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PHONOLOGY AND MORPHOLOGY

of

UPPER CHEHALIS

by

Marvin Dale Kinkade

Submitted to
the faculty of the Graduate School
in partial   fulfillment of
the requirements of the degree
Doctor of Philosophy,
in the Department of Linguistics
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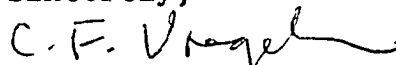
DEPARTMENT OF ANTHROPOLOGY
SOCIAL SCIENCE BUILDING

December 17, 1962

Dean John W. Ashton
Graduate School
Indiana University

Dear Dean Ashton:

Mr. Marvin Dale Kinkade has submitted a satisfactory
dissertation and has satisfactorily passed an oral
examination for the Ph.D. degree in linguistics.

Sincerely,

C. F. Voegelin

C. F. Voegelin
Chairman of Ph.D. Committee

Harold Whitehall

Harold C. Klagstad, jr.

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CONTENTS

I. INTRODUCTION

Upper Chehalis is one of the Salish languages, and belongs to what Morris Swadesh[1] calls the Olympic branch. The most closely related separate language was Lower Cowlitz, now extinct, which was spoken to the south of Upper Chehalis. The two were probably just barely mutually intelligible. Upper Chehalis underwent a consonant shift common to a number of other Salish languages, which Lower Cowlitz did not. Upper Chehalis is a /č/ dialect, Lower Cowlitz a /k/ dialect, i.e., Upper Chehalis shifted /k/, /k̓/, and /x/ to /č/, /č̓/, and /š/ respectively. Some varieties of Upper Chehalis may have been transition dialects in this sound shift, for Boas and Haeberlin[2] speak of two varieties of Upper Chehalis, one marked by having /č č̓ š/, the other /k k̓ x/.

Upper Chehalis and Lower Cowlitz together form an inland division of the Olympic branch of Salish, as opposed to the coastal division, made up principally of Lower Chehalis and Quinault. There were several separate dialects along the coast. Queets and Quinault formed a northern group, and Humptulips, Wynoochie, Grays Harbor, and Willapa Bay formed a southern group (Lower Chehalis), but variations were slight, and the two groups shaded into one another. Both groups now reside on the Quinault Indian Reservation on Washington's coast, and can readily converse with one another. Between the Lower Chehalis and the Upper Chehalis were the Satsops. They were apparently attached to

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[1] Morris Swadesh, "Salish Internal Relationships," _IJAL_, XVI (1950), 157-167.

[2] Franz Boas and Herman Haeberlin, "Sound Shifts in Salishan Dialects," _IJAL_, IV (1927), 117-136.

neither Chehalis tribe, but spoke a dialect between the two, probably more like Upper Chehalis than like Lower Chehalis. The last speaker of Satsop died only a few years ago.

Upper Chehalis was formerly spoken by five bands of Indians in an area of perhaps 2000 square miles in southwestern Washington state, centering roughly at Rochester. To their west, along the Pacific Ocean, were the Lower Chehalis. To the northwest were the Satsops. To the north, along the west side of Puget Sound, were the Skokomish (Twana). The Nisqualli, the southernmost Puget Sound Salish group, lived to the northeast, along the east side of Puget Sound. The Lower Cowlitz were to the south. All these were Salish-speaking groups. But the Upper Chehalis also had three non-Salish neighbors. The Upper Cowlitz, a Sahaptin group, lived east and southeast of the Upper Chehalis. To the south-west were some Chinooks. Originally, there was also an Athabaskan tribe, the Owhilapsh (or Kwalhiokwa), between the Upper Chehalis, Lower Chehalis and the Chinooks, along Willapa Bay and River. The Upper Chehalis called this group /sosóne/.

The five bands were (1) the /sq̓ʷayáełq̓/, located at Mud Bay at the southern tip of Puget Sound, and extending southward from there; (2) the /łmóšlowš/, centered in the vicinity of the present town of Tenino; (3) the /ʔélaweqs/ (meaning beyond the point, referring to a bend in the Chehalis River), located across the river from the present town of Chehalis; (4) the /čax̣ʷásnʔ/ (meaning roasting place, referring to a tribal legend), around Pe Ell in the southern part of Upper Chehalis territory; and (5) the /słačáʔwanxʷ/, whose location I was never able to determine. There was another group in the south called /wápo/ (derived from a French name, Boistfort) situated between the Upper Chehalis and the Lower Cowlitz. They spoke a mixed dialect, and were claimed by both tribes.

The /sə́ʷuyáeɫq̓/ were apparently the most prominent band, and theirs is the name now used by the whole tribe. In the late nineteenth century, Governor Isaac Stevens moved the five bands together onto the small Chehalis Indian Reservation just southeast of Oakville, and along the Chehalis River. There has been considerable intermarriage among coast Indians in Washington, and many Upper Chehalis moved to other reservations in the area—the Nisqualli, Squaxin Island, Skokomish, and Quinault. Many Indians also left the reservations entirely. Over the years, the Upper Chehalis tribe has become mixed, and has almost completely adopted Western culture. As much as seventy years ago, Indian parents were urging their children to learn the ways of the white man and forget their own, including their language. Unfortunately, they were successful, and as a result, not more than three people still speak Upper Chehalis. Fewer than a half-dozen more know a few words or can understand it when they hear it; these people could speak it thirty or forty years ago, but have ceased to use it. Only four or five families continued to use Upper Chehalis, but most of the older generation who did know it are dead by now. My informant, Silas Heck, is the last of six children, and he is presently about 86 years old; none of the next generation learned the language. Two older women of the Secena family, the hereditary chief family, are still alive, but have forgotten the language. One of four Ben brothers is still alive, and is said to be able to speak Upper Chehalis. One or two of the Pete family are alive, but have forgotten much more than they realize. One other Indian, Grover Sanders, was raised by his grandmother and learned Upper Chehalis, and he still lives in the area.

Of the three remaining speakers of Upper Chehalis, Johnny Ben spends the summer in the Seattle area, and Grover Sanders cannot usually be found. I was unable to get in touch with either of these men, but was able to work extensively

with Silas Heck. He lives alone on a corner of the Chehalis Indian Reservation.
He does not see very well, and no longer hears well without a hearing-aid (for
which he seldom has working batteries). But he likes to speak Upper Chehalis,
and remembers a great deal, although he has been accused of translating English
sentence patterns directly into Upper Chehalis. He was most cooperative, how-
ever, and except for poor-fitting dentures, which confused sibilants at times,
spoke very clearly. His family has a mixed origin. His father was part Upper
Chehalis and part Lower Chehalis. His mother, Mary Heck, had Clallam, Nisqualli
and Yakima ancestry.

My material is based, then, on an ideolect, since I worked only with one
speaker, with very little assistance from one or two others who understood, but
did not speak the language.

II. PHONOLOGY

There are 34 segmental phonemes and 6 suprasegmental phonemes in Upper Chehalis. Segmental phonemes are divided into 30 consonants and 4 vowels; suprasegmental phonemes are divided into 1 length phoneme, 3 stress phonemes, and 2 juncture phonemes. Length and stress apply only to vowels.

There are three kinds of consonants: stops, fricatives, and resonants. Stops and fricatives are always voiceless, resonants are always voiced. Consonants occur in the following six positions: bilabial, alveolar, prepalatal, lateral, velar, and glottal. There are two types of prepalatal phonemes, compact (/č/ and /š/) and diffuse (/c/ and /s/). Two contrasts occur among velars, front vs. back, and non-rounded vs. rounded.

Stops occur in all positions except lateral, for 9 stop phonemes. Fricatives occur in prepalatal, lateral, velar, and glottal positions, yielding 7 fricative phonemes; a front-back contrast does not occur for non-rounded velar fricatives. One resonant occurs in each position except glottal, for 5 resonant phonemes. Diagrammatically, then, the three kinds of consonant phonemes occur in six positions as follows:

	bilabial	alveolar	prepalatal diffuse	prepalatal compact	lateral	velar front	velar back	glottal
stops	p	t	c	č		k k^W	q q^W	?
fricative			s	š	ł	x^W x̣	x̣^{W}	h
resonant	m	n		y	l		w	

All stops except /?/ occur combined with a component of glottalization to generate

a glottalized series of stops contrasting with the non-glottalized series. In addition, *a* glottalized stop /ƛ̓/ occurs in the lateral position where no non-glottalized stop occurred. Thus, there is *a* total of 9 glottalized stops, for *a* total of 30 consonant phonemes. The component of glottalization also frequently occurs with all resonants, but no evidence has been found to show that these glottalized resonants *are* phonemic, and they *are* not so considered here.

Vowels occur *at* two levels, mid *and* low; there *are* three contrasts *at* the mid level, front, center *and* back. The four vowel phonemes, then, *are*:

$$e \quad ə \quad o$$
$$a$$

Every vowel may be combined with the length phoneme. (Length is indicated by *a* raised dot: /˙/.)

The three stress phonemes occur on three levels: high (or primary), written /´/, secondary, written /ˋ/, *and* low, which will remain unmarked. Any vowel, or *any* vowel plus length, may co-occur with either primary or secondary stress. Only /e/, /o/, or /a/ (without length) may co-occur with low stress (although [ə] occurs with low stress phonetically, it is not phonemic--see below).

Every noun *and* verb occurs with one, *and* only one, high stress. Most particles occur with low stress, but *a* few regularly have high or secondary stress. Some particles which ordinarily occur with low stress may have high stress when part of *a* compound, such as /ʔáɬnawe/ to you (/ʔaɬ/ to, /néwe/ you, sg.). An *affix* may have high stress, in which case the noun or verb stem to which it is attached is reduced to low, or occasionally secondary, stress; but the total word may have only one high stress. Compound *and* reduplicated stems frequently have *a* high *and a* secondary stress, but the order in which they occur is variable. Secondary stress is not *as* common *as* high stress.

The two juncture phonemes *are* /#/ *and* /|/. /#/ marks sentence boundaries,

and occurs sentence-finally. /|/ marks all other phrase boundaries.

A word may be defined in relation to juncture. Any sequence of phonemes that may both follow and precede juncture (although not necessarily at the same time) is a word. Any major morpheme may follow either juncture phoneme, but many particles can precede only /|/, but not /#/.

Most phonemes can be attested by examples in overlapping distribution. Examples follow to validate the phonological identity of the phonemes set forth above. Minimal pairs will be used whenever possible. Because of the large number of consonant phonemes, examples will be primarily restricted to contrasts of phonetically similar phonemes. Although the root pattern of Upper Chehalis is very simple--CVC and CVCC--verb roots do not often occur alone, and minimal pairs are not always readily available. Because of the many suffixes in the language, it is sometimes difficult to find examples of roots which contrast phonemes with identical suffixes on the roots. It will therefore be necessary at times to give examples of phoneme contrasts in analogous environments rather than in minimally contrasting environments. This will be even more necessary when giving examples of certain infrequently occuring phonemes (such as /k/, /k̯/, and /h/). Examples will contrast phonemes in either prevocalic or post-vocalic position, or both if possible. Minimal contrasts will precede contrasts in analogous environments.

