpose', 'understand' < 'learn (by) oneself', 'realize it' < 'happen to learn it', 'know it' < 'happen or manage to believe it', 'sit down, take a seat' < '(put) rump on top, rump is on top', 'masturbate' < 'bring oneself to a summit', 'guess' < 'similar in the mind', 'one's voice is changing' < 'the throat is tamed' or 'tame the throat'.

4. diminutive, as in 'swimming' < 'little bathing', 'sob' < 'little cry(ing) or weep(ing)'.

5. pluralizing, as in 'expect' < 'look a number of times'.

Body products are mostly body function words nominalized with s- (at least eight and possibly 14 of the 19 words fit this description). The rest are mostly descrip-

tive of the product's function: 'thoughts, feelings' < 'talk in the mind' (incidentally a nice confirmation of the Whorf hypothesis), 'footprint' < 'thing that marks', 'milk; breast' < 'suckled thing'; three are descriptive: 'tear' < 'water of the eye', 'bile; gall-bladder' < 'full (+ unknown affix)', 'shadow' < 'black (+ unknown affix)'.

In the area of body dysfunctions, little other than anecdotal can be said about words relating to life/death/sickness/health: 'corpse, ghost' < 'clothing of (the soul?)', 'almost died' < 'almost' (verbal taboo?), 'drop dead' < '(fall?) on one's nose'.

Words relating to symptom/state/illness/disability, however, do contain some systematic morphosememic organization:

1. Fifteen of these words are formed with -təm 'state of (verb)', which derives morphosememically from the -t 'third person object, on purpose' + -əm 'middle-passive voice'; all are descriptive of physical appearance or feeling and can be inflected for first or second person subject by changing the passive ending (1 sg. -θèlèm, 2 sg. -θè·m, 1 pl. -tálx^{w}es, 2 pl. -tàlèm, 3 -təm). Thus ɬétχtəm is '(third person) is/are trembling or shivering' and ɬétχθèlèm is 'I'm shivering or trembling'.

2. Related to this is the large number of words ending in -əm 'middle-passive' without the -t; there are 14 or 15 of these words (which seem to be conjugated with active

subjects).

3. Words descriptive of feelings: 'weak' < 'bad strength', 'rheumatism' < 'aching', 'dizzy, drunk' < 'face spins around', 'dumbfounded, speechless' < 'rump or insides flying up', 'tired' < 'hurt strength' and also < 'dead in the body', 'nauseated' < 'vomiting in the mind', 'blind' < 'black in the face', 'headache' < 'hurt in the head', 'stomach ache' < 'hurt in the stomach', 'to cramp' < either 'tangled on its own accord' or 'shrunk', 'constipated' (three words) < 'wedged or tight in the anus', < 'dry in the anus' and < 'mired in the anus', 'heartburn' < 'burn (of a fire) in the chest', 'trenchmouth' < 'cooked in the throat', 'faint' < 'the body is forgotten', 'passed out drunk; forgetful' < 'always forgetful in the mind', 'pass out, faint (probably due to lack of air)' < 'break or split rope in throat', 'run out of breath' < 'break or split rope of breath', and 'simultaneously out of breath, overtired and overhungry' < 'split (in) the chest' (as to split apple by hand). The last five show two subsystems at work: 'faint' and 'pass out (if drunk)' are derived from the root 'to forget', and three 'out of breath' words are derived from 'break or split rope' or 'split (by hand)'.

4. Words descriptive of appearance: 'black eye' < 'bruised on eye', 'tuberculosis' < 'coughing face', 'jaundice' < 'bile' < 'gall-bladder' < 'full', 'lame'

< 'climbing rump', 'hunchback' < 'lump on the back', 'hemmorhoids' < 'open sores in rump', 'strawberry birthmark on arm' < 'strawberry on arm', 'wart' < 'dirty (+ unknown affix)', 'diarrhea' < 'ripped up', 'have a crooked jaw' < 'jaw twisted or turned wrong way', 'smallpox' < 'gills on the body'.

5. Words descriptive of actions: 'grinding one's teeth' < 'twisting or turning the teeth the wrong way', 'throw a tantrum' < 'club oneself', 'scar' < 'something healed', 'toothless, teeth missing' < 'moisture or spray in throat' (referring to the sound of spittle during talking), and 'runny nose' < 'to spit from nose'.

6. Words descriptive of functions: 'paralyzed' < 'dead', 'stroke' < 'half of body dead or paralyzed', 'cripple, to limp' < 'broken rump or hip'.

7. Plural-continuative derivation: 'shiver' < 'trembling' because a shiver is multiple trembles, 'steady toothache' < 'have a plural or continous tooth', and 'stutter' has 'plural' reduplication because a stutter is a repetition.

8. Words requiring the word 'sickness': 'menstruation' < 'moon sickness', 'a cold' < 'chill sickness', and 'spirit sickness' < 'spirit power or possession sickness'.

9. Words requiring 'can't, impossible to': 'mute' < 'can't talk' and 'insomnia' < 'can't sleep'.

Words relating to accident/injury show no morphosememic systems except that the roots are nearly all

verbs which can each be inflected with most of the somatic suffixes (the latter retaining their locative meaning as a set). A few anecdotal things are all that can be noted otherwise: 'choke on food' < 'mired in the chest' and 'hit (with arrow, bullet, etc.), wounded' < 'poked'.

Words relating to medicine/curing show several ways of expressing the sememe 'medicine': st'élmex^{w}, -ʔé·ltel, and -tel; the first is used with somatic suffixes to specify where the medicine is to work, the second is used with roots for body parts or roots showing functions of the medicine, the third is only attested with a root showing the medicine's function ('vomit medicine'). Another way of specifying medicines is by naming a plant for the disease it cures: 'swamp gooseberry' < 'hemmorhoid plant', 'trillium' < 'cataracts (?)' < 'swimming like a fish in the eyes'. The word for curing is also interesting since it refers only to an Indian doctor's curing and is related to or derived from the word 'chase something away'. I have not yet had access to much of the vocabulary of Indian doctoring, but another interesting word from that area is k'^{w}ek'^{w}iyəθət 'training oneself to be an Indian doctor or spirit dancer' < 'climbing oneself'. The training involves fasting, purification, and long hikes into the wilderness and so involves both physical and spiritual climbing of oneself.

Finally there is the area of non-human body functions and dysfunctions. This area shows a number of words specialized and generalized in different ways than in English. Greater specialization: three stages of spawning have distinct terms; 'swim (of a fish)' is a different word from 'swim (of a human)'; -élec with animals and birds means 'droppings' as distinct from human feces, s?á·?, and from the human suffix -élec, -(ə)lec 'on the rump'; an animal 'growls' with a different word than a human (though the roots appear related). Greater generalization: animals and birds can q^{w}ɛ̓·l̓ ('talk') like humans; the word t'f̓·ləm 'sing' can be used of birds and insects as well as of people and with insects refers to buzzing; an insect 'stings' and a snake 'hisses' with words a person uses to 'shoot' and 'whisper'; the vocabulary of bird eggs ('eggs', 'nest', 'sit on eggs') treats all three words by referring to the eggs as 'young children'. The corpus of words referring to non-human body functions and dysfunctions still is rather incomplete, but it shows some generalization of terms in the direction of considering fauna to have more human attributes than we do in English. This anthropomorphic trend is born out in legends, stories, and folk beliefs as well (for example in the legend of the Wealick brothers, the elder of whom became a bear, and in the refusal of some Stalo people to kill bears because they believe them to be people who

can take off their coats and become human, and in stories of wolves understanding and responding to human language).

13.2. Survey of the Morphosememics of Other Domains. There is no space here to go deeply into the morphosememic structure of each of the other domains mentioned in Chapter 12. There is no room to treat them in any detail nor to list the data. So this section will survey the structures of the following domains briefly (as outlined in Chapter 12): 1. Land features and place names, 2. Weather features, 3. Water features, 4. Fire, 5. Time periods and tense, 6. Flora, 7. Categories of humans and proper names, 8. Religion and the spirit, 9. Buildings and household goods, 10. Clothing, 11. Hunting and processing the catch, 12. Fishing and processing the catch, 13. Tools for making things, 14. Cedar root baskets, 15. Canoes and boats, 16. Emotions and feelings, attitudes and mental processes, 17. Senses: sights, touches, sounds, tastes, smells, 18. Adverbials: directions and qualifiers, 19. Demonstratives and auxiliaries, 20. Personal pronouns, 21. Transitivizers and intransitivizers and benefactive, 22. Mood (including interjections), 23. Voice, 24. Continuative and plural, 25. Numerals, 26. Prepositionals, 27. Pconj's. The other domains

have not been gathered together yet in list form to be surveyed. The features and functions named and elaborated in each domain show how the Upper Stalo perceive their environment.

13.2.1. Land Features and Place Names. As mentioned in the semantics, 'mountain (any size)' and 'rock (any size larger than pebble)' are named with the same term, smé·lt. There is no word for rolling hill, but there are sqatəméyləp and tewèləhíləp (< tewéłə 'tilted'), both terms meaning 'sloping ground' and ləq'éyləp 'level ground' (< ləq' 'level'). Terms for canyons and steep cliffs are elaborated (χéyłés 'very steep slope, steep shore, steep dropoff' (< 'marked in face'), sχəχék'^{W} 'canyon (narrow, walled-in with rock)' (< 'wedged'), (s)q'^{W}əléqəl 'vertical rock face, cliff', χəq'ét 'bluff', ɬéq 'steep', etc.). The suffix -íləp ~ -éyləp 'ground, land' of course is common. A number of mountain features are elaborated (swəc'ɛ?é 'summit, top of mountain', wəc'é· 'get to summit', sχ^{W}í·təl 'basin; morain lake; chamberpot', yélt 'to rockslide', yélt tə mé·qɛ 'have a snowslide, to avalanche', łíłəqɛy 'glacier, Mt. Cheam' (łíłəqɛy was originally the name of the woman (wife of Mt. Baker) who ran away and settled on the Fraser with her children and dog, all becoming mountains), k^{W}əlqéyłém 'cave',

etc.). There are fewer terms for things in the flats (spéɬχəl 'prairie, treeless area', máqʷəm 'swamp, bog, marsh; swamp tea, Labrador tea'). A 'point of land' is sʔélqsəl and the 'tail of an island' is sθʾəmáxʷəlec with somatic suffixes for 'nose, point' and 'bottom, rump'. Placenames also use many somatic suffixes, anthropomorphizing the geography if you will (-elec, -áθəl, -əs, -ə(l)qs(əl), -əqʷ ~ -íqʷ, and -qəl each appear in four or more placenames). sqʾəw- 'a bend or turn (in river or road)' and sχʷáy- (< χʷə́·y 'many people died at the same time') are common roots in placenames (found in at least four each). Areas named in placenames include: settlements, mountains and rocks, points on the river, turns in the river, mouths of creeks, many rock formations (often said to be people turned to stone by χəχéls 'the Transformer(s)'), channels, rivers and creeks (usually two words: place name + stá·lo(w) 'river'), locations where plants or resources or animals are found (páqʾʷəm 'Popkum, puffballs', ciyá·m 'Cheam village, wild strawberry place', χʷaχʷəlé·ɬp 'Yale, Stalo village below Yale Creek' (< 'willow tree' because a single willow stood there for years), ʔəlqé·yəm 'place on rock wall of Fraser where lots of snakes sun themselves (above χəqʾétələc which is above American Bar)', etc.), lakes,

springs (q^{W}á·ls 'Harrison Hot Springs, boiling'), and waterfalls ('Elk Creek falls, spawning ground'). Places where things were done were also named (as in k'^{W}əq^{W}ɛ́líθ'ɛ 'Coqualeetza, place to club clothes or blankets', c'iyɛ́qtəl 'Tzeachten, fish weir', t'ɛmiyɛhá·y 'Tamihi Mountain, hermaphrodite babies finish (such deformed babies were left to die on that mountain)', etc.). Some places are named for stories too long to explain here (c'ɛ?í·lɛ́s 'Chehalis, on top of the chest', θ'əwɛ́·lí 'Soowahlie, melted or wasted away', yəq^{W}yəq^{W}í·ws 'Yakweakwioose, repeatedly burnt out (village or grass covering)', sx̣^{W}áx̣^{W}iymət 'settlement near Katz Reserve, many people died in the past (an epidemic wiped out 36 pit houses)', etc.). Other features named include the following minerals: t'ɔ́mq'əθəl 'jade, any agate' (< t'əm- 'chop' because jade was used as a whetstone), sɣí·c'əm 'sand', (spá·lk'^{W}əm 'dust', θ'ɔ́x̣ət 'gravel'), st'əwɔ́k'^{W} 'white clay (used for whitening powder, with wool)', sθ'í·qəl 'wet mud', θ'ɛ́θ'əɬ 'crystal', cíkməl 'iron, silver (in silver money)' (< Chinook Jargon), x^{W}ɛ́t 'lead, weight, sinker, shot, bullet', q^{W}íq^{W}i 'copper', k^{W}ú·l 'gold' (< English), sq'^{W}ɛ́l 'hard metal found in mines (used for arrowheads)'.

13.2.2. Weather Features. 100 terms for weather

(including 16 idiomatic phrases) have been found to date. Almost half of these are verbs, showing equal emphasis upon weather actions or functions and weather products. At least 20 of the nominal terms have corresponding varbal forms (sqʷə́txʸəm 'fog' + qʷə́txʸəm 'get fog(gy)', spəhé·ls 'wind' + pəhé·ls 'to blow (of wind)', even swéyəl 'sky, day, weather' + wéyəl 'become day' and wáwəyəl 'getting day, dawn').

The domain as a whole includes terms for: the sun and lighting effects (19 or 20 terms, including t'áltəl 'an eclipse' and t'éltəs 'to eclipse s-th' (< t'èl 'go out of sight')), the moon and its periods (9 terms or phrases), stars and constellations (5 terms), clouds and fog (5 terms), wind (16 terms), warm or cold weather (7 or 8 terms), actions of Thunderbird (6 weather-causing actions), rain (9 terms), hail (4 terms), snow (7 terms), ice and sleet (6 terms), frost and dew (5 terms), and bad vs. good weather (4 terms).