The phoneme /p/ contrasts with /p̓ m w t q qᵂʔ/ as follows:

p/p̓ - /pə́ɬ/ thick : /p̓ə́ɬ/ drop; /ʔet sápn/ he sharpened it : /ʔet sap̓én/ he hit it (as with a stick).

p/m - /ɫə́pɬ/ kill : /ɫə́mɬ/ tie; /pósɬ/ swell up : /mós/ four.

p/w - /lapə́m/ boil : /lawə́m/ dig camas; /pánačs/ ten : /wánačɬ/ be lost.

p/t - /ʔet pánxᵂn/ he caught him at it : /ʔet tánxᵂ/ he passed him.

p/q - /péx̣ɫ/ penetrate, pass through : /qéx̣ɫ/ many; /ʔet sápn/ he scraped it :
/ʔet sáqn/ he scratched it.

p/qʷ - /paló?/ go through : /qʷaló?/ muskrat; /ɫ́épɫ/ kill : /ɫéqʷɫ/ buy a wife.

p/ʔ - /spéx̣tn/ it's penetrating it : /s?éx̣tn/ he's seeing it; /ʔet sápn/ he
scraped it : /ʔet sá?n/ he made it.

The phoneme /ṗ/ contrasts with /p m w ɫ̇ q̇ q̇ʷ ʔ/ as follows:

ṗ/p - see above.

ṗ/m - /ṗéɫč/ drop oneself : /méɫč/ summer; /kʷópa/ eel : /kʷomá˙?/ father.

ṗ/w - /ṗétče/ body : /wétče/ waist; /ʔet ?ápn/ he rubbed it : /?awém/ howl.

ṗ/ɫ̇ - /ṗóqʷa?/ blueberry : /ɫ̇óqʷmɫ/ find; /ɫ̇áposm/ close eyes : /ɫ̇átns/ his uncle.

ṗ/q̇ - /ʔet ṗáln/ he woke him up : /sq̇á˙ln/ he's lifting something out of the
water; /sáṗle?semɫn/ club : /sá˙q̇laxan?/ build a fence.

ṗ/q̇ʷ - /?eƛ́áṗ/ no-good : /?eƛ́áq̇ʷ/ enough; /ṗéɫɫ/ drop : /q̇ʷə́?ɫ/ light.

ṗ/ʔ - /ṗə˙tlm/ all over : /?ə́˙tlnm/ go inland.

The phoneme /m/ contrasts with /p ṗ n w/ as follows:

m/p, m/ṗ - see above.

m/n - /ƛ́ém/ punch, chop : /ƛ́én/ stop; /ʔet méq̇ʷn/ he roiled it : /néq̇ʷɫ/ cotton-
wood.

m/w - /méy/ begin to : /wə́y/ become; /šə́˙m?/ here : /šə́˙w?/ bone.

The phoneme /t/ contrasts with /p ɫ̇ n l c č k s q ƛ̇ ?/ as follows:

t/p - see above.

t/ɫ̇ - /talə́p/ walk together : /ɫ̇alə́p/ stick to the side of something; /smátatn/
he's sharpening it : /smáɫ̇atn/ he's breaking it.

t/n - /táwɫ/ big : /náwɫ/ old, big; /pétɫ/ stick on : /pénɫ/ land.

t/l - /?et taqén/ he closed it : /?et laqén/ he bought it; /latám/ table :
/lalám/ oar.

t/c - /tə́pⱡ/ <u>bump</u> : /cə́pⱡ/ <u>proud</u>; /kʷátⱡ/ <u>ford, wade</u> : /kʷácⱡ/ <u>be named</u>.

t/č - /tat/ <u>the</u> : /čat/ <u>instead</u>; /ʔét/ <u>go into</u> : /ʔéč/ <u>matter</u>.

t/k - /ʔet tásylqsn/ <u>he spanked him</u> : /kás/ <u>train</u>.

t/s - /ʔéto/ <u>then</u> : /ʔéso?/ <u>dive</u>; /táxʷewe/ <u>sell</u> : /sáxʷeyn?/ <u>otter</u>.

t/q - /tet/ <u>the</u> : /qet/ <u>like, as</u>.

t/ḱ - /tə́p/ <u>hit, bump</u> : /ḱə́p/ <u>deep</u>; /ʔet mátn/ <u>he sharpened it</u> : /ʔet máḱn/ <u>he stirred it</u>.

t/ʔ - /tet/ <u>the</u> : /ʔet/ <u>the</u>, /ʔét/ <u>go into</u>.

The phoneme /ⱡ/ contrasts with /p̓ t n c̓ č ƛ̓ k̓ s q̓ ʔ/ as follows:

ⱡ/p̓, ⱡ/t - see above.

ⱡ/n - /xʷə́tⱡ/ <u>get up</u> : /xʷə́nⱡ/ <u>tire of</u>; /tówn/ <u>arrive</u> : /now/ <u>or</u>.

ⱡ/c̓ - /ʔet ⱡómm/ <u>he came for him</u> : /ʔet c̓ómm/ <u>he sneaked up on him</u>; /ⱡə́c̓ⱡ/ <u>lose</u> : /ⱡə́c̓ⱡ/ <u>blow away</u>.

ⱡ/č - /ⱡə́tⱡ/ <u>lose</u> : /ⱡə́čⱡ/ <u>hurt</u>; /ⱡámm/ <u>measure</u> : /čaném/ <u>shiver</u>.

ⱡ/ƛ̓ - /ⱡə́qⱡ/ <u>wrap</u> : /ƛ̓ə́qⱡ/ <u>go out</u>; /ʔet mátn/ <u>he broke it</u> : /ʔet máḱn/ <u>he stirred it</u>.

ⱡ/k̓ - /ⱡáp̓osm/ <u>close eyes</u> : /k̓áp̓óxʷ/ <u>nuts</u>.

ⱡ/s - /ⱡówn/ <u>arrive</u> : /sówn/ <u>boulder</u>; /maⱡə́ⱡ/ <u>flop down</u> : /masə́ntn/ <u>gall</u>.

ⱡ/q̓ - /ⱡə́tⱡ/ <u>lose</u> : /ⱡə́q̓ⱡ/ <u>wide</u>; /ⱡáp̓s/ <u>be blind</u> : /q̓áp̓ⱡ/ <u>heal</u>.

ⱡ/ʔ - /ⱡawə́m/ <u>mow</u> : /ʔawə́m/ <u>howl</u>.

The phoneme /n/ contrasts with /m t ⱡ l c s/ as follows:

n/m, n/t, n/ⱡ - see above.

n/l - /náw/ <u>bluebird</u> : /láw/ <u>disc-game</u>; /k̓ʷə́nmⱡ/ <u>count</u> : /k̓ʷə́lm/ <u>drying rack</u>.

n/c - /ʔet namə́n/ <u>he buried it</u> : /ʔet camə́n/ <u>he hugged her</u>; /ʔet ʔax̣ə́c/ <u>he saw me</u> : /ʔet ʔax̣ə́n/ <u>he saw him</u>.

n/s - /pə́n/ <u>time</u> : /pə̀s/ <u>including</u>; /námⱡ/ <u>finished</u> : /sá·mⱡ/ <u>make</u>.

The phoneme /c/ contrasts with /t n č s č k/ as follows:

c/t, c/n - see above.

c/č - /céx̣ł/ show : /čéx̣ł/ fry; /čécč/ ride : /čécł/ go in, be in.

c/s - /cáqstqn?/ bucket : /sáqsn/ bow of canoe; /pócł/ flood : /spós/ lungs.

c/č - /cómł/ hug : /čómł/ cover; /?et q̓ʷə́x̣ʷc/ he cut me : /?et q̓ʷə́x̣ʷč/ he cut himself.

c/k - /sšéc/ meat : /?alašék/ turtle.

The phoneme /č/ contrasts with /t̓ c s č ƛ̓ k̓/ as follows:

č/t̓, č/c - see above.

č/s - /?et čóq̓ʷn/ he got him up : /?et sóq̓ʷn/ he skinned it; /čécał/ those in a vehicle : /čésa?/ come!

č/č - /čə́łł/ wake up : /čə́łł/ drown; /séčł/ be pinned : /séčł/ split.

č/ƛ̓ - /yáčł/ turn back : /yáƛ̓ł/ go home; /čə́łł/ wake up : /ƛ̓ə́ł/ bitter.

č/k̓ - /čám?/ suckle : /k̓amáq/ not loud.

The phoneme /s/ contrasts with /t t̓ n c č š ł x̣ h/ as follows:

s/t, s/t̓, s/n, s/c, s/č - see above.

s/š - /sówn/ boulder : /šówł/ grow, raise; /méscm?/ mink : /méščn?/ head louse.

s/ł - /swáqsanš/ I am going : /łwáqsanš/ I will be going; /mó?s/ four (diminutive) : /mó?ł/ handful.

s/x̣ - /sá?š/ liver : /x̣áš/ house; /tetx̣t̓és/ that : /t̓ex̣/ while, as.

s/h - /yós/ work : /sqʷayóh/ squirrel; /sówn/ boulder : /hóy/ then, well.

The phoneme /č/ contrasts with /t c č š y k/ as follows:

č/t, č/c - see above.

č/č - /čál?š/ hand, arm : /čál?š/ branch, limb; /łačáytmš/ get back to homeland : /łačáy?s/ sharp-pointed.

č/š - /čówł/ wife : /šówł/ road; /tač/ with : /taš/ from, at, across.

č/y - /čá·/ where : /yá·/ way; /céčml̥/ win : /céyqʷ/ flicker.

č/k - /čá·/ where : /kás/ train.

The phoneme /č/ contrasts with /t̓ c̓ č š y k̓ k/ as follows:

č/t̓, č/c̓, č/č̓ - see above.

č/š - /čanə́m/ shiver : /šánmx/ from then on; /k̓ečáyč̓p/ saw wood : /k̓ešáwm/ get cold.

č/y - /séč̓tn/ he's splitting it : /séytn/ good; /čə́nkʷl̥/ tight : /yə́nkʷs/ pack-rope.

č/k̓ - /čə́ll̥/ drown : /k̓ə́l̥/ bitter.

č/k - /čayáč̓/ get sleepy : /k̓ayáčkayc/ a plant.

The phoneme /š/ contrasts with /s č č̓ y l x̣ h/ as follows:

š/s, š/č, š/č̓ - see above.

š/y - /šalʔáls/ good-looking : /yaláčče/ riverside; /ʔet yáʔšnn/ he told him : /ʔet yáyn/ he likes her.

š/l - /sáʔš/ liver : /sáʔl/ happen; /ʔet šawál̥xʷ/ he grew it : /ʔet l̥awál̥/ he left him.

š/x̣ - /šə́m/ both : /x̣ə́m/ heavy; /x̣áš/ house : /x̣ax̣á·ʔ/ sacred.

š/h - /še/ for : /hé/ hay.

The phoneme /y/ contrasts with /č č̓ š w l/ as follows:

y/č, y/č̓, y/š - see above.

y/w - /yá·/ way : /wá·/ who; /t̓ayš́c̓/ return : /t̓awéc̓l̥/ white fir.

y/l - /yáx̣ʷl̥/ shake : /láx̣ʷl̥/ laugh; /qʷéym/ moss : /qʷélm/ bleed.

The phoneme /k̓/ contrasts with /t t̓ c̓ č̓ l̥ l k q̓/ as follows:

k̓/t, k̓/t̓, k̓/c̓, k̓/č̓ - see above.

k̓/l̥ - /mə́k̓č/ he tried : /mə́l̥č/ summer; /k̓ə́p/ deep : /l̥ə́p/ kill.

k̓/l - /k̓ə́ql̥/ go out : /lə́ql̥/ buy; /q̓ʷák̓ml̥/ plant : /q̓ʷaléml̥/ smoke.

ḱ/k - /ḱámq̓ɬ/ <u>yew</u> : /kamáq/ <u>not loud</u>.

ḱ/q̓ - /ḱə́ɬ/ <u>bitter</u> : /q̓ə́ɬ/ <u>sweet</u>; /maḱá?s/ <u>shoot at targets</u> : /maq̓á·/ <u>Makah</u>.

The phoneme /ɬ/ contrasts with /s š ḱ l x̣ h/ as follows:

ɬ/s, ɬ/š, ɬ/ḱ - see *above*.

ɬ/l - /ɬə́č̓/ <u>hurt, sore</u> : /ləč̓/ <u>full, covered</u>; /?éɬn/ <u>eat</u> : /?éln/ <u>sing</u>.

ɬ/x̣ - /ɬə́pɬ/ <u>kill</u> : /x̣əpɬ/ <u>dry</u>; /pə́ɬɬ/ <u>thick</u> : /pə́x̣ɬ/ <u>penetrate</u>.

ɬ/h - /ɬə́y/ <u>share</u> : /hə́/ <u>hay</u>.

The phoneme /l/ contrasts with /t n y ḱ ɬ w/ as follows:

l/t, l/n, l/y, l/ḱ, l/ɬ - see *above*.

l/w - /láx̣ʷɬ/ <u>laugh</u> : /wáx̣ʷɬ/ <u>striped vertically</u>; /talé·l/ <u>tame</u> : /tawé·lš/ <u>sit down</u>.

The phoneme /k/ contrasts with /t c č ḱ kʷ q ?/ as follows:

k/t, k/c, k/č - see *above*.

k/ḱ - /kás/ <u>train</u> : /ḱamáq/ <u>not loud</u>.

k/kʷ - /tə́ke/ <u>turkey</u> : /tə́kʷ/ <u>salmon eggs</u>; /kás/ <u>train</u> : /kʷə́s/ <u>darken</u>.

k/q - /kás/ <u>train</u> : /qá·se?/ <u>uncle</u>; /čə́kček/ <u>wagon</u> : /čéqm/ <u>scream</u>.

k/? - /kə́y/ <u>grandmother</u> : /?ə́y/ <u>good</u>.

The phoneme /ḱ/ contrasts with /t̓ c̓ č̓ ḱ k k̓ʷ q̓/ as follows:

ḱ/t̓, ḱ/c̓, ḱ/č̓, ḱ/ḱ, ḱ/k - see *above*.

ḱ/k̓ʷ - /ḱamáq/ <u>not loud</u> : /k̓ʷámɬ/ <u>oily, greasy</u>.

ḱ/q̓ - /ḱamáq/ <u>not loud</u> : /q̓améɬče/ <u>Skookum Bay</u>.

The phoneme /kʷ/ contrasts with /k k̓ʷ x̣ʷ qʷ w/ as follows:

kʷ/k - see *above*.

kʷ/k̓ʷ - /?et kʷá·mn/ <u>he warmed it</u> : /?et k̓ʷámn/ <u>he oiled it</u>.

kʷ/x̣ʷ - /?et kʷə́nax̣ʷ/ <u>he held him</u> : /x̣ʷə́nɬ/ <u>he tired of</u>; /tə́kʷ/ <u>salmon eggs</u> : /tə́x̣ʷs/ <u>enemy</u>.

kʷ/qʷ - /kʷáɫ/ aunt : /qʷálɫ/ pitch.

kʷ/w - /kʷáɫ/ aunt : /wáɫ/ come loose; /nokʷ/ some : /now/ or.

The phoneme /k̓ʷ/ contrasts with /k̓ kʷ xʷ q̓ʷ w/ as follows:

k̓ʷ/k̓, k̓ʷ/kʷ - see above.

k̓ʷ/xʷ - /k̓ʷénɫ/ count : /xʷénɫ/ be tired of; /sók̓ʷetn/ he's skinning it :

/sáxʷeč/ he made himself invisible.

k̓ʷ/q̓ʷ - /sxʷayók̓ʷ/ slug : /sxʷayóq̓ʷ/ joint; /k̓ʷélɫ/ spill : /q̓ʷélɫ/ cook.

k̓ʷ/w - /ɫak̓ʷám/ bite : /ɫawám/ mow; /k̓ʷa/ it turned out to be : /wá·/ who.

The phoneme /xʷ/ contrasts with /kʷ k̓ʷ x x̣ʷ h w/ as follows:

xʷ/kʷ, xʷ/k̓ʷ - see above.

xʷ/x̣ - /xʷék̓ʷmɫ/ wipe : /x̣ék̓ʷmɫ/ scratch; /q̓áxʷača/ freeze fingers : /q̓áx̣ača/

paint one's hand.

xʷ/x̣ʷ - /xʷaléɫče/ flowing water : /x̣ʷaléɫče/ hot water; /téxʷs/ enemy :

/téx̣ʷsče/ spit.

xʷ/h - /xʷá·yɫ/ be gone, lost : /háy/ hey!

xʷ/w - /xʷélɫ/ float away : /wélɫ/ fly; /kʷáxʷɫ/ arrive : /kʷáwɫ/ mix in a crowd.

The phoneme /q/ contrasts with /p t k q̓ x̣ qʷ ?/ as follows:

q/p, q/t, q/k - see above.

q/q̓ - /k̓óqɫ/ go out : /k̓óq̓ɫ/ stick together; /qémɫ/ calm, windless : /q̓ém/

already.

q/x̣ - /ɫóqmɫ/ throw (away) : /ɫóx̣mɫ/ burn; /sqélkʷmetn/ it's making a rapping

noise : /sx̣élkʷmetn/ it's rattling.

q/qʷ - /qalékʷ/ rapping noise : /qʷaléx̣ʷ/ go down to a river.

q/? - /qet/ like, as : /?et/ the; /?et sáqn/ he scratched him : /?et sá?n/ he

made it.

The phoneme /q̓/ contrasts with /p̓ t̓ ƛ̓ k̓ q x̣ q̓ʷ/ as follows:

q̓/p̓, q̓/t̓, q̓/k̓, q̓/k, q̓/q - see *above*.

q̓/x̣ - /ƚə́q̓ƚ/ <u>wide</u> : /ƚə́x̣ƚ/ <u>burn</u>; /q̓əm/ <u>already</u> : /x̣ə́m/ <u>heavy</u>.

q̓/q̓ʷ - /q̓ə́ƚ/ <u>sweet</u> : /q̓ʷə́ƚ/ <u>light</u>; /ƚə́q̓ƚ/ <u>wide</u> : /ƚə́q̓ʷƚ/ <u>break</u>.

q̓/ʔ - /q̓aƚ/ <u>modal particle</u> : /ʔaƚ/ <u>to, in, at</u>.

The phoneme /x̣/ contrasts with /s š ƚ xʷ q q̓ x̣ʷ h/ as follows:

x̣/s, x̣/š, x̣/ƚ, x̣/xʷ, x̣/q, x̣/q̓ - see *above*.

x̣/x̣ʷ - /x̣éc̓/ <u>raw</u> : /xʷéc̓/ <u>hornet</u>; /yáx̣ƚ/ <u>worn out</u> : /yáx̣ʷƚ/ <u>shake</u>.

x̣/h - /x̣áyʔ/ <u>fish gills</u> : /háy/ <u>hey!</u>

The phoneme /qʷ/ contrasts with /p kʷ q q̓ʷ x̣ʷ w/ as follows:

qʷ/p, qʷ/kʷ, qʷ/q - see *above*.

qʷ/q̓ʷ - /sqʷayáeƚ/ <u>baby</u> : /sq̓ʷayáeƚ/ <u>Upper Chehalis, Mud Bay</u>; /ʔet ƚaqʷə́n/ <u>he lapped it</u> : /ʔet ƚaq̓ʷə́n/ <u>he broke it</u>.

qʷ/x̣ʷ - /cáqʷsm/ <u>paint the face</u> : /cáx̣ʷsm/ <u>stick up</u>.

qʷ/w - /qʷálƚ/ <u>pitch</u> : /wálƚ/ <u>come loose</u>.

The phoneme /q̓ʷ/ contrasts with /p̓ k̓ʷ q̓ qʷ x̣ʷ w/ as follows:

q̓ʷ/p̓, q̓ʷ/k̓ʷ, q̓ʷ/q̓, q̓ʷ/qʷ - see *above*.

q̓ʷ/x̣ʷ - /q̓ʷə́lƚ/ <u>cook</u> : /x̣ʷə́lƚ/ <u>float away</u>; /yáq̓ʷƚ/ <u>bony, thin</u> : /yáx̣ʷƚ/ <u>shake</u>.

q̓ʷ/w - /q̓ʷə́lƚ/ <u>cook</u> : /wə́lƚ/ <u>fly</u>.

The phoneme /x̣ʷ/ contrasts with /xʷ x̣ qʷ q̓ʷ w h/ as follows:

x̣ʷ/xʷ, x̣ʷ/x̣, x̣ʷ/qʷ, x̣ʷ/q̓ʷ - see *above*.

x̣ʷ/w - /x̣ʷə́lƚ/ <u>float away</u> : /wə́lƚ/ <u>fly</u>.

x̣ʷ/h - /x̣ʷayə́p̓/ <u>jump on</u> : /háy/ <u>hey!</u>

The phoneme /w/ contrasts with /p p̓ m y l kʷ k̓ʷ xʷ qʷ q̓ʷ x̣ʷ/ as *above*.

The phoneme /ʔ/ contrasts with /p p̓ t t̓ k q q̓ h/ as *follows*:

ʔ/p, ʔ/p̓, ʔ/t, ʔ/t̓, ʔ/k, ʔ/q, ʔ/q̓ - see *above*.

ʔ/h - /ʔé/ <u>interrogative verb</u> : /hé/ <u>hay</u>.

The phoneme /h/ contrasts with /s š ł xʷ x̣ x̣ʷ ʔ/ as above.

The phoneme /e/ contrasts with /o a ə e˙/ as follows:

e/o - /ʔet céq̓ʷn̓/ he held it down : /ʔet cóq̓ʷn̓/ he set it up.

e/a - /šén̓ʔ/ to there : /šán̓ʔ/ there.

e/ə - /xʷétł̓/ go upstream : /xʷə́tł̓/ get up.

e/e˙ - /tawélš/ sit down : /tawé˙lš/ sit.