Quite a few of these terms use somatic metaphors and somatic suffixes: sx̣əlx̣ólə-s tə syá·qʷəm 'rays of light' (< 'legs of the sun'), sθəqəlxʸélə́m ~ (Cheh. or Tait) swə́texʸəl 'rainbow' and (Chill.) θəlqxʸélə́m 'getting a rainbow' (-xʸəl 'leg, foot', θə́q 'steep', -əl 'become, go, get', -l- 'plural' in the latter word),

qɛyqɛy̓ɛ̓ələ́·səm 'rays of sun from between clouds' (< qɛyqɛy̓ɛ̓ələ́ 'shədow' + -á·s 'on the face', -əm 'middle voice'); sk'^{w}əx^{y}á·s 'moon' (< k'^{w}əx^{y}- 'count', -á·s 'face'); y̓ɛylɛ̓ələmás 'fleecy wave clouds (resembling sheep)' (< 'repeatedly marked on the face'); sk'^{w}əlk'^{w}élx^{y}əl and q'ɛyq'əlc'iyásəm spəhé·ls (both) 'whirlwind' (-x^{y}əl 'leg', q'ɛyq'əlc'- 'twisting', -ás 'in the face', -əm 'middle voice'), spatpətəlé̓ɛ̓əl 'thunder wind' (< 'repeated blowing with mouth' + ʕon) the arm'); actions of sx^{w}əx^{w}á·s 'Thunderbird, thunder' (and sx^{w}əx^{w}-á·s itself as noted earlier): y̓éləq'ət tə sx^{w}əx^{w}á·s 'to lightning' and y̓élɛ̓ələq'ət tə sx^{w}əx^{w}á·s 'lightning' (< y̓éləq'ət 'open on · eyes', y̓élɛ̓ələq'ət 'opening one's eyes repeatedly'), q^{w}íy̓ɛ̓təs tə ɬéptəls tə sx^{w}əx^{w}á·s 'lightning' and q^{w}íy̓ɛ̓təs tə ƛ'qé·ls tə sx^{w}əx^{w}á·s 'thunder' (q^{w}íy̓ɛ̓təs 'he shakes them', ɬéptəls 'his eyelashes', (s)ƛ'qé·ls 'his wings')(cp. also q^{w}íy̓ɛ̓əət tə témé̓x^{w} 'have an earthquake' < 'the earth shakes itself'), mə sé̓ɛ̓^{w}ə tə sx^{w}əx^{w}á·s 'start to rain' (sé̓ɛ̓^{w}ə 'urinate'); x^{w}émx^{y}əl 'pouring (of rain)' (ɛ̓^{w}ém 'hurry, fast', -x^{y}əl '(in) legs or feet'), x^{w}é̓ə'x^{y}əl ~ x^{w}é̓c'x^{y}əl 'stop raining' (r.m.u. + -x^{y}əl '(in) legs or feet'), himqé̓x^{y}əl 'to rain and snow together (when the snow melts fast)' or 'raining and snowing together' (probably hə- 'continuative', mé·qɛ 'snow', -x^{y}əl as

in x^{W}émx^{y}əl, etc.), sk'^{W}əq^{W}χ^{W}á·s (k'^{W} ~ q'^{W}) 'the hail' and k'^{W}əq^{W}χ^{W}á·s (k'^{W} ~ q'^{W}) 'to hail' (k'^{W}éq^{W} 'to club with sticklike object', q'^{W}éq^{W} 'to beat', -á·s 'in the face')(the other words for 'hail' and 'hailing' appear to have ƛ'əm- as root < c'ƛ'ém 'jump', cp. 'grasshopper'), syɛlyelísəm 'icicles' < yélés 'tooth' + R 'many, plural'); one of the variants for 'dew' sɬémx^{y}əl < s- 'nominal' + ɬém- 'moisture, rain' + -x^{y}əl 'on the foot' (actually underfoot).

Other morphosememic patterns to note are: the elaboration of words for rain and snow (sɬém$\acute{ə}$x^{W} 'the rain', ɬém$\acute{ə}$x^{W} 'to rain', ɬémt 'rainshower', ɬɛlétəm 'to sprinkle' (< 'one gets splashed'), ɬəmɬémə$\acute{ə}$x^{W} 'rain on and off', x^{W}ém$\acute{ə}$x^{y}əl 'pouring (of rain), raining hard', x^{W}éθ'x^{y}əl 'stop raining', himqéx^{y}əl 'raining and snowing together', χ^{W}í·q'^{W}əl 'to sleet, rain freezing rain, silver thaw', syíq 'falling snow', mé·qɛ 'snow on the ground' (~ 'to snow' in a few idiolects), yíq 'to snow', q'əlsiyéqəm 'snowdrift' or 'to snowdrift' (?), and sk^{W}əlx^{y}ém$\acute{ə}$ 'fine snow that drifts in through cracks'); the compatibility of both χéƛ' 'turbulent' and líq^{W}əl 'calm' with both wind and water, the words for cessation of wind and of rain (Cheh. cémq 'to stop blowing (of the wind)', x^{W}éθ'x^{y}əl (θ' ~ c') 'to stop raining', is there a word for 'to stop snowing'?), references

to the moon burning out and being new (χéws tə sk'^{w}əx^{y}á·s 'first quarter of the moon' < χéws 'new' (the month begins on the first visible sliver after the blacked-out moon), ə'éə'əχ tə sk'^{w}əx^{y}á·s 'the last quarter of the moon' < ə'éə'əχ 'burning out', ə'éχ tə sk'^{w}əx^{y}á·s 'the new moon (blacked-out)' < ə'éχ 'burned out'), and the existence of constellations (in a few cases corresponding to ours, as in q'ayíyəc' 'the Elk (corresponding to the Big Dipper or Ursa Major)'; Hill-Tout (1902) and Wells (1965)[1] report others which I have not yet elicited but which seem transliterable as tə ləwámət 'Milky Way' (possibly < ləwámət 'costume of any kind of dancer'), s?éle 'Pleiades' (possibly sí·le 'grandparent'), and wáwəyəl k^{w}ásəl 'morning star (usually Venus, but also can be Mars, Jupiter, or Saturn when rising before the sun)' (< wáwəyəl 'getting day, dawn', k^{w}ásəl 'star')).

13.2.3. Water Features. This domain contains river features (about 85, a few of which may be used with other bodies of water), functions of water, and

1. Charles Hill-Tout: "Ethnological Studies of the Mainland Halkomelem," in Report of the 72nd Meeting of the British Association for the Advancement of Science, 1902, pp.355-490. And Oliver N. Wells: A Vocabulary of Native Words in the Halkomelem Language, second ed., 1965, published by the author, pp.1-47.

bodies of water other than rivers (about nine, largely unanalyzable, including k'^{W}éx̌'k^{W}ɛ 'ocean, sea', sk^{W}ól 'waterfall', sk^{W}íkʷəl 'small waterfall', θíχ 'spring', máq^{W}əm 'marsh, swamp, bog; swamp tea', χá·cɛ 'lake', χáχcɛ 'small lake, pond', sqəqá·qəl 'pond (with clear water)', θ'əq^{W}ɛ́ɬcɛ 'dirty pond, dirty puddle'). The Stalo people are named for the river, i.e. stá·lo(w) '(any) river, Fraser River, Halkomelem-speaking people of the Fraser River', and live too far from the ocean to make use of it. Thus it is not surprising that river terms are elaborated in Chilliwack and other Upper Stalo dialects. The only specializations (and analyzable terms) in non-river features are those of lakes and ponds; the only distinctions there are in size and clarity.

Functions of water have not been fully catalogued yet but include: q^{W}ɛ́s 'fall into water', k'^{W}ɛ́ɬ 'spill (of liquid or solid, of river into dry area)', qá· 'water', pá·lχ^{W}əm 'to steam', pí^{W}əls 'to freeze', spí·w 'ice', q^{W}ɛ́ls ~ ɬátq^{W}əm 'to boil', θ'q'ɛ́m 'a drop of water, to drip', p'áq'^{W}əm 'to bubble, to foam', t'ɛyíc'əm 'fizzing (of s-th dropped in water, of soda pop, etc.)', q'^{W}ɛ́t'c'əm 'sloshing sound, gurgling', k'^{W}éx̌'^{W}ələm 'pouring a liquid', θ'éχət 'scald s-th', and the like, to give a sample. Some of these terms

also appear in other domains too (weather, sounds, preparing food, etc.).

River terms so far include: types of river (8 terms), parts of rivers (19 terms), midstream obstructions (5 terms), turbulence (15 terms), seasonal fluctuations (11 terms), directions (on and with respect to rivers)(21 terms), depth (5 terms), and clarity (2 terms). Types of rivers found so far include stá·lo(w) 'river', státəlo(w) 'creek', təltələwém 'lots of little streams (as come down a mountain after a rain)', sc'élέx^{w} 'slough, backwater stream', łəltélec 'channel (that makes an island)', and corresponding to each root in this set are verbs to travel on these, i.e., tá·l 'go toward or out in the middle of the river, go away from shore (in a canoe or boat)', c'élέx^{w} 'go into a slough or quiet backwater', and łəltələcəm 'go through a channel'.

Parts of rivers include shore features such as səmláθəl 'riverbank', péq^{w}ələs 'riverbank caving off' (< peq^{w} 'split off' + 'tooth (?)'), stalowé·lé 'riverbed' (-é·lé 'container'), ʔéθələc 'bottom (of river, lake, waterfall, basket, anything)', cécəw 'beach, shore', syí·c'əmíləp 'sand bar', and probably features such as syí·c'əm 'sand', θ'éχət 'gravel', q^{w}émélép 'cottonwood bark driftwood (used to carve toy canoes)',

q^{w}ɬé·y 'driftwood; snag', q^{w}éɬq^{w}əɬəy 'driftwood bits of small bits of wood and bark', etc. Parts of rivers also include features of shape: sk^{w}ətéx^{w}qel 'inlet' (< 'inside' + 'in head'), sméyɛ 'bay', sq'éwqel 'a bend or curve (in river, lakeshore or road)', q'əwqéylém 'go around a bend or curve (river, lakeshore, road)', and st'éχ 'fork (in river, road, tree)'; these last three share compatibility with 'river' and 'road', and the last nine words mentioned before st'éχ all probably share compatibility with 'lake' as well as 'river'. Midstream obstructions include items like ƛ'əcés 'island', ƛ'íƛ'ces 'small island', sméːlt 'rock', stəqtéq 'jampile, logjam' (< téq- 'closed'), q^{w}ɬé·y 'snag; driftwood' and probably 'sandbar' as above. These are also compatible with 'lake' as well as with 'river' (except possibly stəqtéq and syí·c'əmflep).

Turbulence (and calmness) is an elaborated area like parts of rivers, and directions; it even includes a lexical suffix -əleq ~ -éleq 'waves' and a cover term(?) χéƛ' 'turbulence (of wind or water)'. It also includes features like: 'wave' (Chill., Tait: syá·lc'e, Seabird Is. syá·ləc'ep, Cheh. sméːyəleq), 'waves are getting bigger' (θiθəhéləq), 'eddy' (x^{w}əlk'^{w}í·m and x^{w}tiytí·m < x^{w}(ə)- 'go' + tiyt 'upriver' + -í·m 'repeatedly')

and 'to eddy' (x^{w}élk'^{w}), q'éyəχəm 'whirlpool' (possibly < q'éyχ- 'black'), ləχ^{w}ém tə qá· 'rapids, fast water', ɬá·ltəs 'spray', sp'áq'^{w}əm 'foam', sqém 'died down a bit (of water), quieter (of water)', sqéqəm 'calm water' and líq^{w}əl 'calm or smooth'.

Seasonal fluctuations are expressed by verbs such as spípəw 'frozen', c'íyx^{w} 'dry', ƛ'pí·l 'go down', (Tait) θí ~ (Chill.) hík^{w}θət 'get big', or k'^{w}ək'^{w}íy 'climbing, ascending' followed by tə stá·lo 'the river' or tə qá· 'the water'; but there are five specialized terms also used (less often): lɛ θ'é·m 'subsiding, (water) going down, tide going out, be low tide', mə qém·əl 'tide coming in', sqém·əl 'tide' (cp. qá·m 'fetch water' mə ləc'léc' 'be high tide', təmqaqá· 'high water time'. There is little tidal fluctuation on the rivers, so snow runoff and summer heat produce most of these 'tidal' effects.

Directions show a great deal of morphosememic structure. These terms are of several types: directions toward and away from the river, upriver and downriver, both previous types used at once (regarding sides of a house), and for up and down movement in the river one pair of words (p'ék^{w} 'float, come to surface' and míq' 'sink'). The river system is so central to the Stalo people that these terms are the

main set of general directional terms besides demonstratives and the phrase lí tə smé·lt 'to the mountain'. Reference to the mountains is less useful than to the river because there are mountains on three sides (north, south, and east below Hope, B.C., north, east, and west above). Terms for toward and away from the river have been analyzed in the last chapter (cúcu and tá·l (both) 'toward the river (on land), away from shore (on the river)' and cá·ləq^{w} 'toward the backwoods, away from the river'). Upriver and downriver terms: wóq^{w} 'drift downstream, drown', łá·s 'drift downriver', ʔɛhíw 'upstream' and tíyt 'upriver (perhaps more upriver than ʔɛhíw)' are the basic roots; they are suffixed with -í·l (~ -éyl ~ -əl) 'go' and -əm 'middle voice' or -əχəl 'way, -wards' and prefixed with x^{w}ə- 'go' or hə- ~ R- 'continuative' or təl- 'from'. This produces: hé-wq^{w} and wí-wəq^{w}-éθət and hé-wq^{w}-əl=əm 'drifting downstream' (all three), łə-łá·s 'drifting downriver', woq^{w}-éyl-əm 'drift downstream', x^{w}ə-wq^{w}--éyl-əm 'go downstream', x^{w}ə-híw-əl 'go upstream', x^{w}ə-híw-əl-əm 'go(ing) upstream', łás-əχəl 'downriver (-way), down that way', tíyt-əχəl 'upriver way, up that way, way upriver', təl-łá·s 'from downriver', təl-tíyt 'from upriver, people from upriver, dialect from upriver (i.e. Tait dialect)'. s-łéq'-qəl 'way

upriver' is not completely clear yet but may be related to łəq'əwɬ̓ 'opposite side of house (on inside)'. For the sides or ends of a house -éχəl (related to -əχəl) is added to both systems mentioned, as is s-nominalizer: cucuwéχəl 'front end of house (inside or out)(side toward the river)', scəlq^{w}éχəl (q^{w} ~ k^{w}) 'back end of house (inside or out)(side away from the river)', stiytéχəl 'upper end of house (inside or out)(upriver side)', səwq'^{w}éχəl 'lower end of house (inside or out)(downriver side)'.

The number of somatic suffixes used (with semological extensions of meaning) has not been mentioned. -(ə)ləc 'bottom', -áθəl 'mouth', -qəl 'head', and even -eləs 'teeth' (in póq^{w}-eləs 'riverbank breaking off') are used in the domain of river (or water) features. x^{w}ə- 'go' is found as well in areas besides directions (x^{w}ə-ʔéyəm 'clear (of moving water)' < ʔəyóm 'strong', x^{w}tiytf·m ~ x^{w}əlk'^{w}f·m 'an eddy'). The domain of water features (especially river features) is of course closely related to that of canoes and canoeing.

13.2.4. Fire. This domain is not very completely compiled or analyzed, but some 40 words at least belong, not including words for types of cooking or curing. These 40 seem to fall in several categories: qualities and parts of a fire, technology of fire, lighting and

extinguishing of fire, and uses of fire. Qualities and parts of a fire include terms like pɛ́·yc'əm 'to spark, a spark', x^{w}átk^{w}əm 'a flame, have a flame', wáwəqəm 'red blaze (of a fire)', yə́q^{w} 'to burn', hɛ́yəq^{w} 'burning; fire', p'á ƛ'əm 'to smoke, to make smoke; to smoke (tobacco)', sp'áƛ'əm 'smoke', p'ɛp'əƛ'ɛ́·ləqəm 'smoky smell' (even p'əlƛ'áməɬ 'choked with smoke'), ƛ'ɛ́lx̣əm 'crackle or pop (of a log on fire, firecrackers, etc.)', sx^{w}iyə́ɬtəl 'heavy dirty cinders, embers, charcoal', x^{w}(h)íyəq^{w}ələ 'soot', sc'ɛ́·s 'fine white ashes', etc. Note the speciali- zation of words with smoke (others will be seen) and the three kinds of charcoal.

The technology of fire includes terms dealing with firewood, ingredients for starting a fire, and equipment for making and using fire. For example: siyá·ɬ or syá·ɬ 'firewood', syáyɬ 'little sticks of firewood', q'pə́t tə siyá·ɬ 'gather firewood', siyaɬɛ́·wtx^{w} 'woodshed', k'^{w}íx^{w}əɬp 'pitchwood', θ'iq'^{w}ə́lcəp 'chop wood' (θ'íq'^{w}- 'punch', -əlcəp 'firewood'), syəq^{w}ɬɛ́·ltəl 'tinder (dried cedar bark pieces)', sísq' 'kindling' (sə́q' 'split', R- diminu- tive), sx^{w}hɛ́yəq^{w}ɛlɛ 'firepit in house', sí·lcəptəl 'firedrill' (sí·l- 'spin', -əlcəp 'firewood', -təl 'device'), sx^{w}θá·yəlcəp 'fire poker', sp'əƛ'əmɛ́·lɛ́təl

'smoke-hole (built with covered cupola to keep out rain)', ƛ'ɛ́c'əq 'torchlighting firebox, platform and shield for fire in canoe for torchlighting', stú·p 'stove', méces 'match, matches', etc. Note the special lexical suffix -elcəp 'firewood' and the items which are not found in the white man's technology (firedrill, firebox, etc.) as well as items borrowed from white technology (stove, match, etc.).

Uses of fire also include terms not found in white technology (as well as some that are): p'ƛ'ámt 'to smudge (burn greens (esp. bracken fern) for smoke to get rid of mosquitoes)', leχéywɛ 'spear fish by torchlight, to torchlight', pəláqəl 'torch (made of dried sockeye head or pitchwood)', p'ɛ́k'^{W}ət 'smoke s-th (hides, salmon, meat)', yeq^{W}ɛ́·ls 'burn the belongings of one deceased in a funeral ceremony, burn food for the dead in burning ritual, "feed the dead", have a burning', syəq^{W}ɛ́·ls 'food offered the dead at a burning ceremony', ɬp'á·ƛ'əm 'smoke a pipe', etc. In this domain it may turn out that Halkomelem has a more highly developed vocabulary than English does.

13.2.5. Time and Tense. Tense has already been considered in the chapters on verbs, nominals, and demonstratives. With independent words for time, the following periods are found: syílálem 'year',

sk'^{w}ex^{y}á·s 'moon, month' (s- nominalizer, k'^{w}ex^{y}- 'to count', -á·s 'face')(used with quarters of the moon), ɬqé·lc' 'moon, month'(use uncertain), təm- 'season, time for', no word for 'week', swéyəl 'day, weather, sky', sk'^{w}í·ls 'what hour?', no words for 'minutes' or 'seconds'. It is unclear how specific years were referred to but probably by description of some event; in giving someone's age, the number can precede either syiláləm or mé·qs 'fallen snow(s)'. Each year began at about the first quarter of the moon in October. The moon beginning in October was the first of each year. There is no cover term for seasons but four are named: təmq'^{w}íləs 'Spring' (the root is said to mean 'plants coming up' but has not been attested otherwise), təmk'^{w}ák'^{w}əs 'Summer, hot time', təmhiléłx^{w} 'Fall' (possibly < híl-əm 'fall, tumble'), təmχéyλ' 'Winter, cold time'.

The quarters of the moon have been mentioned in weather features. There are names also for each month; each month was a lunar month (29.5 days) beginning on the first quarter of the moon visible after the dark moon. Each name refers to a time for some activity or happening: the moon beginning in October was called təmpá·q'^{w} (~ təmpá·k'^{w}) 'time for Chehalis spring salmon (time to catch and smoke-dry them)' or təmcéɬtəl

'time to dry fish'; the moon that began in November was xʸəc'ó·wəstəl 'time to store away canoe paddles (for the winter)' (xʸəc'- 'store away', -ó·wəs 'canoe paddles', -təl 'device (i.e. month)' or 'reciprocal') (paddles are stored with canoes because ice and rain or snow prevent most canoe travel) or təlxʷíc 'leaves are falling'; the moon beginning in December was məqá·s 'fallen snow season' (mé·qɛ 'fallen snow'); the moon of January was pəláqəs 'torch season' (< peláqəl 'torch (used for torchlighting in January)'); the moon of February was təmƛ'í·q'əs 'time to get jammed in or stuck' (< ƛ'í·q' 'jammed or stuck (as in a trap or under s-th fallen on top)', -əs 'season' or possibly 'face'; so called because people lived in pit houses at this time in winter and with a heavy snow the entry hole at the top of the pit house might be jammed); the moon beginning in February could also be called təmt'əlémcəs 'time one's hand sticks to things (from cold)'; the moon beginning in March had two names, wəlók'əs 'little frog season (when they begin talking)' or qʷəlayθí·ləm '(birds) making music'; the moon in April was təmkʷíkʷəxʸəl 'time for baby sockeye salmon' or łəmtáləs 'time of spring showers in the eyes'; the moon beginning in May was təm?əlílə 'salmonberry time'; that in June was təmqaqá· 'high water time' or

təmt'ɛ́mx^{w} 'time for gooseberries' (less common name); the moon beginning in July was ʔepáɬstəl 'tenth moon' or təmq^{w}ɛ́·l 'time for mosquitoes' or at Yale təmcɛ́ɬtəl 'time to dry fish' (fish was wind-dried there as early as July); the moon in August was təmθéqi 'time for sockeye salmon'; and the moon beginning in September was təmk'^{w}á·lex^{w} 'time for dog salmon'.

Some years there were thirteen moons (the extra name probably taken from and during a multiply-named month), and some years, more frequently, there were twelve. The events described in the month names were probably taken as more important than the exact 29.5 day periods. And it seems people frequently disagreed over which moon it was. Only a few people took the exact count (one man tied knots long ago, and another at Yale used sticks stuck in the ground). At any rate, the morphosememic patterns are pretty clear: eight of the terms relate to gathering and processing food, four relate to activities of fauna, seven relate to weather or are caused by weather directly, and one is numbered (allowing the calculation of when the year begins).

The days of the week and hours are given in the chapter on numerals. Days of the week were given names after the white man brought Christianity, as is obvious

from Sunday < 'sacred day'. The morphosememics of Saturday 'broken (of rope or string)' and Monday 'day after (Sunday)' is interesting but not systematic. The other days are named from numerals implying that Monday is the first day of the week and showing a preference for less-used allomorphs of numerals (θəm- in 'Tuesday' and mós as a rare variant in 'Thursday'). The system of hours and lesser periods was discussed and shows no morphosememic pattern except the use of numerals.

Other time periods include past, present, or future days, relative time periods (largely Vadv's), and divisions of the day other than hours. The first of these includes words and phrases like cəlé·qəɬ(əɬ) 'yesterday', yəwélməls k'^{W}ə cəlé·qəɬ(əɬ) 'day before yesterday', tlàwéyél 'today', tlà x^{W}əlé·lt 'tonight', wéyələs 'tomorrow', and yəléw k'^{W}ə wéyələs 'day after tomorrow'. The present is denoted using tlà- ~ tlà 'this', the past using -əɬ 'past tense', and the future using -əs (perhaps with 'cyclic period' alloseme to imply 'future'). For two days removed from present in either direction Vprep A N is used instead of swéyəl Vprep A N (i.e., 'day before yesterday' < 'before yesterday' and 'day after tomorrow' < 'after tomorrow').

Relative time periods include words like qé·ys

'lately, recently', hí·θ ~ wəɬí·θ(əɬ) 'long ago', məṯx^{w}ə́m 'early', ʔá·yəm 'late', and other words listed as Vadv's. tlà- and tense suffixes sometimes play a role with these words as well.

Finally divisions of day other than hours includes terms like: wáwəyəl 'dawn' (< 'being day'), lɛ́·təɬ 'morning' (< lɛ́·t 'be night' + -əɬ 'past tense'), tə́x^{w}swɛ̀yə̀l 'noon, mid-day', yəlɛ́·w tə́x^{w}swɛ̀yə̀l 'afternoon' (< 'after mid-day'), lə θ'ə́ɣ tə syá·q^{w}əm 'sunset' (< 'the sun has burned out'), θətí·l 'get dark', θɛ́·t 'darkness', x^{w}ɛlɛ́·lt 'evening' (< 'go being night' x^{w}ə- + lɛ́·t + -R$_{1}$- 'continuative'), slɛ́·t 'night', lɛ́·t 'be night', tə́x^{w}slɛ̀·t 'midnight'. These show some interesting morphosememic patterns: 'morning' is the 'past tense' of 'night', 'dawn' is 'being day' and 'evening' is 'being night', 'noon' and 'midnight' are both formed in the same way, mid- + day/night. All these terms (and θətí·l which is in the process of becoming θɛ́·t) can be seen to develop into each other much more as processes (becoming something > be something) than the terms in English. They are less like divisions of day and more like blendings. Another pattern is with 'sunset' which uses the same 'burned out' metaphor that 'new moon (i.e. dark moon)' does. θ'ə́ɣ thus is compatible with 'fire', 'sun' and 'moon'.

13.2.6. Flora. This domain includes names of flora, classes and parts of flora, actions or processes of flora, and medicines. Harvesting and processing the harvest and food preparation could be considered under this domain or as related but separate domains; they are here considered separate domains. So far 136 names have been found for flora, and an additional 26 derivationally related terms are attested for specific fruit, bark, flowers, or pitch of some of the 136 flora. The derivation has been discovered for half of the 162 terms, so there is much fruit for study.

The 26 terms mentioned all show the same pattern: when {-əɬp} 'plant, tree' is attached to them, they form the word for the whole plant, but when -əɬp is absent they refer to the edible fruit (in four cases to the bark or wood, in two to the flower, and in one to the pitch) of the plant or tree. For example, q^{W}ə?ə́p 'crabapple, apple', q^{W}ə?ə́pəɬp 'crabapple tree, apple tree' and sk'^{W}ə́·lməx^{W} 'blackberry', sk'^{W}ə́·lməx^{W}əɬp 'blackberry plant'. To refer to the bark or wood, either an s- nominalizer is added (as with st'ələ́m 'wild cherry bark' and slə́·y 'Douglas fir bark') or the suffix -ə́·y 'bark, wood' is present (as with χpə́·y 'red cedar bark and wood' and c'sə́·y 'fir bark and

wood'), or both are done (slé·y). With 'wild rose' qélq refers to the fruit ('rose hips') or the flower ('wild rose'); with 'dogwood' there is no fruit so q^{W}ítx refers to 'dogwood flower'. The fruit of a 'pitch tree' $k'^{W}ix^{W}$əɬp can only be $k'^{W}ix^{W}$ 'pitch, sap'. It is certain that there are more than 26 such sets of fruit minus -əɬp and plant plus -əɬp; all of the (edible) fruit-bearing flora probably work this way. The 26 words attested in such pairs include: apple, blackberry, wild trailing blackberry, blackcap, black-haw (berry), shiny black mountain huckleberry, blue elderberry, red elderberry, gooseberry, red-flowering currant (flower has separate name), June plum, kinnic-kinnick berry/pea/bean, short Oregon grape, raspberry, salalberry, salmonberry, saskatoon berry, wild straw-berry, thimbleberry, and the seven words above refer-ring to bark, flowers, or pitch. The other edible-fruit-bearing flora (five more kinds of blueberries/ huckleberries, red huckleberry, two kinds of cherry, cranberry, soapberry, wineberries, hazelnut, and or-ange) probably follow the same morphosememic pattern because their fruits are all attested without -əɬp; it is merely that -əɬp forms for the whole plant have not been elicited yet.