The phoneme /o/ contrasts with /e a ə o˙/ as follows:

o/e - see above.

o/a - /ʔamo/ unless, so : /ʔama/ if.

o/ə - /ł̓óml̓/ wrinkled : /ł̓ə́ml̓/ tie.

o/o˙ - /qʷóʔ/ drink : /qʷó˙ʔ/ give a drink.

The phoneme /a/ contrasts with /e o ə a˙/ as follows:

a/e, a/o - see above.

a/ə - /nám̓l̓/ finished : /ném̓l̓/ bury.

a/a˙ - /słánay̓ʔ/ woman : /słá˙nay̓ʔ/ girl.

The phoneme /ə/ contrasts with /e o a ə˙/ as follows:

ə/e, ə/o, ə/a - see above.

ə/ə˙ - /tə́pml̓/ hit (as with a rock) : /tə́˙pml̓/ tap.

There are few restrictions on the occurrence of consonants. All occur initially, finally, pre-vocalically, inter-vocalically, and post-vocalically. One of the most notable features of Upper Chehalis consonants is their propensity toward clustering. Even in this there seem to be few restrictions on combinability, either of types of consonants, or in the number possible in a cluster. Up to eight consonants have been found at the end of a word uninterrupted by a vowel, and ten inter-vocalically; five and six consonants in final position are quite common. An example of eight consonants in sequence occurs in the word

/scénqsmstwn/ he's hitting her face against the ground (/-qs/ nose, /-mstw-/ con-
tinuative inchoative third person singular object, /-n/ third person singular
continuative subject). As can be seen from this example, a good many of the con-
sonants in a cluster are apt to be provided by suffixes, which are frequently
entirely made up of consonants. Reduplication can also be a source of large
clusters of consonants, as in /stéq̓táq̓ʷtn/ he is slapping him repeatedly, which
is derived from a root /téq̓ʷ-/ slap reduplicated, plus /-t-/ third person sin-
gular continuative object, and /-n/ third person singular continuative subject.
Many of the multi-consonant clusters include at least one resonant (which may
be syllabic, see below), but not necessarily, as indicated by this last example.
Other examples of word-final consonant clusters are /céčslwltxʷ/ beehive (/céčs/
bee, /-lwltxʷ/ house), /čátt̓qmɨnʔ/ city marshall, /c̓éčkᵂ̓qɨnɨ/ out of breath, /ʔet
q̓ʷśmčlčmn/ he crumpled it.

Initial consonant clusters are seldom as large as final clusters, possibly
because there are far fewer prefixes in the language than suffixes. However,
some of these prefixes are also entirely consonantal, and so three and four con-
sonant clusters initially are not hard to find, e.g., /stxʷk̓əlceśs/ holding still
(/s-/ continuative aspect, /txʷ-/ get, become, make), /nkʷsq̓ᵂ̓ákatn/ it is grown
(/nkʷs-/ habitually, /-tn/ passive completive). The prefix /nkʷs-/ has provided
the largest initial consonant clusters found--six consonants: /nkʷsqtx̣énowaystwaln/
he's disagreeing with him (/-twal-/ continuative obviative object, /-n/ third
person singular continuative subject), /ʔet nkʷstxʷq̓ᵂ̓śtɨ/ it always burns (/-ɨ/
intransitive completive). But initial clusters of up to four consonants have
been found even without a prefix: /šɨčtónwayača/ thumb, /nxʷk̓qʷśm/ equinoxial
spring windstorm.

There are few restrictions as to what types of consonants may combine in

clusters. Three stops have been found together, as in /ptqʷéxʷɫokʷɬ/ moon (/pétqʷ/ night, /ɫokʷáɬ/ sun, moon); three fricatives, as in /sxʷɫáx̣ḳps/ lowest (/sxʷ-/ superlative); or three resonants, as in /x̣syálwn/ ugly. But no more than two glottalized consonants were found together initially or finally, except in redup-licated forms: /swésq̓q̓/ robin, /p̓ḳʷélmš/ mole, /t̓áx̣ʷáča/ slap one's hand (/t̓éq̓x̣ʷ-/ slap, /-ača/ hand), /sč̓čát/ a fish. Three glottalized consonants were found together intervocalically or in a reduplicated word: /st̓éq̓t̓áx̣ʷtn/ he's slapping him repeatedly. No front and back velars were ever found together in initial clusters, and no dissimilar velar fricatives (/xʷ/, /x̣/, /x̣ʷ/) were found together. Two /y/ or /w/ phonemes may not occur together. /k/, /ḳ/, and /h/ were found in few clusters, probably because there were few words which contained these phonemes at all. /ʔ/ and /h/ may not occur together. Two /s/ phonemes sometimes occur together, but are more often assimilated to one /s/. Likewise, /t/ and /s/ or /š/ are assimilated to /c/ and /č/ respectively. No initial clusters were found beginning with /l h č k ḳ x̣ʷ/, but it is not improbable that initial clusters may begin with any of them. Similarly, no final clusters were found ending in /w y k p̓ t̓ č̓ ḳ ḳʷ x̣̓ x̣ʷ h/.

Medial clusters have even fewer restrictions than initial or final clusters, and an innumerable variety of them occur, containing anywhere up to ten conso-nants, as in /t̓aʔacqʷáʔstqlscnčsa/ I have a headache again (/t̓a-/ and /-čsa/ again, /ʔac-/ stative aspect, /qʷáʔstqls/ headache, /-čn/ I, completive).

The following figures indicate the numbers of different initial and final consonant clusters found in Upper Chehalis. Initial clusters: 65 CC-, 83 CCC-, 21 CCCC-, 2 CCCCC-. Final clusters: 168 -CC, 235 -CCC, 129 -CCCC, 31 -CCCCC, 17 -CCCCCC, 1 -CCCCCCC, 1 -CCCCCCCC. There are certainly many more, since the above figures do not include all (or even many) combinations of object and subject

pronominal suffixes.

No vowel may occur initially, and only /a/, /e/ and /o/ (stressed or un-stressed, short or long) may occur word-finally. Otherwise, vowels always occur between consonants.

Vowel clusters are not common, but a few have been found. Only short /e/, /o/, or /a/ may occur in a vowel cluster, but not more than two vowels may occur together. Either member of such a cluster may have stress. The following vowel clusters were found: /ea/, /eá/, /eo/, /éo/, /oe/, /óe/, /áe/, and /oá/. Examples of some of these are /cneáwmš/ they, /čamóec̣a/ snail, /čócea/ upstream, /lepoá/ peas, /x̣lx̣áec̣pn?/ axe, /x̣áx̣eoł/ pine tree.

Some phonemes occur much less frequently than others. The most notably infrequent are /h/, /k/ and /k̓/, and several of the words in which these do occur are borrowed from English, French or Chinook. /h/ occurs in eleven words, two of which are borrowed from English. /k/ occurs in nine words, at least five of them borrowed (two from English, two from Chinook, and one from French). /k̓/ occurs in only four words, none of which are known to be borrowings. /š/ is not as common as most other consonants, but far more common than /h/, /k/ or /k̓/. All other phonemes are quite common.

Several of the consonants set up above are of such a phonetic nature that they could be interpreted otherwise than has been done here. The consonants in question are the affricates /c c̓ č č̓ ƛ̓/, the rounded velars /kʷ qʷ k̓ʷ q̓ʷ xʷ x̣ʷ/, and all the glottalized series of stops.

The glottalized stops might be taken as the basic series of stops, rather than the non-glottalized series, which would then be said to be combined with a component of deglottalization to form the non-glottalized series of stops. The only advantage of stating the relationship of the two series this way is that

/k̓/ does not have to be set up separately. Instead, it would be part of the basic glottalized series, but would be the only position to which deglottalization is not added. It would also be necessary to set up the glottal stop separately for the deglottalized series. The net result is identical as far as the total number of consonants is concerned, but it seems more natural to start with the simpler (phonetically) series, i.e., the non-glottalized series, and work to the more complex series; it also seems more natural to add a component than to subtract one, which is essentially the effect of deglottalization.

Another possible interpretation of the above-mentioned phonemes would be to consider them clusters rather than unit phonemes. Such a solution could drastically reduce the number of consonant phonemes--from 30 to 17. This is, however, the only advantage to a cluster solution, and there are reasons to believe that it would be an unsound solution anyway. A cluster solution would be no problem as far as consonant clusters are concerned; it would merely increase the possible number of consonants in a cluster. It would require the addition of some sort of juncture phoneme to account for distinctions between a glottalized stop and a cluster of a stop and /ʔ/, as in /tawə́n/ he mowed it vs. /tʔáwn/ (a place name) or /tʔwón/ guess. The last two examples would have to be written /t+ʔáwn/ and /tʔ+ʔwón/ (or some such way), and the first would be /tʔawə́n/. /k̓/ would have to be written as /tɬʔ/ or /k̓ʔ/, and a statement included to the effect that /k̓/ or the sequence /tɬ/ only co-occur with /ʔ/. This would simply not be true--/tɬ/ is an acceptable consonant cluster by itself, albeit always across a morpheme boundary. Likewise, /x/ would only co-occur with /w/, and could never occur alone.

/c̓/, /č̓/, and /k̓/ would have to be written as /tsʔ/, /tšʔ/, and /tɬʔ/ respectively. The glottal stop could not come between the stop and the fricative,

because the result would be identical with a cluster solution of a consonant cluster such as /t͡s/, which exists and is phonetically different from /č/--compare /mə́t͡s/ kidneys and /x̌ʷéč/ hornet, /x̌ʷə́tⱡ/ get up and /x̌áⱡ/ underbrush (and /x̌ə́tⱡ/ break). Another objection to writing /ts?/, etc., is that these would be the only instances in which /?/ occurs after a fricative finally (such a sequence does occasionally occur initially).

Another reason to adopt the unit phoneme solution has to do with the canonical form of a root. Most of these are CVC or CVCC (and sometimes CCVC or CCVCC). CVC roots would be far fewer if a cluster solution were adopted, and 12 other canonical forms would have to be set up, namely CVCCC, CCCVC, CVCCCC, CCCCVC, etc. I feel that this complexity of root forms would do serious injustice to an otherwise rather neat and clear feature of the language.

There are at least three other objections to a cluster solution, all involving morphology. When a verb is reduplicated initially to indicate repeated action, only CVC is repeated, whether the root is CVC or CVCC. Thus /?éⱡn/ eat becomes /?éˑⱡ?eⱡn/ eat slowly away. The statement explaining this sort of reduplication is rather simple if affricates, etc. are considered unit phonemes. But with a cluster solution, the statement has to have several qualifications, such as "except a series of stop and glottal stop, /t/ and /s/, /š/ or /ⱡ/, and velar plus /w/, in which case both are repeated in the reduplicated portion of the word." E.g., /sə́p-/ hit is reduplicated as /sə́psap-/ pound on, /t͡sə́q̌x̌ʷ-/ slap as /t͡sə́q̌t͡q̌x̌ʷ-/ slap repeatedly. (The opposite problem can occur, i.e., an affricate may not be an affricate morphemically, as in /ⱡə́č-/ sprinkle, reduplicated as /ⱡə́tⱡč-/ sprinkle often. This, however, is the only instance of this that I found.)

Another type of reduplication is post-reduplication, used in superlative

formations. In this case, only the first consonant after the stressed vowel of the root is repeated, as in /sxʷqə́xxs/ most from /qə́x-/ many, /sxʷƛ́óq̓ʷq̓ʷst/ highest from /ƛ́óq̓ʷ-/ high, up. A cluster solution would have the same effect of complexity on post-reduplication as on pre-reduplication above.

The third objection on morphemic grounds involves one of the allomorphs of the intransitive morpheme {-ɬ}. As presently stated concerning this allomorph, a vowel is infixed between the last two consonants of a stem, e.g., /ʔɛ́ɬp/ shoot with an arrow, /sʔɛ́ɬapn/ he's shooting with an arrow. Under a cluster solution, the exceptions of stop plus glottal stop, etc., would again have to be made to account for such words as are here written /ʔáˑmą́/ wait, /sʔáˑmaq̓n/ he's waiting, or /táčɬč/ sick, /stáčɬačn/ he's getting sick.

In summary, morphemic statements would become much more complex and irregular if a cluster solution were adopted. The reduction from 30 to 17 phonemes does not seem to warrant this.

Two other phonemicizations are possible as regards /ə/. One reduces consonant clusters, the other increases them. The first is to consider all occurrences of [ə] as phonemic, especially when unstressed (as in connection with resonants). Consonant clusters would thus be greatly reduced, particularly since most clusters, and especially the long ones, contain at least one nasal. It could also break up some clusters in which a voiceless schwa follows a stop, but these schwas are not consistently present—in fact, not ordinarily present. Some morphophonemic statements would be simplified (such as the alternation between third person singular object /-n/ and /-ə́n/; these would be then /-ən/ and /-ə́n/ respectively, and a statement would still have to be made to account for the stress, so little would really be gained), but others would be complicated, particularly in accounting for many additional allomorphs created by variations of

suffixes with or without [ə], depending upon what phoneme precedes the suffix.
A solution setting up [ə], unstressed, as a phoneme does not seem desirable, both
because it doesn't make a phonemic statement any simpler, and because it is either
predictable by environment or in free variation with silence.

The other possible treatment of schwa is to eliminate it entirely as a pho-
neme, including when stressed. In such a phonemicization, words could occur with-
out any vowel, but with stress, or stress and length. The phonetic schwa heard
in these words would then be predictable from the stress (when no other vowel
is present with the stress). However, any one stressed vowel could be eliminated
by the same interpretation, but only schwa can be entirely eliminated, since only
schwa is predictable when unstressed. An important objection to complete elimi-
nation of schwa in this way, besides being a very difficult position to maintain,
is the effect on canonical shapes. These would be made more complicated by the
addition of such forms as C'C and C'CC (reduplicated as C'CCCC).

No matter which solution of affricates, rounded velars, glottalized stops
and vowels is adopted, there will be certain assymetries in a chart of the pho-
nemes. If all affricates, etc. are considered clusters, or even if rounded velars
are accepted as unit phonemes (and affricates and glottalized stops are not),
there are four assymetries in the resultant consonant system. There is no frica-
tive in the labial series--but this is true of any consonant chart of Upper Che-
halis. There are no stops to correspond to /š/ and /ł/, and no fricative to cor-
respond to /k/ which can occur alone (i.e., without /w/).

In any other consonant system (as well as the one I have adopted), there
are no fricatives to correspond to /p/, /t/, or /k/, and there is no stop to cor-
respond to /x̌/ in a unit phoneme system. In a cluster solution, there may be a
/x̌/, but it cannot occur alone (only with /ʔ/).

On the whole, however, the consonant system is quite symmetrical. There are pairs of plain and glottalized stops at every position except lateral and glottal, where only /k̓/ and /ʔ/ occur. There are fricatives in all positions except labial, alveolar (/s/ may pair with either /t/ or /c/, however), and unrounded front velar. There is probably a reason for this last mentioned gap in the system. Historically, front velars shifted to alveo-palatals (i.e., to č, č̓, and š), as attested by comparison with other Salish languages (such as Lower Cowlitz [kówɬ] wife vs. Upper Chehalis /čówɬ/). But Upper Chehalis has just a few words with /k/ and /k̓/--mostly borrowed from English, French or Chinook. That there is no labial fricative is also unsurprising--few, if any, Salish languages have one.

Most Upper Chehalis morphophonemic changes are non-automatic, and are best discussed in connection with the appropriate morphemes. A few types of morphophonemics, however, are phonologically conditioned and predictable, and belong with a discussion of phonology.

When a morpheme ending in /t/ is followed by a morpheme beginning with /s/ or /š/, the result is identical with, and therefore morphophonemically, /c/ or /č/ respectively. Thus, any continuative verb form with a third person singular object /-t-/ and a second person singular subject /-š/ ends in /č/: /smó·lokᵂeč/ you (sg.) are cheating him (/s-/ continuative aspect, /mó·lokᵂe-/ cheat, transitive continuative, /-t-/ him, continuative, /-š/ you, sg., continuative).

The same is not true of /ƛ/ followed by /s/ or /š/. These clusters are never similar to /c̓/ or /č̓/, and contrast, although not minimally, in such words as /mə́c̓s/ kidneys and /x̣ᵂéč̓/ hornet.

The continuative prefix /s-/ and a root-initial /s/ are usually merged to a single /s/: /ʔet sáʔɬ/ it happened (completive) vs. /sá·wn/ it's happening

(continuative). Sometimes the /s/ is rearticulated, but the choices seem to be in free variation; they will be written as spoken--with one /s/ or two, as the case may be.

The contrast between /k/ and /kʷ/, /k̉/ and /k̉ʷ/, /q/ and /qʷ/, /q̉/ and /q̉ʷ/, and /x̣/ and /x̣ʷ/ is neutralized before any /o/ or /w/. All velars are rounded in this position, and will be so written, even when another form of the root in which this phoneme occurs indicates whether the root actually has the rounded or the non-rounded phoneme. An example of a velar becoming rounded before /w/ is /słóx̣ʷwn/ it is burning (continuative) from /łəx̣-/ as in /ʔet łəx̣ł/ it burned. That the root of a reduplicated form such as /x̣ʷóq̉ʷx̣ʷq̉ʷ/ windpipe begins with a rounded velar is shown by the second part of the word in which the root has been reduced to two consonants, both rounded.

/w/ is changed morphophonemically to /o/ following another /w/, and /y/ becomes /e/ after another /y/. This happens most noticeably in superlative forms, in which the post-vocalic consonant is reduplicated. Thus, instead of two /w/ or /y/ phonemes co-occurring, such forms occur as /sx̣ʷnáwos/ biggest, oldest from /náw-/, and /sx̣ʷʔéyest/ best from /ʔéy/ good.

/ə/ may disappear from a root when the stress is shifted to another part of the word, as in /c̉x̣ʷšénm/ wash one's feet from a root /c̉éx̣ʷ-/ wash (which appears in this shape in /c̉éx̣ʷmł/ wash, intransitive), a lexical suffix /-šn/ foot (here in an alternate form /-šén/), and /-m/ intransitive completive. The stress may also precede the root, as in /ʔáctməš/ ground from /təmš/ earth, ground. /ə/ is also frequently lost in pre-reduplicated forms, especially if the root is CVCC, e.g., /t̉śq̉t̉éq̉x̣ʷ-/ slap repeatedly from /t̉śq̉x̣ʷmł/ slap.

/ə/ may also be replaced by /a/ when the stress is shifted from the root. This also happens in reduplicated forms, but only if the root is CVC: /ʔet

sə́psápn̓/ he pounded on it from /sə́pmɬ/ hit, /ʔet pə́qʷpaqʷn̓/ he spilled it here and there from /pə́qʷɬ/ spill.

The replacement of /ə́/ by /a/ is especially common in CVC roots to which the completive form of the intransitive allomorph /-m/, or the first person singular completive object /-c/ or third person singular completive object /-n/ (both object subclass I) is added. Whenever these suffixes follow a CəC root, they have the alternate shapes /-ə́m/, /-ə́c/, and /-ə́n/ respectively, predictable from this particular root shape. When these stressed allomorphs are added, the /ə́/ of the root is replaced by /a/. For example, the root /ʔə́x̣-/ see (as in /ʔə́x̣mɬ/ see, intransitive) becomes /ʔax̣-/ in /ʔet ʔax̣ə́c/ he saw me and /ʔet ʔax̣ə́n/ he saw him. /lə́p-/ boil becomes /lap-/ in /ʔet lapə́m/ it boiled, but remains stressed in the continuative form /slə́pmetn/ it is boiling.

Little need be said about the phonetic values of labial, alveolar, velar, and glottal stops, except that they are nearly always aspirated, sometimes quite heavily, in all positions, although final and pre-fricative stops are not necessarily released. The amount of aspiration following a stop varies freely from very heavy to none at all.

Rounded velars, both stop and fricative, are rounded throughout their articulation. They do not consist of a stop plus labialization.

Only two words containing voiced stops or fricatives ever occurred when my informant was speaking Upper Chehalis. One of these was definitely a borrowed word: [ƛ̓ı ƛ̓əláleč], the name of a group of Indians from the Seattle area. The other word was a personal name: [gʷálax̣]. This is the name of my informant's mother's first cousin. He insisted that the name was Upper Chehalis, but I think it might well come ultimately from another language. Silas Heck's mother's family were partly Clallam, partly Yakima (from the Ellensburg area), and partly Upper

Chehalis. Silas Heck's name is from Clallam, and he was named after one of his
mother's cousins. He insisted that his own name was Clallam, but that [gᵂálax̣]
was Upper Chehalis. If it is Upper Chehalis, it is the only word I found in the
language containing a voiced stop. I do not consider the name so surely indigenous
as to set up another phoneme, especially a phoneme that would be so irregular as
far as the pattern of all other consonants is concerned.

Glottalized stops may also be aspirated, but are not so as consistently as
non-glottalized stops. Although the glottal release of glottalized stops is
usually quite distinct and sharp, it may sometimes be reduced, and is often rather
slight in a consonant cluster, such as occurs in the morpheme /-č̓p/ fire, and in
narrative speech. It is sometimes so slight that it is difficult to hear the
glottalization.

Alveolar and lateral fricatives are very strongly articulated; the alveo-
palatal fricative and the affricates are slightly less so. These sounds were
somewhat troublesome for my informant to articulate because of poorly fitting
dentures, and resultant sounds were occasionally difficult to determine. Back
velars, too, are strongly articulated, but the fricative quality of front rounded
velars is slight, but always greater than the friction accompanying the glottal
fricative.