Further morphosememic patterns can be seen in the

terms for flora which can be derived: 20 are named for their appearance, nine for uses as medicines, six for uses for devices, five for what the plant does, five for how it is harvested, three for its taste and two for how it is eaten, three for fauna that use it, and two for where the plant grows. These are named for their appearance: χ́éyθ'-əɬp 'unripe tree' (because of its white bark) > 'alder', χ̓(ə)p-é·y-əɬp 'striped or scratched bark tree' > 'red cedar tree', s-χ̓é·m-əθ 'tear(s) in the mouth' > 'cottonwood sap' (the sweet sap is eaten), qʷəmc-á·ls 'moss berry' > 'wild bog cranberry' (resembles moss), cackʷá·ləs 'being distant/far in the eyes' > 'goatsbeard plant' (flowers can be seen from way far off), sχ̓èməlέxʷəɬ 'tears on tongues' > 'wild tiger lily' (descriptive of spotted petals), sqʷəlíp 'hair in the dirt' > 'beard moss, black moss bread' (this moss, especially the black variety growing on spruce trees, does indeed resemble hair and is baked underground to make a sweet licorice-flavored loaf), qʷiqʷáyəls 'yellowish' > 'orange color, orange fruit', q'ʷəyflέxʷəɬp 'tree that dances' > 'white pine', θ'əctíyəɬp 'metal nail tree' > 'poplar' (because it resembles a nail sticking out of the ground), p'əlp'èlq'əmé·ləws 'many-flashing leaves, many-sparkling leaves' or 'flashing or sparkling many leaves'

(unclear whether R is 'plural action' or 'plural object') > 'poplar', s?á·yθəq^{W} possibly 's-th sharp on top of the head' (s- + ?ey-áθ + -əq^{W}) > 'raspberry' (some varieties of this berry are more pointed than any other berry), c'əslέc 'grows at the bottom' > 'saskatoon berry' (berries can be picked down to the base of the bush), pəpq'éyá·s 'being white (+ ?) in the face' > 'snowberry' (has white berries)(deglottalized p like in 'red cedar tree'), (Cheh.) qəlémes 'eye in the face' > unidentified plant (good for asthma) with roots resembling eyes, qέyqəmx^{y}əl 'soft (+ ?) in the foot' > 'plant with round bulbs like potatoes (which taste like potatoes)', χέχək'^{W} 'wedged' > '"wild artichoke" (identity uncertain, a plant with edible bulb or root, could be eaten raw, cooked, or dried, grew on Seabird Island and by Chehalis)', c'əlíc'əplex^{W} (c' ~ θ') 'lots of eyes closed' > '"wineberries, Japanese wineberries"' (possibly 'red blackcaps')(leaves are twisted closed till just before the berries are ripe, then they open like eyes), (Tait) χέyəslátəl 'facing one another' > 'wild ginger (asarum caudatum)' (large paired leaves face each other), and x^{y}ɛwəqέl 'carrot-like' > 'yarrow' (the leaf is very fine and carrot-like).

Named for uses as medicines: θ'ex^{W}fyəɬp (x^{W} may

be χ^{w}) 'washing or cleansing (bark) plant' > 'red-osier dogwood' (the bark and berries are used to induce vomiting as a purgative), θ'q'^{w}í·wíyəɬp 'sores-in-rump-or-on-genitals plant, hemorrhoids plant' > 'swamp gooseberry' (used as medicine for such sores), θ'əl?é·ltəl 'heart medicine' > (Tait) 'juniper' and (Cheh.) 'wild ginger', χəχq'əlé·ɬp 'scratching (to itch)(medicine) plant' (χéy-q'-əls 'scratching without leaving cuts, as in itching') > 'False Solomon's Seal' (used as medicine for dandruff), x^{y}ɛx^{y}t'á·ləs 'swimming (fish-like) in the eye' > 'trillium' (used as medicine for cataracts), pépəpà·təm 'getting blown on by mouth' > 'rattlesnake plantain' (the top and bottom surfaces of each leaf separate and can be blown into and inflated; the inside surfaces are then applied as a poultice especially to open cuts and abrasions to promote healing), x^{w}ák'^{w}əltəl 'numbing medicine' > 'big-leaved avens', θ'iθ'x^{w}iməléləws 'allergic reaction leaves' > 'big-leaved avens', x^{w}əq'^{w}ələ?é·ltəl 'hangover medicine' > 'alumroot'.

Named for uses in making devices: θ'é·χəy 'scalded bark' > 'blue-joint reed-grass (bleachable grass)' (this grass is scalded and left in sun to bleach white, then it is split and used for white patterns on the outside of cedar-root baskets), q'əwáwəɬp probably

'staff tree/plant' > 'hardhack' (used for staff or walking stick among other things), q'əmó·wəɬp 'canoe paddle tree' > 'broadleaf maple' (used to make canoe paddles), qé·θəɬp 'fish spear prong plant' (qé·θəx^{W} 'prong of fish spear') > 'Oceanspray' (the prong is still made from Oceanspray wood), t'é·c'əɬp 'fish-drying stretcher plant' > 'pink spirea' (this wood is still used to make t'é·c' 'crosspiece or stretcher to hold open drying fish'), and téχ^{W}əceɬp 'bow tree' > 'yew tree' (used to make bows).

Named for what the plant does: cəlqá·mé 'berry that falls or drops' > 'blackcap berry', χéyχəmels 'grabbing' > 'burdock', θ'éχθ'əχ (~ c'éχc'əχ) 'stinging many times' > 'stinging nettle' (cp. c'éχtèl 'rattlesnake'), c'əq'^{W}c'éq'^{W} 'poking many times; thorn' > '(Scotch) thistle', and c'q'^{W}éɬp 'tree that pokes' > 'spruce tree'.

Named for how it is harvested: k^{W}x^{W}á·méls 'knock or rap the berry' > 'shiny black mountain huckleberry or blueberry', sk'^{W}éq^{W}ces 'something clubbed on the hand' > 'red huckleberry', t'əlémeɬp 'stick to tree' > 'wild cherry' (the outer bark is peeled off for designs on cedar root baskets, some left natural (reddish brown) and some dyed black with alder or iron; the green inner bark is peeled for medicine; both are

tricky to peel without ruining the outer bark which seems to stick to the tree), q'^{W}əmétx^{W} 'pull up by the roots' (q'^{W}əmét 'pull up by the roots') > 'water lily' (use unknown), and possibly c'əslέc 'grow at the bottom' > 'saskatoon berry' (to describe harvesting).

Named for use by fauna: pipəhamé·ləws 'frog leaf' and sɬέwəls tə pípəhà·m 'frog's mat, frog's mattress' both > 'plantain', and sɬέwəls tə spέ·θ 'bear's mattress' > 'sword fern' (because the female bear lies on this (and eats it) when she is going to give birth).

Named for taste: q'ət'əmé·yəɬp 'sweet-tasting bark tree' > 'balsam' (the cambium was scraped and eaten), q'έyt'a 'sweet-tasting (+ ?)' > 'orange honeysuckle', and q'éq'ət'əm sqέ·wθ 'sweet potato' > 'arrowleaf, wapato' (other names for this plant whose tubers were harvested in marshes and in Sumas Lake and eaten like sweet potatoes are (Chill.) x^{W}oq'^{W}ó·ls and (Tait) sqəqewíθəɬ).

Named for how eaten: ɬəx^{W}ɬéx^{W} 'spit out many times' > 'choke cherry' (actually rather tasty once one get used to it, but the huge stones must be spit out often) and c'ic'əmé·wəɬ 'licking a canoe' > 'cottonwood sap' (c' in both cases seems an error for θ', θ'íθ'əm 'licking', -έ·wəɬ 'canoe'; because the bark could be peeled off and the sap eaten out of it).

Named for where it grows: cəwó·ɬp or cəwówəɬp 'beach tree, shore tree' > 'cottonwood' (which grows along the cə́cəw 'beach, shore') and máq^{w}əm 'swamp' > 'swamp tea, Labrador tea' (máq^{w}əm actually means both).

Other morphosememic patterns include elaborations of alders (2 kinds named), blackberries (2 kinds named), blackcaps (3 named), blueberries/huckleberries (7 kinds named [note: the terms 'huckleberry' and 'blueberry' are interchangeable in botany; I have used huckleberry when the actual color is specified other than blue]), cherries (3 named), elderberries (2 named), ferns (5 kinds, 8 names), firs (2 kinds + cover term), fungus (3 kinds), gooseberries (2 kinds named) + one currant, grasses (2 named + cover term), plantains (2 kinds, 3 names), reeds (4 kinds named), mosses (2 kinds named + cover term), Oregon grapes (2 kinds named). Diagnostic features (perhaps componential and allosemic) which speakers refer to to differentiate the above elaborations are as follows:

tall/short: alder, blackberry, blueberry, Oregon grape

mt./anywhere/swamp: alder, blueberry, fern

color (black/blue/gray/red/white): blackcap, blueberry, elderberry, moss, fungus

fruit bunched/not bunched: blueberry, cherry

taste good/bad/poison: fern, blueberry, elderberry,

cherry, etc.)

leaf shape: fern, wineberry

stickers many/normal/none: gooseberry and currant

where growing, ground/under spruce/on trunk/on limbs:
plantain, moss, fern, fungus

sharp/scaldable: grass

(unclear, possibly round (+ smooth) stem/serrated stem):
reeds

Thus: χ̣éyθ'əɬp 'alder', wésəwɛy 'small mountain alder'; sk'^{W}ó·lməx^{W} 'blackberry', sx^{W}əlmə́x^{W}əɬ sk'^{W}ó·l--məx^{W} 'wild trailing blackberry'; cəlqá·mə́ 'blackcap', p'ə́q' cəlqá·mə́ 'whitecap (white blackcap)', c'əlíc'əplex^{W} (both c' may be θ') 'wineberry (probably red blackcap)'; má·ləsəm 'tall marsh blueberry', ɬəwqí·m 'short gray marsh blueberry (with berry in bunches)', lə́θ'ilec 'large gray mountain huckleberry', sχ̣^{W}(?)ə́x^{y}ix^{y}əq 'small low-bush gray mountain huckleberry (grows on summits)(probably 'dwarf blueberry (vaccinium caespitosum)')', x^{W}íx^{W}ək'^{W} 'mountain blueberry resembling sχ̣^{W}ə́x^{y}ix^{y}əq but sweeter (oval-leaved blueberry, vaccinium ovalifolium)', k^{W}x^{W}á·mə́ls 'shiny black mountain huckleberry (vaccinium membranaceum)', sqé·lə and sk'^{W}ə́q^{W}ɛs 'red huckleberry (vaccinium parvifolium)'; k^{W}ík^{W}əls '(bitter) cherry (prunus emarginata)(grows in bunches)', (Tait) ɬəχ̣^{W}ɬə́χ̣^{W} 'choke cherry (prunus

virginiana)(cherries in a line along branch)(grows at Yale and above)', t'əlémeɬp 'wild cherry tree (probably prunus emarginata)'; θ'ík^{W}ək^{W} 'blue elderberry', sθ'íwéq' 'red elderberry'; θ'ék^{W}ɛ 'mountain fern with wide top (now used by florists)', wəlék^{W}sɛ 'poison fern that grows in swampy places', ptέ·k^{W}əm 'bracken fern', sέ·q 'bracken fern root (can be roasted and eaten)', (s)θχέ·ləm 'sword fern (root can also be baked in ashes, peeled and eaten)', sɬéwəls tə spέ·θ 'sword fern', st'usláyə ~ (Cheh.) ʎ'ɛsíp 'licorice fern (grows on trunk and limbs of maple trees, perhaps on other trees, sweet licorice tasting roots chewed for colds, coughs and asthma)'; lέ·yəɬp 'Douglas fir', t'áq^{W}əɬp 'white fir', c'sέ·yəɬp 'fir tree'; q'ém·əs ~ q'émés 'big white mushroom that come out from under moss (edible)', s?ámá·q^{W}əs 'bracket fungus (Fomes sp.) (grows perpendicular to trunk, edible from rotten alder logs, washed and cooked it tastes meaty like mushroom)', tómέɬ 'Indian paint fungus (probably a lichen)(red on rocks), red ochre, red paint', spápəq^{W} 'mould (on food, clothes, etc.)'; t'έ·mx^{W} 'gooseberry (ribes divaricatum, ribes lobbii)(found in marshes or swamps, has large spaced thorns)', θ'q'^{W}í·wíyəɬp 'swamp gooseberry (ribes lacustre)(has many thorns all over which can infect like devil's club thorns)', sp'έ·θ' 'red-flowering

currant (ribes sanguineum)(has no thorns)' (its flower is called q^{w}elíyəs); pəx^{y}é·y 'sharp grass (which cuts a person)', θ'é·χəy or θ'é·χɛy 'white straw grass (reedgrass, especially bluejoint reedgrass)', sá·χ^{w}əl 'grass (all kinds)'; pipəhamé·ləws ~ słéwəls tə píphà·m 'plantain (common type)(grows most anywhere)', pəpəpá·təm 'rattlesnake plantain (grows under spruce trees)'; sθ'é·qəl 'bullrush (used to weave mats)', χémχəm 'horsetail reed', x^{w}əq'^{w}él·ɛ 'scouring rush' (perhaps < 'drag' + '(in) container' for its use in cleaning bowls and dishes; this last-minute etymology was not entered with the others), wó·l 'round reed, tule'; məχt'éləs 'gray moss hanging on tree limbs', sq^{w}əlíp 'beard moss (gray, black when on spruce trees, grows on trunk and limbs), black moss bread', q^{w}á·m 'moss (any kind, on rocks or trees)'; səlíyəɬp 'short Oregon grape' (has term for fruit səlíy), θ'ó·lθ'iyəɬp 'tall Oregon grape' (lacks term for fruit).

Other areas of the domain of flora are classes of flora, parts, actions or processes, and medicines. Medicines will not be treated further here because many of them and recipes for them are family possessions not divulged outside a given family. They are still used today and many are quite effective, but only the most common are talked about generally.

Classes of flora include about 16 terms so far, characterized by frequent use of R 'diminutive' and -əɬp 'plant, tree' and with words for weeds by use of -əlәp 'dirt, earth, ground'. Terms found include: θəqé·t - θqé·t 'tree', θíθəqət (~ (Cheh.) θéθəqət) 'little tree', ʔɛʔɛxʷíyəɬp 'small tree', θəqθéqət 'many trees, thicket, forest, timber', sxʸíxʸəc' 'the woods' (cp. xʸəc'í·ləm 'go through the woods'), c'sé·yəɬp 'fir tree', c'əq'ʷc'éq'ʷəɬp 'thorn bush', θ'í·məɬp 'berry bush, berry plant', spé·lχʷ 'vegetable food (any kind, including bulbs, roots, stalks, etc.)', xʷíxʷəl (both xʷ may be χʷ) 'small bush, shrub, underbrush', sq'əpléc 'dense underbrush' (< 'something gathered together at bottom'), sc'éc'əsəm 'small plants' ('something growing'), c'əséməlәp 'weeds in garden', sqélép 'weeds; a lot of dirt; garbage', sá·χʷəl 'grass', and qʷá·m 'moss'.

Parts of plants are perhaps more extensively developed (32 terms so far) and are characterized by: special terms for particular plants (14), frequent use of lexical suffix -é·y ~ -əy ~ -iy 'bark, wood' (9 terms) and somatic suffixes (8 or 9 terms)(especially with -cəs 'hand' > 'bough'), contrast between inner and outer barks, and sememic joining of ['fruit'] and ['berry'](sθ'í·m), ['bark'] and ['wood'] (-é·y), and

['nut'] and ['seed'] and ['heart of root'] and ['core (of anything)'] (sθ'əmí·wəl). Also notable are several interesting but unsystematic sememic and morphosememic developments ('sewing needle, bullrush mat needle, fir or pine needle', 'lump on tree (burl). lump on person (goiter, etc.)'; 'knothole' < 'container of branch', 'pussywillow' < 'puppies in the hand', etc.). Some of these terms for parts of plants are: s-θ'í·m 'berry, fruit', s-θ'əm-í·wəl 'nut, seed, heart of root (removed in root-splitting), core (of anything)', s-θéθq-iy 'green inner shoots (of blackcap, salmonberry, thimbleberry, cow parsnip, wild rhubarb, fireweed, possibly others)(peeled and eaten raw in spring)', sáq'^{w} 'outer part of stem or sprout (of cow parsnip, and perhaps other plants)', θ'ép-ey-əq^{w} 'inner part of berry (hull) left on bush when certain berries are picked (raspberry, blackcap, wineberry, thimbleberry, salmonberry, etc., not blackberry, etc.)' (< 'closed (of eye)' + 'bark, wood' + 'on top of head'), k^{w}émlex^{w} 'root', sc'é·x^{y}t 'branch', sc'éx^{y}t-cəs 'limb (of tree, bush)', sc'əx^{y}t-é·lɛ 'knothole', χpé·y-cəs 'cedar limb, cedar bough', s-ləw-íy 'inner cedar bark', sák'^{w}əm (q'^{w}?) 'outer cedar bark, cedar bark splint', s-l-é·y 'Douglas fir bark or wood', c's-é·y 'fir bark or wood', sc'á·ɬɛ 'leaf', s-p'é·q'əm 'bloom, flower',

p'ɛθ'-təl or p'ɛθ'-təl 'needle (fir, pine, sewing, mat)', (Tait) sc'ɛ́k' 'cone (of fir, pine, etc.)', p'əl-y-í·ws 'bark', x^{W}ɛ́yləm 'vegetable fibres or strings, string, thread, rope', smɛcɛ́ 'lump (on tree or person), burl, goiter', k'^{W}íx^{W} 'pitch, sap, gum', k'^{W}íx^{W}-ɛɬp 'pitchwood (usually fir)', sə'íkʷ-əm 'tiny slivers of fir bark', s?ɛ-lɛ́c 'bottom or trunk of tree', st'ɛ́x̌ 'fork (in tree, river, road)', s-t'it'əx̌-ɛ́y-əq 'fork in root or tree', c'əq'^{W}c'ɛ́q'^{W} 'thorn', (Cheh.) sx^{W}-t'ɛ́m-əcəl ~ (Tait) súsək'^{W} (< Thompson [šíšək'^{W}]) 'cedar sapling', sq^{W}əq^{W}əmɛ́y-cəs 'pussy willow' (sq^{W}əmɛ́·y 'dog' + R- 'diminutive' > sq^{W}íq^{W}əmɛy 'puppy' + Aə of i 'plural (of diminutive)' > sq^{W}ɛ́q^{W}əmɛy 'puppies' + -cəs 'in the hand' > 'puppies in the hand' > 'pussy willow'), s-qəw-ɛ́·məθ' 'side of tree first warmed by sun' (cp. qəw-ɛ́θət 'warm oneself by fire'), sq'x̌ɛ́p 'stump'.

Actions and processes of flora include 19 terms at present (some derivations) and features -əm 'middle voice' and -θət 'reflexive' and s- (plus or minus R) 'participle'. -í(·)wəl 'insides', -əməθ' 'pole, standing (tree)' and -ɛ́·ləws 'leaf, leaves' are featured with living flora, while -iy ~ -ɛ́·y 'bark, wood' is featured with dying flora. Terms include: c'í·s-əm 'grow (of flora or fauna)', x^{W}í(y) 'uncurl, open shoots,

wake up (of flora or fauna)', p'é·q'-əm 'to bloom', χəlc'-ɬwól-óm 'twisted of a tree', s-χé·lc'-əməθ' 'grown twisted (of a tree)', sé·wc'-əm 'rustling (of leaves, papers, etc., a sharp sound only)', qé·yƛ'-əm '(make) squeaking sound (of tree, chair, shoe, etc.)', smələmóɬq^{w} 'lumpy (of bark, ground, etc.)', x^{w}ís 'fall off (of leaves, berries)' (cp. x^{w}ís-ət 'shake off leaves or berries'), x^{w}əs-é·ləws 'leaves falling', píχ^{w} and píχ^{w}-əm (possibly x^{w}) 'fall of or blow (of petals or seed fluff)', t'ép-iy-θət 'die (of tree or plant)' (t'ápiyθət 'dying (of tree or plant)'), st'épiy 'dead (of tree or plant, i.e. of flora)', yéq' 'fall (of tree)' (cp. yéq'-ət 'to fall a tree'), syéyəq' 'fallen tree, log', pq^{w}-é·y 'rotten wood, decayed and broken wood' (< péq^{w} 'break off, split off'), pq^{w}é·yθət 'wood decays'. Note the allosemic metaphor of the plant 'waking up'.

Terms for harvesting and processing the harvest are related closely to this domain and include terms like ɬq'^{w}át 'to bark a tree', x^{w}ísət 'shake off berries or leaves', ɬí·m 'pick(ing) fruit (especially berries), picking leaves', etc. They have been omitted here because they are not fully compiled and because they all involve action of humans or other fauna and are not functions of flora themselves.

13.2.7. Categories of Humans. Seven kinterms express relationships to a child whose parent or guardian (the connecting link) has died or left. This emphasizes the Stalo concern for orphaned children and the cultural fact that Stalo children are frequently raised by relatives other than parent. Several other terms also emphasize relationship even though a connecting link dies; perhaps connected is the fact that public response is much greater in attending funerals and helping a bereaved family that it is in the surrounding white society. A number of kinterms have allosemes linking more distant relatives to nuclear family members, and this may reflect extended family lodging in longhouses and pithouses. Social status terms show four classes: chief, other upper class person, average person, and slave; terms for tribes and nationalities are usually borrowed from the outside group as are terms for non-Indian occupations. Most native occupation terms tell what the person does, often using lex^{W}s- or s- + R added to the verb root. Much interesting detail could be added to this summary.

13.2.8. Religion and the Spirit. This domain (100 terms attested so far) covers the categories mentioned in the last chapter. Many of the terms

have root yuw- or yəw- 'possess power of a spirit' (syéwə 'seer, fortune-teller', syúwél 'spirit power, guardian spirit; spirit song', syuwí·l 'power to do witchcraft; witch; ritualist; an evil spell', yəwí·lt 'cast an evil spell on s-o', syéwməqcəs 'large rattle used by some dancers at spirit dance', hɛywíləq^{W} 'a burning song; a sχ^{W}áyχ^{W}ɛy song', yuwí·ləq^{W} 'medicine song'). Several different spirits are recognized with separate terms (sx^{W}elí 'life spirit', smestíyex^{W} 'soul, spirit which can be lost and returned while remaining alive', syúwél 'guardian spirit, spirit power', slé·m 'spirit power of an Indian doctor', and spaləq^{W}íθ'ɛ 'ghost; corpse'). The words for 'Indian doctor' (sx^{W}lé·m) and his power (slé·m) seem to have root lé·m 'go, going', while -í·l ~ -əl 'go' occurs in several of the words quoted with root yəw- ~ yuw-; perhaps this is because all these words involve spirit-travelling to learn things, perform acts in other places, find other spirits, etc.

Other interesting metaphors involve 'climbing oneself' > 'training oneself to be an Indian doctor or spirit dancer' (k'^{W}ək'^{W}íyəθət), c'élέx^{W} 'go into quieter water' > sc'əlέx^{W}əm 'experienced spirit dancer', χ^{W}áy (or χ^{W}éy) 'many people die' > sχ^{W}áyχ^{W}ɛy 'sχ^{W}ayχ^{W}ɛy mask or dance' (many people die in the

story of how the mask originated), '(rain)shelter device' > 'square dressing-room of blankets where the sx̣ʷáyx̣ʷɛy dancers dress' (q'alə́c'təl), 's-o is put away' > 'funeral' (qɛ́·yləmtəm), 'marking device' > 'carved grave pole' (x̣ɛ́·θ'-əc-təl), and 'breaking one's canoe(s)' (yək'ʷ-á·ɬ-əm, yə-l-k'ʷ-áɬ-əm) as well as ʔíx̣ʷəθət 'sweep up oneself' both > 'have the last spirit dance of the season, have "the sweep-up"'.

13.2.9. Buildings and Household Goods. This domain includes more non-Indian items now than Stalo items. It includes types of buildings (at least 27), parts of buildings (at least 25), kitchen utensils (at least 24), furniture (at least 17), other household items (at least 30 to 40), and how to make or use any of the foregoing (at least 33). Most of the types of buildings are listed in Chapter 5 under -ɛ́·wtxʷ 'building'; some of the few that are not so suffixed are sqə́mə́l 'pit house', sqíqəməl 'puberty hut, menstrual hut' (< 'little pit house'), qətí·wstəl 'sweat house', sxʷiymɛ́·lɛ 'store', and t'm-í·ws-ɛ̀·ls 'log cabin' ('chop(ped)' + 'on outside covering, skin' + ?). Most of the -ɛ́·wtxʷ terms describe with verb root the activity done within. Parts of buildings include things like 'main rafters' (< 'climbing up'), 'wall', 'housepost, carved inside post', 'roof plank, wall

plank, shake, covering of hole in pit house', etc. Kitchen utensils elaborate spoons (5 terms) and bowls or troughs (7 terms).

13.2.10. Clothing (including ornaments and glasses). Some 52 terms have been found so far (all but nine completely analyzable). -tel 'device, thing for' is common (on 15 terms). 24 of the terms use 13 somatic suffixes to specify where the item is worn. Other lexical affixes include those natural with clothing: -ʔ·ws 'covering, skin', -ɬwət 'garment', -ɬyiws 'pants', (< 'bark covering'), -iy 'bark', -ɬ·lɛ 'container', etc. -ɬ·ləq is used to describes 'waves' in an 'underskirt'. Few borrowings are found (only three, possibly five), in spite of the fact that most of the items were brought by the white man. Some cases of diminutive R occur. Roots describe the appearance (22 cases), function (11 cases), or material (5 cases). The same root is often used in pairs or larger sets of words, with a somatic suffix telling where the item is worn: 'gathered' > 'armband' and 'garter', 'strap' > 'belt' and 'shoelace', 'poke' > 'ear-ring' and 'brooch', 'hook' > 'nose-ring' and 'necklace, neckerchief, scarf', 'clothes' > 'dress' and 'shawl', 'deep, under' > 'shirt, undershirt' and 'modern skirt' and 'underclothes' and 'underskirt, slip' and 'underpants' (all these items are worn under

or are tucked under), 'dirt' > 'moccasin' and 'diaper' and 'menstrual pad', 'denim' (itself named from 'soft rustling of material, shuffling') > 'denim clothes' and 'denim pants, jeans', 'inner cedar bark' > 'dress', 'outer cedar bark' > 'cedar bark skirt', 'animal' > 'buckskin clothes'. 'Eyeglasses' has two terms (synonymous): s-t'ale-ʔá·les-tel 'lose sight of in eyes device' (cp. 'eclipse') and sk'^{w}ec-ás-tel-á·les 'window or mirror on the eyes' or 'device on the eyes for seeing faces'.

13.2.11. Hunting and Processing the Catch. This domain has not been compiled yet but includes terms for devices, methods, and verbs of hunting (at least four traps are named and paired with distinct verbs to set each, for example; also two slingshots, bow, arrow, quiver, parts of the arrow (feather for arrow, shaft, arrowhead) -- all are separately named); terms for butchering, preserving, and storing meat; for tanning hides and sewing; processing wool (carding, spinning, dyeing, weaving: verbs and devices or items). There are as many verbs as nominals in this domain, and they are often paired (verb and nominal). Weaving nets (from plant fibre), weaving mats (from bullrushes or cedar bark), and weaving baskets (from cedar roots and slats, cherry bark, reedgrass) all belong with Gather-

ing and Processing the Harvest.

13.2.12. Fishing and Processing the Catch. This domain is even more highly developed than the last. 75 terms have been gathered so far and cover methods of catching and processing fish (butchering, smoking, wind-drying, storing, etc.), equipment used, and parts of the equipment. At least 15 different methods (each named) of catching fish have been found (dip-netting, still-dipping (resting dip-net on river bottom), set-netting or gill-netting, setting a line from shore for sturgeon (gang-line or cross-line), spearing, spearing sqʷә́x̣əm, gaffing, torchlighting, pole-fishing, jerk-lining, scooping eulachon, drift-netting between two canoes, drift-netting between two canoes but for sturgeon, setting a net and drifting with it, and trapping fish by weir); these are distinct names too, not inflectional variations of one another. Each method has a number of verbs and associated nominals (bait a hook, mend a net, sliding bone rings for dip-net, etc.). There are nearly 40 terms for equipment and parts of equipment (attested so far)(8 nets including separate ones for spring salmon, sockeye, coho, etc.; a fish spear has: tɛ́·ƚ 'detachable harpoon points', qɛ́θəxʷ 'prong of fish spear', sʔɛ́lә́m 'shaft of spear', talә́ptəl 'string or line attached to points of fish spear', and c'sı́cim 'spear pole knot (clove hitch)';

there is even p'ép'əƛ' 'sturgeon spear' and shélqs 'seal spear' beside té·ɬ 'fish spear'). There are different methods of cutting and drying fish as well, each named. Much of the equipment is named with -təl 'device' (suffixed to each name for a type of salmon it yields 'coho net', 'sockeye net', etc.). Verb roots of this domain are more actions than descriptions.