The greatest allophonic range of consonant phonemes occurs among the reso-
nants. Each of these has at least seven allophones, five of which are syllabic;
/n/ has one additional allophone:

/m/ : [m], [m̥], [əm], [mə], [m̓], [əm̓], [m̓ə]

/n/ : [n], [n̥], [ən], [nə], [n̓], [ən̓], [n̓ə], [ŋ]

/l/ : [l], [l̥], [əl], [lə], [l̓], [əl̓], [l̓ə]

/y/ : [y], [y̥], [əy], [yə], [y̓], [əy̓], [y̓ə]

/w/ : [w], [w̥], [əw], [wə], [w̓], [əw̓], [w̓ə]

In addition, the [ə] of the [əm], etc. variety may be rounded in varying amounts (or not at all) after a rounded velar consonant or /w/. The exact occurrence of glottalization of the glottalized varieties varies. A glottalized resonant may be preglottalized or postglottalized; sometimes it sounds as if the glottalization occurs somewhere between the beginning and the end of the resonant. This variation can even be heard within different repetitions of the same word. An example of this is [šáwoy̓ə] play. No glottalized allophone may occur word-initially. The [m̩] and [əm] varieties occur in free variation. Glottalized variants are usually in free variation with the otherwise identical non-glottalized variants. But some words nearly always occur with a resonant glottalized, others with no resonant glottalized. For example, /náw/ big, old is ordinarily pronounced [náw̓], and /náw/ bluebird is always [náw]. But when the two words were checked with the informant, he insisted that they were identical, and then pronounced them the same—both without glottalization. No conditioning factor has been found to indicate when a resonant will be glottalized and when it will not be, although some such determinant may be present in the language. Words such as [sk̓ʷatán?] mouse which were never heard without the glottalization following the nasal (the glottalization is quite strong, and follows the resonant when the latter occurs word-finally) will be written phonemically as two phonemes, a resonant and a glottal stop, even though this practice may be inconsistent and perhaps not quite phonemic.

[əm], [ən], [əl] (or [m̩] and [əm̩], etc.), and less frequently [əy] and [əw], occur after any consonant, except initial /s/, before a vowel, another consonant, or pause. The [m̩] type variants are more common after rounded velars. Examples of the occurrence of these syllabic variants are [kʷpósənoɬtamš] upper-class

person, [x̣ə́łəlp] open-weave basket, [čópwax̣ənstwən] squeeze with the arm,
[yá?čəmšəm] approach, [q̇ʷółəwe?] maple.

[əm], [ən], [əl], and [əy] occur after an initial consonant, and before the
stressed vowel of the word. Another consonant may occur between the resonant
and the stressed vowel. E.g., [šəmém?] pigeon, [pənskʷétəmł] Saturday, [x̣əlx̣ás]
arrow, [?əyáq] pretty voice.

[wə] and [yə] occur word initially before another consonant preceding the
stressed vowel of the word, as in [wəčénəm?] dance and [yəx̌ówḷənowt] get home-
sick. [yə] also occurs before any back velar consonant, as in [xʷiyúyəqs] auto-
mobile and [pátyəq̇əm] reach with the foot. [wə] also occurs before final or pre-
consonantal [ł], as in [čówəł] wife and [sqéwəłči] sea, salt water.

[nə] occurs word-initially before a stop (glottalized or non-glottalized)
preceding the stressed vowel of the word, e.g., [nəkʷá˙?] leave, [snəčél?] coyote.

A velar nasal, [ŋ], occurs occasionally as an allophone of /n/ in one single
morpheme, and then in free variation with [n], the more common form: [nkʷs-]
or [ŋkʷs-] habitually.

Some resonants are more compatible with certain resonants than others, so
that certain clusters frequently occur involving non-syllabic variants of reso-
nants rather than syllabic variants (but the two are in free variation in the
same words). The non-syllabic resonants are apt to occur in clusters, particu-
larly if a phonemic vowel follows the resonant. Compatible clusters are: lat-
eral plus [n], [m], [w], or [y]; [t] or [n] plus [l], [w], or [y]; [y] plus [n],
[w], or [l]; [s] plus [m], [n], [w], or [y]; a few others occur sporadically.
Examples of these clusters are [sxʷélmanc] young salmon, [?opélyanesetəm] get
a toothache, [cólčstwaya] toad, [shénləmš] a large bird, [táynowt] refuse,
[čáyweləmł] waylay, [mákʷsnalemł] kiss, [sá?syaləqʷ] build a wall, [qʷátłnametən]

lightning.

The glottal stop phoneme has two allophones, [ʔ] and [əʔ]. The latter occurs after an initial consonant and before the first stressed vowel of a word; another consonant may occur between the glottal stop and the vowel. Examples of [əʔ] are [səʔóɬawš] cook, [ɬəʔwón] guess, [ɬəʔóleɬen] salmon-fishing.

Phonetically, there are at least eleven vowel phones in Upper Chehalis: [i ι e æ a ɑ ɔ o ʋ u ə]. [a] and [ɑ] are in free variation, and may therefore be included in the same phoneme. These phones occur short and long: [námɬ] or [nǽmɬ] finished, [qáˑʔ] or [qǽˑʔ] water.

[i], [ι], and [e] are also in free variation, as in one of the definite articles, which may be [tιt] or [tet], or as in [ʔílamš] or [ʔélamš] Indian. Before a back velar consonant, [e] is followed by a [ə] glide, as in [čéəqəm] scream. [e] is the most commonly used of these three phones. They are all assigned to the same phoneme, /e/.

[u] and [o] are in free variation, just as are the front vowels. Sun may be either [ɬukʷáɬ] or [ɬokʷáɬ]. The latter is more common, as is [o] generally, except after [y]. Then [u] is used rather than [o], as in [yús] work or [ʔeyu] just, merely. [ɔ] is in complementary distribution with [u] and [o]. [ɔ] occurs only before [ʔ] and [h], or when length occurs with a back rounded vowel; otherwise [o] or [u] occur. Thus [ɔ] occurs in [sqəʔóʔqʷəlʔš] little skull, [sqʷayɔ́h] squirrel, and [ʔóˑx̣ʷaɬte] strangers, but [o] occurs in [sqəʔóqʷəlʔš] skull and [ʔóx̣ʷɬ] stranger. Thus [u], [o], and [ɔ] are assigned to the same phoneme, /o/.

[ə] is a mid-central vowel, but can be colored by neighboring consonants. Before or after [y] it may be somewhat fronted. [ʋ] occurs only before or after a rounded consonant, and is sometimes in free variation with [ə] in this position. Thus, [ʋ] usually occurs in [ʔawʋ́m] howl, [kʷʋpemɬ] straighten, and [yúq̓ʷpataqəm]

walk. The last example may also occur as [yə́q̓ʷpataqəm]. Since [ə] and [ʊ] are in complementary distribution or free variation, they are assigned to the same phoneme, /ə/.

What has here been called a phoneme of length may phonetically have one of two effects, or both, on a vowel, and is not necessarily length at all. It may be length alone, as when combined with /a/, as in [sɫtáˑmš] boy (compare [sɫtámš] man). Or it may be a change in the quality of the vowel, as when combined with /ə/. When length is combined with /ə/, the vowel is fronted to [æ], but is not lengthened; e.g., [tə́pɫ] hit and [tǽpmɫ] tap (phonemically /tə́ˑpmɫ/) are related in the same way as are /sɫtámš/ and /sɫtáˑmš/--both are diminutives. But when length is combined with /e/ or /o/, both quality and length change. They are lowered from [e] and [o] to [æˑ] and [ɔˑ] respectively. Thus, using more forms involving the same diminutive morpheme as above, [pǽˑšpš] kitten is the diminutive of [péšpš] cat, and [mɔ́ˑsmoskeyɫ] calf is the diminutive of [mósmoske] cow.

Before resonants, phonemically non-lengthened vowels are usually phonetically a little longer than non-lengthened vowels before stops and fricatives, but these somewhat lengthened vowels are not as long as phonemically long vowels, and are phonetically in free variation with phonetically shorter vowels. I.e., /a/ is longer before /m/ than before /p/, but shorter than /aˑ/.

In a sequence of two homophonous phonemes, each is separately articulated, as in /qétt/ tomorrow, /pə́ɫɫ/ thick, /sxʷmáq̓q̓s/ oldest, /ɫə́mmɫ/ tie (phonetically [ɫə́məmɫ]).

Pitch by itself is non-phonemic, but serves partly to mark stress and, together with pause (silence), is the articulatory realization of terminal junctures. Pitch in Upper Chehalis is an intonational phenomenon, rather than one of word tone.

Only change of pitch (or its relation to its environment) is relevant to stress, but the nature of the change is part of juncture. What is heard as stress is one of three things, or combinations of them:

1. Change of pitch: nearly always a fall, seldom a rise, and a fall and rise on long vowels before certain allophones of juncture.

2. The pitch of a stressed vowel may be level, but higher than that of the following vowel; the amplitude of the stressed vowel will also be greater than that of the following vowel, and may be the more important determinant of stress if the difference of pitch is slight.

3. The pitch of the vowel heard as stressed may not be significantly different from the neighboring vowels, or may even be lower; in these cases, higher amplitude determines stress; high amplitude may occur with either of the above, and when it does, may be as important as, or more important than, the pitch change or contrast alone.

Long vowels are always heard as stressed, and nearly always have some change of pitch and higher amplitude than surrounding unstressed vowels.

Any vowel, but especially a stressed vowel, that has an accompanying drop in pitch and amplitude is pharyngealized, or creaky, from the point at which the fall begins and throughout the remainder of the articulation of the vowel.

There are two terminal juncture phonemes in Upper Chehalis, realized as pitch movement and/or pause (silence). One of these junctures, written /|/, has seven allophones, and marks phrase boundaries other than sentence final. The seven allophones are:

1. Level pitch with pause. Generally, the pause is of relatively brief duration.

2. Rising pitch without pause.

3. Rising pitch with pause.

4. Falling-rising pitch without pause. The amount of pitch change may vary, and is not significant, but the fall is usually greater than the subsequent rise; examples have been found where the fall is as much as 30 percent of the beginning pitch, and the subsequent rise 24 percent higher than the lowest point of the fall.

5. Falling-rising pitch with pause. The length of pause varies as in (1) above.

6. Falling pitch without pause. The actual amount of fall of the pitch is not significant as long as it is over about 12 or 15 percent. A fall of 9 percent is heard only as stress, but any fall over 17 percent is heard as juncture. There is, indeed, great variation in the amount of fall--examples range from 17 to 43 percent change--with the difference attributable to style and emphasis.

7. Falling pitch with pause, and pitch as in (6). As in (1) above, the length of pause can vary considerably, but within a slightly greater range. Pauses with this allophone have been found to vary greatly in length.

The pitch change of any of these allophones can occur within the domain of one vowel or over a series of two or three vowels.

All these allophones of /|/ occur in free variation as stylistic variants; certain of them, however, vary in frequency of occurrence, and some have preferred positions within a sentence. Allophones (2), (3) and (5) are uncommon, but the others occur frequently. Allophones (2) and (3) occur primarily near the beginning of a sentence, especially just after the introductory particle /hóy/ and then. Allophones (4) and (5) occur especially with long vowels. Allophones (6) and (7) frequently occur before the final word in a sentence.