13.2.13. Tools for Making Things. 29 terms have been found so far (18 pre-contact, 11 post-contact tools). Most have -təl ~ -əls 'device' (q.v. in Chapter 5), s- ~ sx^{w}- 'nominalizer' and/or R 'continuative' (thus 'device or thing for doing an activity'). Roots are verbs describing what the item does in all cases but the few borrowings (ləpyús 'hoe' < French la pioche 'pickaxe, mattock', lapél 'shovel' < French la pelle 'shovel', héməs 'metal hammer (for nails)' < English, métəkəs 'mattock' < English).

13.2.14. Baskets and Basketry (especially cedar root). This domain includes types of baskets (cover term sí·təl 'basket' plus 14 types attested to date), parts (11 terms), and techniques (12 terms to date). Four tools used may also belong (mattock and adze for digging roots, awl and borer for making holes in weaving). Baskets are named for what they contain (nominal root + -é·lɛ 'container' as in: 'berry basket', 'bait

basket', 'clothes (belongings) basket', 'Indian ice cream basket', 'stink salmon egg basket') or what they do ('squeeze face' > 'basketry cradle, baby basket' (p'éθ'es), 'thing to fetch water' > 'water basket' (sx^{W}qá·m), 'salmonberries in the hand' (Tait) and 'something poured' (Cheh.) both > 'little berry basket (tied around waist, berries from hand go into it, when it's full it is poured into the large berry basket (sθ'ímèlè) on one's back)' (lí·lɛ-cəs (Tait), sk'^{W}éɬ-em (Cheh.) respectively). θ'ówex̣ ~ ƛ'pét 'cedar slat basket' (ƛ'ép 'deep, under') and sk^{W}é·m 'storage basket' are probably descriptive in origin. Parts of baskets include: sk^{W}élec 'coiled bottom of basket before the sides are on', yem-éwés-təl 'wide cedar root strips for baskets (wrapped around bundles of fine strips)', sx^{W}e'é·ɬtəl 'fine cedar root strips for baskets (bundled and wrapped with yeméwéstəl when the basket is constructed)', x̣p-á·y-s 'wide cedar slats from saplings (for θ'ówex̣ baskets)', sx̣éles 'basket design', st'elém 'cherry bark for basketry imbrication', (Tait) pélel ~ (Cheh.) c'q'éyx̣ st'elém 'blackened cherry bark for basketry imbrication', θ'éx̣ey 'reedgrass bleached white (for basketry imbrication)', q'p'é·lectəl 'lid, cover', yémqetel 'buckskin strips zig-zagged over top of harvest as lid for

berry basket'. Techniques include: sc'ə́q'^{W} 'fine cedar root weaving', c'əq'^{W}ə́·wəł 'to weave a cedar root basket', χpá·ys 'cedar slat work', sík'^{W}əm 'peel off outer cedar bark' (< sáq'^{W}əm 'outer cedar bark'), seq'ə́t tə k^{W}ə́mlex^{W} 'split the root', x^{Y}í·pət tə k^{W}ə́mlex^{W} 'peel the root, scrape the root, taper the root (with a knife), straighten (unevenly split) root', sə́χ^{W} 'to split a root from the wrong end (the small end)', t'ə́c'əχəlí·m 'to split roots an uneven thickness', ə́íc'ət 'split it open (with fingernail)(of white grass for basket designs or of thin inside bullrush for string)', q'ə́lq't 'wind it around s-th'. Terms used in techniques include four not specific to cedar root basketry.

13.2.15. Canoes. This domain includes types of canoes or boats (10 terms), parts of canoes or boats (8 terms), equipment for canoe or boat (7 terms), how to make a canoe (16 words or phrases, possibly plus 9 relevant tools), accidents and repairing a canoe (14 terms), and how to canoe (67 terms!). River conditions and counting canoes and canoe paddles are also related to this domain but not part of it.

Types of canoes and boats include slə́x^{W}əł 'any canoe', q'əχ^{W}ə́·wəł 'war canoe, largest canoe made', x^{W}áq'^{W}əlecəm 'large river canoe with high bow' (< 'drags

its behind'), ƛ'əlé·y 'shovel nose river canoe' (possibly < root in ƛ'él-l-əx^{W} 'stop' + -é·y '(in) bark, wood' referring to its ability to shovel onto shore so travellers could step ashore), sq^{W}éəm 'canoe with shovel nose at each end', téyowəɬ 'racing canoe', t'q'^{W}é·ləc 'canoe or boat cut off short in back (stern couldn't be repaired)', ə'ɬémə 'raft', potówəɬ 'row boat', and stim·ót or stim·ó·t 'steamboat'. Roots, except for borrowings, refer to appearance ('drag', 'broken (like string or rope)') and function ('stop', 'to canoe race'); two or three terms (if slə́x^{W}əɬ is counted) use -owəɬ 'canoe'; two refer to the "behind" ('stern') of the canoe with -ələc.

Parts of canoes include q'ɬél 'bow of canoe', ʔélwəɬ 'middle (on inside) of canoe', ʔilé(·)q 'stern of canoe' (these three with allosemy already traced), ɬəx̣-əlwéɬ-təl 'thwart or crosspiece in canoe' (< 'lay in middle of canoe device'), ɬəx̣-owés-təl 'boards on bottom of canoe to set things on' (< 'lay paddle on device'), (s)pátəl 'sail' (< 'blow device'), (s)patəl-é·lé 'mast', (Tait) sx^{W}əéyələc ~ (Cheh.) ə́éyəlɛctəl 'rudder' (< 'fixing in rear device').

Equipment includes: slax^{W}əɬé·wtx^{W} 'canoe shed', sq'éḿəl 'canoe paddle', -owəs 'canoe paddle', ɬéltəl 'canoe bailer', sx̣^{W}óq'^{W}təl 'canoe pole', potówəs 'oar

(for rowboat)', q'ə́l-x^{y}ə-təl 'canoe mat (to kneel on)', sɬə́wə́l '(bullrush) mat (used for sail, canoe mat, house mat, etc.)'. -təl and -owəs are the common suffixes here, and roots (except for borrowed pot < English 'boat') express the activities done by the equipment ('bail device', 'pole (a canoe) device', 'protect leg device').

How to make a canoe (hə̀·y 'make a canoe') includes (in order of construction): yə́q'ət 'fall a tree', x^{w}ə́yləmt 'measure it (by hanging strings to check levelness)', pəq^{w}-íwə́-t 'split it in half', t'ə́m-əqs-t 'chop the point or end of it, shape it (of a log by chopping its end)', θiyq^{w}-íwə́-t 'dig it out inside' or t'əm-əwí·l-t 'chop the inside of it out' or t'əmt'ə́məθ qəsu ɬəq^{w}ə́t 'chop notches in it and remove them', x^{y}ix^{y}əpówəɬ 'planing a canoe', x^{y}ip-əwí·l-t 'plane it inside', q'^{w}ə́·yt 'burn on pitch on it (of a canoe)(to keep it from cracking in the sun, burn off splinters, and apply pitch for better glide)', t'ə́t 'try it out' (to see if it is tippy, etc.), wíqət 'spread it wide (of canoe, by filling it with water and dropping red hot rocks in to boil the water; this spreads the canoe)', θíyt tə ɬəχəlwə́ɬtəl 'fix the thwarts or crosspieces', and x^{y}ə́·lt tə ɬəχəlwə́ɬtəl lí tə q'ɬə́l 'bore a hole in the thwart in the bow (so mast can be inserted at need)'.

In the subdomain just above, how to make a canoe, the roots are all activities of course; note the frequent use of -iwəl ~ -ewí·l 'insides' in terms that would rarely be used outside of canoe-building. Some of the above terms are not limited to canoe construction, i.e. yéq'ət, t'əmt'ámət, ɬəq^{W}át, t'ét, θíyt, x^{Y}á·lt and probably x^{W}éylámt. Tools used here may fit in, for example, string, hatchet, broadaxe, wedge (used while chopping out the inside), hand-hammer (of stone), mattock (used now), elbow adze for canoe-making (héléytəl 'making canoes device', -le- 'plural object'), x^{Y}íx^{Y}əpəls 'plane', especially sq'^{W}əmóχ^{W} x^{Y}íx^{Y}əpəls 'horseshoe-shaped plane (bend blade with handles added) for canoe-making', and x^{Y}á·x^{W}í·ls 'a borer, auger'.

Canoes can be x^{W}áx^{W}a 'light', x^{W}ét·əs 'heavy', or k'^{W}éθ'əm 'tippy' and can k'^{W}ét 'tip over, spill (of canoe, cup, anything)', k'^{W}ɬép 'capsize', p'íχ^{W} 'leak (of a canoe)', míq' 'sink (of anything)', qəp'ás '(be) turned over (of canoe in water and other things)', and everyone can q^{W}ás 'fall overboard, fall in water'. Repairs (θé·yt tə slóx^{W}əɬ 'fixing or repairing a canoe') seem to involve -owəɬ in all terms: qəp'ásowəɬ 'canoe turned upside down on land', qəp'esówəɬ 'turning over a canoe (on land)', t'ék^{W}owəɬ or t'éq^{W}owəɬ 'caulking a canoe', ɬéqowəɬ 'patching a canoe' (< ɬəqét 'patch it').

I will not quote all the terms for how to canoe, but here is a representative selection: ʔé·yxʷí·ləm 'canoe-riding, out canoe-riding' (< ʔé·y 'keep on going'), ʔiyxʷí·ləm 'go for a canoe ride', ʔistéytiyəl 'group of canoes travelling upstream (in moving to camp for fish-drying)', t'éḵ'ʷəl 'going across the river', té·y 'to race a canoe', ɬəq'áƟəl 'two canoes side by side drift-netting for sturgeon' (cp. ɬəq'ét 'wide'), xʸíxʸəmɛl 'two canoes side by side drift-netting' (< xʸám- ~ xʸém- 'shallow'?), yéχʷət 'untie it, loosen it (of tied-up canoe or anything)', ʔəlá·ɬ 'get aboard' (< ʔəl 'middle (?)' as in ʔélwəɬ), ʔá·ɬ 'be aboard', ʔá·ɬstəxʷ 'put s-th aboard' (last three words can refer also to car, wagon, etc.), qʷsét 'launch it, push it (or s-o) into the water, put it into the water' (< qʷés 'fall into water'), χəƟ'ásəm 'push out from shore (man in bow does this with paddle when crew is aboard)' (< χəƟ'-ét 'shove s-th (i.e. sudden action)'), Ɵəχásəm 'push out from shore (in canoe)' (< Ɵəχ-ét 'push s-th (more steady action)'), híqət tɛ slέxʷəɬ 'push out your canoe into the water', tá·l 'go out into the middle of the river, go away from shore (in canoe)', woq'ʷέyləm 'drift downstream' (and the set of directional words for upstream and downstream), χʷáχʷəqʷəq'ʷət xʷəhíwəl 'poling upstream (in a riffle)', χʷáq'ʷət 'pole

a canoe', leχéywɛ 'to torchlight (spear fish at night from canoe by torchlight or firelight or lantern)', láqʷexʸ te pátəl 'put up a sail', pátələm 'to sail', ʔéχʸel 'paddle a canoe', ye-ʔí·xʸel 'paddling along, travelling by paddling', xʷɛlxʸ-ówes 'lift one's paddle while paddling', q'á·lés ~ q'á·lésəm 'pry at bow to turn sharply (return paddle to edge of canoe and pry against it)', q'é·lec ~ q'é·lécəm ~ q'é·lécəl 'pry in stern to turn canoe sharply', ɬímes ~ ɬíməsəm 'pull in once (at bow) to turn wide or slowly (reach out with paddle and pull it toward canoe)', θé·yəlec 'steering at stern to keep canoe straight (with paddle or rudder)(may involve switching sides)', c'élcəs 'switch sides in paddling', c'élc'el-cəs ~ c'elc'el-éws--em 'repeatedly switching sides in paddling', ʔiyá·θət 'go backwards (of anything), back up, paddle backward, step backward, etc.', ɬélt-es-t 'splash/spray s-o with water, flip water into s-o's face (with paddle or anything)', ɬí·lθət 'bail (a canoe)', q'əwqé·yləm 'turn around a bend, turn around to go back', yəlé·wxʸ 'pass by s-th', táχʷəsəm ~ tχʷówəɬ 'tow a canoe, pull(ing) a canoe by rope on bow through rough water (while a man with paddle stays in to push away from bank)', t'ékʷ 'get stuck in mud, get mired (of anything)', xʷok'ʷówəɬ 'drag a canoe', xʷək'ʷówéɬ 'dragging a canoe', ʔiləmówəɬ

'carry a canoe on shoulders' (cp. ʔilém-t 'carry s-th on shoulders'), c'élóx^{w} 'go into a quiet backwater', ɬè·l or ɬé·l 'land a canoe', q'^{w}ím 'get out of a canoe', q'^{w}íməls 'unloading a canoe, taking things out of a canoe', táχ^{w}et tə slóx^{w}əɬ 'pull up a canoe (on the beach)', q'éysət 'tie it up (canoe, horse, laces, nets, etc.)', and x^{y}əc'ó·wes 'store or put away canoe paddles (for winter)'. (See chapter on numerals for forms like k'^{w}ilówəɬ 'how many canoes?', k'^{w}ilówəs 'how many paddles (or paddlers)?', ɬq'əcəsówəɬ 'five canoes', ɬq'əcəsówəs 'five canoe paddles, five paddlers', and ʔislé·wəs 'two paddles (or paddlers)').

I have given many forms here because this specialization seems quite remarkable and interesting. Most of the terms apply only to canoeing (and boating in recent times). This specialization is understandable because the Stalo are a river people (as their name implies); perhaps it has been aided by the fact that canoe-racing has survived strongly and is very popular with all ages. The area of canoeing could be divided up into types of canoe travel, launching and landing, directions, strokes, portages, sailing and bailing and poling. Several morphosememic patterns can be seen in roots and in affixes. The distinction between χəθ'ásəm and θəχásəm apparently derives from that between 'shove'

and 'push' where the former implies ['single sudden action'] and the latter ['steadier, more prolonged action']. q'á·lés(əm) and q'é·léc(əm) both derive from q'əl- 'twist' as in q'əl-q' and q'əl-p' (see lexical suffixes chapter under -q' and -p'). łím-əs may < lí·m 'pick(ing)(fruit or leaves)' since both involve reaching out and pulling s-th back towards one. θé·y-ələc < root θé·y ['fixing'] alloseme rather than from ['making'], i.e. 'fixing (the direction of travel) in the stern'. łí·l-θət 'bail' has the same root, 'spray, splash', as in łéltəs, łá·ltəs 'spray' and łəlétəm 'sprinkling' (t is lost before -θət). The root in c'él-cəs may be the same as in c'éléx^{w} 'go into quieter water' if the root means 'switch' and c'éléx^{w} is 'switch to quieter water'. As mentioned in the allosemy, -ás ~ -əs has alloseme ['bow of canoe'] and -(ə)ləc has alloseme ['stern of canoe'] in this domain (except with łélt-əs-t). -ówəł 'canoe' seems to be used in all the words for portages; -í·l ~ -əl 'go' is common throughout the area of canoeing. And when 'repeatedly switching sides in paddling' ones can either switch hands (-cəs) or switch one's body (-əws) to do it.

13.2.16. Emotions and Feelings, Attitudes and Mental Processes. A partial list of words elicited con-

tains about 86 terms. The allosemic variations of a number of these were considered in the last chapter. The domain expectedly contains many words with somatic suffixes referring to the mind (-íwəl ~ -í·wəl ~ -əwəl 'in the insides (the mind and feelings)', -wəɬ '-minded', -élməl 'in the mind'), with ləx^{W}- 'always' and ləx^{W}s- 'one who always (verbs)' (reflecting attitudes), s- ~ (s-) + R 'participle' (reflecting a state of mind usually), with reflexive inflections (-θət and -lámət)(showing the internal nature of emotions, etc.), and -məɬ 'transitivizer (which implies indirect effect upon the object)'.

As mentioned in 12.0, nine verbs can appear in the structure V A-4.6 sq^{W}élewəl-4.6 and morphosememically combine to yield attitude terms: ʔéy təl sq^{W}élewəl 'I'm glad/grateful/thankful., I have good feelings.' (ʔéy 'be good'), x^{W}ayíwəl təl sq^{W}élewəl 'I'm happy' (x^{W}ayíwəl 'be happy'), χéɬ təl sq^{W}élewəl 'I'm sorry' (χéɬ 'to hurt'), θəhít-cəx^{W} tɛ sq^{W}élewəl 'keep your mind on what you're doing!, concentrate!' (θəhít 'be careful of s-th'), ƛ'épstəx^{W} tɛ sq^{W}élewəl 'be patient!' (ƛ'épstəx^{W} 'cause s-th to be deep/under/low'), ʔɛyémstəx^{W} tɛ sq^{W}élewəl 'have courage!' (ʔɛyémstəx^{W} 'make s-th strong'), hík^{W} təl sq^{W}élewəl 'I'm conceited/proud' (hík^{W} 'be big'), mə qəlqéyl təl sq^{W}élewəl 'I've lost

heart, I'm discouraged' (qəlqéyl 'be destroyed, get destroyed'), cécɛ tə sqʷéləwəls '(s)he's emotional (cries easily, happy or sad)' (cécɛ 'be tender'), and yé·q təl sqʷéləwəl 'I change my mind' (yé·q 'to change').

sqʷéləwəl itself, a cover term for this domain, means 'thoughts, feelings, emotions' and derives from sqʷè·l 'talk, speech' + -əwəl 'on the insides (in the mind)'; this is a nice confirmation of the Whorf hypothesis. In all nine cases then, the sememic structure is 'My (your, his, etc.) thoughts/feelings (Verb).' or 'My thoughts/feelings are (verb).', which then converts to the glosses above morphosememically.

Other systematic morphosememic patterns include ʔiy-é·lwəs 'brave' < 'good in the stomach' and qəl-élwəs 'cowardly, afraid to try' < 'bad in the stomach' (or -é·lwəs ~ -élwəs has alloseme ['in courage'] if one allows that much semantic distance between allosemes); (s-)xʷə-ʔéy-wəɬ ~ ləxʷ-ʔéy-wəɬ 'generous, kind, good-hearted; easy-going, good-natured' < 'good-minded' and 'always good-minded', (xʷ-)qél-wəɬ 'stingy' < 'bad-minded', s-qəl-wíɬ(-məɬ) 'hate (s-o), hold a grudge (against s-o)' < 'bad-minded' + ʔ, and ləxʷ-qél-wəɬ 'cranky, crabby, dirty-minded' < 'always' + 'bad, dirty' + '-minded'; t'ək'ʷ-élmél 'homesick' < 'go home in the mind'; sʔú·məɬ 'lazy (by nature)' < ʔú·məɬ 'sitting';

sɬaɬek'^{W}íwəl 'dumbfounded, speechless, surprised, overwhelmed, overpowered' and ɬk'^{W}íwəl·ax^{y} 'excited me' < ɬá·k'^{W} 'fly' or s-ɬá·ɬek'^{W} 'flown up' + -íwəl 'on the insides (in the mind)'; and ƛ'əlx^{W}-í·ws-əm 'quiet down (a person)' < 'stop one's body'.

13.2.17. Senses. This domain divides into sights (visual effects), touches (tactile feelings), sounds, tastes, and smells; each is compatible with certain body function verbs (see 13.1). Allosemic patterns have been outlined in 12.2.8 and a number of terms are listed there. As mentioned there, smells (11 terms so far), tastes (8 terms), and visual effects (20 terms) are not yet well-attested compared to sounds (76 terms) and touch (30 terms). Each area has cover terms (shéq^{W}əm 'a smell', t'és 'a taste', sk'^{W}éc 'a sight', lápχ^{W}əm 'a sound, a noise', and qétχməls 'a feeling'), but most members are verbs, often with -əm 'middle voice' or 'intransitivizer', often participles or reduplications.

Smells also have a lexical suffix -élέqəp (~ -əqəp ~ -éləqəm once) 'smell, in smell' in four examples; most roots are also attested in other words (ʔɛy-éləqəp 'good smell', qél-əqəp 'bad smell', qəlqéyl-élέqəp 'turn bad in smell' < qəlqéyl 'destroy(ed)', səlcíméléqəp 'how does it smell?').

Tastes so far all have $-R_1-$ plus -əm, probably participles; a few have roots attested elsewhere (as ƛ'ə́ƛ'əɬəm 'salty' < ƛ'ə́ɬəm 'salt' and pápəq^{w}əm 'getting mouldy in taste or smell' < páq^{w}- as in páq^{w}-θət 'get mouldy'); no lexical suffix for taste has been found yet.

Sights or visual effects have a lexical suffix (as seen in səlcím-aməx^{y} 'what color is it?, what does it look like?', ʔiy-á·məx^{y} ~ ʔɛy-á·məx^{y} 'good-looking', etc.) and a lexical prefix for most colors, c- (q.v.); other terms are participial (s- + R, as in sƛ'əlƛ'ə́lχ 'spotted', sχə́yχəp' ~ sχíχəp' 'striped', sƛ'íƛ'əsəl 'dark-colored', ləc'lác'təl 'many-colored'); some have -əm but are otherwise unanalyzable (p'ə́lq'əm 'sparkle, flash, reflect, glitter, sparkle', ƛ'ə́·wq'əm 'bright', c'ə́·lc'əm 'dazzling', θ'ə́lχəm 'transparent').

No lexical suffix for touch has been found yet; many of the words of touch are participles (with R, s- + R, R + -əm) and many merely have -əm 'middle voice' or 'intransitivizer'; a number of the terms derive from nominals or verbs of similar meanings (qíqəχəm 'slippery' < qíχəm 'slip, slide', títəx^{y}əm 'slimy' < s-tíx^{y}əm 'slime, (esp.) fish slime', ƛ'íƛ'əq'əl 'gummy, sticky' < ƛ'íq'- as in ƛ'íq'ecəs 'stick to the hand', θ'íc'əqəl 'muddy' < sθ'íqəl '(wet)

mud', smɛlmálx^{w} 'oily' < málx^{w}-t 'oil it, grease it', etc.).

Sounds include many terms with unanalyzable roots; many of these seem sound symbolic (k^{w}ém 'to thud (dull, on ground)', ƛ'émq'^{w}ɛls 'make a crunching or cracking noise (like ice breaking or chewing apples)', wɛt'éləq 'to splatter', wɛt'émɛq'^{w} 'splash (once)', sé·wc'ɛm 'make a sharp rustling sound (leaves, paper, etc.)', c'tés 'ringing sound when s-th drops (spoon, heavy ashtray, etc.)', ʔá·lχɛm 'a murmur', k'^{w}péx^{w} 'make a sudden thump when s-th falls to ground', t'éx^{w}qɛm 'suction sound of s-th pulling out of mud', etc.). Over 20 of these words have -ɛm 'middle' or -ɛm 'intransitive', and some also have -éls ~ -ɛls 'intransitive' (q'étχtəs tə ləláθəl '(s)he's rattling the dishes', q'ɛtχéls 'to rattle (cans, etc. to shivaree or wake newlyweds)', q'étχɛm 'rattling (of dishes, metal pots, wagon on gravel), scraping sound (like food off dishes)'; some of the same sounds can be made with wood, rocks, shells, etc. instead of post-contact metal and pottery). Many of these words can have continuative or plural R k^{w}ánk^{w}ɛm 'thudding (of footsteps, horse on ground, etc.)', ƛ'élƛ'ɛləq'^{w} 'continuous shooting or popping sounds' < ƛ'éləq'^{w} '(make) a pop, a shot'); some have a wɛ- prefix of unclear meaning (wɛƛ'éləq'^{w} 'a shot, explosion').

Two subgroups of sounds exist, one referring to the voice with -(ə)qəl somatic suffix: sθí·qəl 'loud (of a voice), a loud voice' (θí·- 'big'), st'ɛ?éqəl ~ stɛqí·l 'sounds like (a person)' (stɛ?é 'similar, like'), x^{W}iyéθəqəl 'sharp (in) voice, high pitch in voice or melody' (?iy-éθ 'sharp' < 'good edge'), ?ayémqəl 'slow (in) voice' (perhaps -qəl 'language' instead here) (?áyém 'slow'), x^{W}?éyəqəl 'clear voice' (x^{W}ə- 'become, go', ?éy 'good'), ?iyésqəl 'pleasant voice' (?iyés 'pleasant, fun'), t'í·wqəl 'high-pitched (and/or) slow words or talking' (t'í·w 'slow beat'). A few words lack the suffix but fit in semenically: sx^{W}?í?ɛ̓ɬ 'soft voice' (< x^{W}?í?ɛ̓ɬ 'talk quietly'), ƛ'əpíləstəx^{W} tə sqəlx^{W}é·le 'lower one's voice in pitch', etc. The roots with these -(ə)qəl words are descriptive Vaj's in all cases. səlcí·mələqəl 'what does it sound like?' may belong in this subgroup or the next.

The second subgroup has terms with -élóqəl 'sound' (which is homophonous with -élóqəl 'smell, in smell'): stélóqəp 'a distant sound', sɛsetélóqəp 'keep on hearing a distant sound', ?əhélóqəp 'a faint sound carried by the air, sound within earshot or hearing distance' (< ?əh- as in ?əh-á·t 'wrap s-th up'), θx^{W}élóqəp 'a steady sound that's been stopped for a while' (< θéx^{W} 'disappear'), cq^{W}élóqəp 'a loud sound' (wəláy θéx^{W}ələqəp

'sound getting softer', mí x^{W}ə cq^{W}élélqəp 'sound getting louder'), ʔiyaθélélqəp 'sharp sound', $χ^{W}$əm$χ^{W}$əmɛlélqəp 'talks fast (probably sic for 'fast sounds')'; the roots here too seem to be descriptive adjectivals.

13.2.18. Other Domains. The remaining domains mentioned at the beginning of this chapter are somewhat grammatical and somewhat syntactic, but grammatical and syntactic categories are morphosememic categories too. As such they are stored with the other semological information on each term in the speaker's brain. After all, the fact that a word is an adverbial (can modify a verb for example) or a personal pronoun (can be subject or object of a verb for example) or a reciprocal has semantic (and morphosememic) effects as well as grammatical ones, especially in sememic co-occurrence restrictions and in the morphosememics of phrase expansion (see 13.3).

Most of the data has already been given in other parts of the grammar, and some morphosememic information will also be found in those sections. Some of these domains and references include: 1. Adverbials (directions and qualifiers): 6.2.4, 7.3, 7.4, 9.4; 2. Demonstratives and auxiliaries: 9.1, 9.2, 9.3, 9.4, 6.2.7, 6.2.8; 3. Personal Pronouns: Chapter 4, 9.5, 9.6; 4. Transitivizers, intransitivizers and benefactive:

6.1.2, 6.1.3; 5. Mood (interrogative, subjunctive, imperative, declarative) and interjections: 6.1.7, 6.2.5, 7.1; 6.Voice (active; passive; middle, reflexive; reciprocal): 6.1.2.2, 6.1.3, 6.1.6 (also Chapter 4, especially 4.4, 4.5, 4.8, 4.9, 4.10); 7. Continuative and plural: 2.3, 2.5, 6.1.9; 8. Numerals: 5.2.2, Chapter 10; 9. Prepositionals: 6.2.3; 10. Conjunctive particles (and disjunctives, etc.): 7.2.

Besides having inflectional, grammatical, and syntactic features unifying them, these domains also have (other) morphosememic features of unity as well. Adverbials include Vadv, Padv, Pmod, and Dadv's; the terms cover the morphosememic areas of intensity of action or state (Vadv's #1, 2, 3, 37, 52 in 6.2.4), sequence (#4, 5), degree of action or state (#17, 18, 37, 39, 41, 51), direction and location (#6 through 16, 19, 50; all Dadv's), iteration (#20, 21), time (#22 through 36, 38, 42, 48, 49), accompaniment (#44, 45), quality of action or state (#46, 47), probability (#40, 43, several Pmod's), obligation to perform action or be in state (remaining Pmod's), and perhaps negatives (#53 through 56).

Demonstratives and auxiliaries are united into a domain because they work together to express nearness of state and destination of action towards or away from

subject; they also provide the carriers for a number of suffixes for verb or nominal.

Personal pronouns express the person, usually the number and often the gender of each subject and/or object of each verb phrase; they clarify these features when nominals are also present as subject and/or object; they also express person and usually number of the possessor of a nominal, and are capable of expressing emphasis of person, number, and gender of possessor, subject, or object.