The other juncture, /#/, marks the end of a sentence, and is like the last allophone of /|/ described above as far as pitch is concerned, but the ensuing pause is much longer. Variation in the amount pitch falls in connection with

this sentence-final juncture has been found to range from 19 to 42 percent change, almost identical to that described in (6) above. But the shortest pause was usually over two or three times as long as in (6). It is this length of pause, then, that distinguishes /#/ from the last allophone of /|/ described above.

Over a whole sentence, the pitch (and amplitude) gradually falls, but can rise on any stressed vowel. The overall effect, however, is a gradual fall, with the peak on the first stressed vowel in the sentence.

Junctures do not mark sentence types; they only delimit phrases and sentences. An interrogative sentence is marked by an interrogative verb, suffix, or other word (such as English where, when, who, etc.), and intonation is as on any non-interrogative sentence. Pauses can be eliminated for stylistic purposes, so that phrases are not always marked, and sentence final juncture cannot be distinguished from the allophone of phrase final juncture most similar to it.

III. MORPHEME CLASSES

Upper Chehalis has three major morpheme classes: verbs, nouns, and particles. Divisive for verbs are continuative or stative aspect pronominal subject suffixes when no article precedes the word. For example, /sq̓ʷə́twn/ is a verb meaning it is burning on the basis of /-n/, the third person singular continuative subject suffix, and the lack of any article preceding the word. If an article precedes, as in /tet sq̓ʷə́twn/, the form is a noun meaning the fire (or, more exactly, the burning). An article preceding a word that is otherwise verbal serves to transform it into a noun. Articles are particles, and are few in number; a list of them serves to define them.

Nouns may be formally defined three ways: (1) a word preceded by an article and without completive aspect pronominal subject suffixes; (2) words that may take possessive affixes; and (3) words which may follow a preposition, with or without an article (such as locational and temporal nouns such as /lé·ʔ/ far away or /yás/ yesterday). The third is the most satisfactory criterion, because it allows both personal pronouns and locational and temporal words to be classified as nouns. Since they function the same way in a sentence as other nouns, this is desirable. Many verbs may be transformed into nouns by the addition of possessive affixes, but must also be preceded by an article.

A noun may become a verb by the addition of an appropriate aspect prefix and/or a subject suffix to the noun. For example, /q̓ʷalán/ ear becomes a verb in /yálš q̓ʷalánč #/ you are nothing but ears (/yálš/ nothing but, /-č/ you, sg. completive)--said by wren to a rabbit in a folk-tale. /qáxaʔ/ dog becomes a verb

in /céne we ʔacqáₓaʔ #/ <u>he has a dog</u> by the *affixation of /ʔac-/* <u>stative aspect</u> *and /-∅/* <u>he, stative</u>. */ʔáls/* <u>chief</u> *becomes a verb in /ʔama ʔálsčn/* <u>if I were</u> <u>chief</u> *(/-čn/* <u>I, completive</u>*).*

A noun *may also become a verb by the addition of the verbalizing suffix* /-mʔ/.

Particles *are the only major morpheme class which do not have affixes, and are so defined.* There is one exception to this, *the negative particle /mélta/.* /mélta/ *may take two or three suffixes, but these are peculiar to this one word, and may be included in the definition of particles.* Particles *are relatively few in number and may be listed.* They *can be subdivided into seven subclasses, according to similar function in a sentence.* These *subclasses are articles, demonstratives, possessive pronouns, prepositions, conjunctions, and interjections.* Numerals *and interrogatives are rather difficult to classify, but are perhaps best considered nouns.* Articles *must always be followed by a member of the noun class or a completive form of the verb.*

It *is very common for words to be changed from one class to another.* Nouns *and particles often become verbs by the addition of a subject suffix.* Verbs *often become nouns by the addition of an article and/or a possessive affix.* Nouns *and verbs never become particles.*

Verbs *may become nouns in two ways.* The *continuative, completive and stative aspect forms of a verb may be simply used as nouns, especially by having possessive affixes attached to them, or nouns may be formed by the use of one of a class of four or five nominalizing suffixes.* Some *of these methods are very common--so common that the line between verbs and nouns has become extremely blurred, and it is often quite difficult to decide if a particular word is a verb or a noun.*

As stated, continuative and stative forms of verbs are often used as nouns, and as such are identifiable by the use of an article before these forms. A possessive affix may also be present. Since completive aspect verb forms are by definition marked by a definite article (usually /ʔet/, which seldom occurs with nouns), they are not used as nouns as long as a subject suffix is present, since no distinction could be found if both verb and noun were marked by /ʔet/; two articles never occur together, so /ʔet/ would not be repeated. A common example of a continuative verb form used as a noun is /sq̓ʷə́twn/ fire. This is the only free morpheme in the language for fire. It occurs as subject of the verb in /sq̓ʷóx̣ʷmetn tet sq̓ʷə́twn/ the fire is smoking, as object of the verb in /ʔet ɬaq̓áwstaqn tat sq̓ʷə́twn/ he stirred the fire, as object of a preposition in /tat kʷə́tasloɬ we ʔaɬ tet sq̓ʷə́twn/ the kettle is on the fire, as both verb and object of a preposition in /tet sx̣ʷá·c̓p we sq̓ʷə́twn ʔaɬ tet sq̓ʷə́twn/ the wood is burning in the fire. It may also have a plural form: /sq̓ʷə́twenqʷlʔš/.

Continuative forms of verbs may be used as nouns even with other verbal prefixes present, as in /tat nkʷsšáwawn tat ·manó·mš/ the playing children (/nkʷs-/ habitually), /tat nkʷsakʷámetn tat manó·mš/ the whispering children.

Stative forms of verbs are used as nouns even more commonly than continuative forms. Such forms as /ʔaclə́px̣ʷɬ/ hole, /ʔacč́ə́lqɬ/ hollow place, /ʔacmə́k̓ʷɬ/ pile, /ʔacmə́lk̓ʷɬ/ package (from /mə́lk̓ʷ-/ cover), /ʔactə́qɬ/ prisoner (from /tə́qɬ/ tie up, arrest) are only a few of the possibilities, and some show how a shift in meaning may also be involved (package, prisoner). Frequently nouns derived from stative aspect verb forms stand in apposition or genitive (i.e., possessed) relationship to a following noun, and as such are commonly translated into English as adjectives: /tat ʔacpósɬ sx̣ʷayə́q̓ʷs/ his swollen joints (/pós-/ swell), /tat ʔacq̓ʷə́oɬ tat manó·mš/ the dirty children (/q̓ʷéc-/ dirty). Plurals are formed

from these nominalized forms of verbs *as* from ordinary nouns: /tat ʔacq̓ʷáˑɬqʷlʔš tat sólčs/ the wounded soldiers.

Completive verb forms may also be used *as* nouns in two ways. The less common way is to simply use the completive verb form after *an* article (/tet/ or /tat/) *and* before *another* noun without *an* article preceding the second noun: /tat q̓éxʷɬ qʷáyɬ/ the fat boy (/q̓éxʷ-/ fat). Otherwise, all nouns are preceded by *an* article. In this position, the nominalized verb is nearly always equivalent to *an* English adjective. Nominalized verbs used thus have *a* plural form peculiar to them, unlike the plural forms of either nouns or verbs.

The second way of using completive verb forms *as* nouns is to juxtapose the verb *and a* noun, both preceded by *an* article (without subject suffixes on the verb). The first of these is then in *apposition* to the second, or the whole is *a* genitive construction, with the second possessing the first, *as* in /tat yə́mcešs tat q̓életn/ the fat (of) the elk.

Minor morphemes in Upper Chehalis *are* affixes *and* operators. Three operators function: reduplication, length, *and* compounding. Suppletion *and* subtraction serve *as* allomorphs of certain morphemes. Reduplication serves three morphemic functions: repeated *action* (prereduplication), superlatives (postreduplication), *and* slow, continuous *action* (postreduplication). Length serves four morphemic functions: perfective forms, diminutives (nouns *and* verbs), *a* few noun plurals, *and* emphasis.

Many morphemes *are* indicated by affixes. A list of affix morphemes follows. Allomorphs *are* not listed here (several affix morphemes have *a* large number of allomorphs), but affix morphemes with both completive *and* continuative aspect forms *are* marked by *a* plus (+) following the affix. The numbers indicate classes *and* orders of the affixes.

100. Noun prefixes
  101. ɫa- definite article, feminine
  102. nk^w- <u>with</u> (?)
  103. ns- <u>place</u> name

200. Verb prefixes
  220. Modal
    221. q̓es-

  230. Aspect and tense
    231. s- continuative aspect
    232. ʔac- stative aspect
    233. ɫ- future tense

  240. Miscellaneous
    241. ɫès- <u>take part in</u>
    242. tays- negative
    243. nk^{w}s- habitually
    244. ɫa- <u>back, again</u>
    245. čs- <u>colors</u>
    246. tx^w- <u>get, become, make</u>

  250. Gradation
    251. čt- comparative
    252. sx^w - st superlative

300. Infixes
  310. Verb plural
    311. -a-

400. Lexical suffixes
  410. Linking suffixes
    411. -al-
    412. -ay-

  420. 90 suffixes, see below

500. Noun suffixes
  510. Plural (13 major allomorphs)

  520. Possessive
    521. n-   1st pers sg
    522. ʔa-   2nd pers sg
    523. -s   3rd pers sg
    524. -čɫ   1st pers pl
    525. -nalp 2nd pers pl
    526. -syamš 3rd pers pl

  550. Miscellaneous
    551. -aʔsteʔ <u>at a time</u>
    552. -qas desiderative

560. Verbalizer
   561. -m?

600. Particle suffixes
  610. Negative suffixes
    611. -t
    612. -w
    613. -ws

700. Verb suffixes
  710. Nominalizers
    711. -alača nomen actoris
    712. -łn? implement
    713. -n? implement, place
    714. -tn abstract, etc.
    715. -anom <u>by means of</u>

  720. Positionals +
    721. -ślow- <u>apart</u>
    722. -m- ?
    723. -še- <u>for</u>
    724. -tox^w- <u>to</u>
    725. -tme- ?
    726. -tače <u>upon</u>
    727. -ne- ?