Transitivizers, intransitivizers and the benefactive may be categories of a single domain because they specify the functions and intents of subjects and objects of each verb phrase. Thus these affixes spell out whether the subject caused the object to do something, did something to the object on purpose, did something for the object, did something accidentally to the object, did something purposely but just for the activity and not for an object in particular, etc. In other words, these affixes spell out the functions and intents of the pronouns required for every verb phrase.

Mood seems to be a domain indicating immediate purposes or attitudes of the speaker in making an utterance: asking a question (interrogative), admitting

uncertainty or dependence on time of action or state (subjunctive and some interjections), giving a command (imperative), making a statement (declarative), or expressing surprise or affirmation (interjections). In these morphosememic functions all varieties of interrogative for example (Vq, -e inflection, ʔétɬ tag-question, etc.) perform the function with similar effect; the only differences for interrogative would be whether the speaker expects a yes or no answer, an explanation, etc. Mood effects the entire sentence. An interesting morphosememic pattern is that interrogative verbs can be put into the subjunctive mood, but this annihilates both moods and produces verbs translated as relative clauses (as mentioned in earlier chapters).

The domain of voice is broader morphosememically than inflectionally. It specifies the direction of action between subject and object of a verb: the subject directs the action or experiences the state (active), the object is directed (acted upon) by a subject which may be unspecified (passive), the subject directs the action towards himself (middle, and reflexive), the subject and the object direct action at each other (reciprocal). The distinction between 'middle voice' and 'reflexive' is very delicate and is explored in 6.1.6 especially.

Continuative and plural are joined together in a morphosememic relationship for several reasons: ablaut and reduplication are both used to form plural for nominals and continuative for verbs; reduplication is also used to form plural subject, plural object, and plural action inflections of some verbs; continuative and plural are sememically similar in that they both enlarge the quantity of what they apply to; both A and R are complex processes with many phonological variations -- these are easier to treat and keep in mind with a linking of continuative and plural.

Numerals of course form a semantic domain because they alone count things exactly, and because certain affixes and allosemes occur only with numerals.

Prepositionals also form a domain with some morphosememic coherence: they include words of direction and location in relation to nominals (yewé·lmals 'before' and stɛ?é 'similar to, like' are the only exceptions to this morphosememic categorization); prepositionals are also Vi's which require nominal objects (as discussed in the syntax) and which require special forms of independent pronoun (as discussed in 4.11).

Finally, conjunctive particles and the other members of Pconj (some are disjunctive ('or'), etc.) form a semantic domain, not only because of how they conjoin

syntactically, but also because they are the only terms which morphosememically join nominals, independent pronouns, numerals, verbs, phrases or sentences as 'co-ordinate' elements (other conjunctions subordinate what they conjoin).

13.3. Morphosememics of Phrases, Sentences, and Speech Events. This last section in Chapter 13 is more of a tentative nature than what has preceded. All the labels for morphosememic classes within domains would seem to be relevant in putting words into phrases and phrases into sentences. They can for example be used in determining semantic compatibility, as can parenthetical elements within glosses (ʔ'ɛ́mq'^{w}els 'make a crunching or cracking sound (of ice breaking or eating apples)'). An example of using morphosememic classes in this way would be the observation that terms for basketry techniques would compatibly appear within the same phrase, sentence, or speech event with types of baskets, basket parts, or tools used for basketry. It follows in many domains (perhaps most) that one morphosememic class is compatible with the others in its domain, and that classes of functions or techniques (mostly verbs) are generally compatible within a verb phrase with classes of types or parts (mostly nominals) from the same domain.

13.3.1. Nominal Phrases (NP's) and Their Expansions. With unexpanded NP's of the shape A V (using abbreviations from syntax chapter throughout 13.3), A if marked for human or sex gender becomes 'someone (male/female) that'; if A is not marked for human or sex gender it becomes 'something that'; with the other unexpanded NP's containing an article (A N, A D, A Num), the semantic elements of the A set act as covert modifiers of the N, D, or Num; ['indefinite'] and ['generic'] components are overtly translated as 'a' and 'some' or by omitting the article with ['generic'] and putting the English noun in generic plural. Alternatively, the gender component may be transferred directly to the N, D, or Num if these are regarded as having no intrinsic gender rather than having allosemes of each gender. It should be kept in mind that the N, D, or Num is the item semologically modified in unexpanded NP's, and that the A is the semological modifier.

Only A N and A V are attested with modifiers, and A V expansion is to be treated as VP expansion which is then nominalized. A N expansion with modifiers merely adds more modifiers modifying the N in most cases. But with A Vadv Vaj N, the Vadv modifies the Vaj which in turn modifies the N. With A N-4.6$_3$ A N the second A modifies the N following and both in turn

modify the first A N (as already discussed in the syntax). With A N-4.6$_3$ A-4.6 N-4.6 similarly, the second A and its 4.6 modify the second N, and the combination in turn modifies the first A N.

When NP's are expanded by apposition, the second nominal is usually more specific semantically than the first, and the more specific term seems to semologically replace the less specific one as the thing modified. When 4.3 is involved in the apposition and is first or second person (thus identified with speaker or hearer) it becomes the more specific and seems to be the element modified.

When NP's are expanded by conjoining they are conjoined as equals and function jointly.

13.3.2. Verb Phrases (VP's) and Their Expansions. The morphosememic function of subject and object are determined from syntactic placement of NP's, the transitivity (or lack of it) of the verb, the type of verb (for example, Vprep's require objects), and correlation of person and number of personal pronouns with person and number of NP's. When an NP is determined to be the subject (S) or object (O) of a verb it is marked as such semantically (semologically). When an NP is present and is matched up with a personal pronoun suffix as S or O, the NP morphosememically re-

places the pronoun.

When the VP is expanded with internal modifiers, some morphosememically modify the main verb directly, and some modify it indirectly by modifying a modifier of the main verb. The main verb can be identified by syntactic placement in most cases; when it is not so identifiable and is not identifiable from inflection the VP is ambiguous.

The following modify the verb directly: Vaux's ls and me - mí, Pmod, and the Vadv physically closest to the main verb. When there are two Vadv's preceding the main verb, the first or outer one modifies the second or inner one; where three Vadv's precede the main verb there are too few examples to be certain, but it appears that the first modifies the second which modifies the third which modifies the main verb. It may be that such chains of modification account for how words or inflections can modify whole phrases; such words modify directly the word which follows and indirectly all the remaining modifiers and the main verb. It seems that tense, interrogative, and negative elements which precede other internal modifiers work this way too; the first element modifies the next modifier which modifies the next, etc., till the main verb is reached. Thus it is difficult to look at a sentence

containing Vneg-4.4-Tense (?f, 1f)-4.9b Vadv Vadv M.V. and tell whether the negative modifies (negates) the first Vadv, the second Vadv, the main verb only, or everything. Morphosememically it is a chain of modification.

13.3.3. Sentences and Their Expansions. VP's can be sentences by themselves. As such they can be expanded with appositives and non-conjoined VP's (prepositional phrases and subjunctive phrases). N's added in apposition are vocative and are so marked morphosememically because they merely direct the conversation. VP's added in apposition are parenthetical in flavor and probably modify the main verb, but there are too few examples to be sure. Prepositional phrases and subjunctive phrases appear to modify the main verb in the same way as do Vadv's (of location and of time).

Sentences can also be expanded by subordinate conjunction of VP's (relative clauses and regular subordinate clauses). Relative clauses are VP's preceded by an A and morphosememically organized like the NP < A V. Thus the A marked for 'human' or sex gender becomes 'someone (male/female) that' and if not so marked it becomes 'something that'; as mentioned in the syntax, relative clauses can serve as S or O in the main VP; either the S or the O of the VP in the rela-

tive clause so serves actually, and the remainder of its VP modifies it. In other words, either the S or the O (or -S or -O) can be relativized with the rest of its VP modifying it adjectivally ('someone that I saw' or 'someone who saw me'); then the item relativized can serve as S or O of the main VP in the sentence ('I liked someone that I saw.' or 'I liked someone who saw me.'). A regular subordinate clause modifies the main verb but undergoes many translational shifts before a smooth English translation is obtained. There may be some morphosememic subtleties going on which there has not been time to study yet.

Sentences can also be expanded by co-ordinate conjunction of independent VP's. The VP so added does not combine morphosememically with the preceding sentence or VP except to the extent that it is almost always indicated as an action subsequent to that in the preceding VP. This indication is done through the co-ordinating conjunction in most cases.

13.3.4. The Speech Event. Except for formal speeches, the morphosememic structure of each speech event is highly individualistic. It depends much on the style of the speaker, what the speaker and hearer know together about the topic (or know each other knows), how informative the speaker wishes to be, how open the

speaker is to questions from the hearer, etc. As mentioned in the last chapter ambiguities are often not resolved even at the end of the speech event. The stories and narratives obtained so far feature many sentences begun with co-ordinating conjunctions, sometimes continuing for a page or more. These indicate subsequent events and serve to carry on the narrative. They also serve as hesitation forms, especially the longer conjunctions like qəƛ'as?ɬsu. In the future as more stories and some conversations are obtained, transcribed, and studied, the morphosememic structure of speech events can be illuminated.

BIBLIOGRAPHY

Works Consulted on Halkomelem

Boas, Franz and Hermann Haeberlin: "Sound Shifts in Salishan Dialects," in IJAL, vol.4, 1927, pp.117-136.

Cope, Leona: "Calendars of the Indians North of Mexico," in University of California Publications in American Archaeology and Ethnology, vol.16, no.4, Nov.6, 1919, pp.119-176 (Thanks to Mary R. Haas for this reference).

Duff, Wilson: The Upper Stalo Indians of the Fraser Valley, B.C., Anthropology in British Columbia, Memoir 1, British Columbia Provincial Museum, 1952, Victoria, B.C.

Elmendorf, William W.: "Lexical Innovation and Persistence in Four Salish Dialects," in IJAL, vol.28, 1962, pp.85-96.

Elmendorf, William W. and Wayne Suttles: "Pattern and Change in Halkomelem Salish Dialects," in Anthropological Linguistics, vol.2, no.7, 1960, pp.1-32.

Galloway, Brent D.: "Some Similarities Between Semology and Phonology (With Illustrations from Chilliwack Halkomelem)," a paper delivered at the Sixth International Conference on Salishan Languages (abbreviated ICSL), Aug.16-18, 1971, Victoria, B.C., unpublished.

Galloway, Brent D.: "Reduplication in the Chilliwack Dialect of Halkomelem (With a Sketch of Phonemics)," a paper delivered at the Eighth ICSL, Aug.13-15, 1973, Eugene, Oregon, unpublished.

Galloway, Brent D.: "Two Lessons in Time in Upriver Halkomelem," a paper delivered at the Tenth ICSL, Aug.14-16, 1975, Ellensburg, Washington, in Lektos, Fall 1975, ed. by Robert St. Clair, University of Louisville, Kentucky.

Galloway, Brent D.: "Anatomy in Upper Stalo Halkomelem, A Morphosememic Study," a paper delivered at the Eleventh ICSL, Aug.12-14, 1976, Seattle, Washington, unpublished.

Haeberlin, Hermann K.: "Types of Reduplication in the Salish Dialects," in IJAL, vol.1, 1918, pp.154-174.

Harris, Jimmy Gene: "The Phonology of Chilliwack Halkomelem," M.A. thesis, University of Washington, 1966, unpublished.

Hill-Tout, Charles: "Ethnological Studies of the Mainland Halkōmē'lEm, a Division of the Salish of British Columbia," in Report of the British Association for the Advancement of Science, vol.72, 1902, pp.355-490.

Hill-Tout, Charles: "Ethnological Report on the StsEēlis and Sk'aúlits Tribes of the Halkomelem Division of the Salish of British Columbia," in Journal of the [Royal] Anthropological Institute, vol.34, July-December 1904, London, England.

Suttles, Wayne: Unpublished grammatical notes on Musqueam Halkomelem (untitled) for Anthropology 407, Winter 1969, Portland State University, Portland, Oregon.

Swadesh, Morris: "Salish Phonologic Geography," in Language, vol.28, 1952, pp.232-248.

Wells, Oliver N.: A Vocabulary of Native Words in the Halkomelem Language, 2nd ed., 1965, published by the author.

General and Non-Halkomelem References Cited

Amoss, Pamela Thorsen: "Nooksack Phonemics," M.A. thesis, University of Washington, 1961, Seattle.

Bloomfield, Leonard: Language, 1933, Holt, New York.

Ferguson, Charles A.: "Assumptions About Nasals: A Sample Study in Phonological Universals," in Universals of Language, ed. by Joseph H. Greenberg, 2nd ed., 1966, M.I.T. Press, Cambridge, Mass.

Gleason, H.A., Jr.: An Introduction to Descriptive Linguistics, rev. ed., 1961, Holt, Rinehart and Winston, N.Y.

Halliday, M.A.K.: "Language Structure and Language Function," in New Horizons in Linguistics, ed. by John Lyons, 1970, Penguin Books, Baltimore, Md.

Hockett, Charles F.: "A System of Descriptive Phonology," in Language, vol.18, 1942, pp.3-21, reprinted in Readings in Linguistics I, ed. by Martin Joos, 4th ed., 1966, Chicago.

Hockett, Charles F.: "Problems of Morphemic Analysis," in Language, vol.23, 1947, pp.321-343, reprinted in Joos (1966).

Hockett, Charles F.: "Peiping Morphophonemics," in Language, vol.26, 1950, pp.63-85, reprinted in Joos (1966).

Jespersen, Otto: Growth and Structure of the English Language, 9th ed., 1938, (Doubleday Books ed., 1961, New York).

Kuipers, Aert: The Squamish Language, vol.1, 1967 and vol.2, 1969, (both) Mouton Press, The Hague.

Schachter, Paul: "Some Comments on J.M. Stewart's 'The Typology of the Twi Tone System,'" in Bulletin of the Institute of African Studies (abbreviated here BIAS), vol.1, no.1, 1965, pp.28-42.

Stewart, J.M.: "The Typology of the Twi Tone System," in BIAS, vol.1, no.1, 1965, pp.1-27.

Stewart, J.M.: "Reply," in BIAS, vol.1, no.1, 1965, pp.43-48.

Welmers, William E.: "Tonemics, Morphotonemics, and Tonal Morphemes," in General Linguistics, vol.4, no.1, pp.1-9, 1959, University of Kentucky.

Welmers, William E.: "A Further Note on the Typology of Tonal Structures," in BIAS, vol.1, no.1, 1965, pp.49-67.