  730. Inchoative
    731. -áw- intransitive
    732. -áwm- + transitive

  740. Intransitive suffixes
    741. -ł + (9 subclasses)
    742. -ś-
    743. -mł + implied transitive

  750. Transitive object suffixes + (8 subclasses)
    751. 1st pers sg
    752. 2nd pers sg
    753. 3rd pers sg
    754. 1st pers pl
    755. 2nd pers pl
    756. 3rd pers pl
    757. Obviative
    758. Reciprocal
    759. Reflexive

  760. Passive + (8 subclasses)

  770. Imperative
    771. -la? 2nd pers sg
    772. -nela? 2nd pers pl

780. Subject suffixes +
  781. -čn/-anš   1st pers sg
  782. -č/-š   2nd pers sg
  783. -ø/-n   3rd pers sg
  784. -či/-stawt   1st pers pl
  785. -čalp/-alp   2nd pers pl
  786. -yamš/-elt   3rd pers pl

790. Adverbial suffixes
  791. -ex^wo? still, yet
  792. -čsa again
  793. -na interrogative
  794. -x definite location
  795. -ke evidently
  796. -ače again
  797. -ače quotative

Affixes (excluding clitics, which occur at the extremes of words) occur in ascending numerical order in either direction away from the stem according to the preceding affix inventory (except 246). Except within 240 (miscellaneous verb prefixes), there are no co-occurrences within decades. The density range of possible affixes per stem is 0-S-0 to 1-S-4 (S = stem) for nouns, and 0-S-2 to 3-S-5 for verbs; only one infix may occur per root. The following schemata show the positions of affixes in relation to the stem:

Nouns - 100 | S | 410 | 420 | 510 | 520
                              550
                              560 | 780 | 790

Verbs - 250 | 243 | 244 | 230 | 242 | S | 410 | 420 | 720 | 740 | 780 | 790
              241   246   300   730   750
              245   220   760
                                                               770
                                                   710 | 510 | 520
                                                               550

252 and one allomorph of 510 are ambifixes. The prefix portion of 252 occurs in the 250 position, and the suffix portion in the 720 position (or possibly the 400 position—the two have not been found to co-occur). The prefix part of the ambifix allomorph of 510 occurs in the 100 position, and the suffix part in the 510 position. Three suffixes (or groups of suffixes) are discontinuous: some

allomorphs of 510, 513, 525, and 756. The discontinuous allomorphs of 510, 513, and 525 begin within (as an infix) the immediately preceding stem or lexical suffix, and continue in the 510 and 520 positions. 756 begins in the 750 position and ends following the 780 position.

Suffixes 520, 550, 600, and 790 are always closing suffixes--no other suffix may follow them. Suffixes 420, 510, 560, 710, 770, and 780 may close, and often do. Suffixes 410, 720, 730, 740, 750, and 760 may not close--another suffix must follow.

Affixes have been found to occur in the following combinations (an item marked by parentheses or by ± may be skipped in that series; an item below another may be substituted for the upper item, and the series continues from the substituted item):

Nouns - (100 +) S ± 510 ± 520 + $\emptyset$
+ 410 + 420 ± 510 ± 520 + $\emptyset$
+ 420 ± 420 ± 510 ± 520 + $\emptyset$
+ 551 + $\emptyset$
+ 520 ± 552 + $\emptyset$
+ 560 + 780 ± 790 + $\emptyset$

Verbs are best listed separately according to compatible prefixes and compatible suffixes, because otherwise the possible combinations of prefixes and suffixes become rather cumbersome. There are two exceptions: 245 and 252 are followed by the stem alone, and no suffixes.

Prefixes - a. $\emptyset$ + S

b. 251 ± 232 + S

c. (243 ±)(244 ±) 230 + S

d. (243 ±) 246 + S

e. 241 + S

f. (232 ±) 242 + S

g. (230 ±) 246 + S

h. (230 ±) 220 + S

Suffixes - a. S + 410 + 420 + 740 + 770 ± 790
                              + 780 ± 790
                      + 750 + 770 ± 790
                              + 780 ± 790
                      + 760 + 780 ± 790

b. S + 420 ± 420 + 740 + 770 ± 790
                         + 780 ± 790
                 + 750 + 770 ± 790
                         + 780 ± 790
                 + 760 + 780 ± 790

c. S + 720 + 750 + 770 ± 790
                 + 780 ± 790

d. S + 726 + 740 + 770 ± 790
                 + 780 ± 790

e. S + 731 + 740 + 770 ± 790
                 + 780 ± 790

f. S + 732 + 750 + 770 ± 790
                 + 780 ± 790

g. S + 740 + 770 ± 790
           + 780 ± 790

h. S + 750 + 770 ± 790
           + 780 ± 790

i. S + 760 + 780 ± 790

j. S + 710 ± 510 ± 520 + ∅

The stem of an Upper Chehalis verb or noun is usually composed of an easily isolable root with or without a lexical suffix and/or a morphological operator; it may also be a compound. A stem is here defined as that part of a noun, verb, or particle to which grammatical and/or pronominal (i.e., any non-lexical) affixes may be added.

The root is the basic part of any word in Upper Chehalis; it is the minimal stem. It may occur alone, or with a variety of affixes and operators. The root of a noun or verb occurs in one of two predominant shapes: CVC or CVCC; there

are also a few CCVC roots. Particle roots are not regular, and may consist of C, CV, CVC, CVCV, CVCC, CVCVC, or even more complex sequences of phonemes. Affixation results in very little morphophonemic change within a word, so these roots can easily be discerned. A root or stem, in itself, cannot be classified as either a noun or a verb. Assignment of a root or stem to one of these two classes can only be made according to the type of affixes used with it, or according to its position in a sentence in relation to other identifiable words.

Of noun and verb roots that are recognizably CVC or CVCC, over seventy-five percent are CVC. There are, however, a large number of words which cannot be reduced to roots of these types. A few of these are borrowed words which do not conform to the word patterns of the language; a few probably do represent minor additional types of roots. But most of them are merely not analyzable into roots plus affixes, i.e., the word may have the structure of root plus affix, but no forms have been found comparable to either hypothetical part to warrant the establishment of the parts as separate morphemes. This is largely possible because of the great number of lexical suffixes in the language, some of which occur rather infrequently, and are thus not always easy to verify; it is also quite possible that some former root-lexical suffix stems have lost any separate identity and have become fossilized as irregular roots.

An example of a root that can occur unmodified is /ƛ́óq̓ʷ/ high, up, above, top. Its superlative form is /sxʷƛ́óq̓ʷq̓ʷst/ highest, and other derivative forms are /ƛ́óq̓ʷalesm/ look up (/-ales/ eye), /ƛ́oq̓ʷállatàm/ be on a table (/latàm/ table, from French la table), /ƛ́óq̓ʷax̣ʷ/ be on top of a house (/-ax̣ʷ/ house), /sƛ́óq̓ʷax̣ʷ/ roof, /ƛ́óq̓ʷɬ-/ be above, /ƛ́óq̓ʷɬcàne/ above him, /ƛ́oq̓ʷáleyq/ upper bunk (/-áleyq/ bed), /ƛ́oq̓ʷálsɬče/ surface (/-če/ water), /ƛ́oq̓ʷé·l²s/ top of a mountain or hill, /ƛ́ó·q̓ʷm/ top, up. Another common root is /nám-/ finish, end, which occurs in

many compounds, mostly to emphasize that an action has been completed, but it also has a number of other derivatives: /ʔet nàm?éɬn/ he ate, finished eating; /námɬ/ finish, /náms/ end (transitive and intransitive), /námš-/ prepare, /námnàxnowt/ agree (/-nowt/ mind), /námeyq/ low tide (/-eyq/ water), /snámos/ end (noun), /námsànte/ Monday (/sánte/ from English Sunday), and perhaps also /snámeaqoleɬn/ shellfish (/-eaq/ horn ?). The root /náw-/ old, big also serves as the basis for a number of derivatives: /sxʷnáwos/ oldest, /nawáys/ top of a tree, end of a road, /náwće/ body (/-će/ body), /nàwćeyás/ day before yesterday (/yás/ yesterday), /náwsànte/ Fourth of July (literally big Sunday), /náwxš/ big house (/xáš/ house), /snáwɬ/ old person, /náwaɬte/ old people, /snáwɬt?amš/ old lady.

A few borrowed words fit the CVC(C) root patterns, but most do not: /ká·s/ train, truck (from English cars), /šép/ ship, /lám/ rum, alcoholic beverage, /táwn/ town, but /molá·/ mill, machine (from French moulin), /lepoá/ peas (from French les pois), /wášntn/ president (from English Washington, D. C.), /šóšokle/ Jesus (from French Jésus Christ), /camóeqa/ snail (from Chinook), and many others.

Some of the words that appear to consist of a root plus lexical suffix (but cannot be thus broken down because of their unique morphemes--if that is what they are) are: /pé·psayo?/ bird, animal, /kʷánayo?/ rat, /wáymacš/ give up, /cétpn/ fish-trap, /táčɬč/ sick(en), /téxʷcɬ/ tongue.

There may be a few roots which begin with a consonant cluster, i.e., CCV--. But whether this is the case or that these are ordinary roots with the root vowel lost when a suffix was added and stressed (as does happen, e.g., /ptqʷéxʷɬokʷɬ/ moon from /pétqʷ/ night) is impossible to tell unless a related form can be found to indicate the latter choice. A few of this sort of words are: /qténm/ meet, /š?óm/ cry, /sx̌?éčɬ/ skin (noun), /x̌?óleɬn/ fish for salmon (cf. /séɬn/ food,

salmon, /ʔéɬn/ eat), /qʷɬšémɬ/ give a present, /p̓k̓ʷélmš/ mole (/-mš/ people),
/q̓ʷcx̣ʷéˑʔ/ witch, /q̓ʷɬóyʔ/ leaf, /q̓ʷx̣ʷáɬkʷ/ shark, /čsq̓éyq/ ant, etc.

It is sometimes impossible to assign a meaning to a root (or to a lexical
suffix) which can be isolated by analogy with other forms: /čáčx̣ʷeyq/ puddle
(/-eyq/ water), /qʷáˑwaq/ join in singing (/-aq/ voice), /qʷáɬčp/ cinder (/-čp/
fire), /x̣ʷeménowt/ get lonesome (/-enowt/ mind). An example of an isolable but
undefinable lexical suffix is /-éˑlʔs/: /k̓apéˑlʔs/ foot of a mountain (/k̓ép/
deep, under), /k̓oq̓ʷéˑlʔs/ top of a mountain (/k̓óq̓ʷ/ high, up, above, top),
/tawéˑlʔs/ high tide (/táw-/ big).

Another frequent variation of the CVC or CVCC root pattern occurs in the
inherently reduplicated nouns, the CVC root of which never occurs alone, although
the vowel in the second half of the forms may vary (or be absent). A few of these
are: /tóptp/ flying squirrel, /x̣átx̣t/ duck, /čékček/ wagon, /sk̓áˑk̓aˑ/ crow,
/x̣ʷóq̓ʷx̣ʷq̓ʷ/ windpipe, /téčténe/ humming bird, /swáˑwaʔ/ cougar, /sqʷátqʷt/ angle-
worm, /ʔánaʔána/ magpie, /x̣aléˑwx̣alo/ butterfly, /k̓éšk̓š/ tree (cf. /k̓éšk̓ašawmš/
trees, /sk̓áˑk̓šk̓ašn/ he is logging), /péšpeš/ cat.

One type of stem is an expansion of a root by reduplication. This has three
forms in Upper Chehalis. The most common is prereduplication, and there are two
types of terminal reduplication.

Prereduplication repeats the root as far as the first consonant after the
root vowel. Thus all of a C_1VC_2 root is repeated ($C_1VC_2C_1VC_2$), but $C_1VC_2C_3$ becomes
$C_1VC_2C_1VC_2C_3$. The reduplicated portion always has the primary word stress, and
as a result, the vowel (quality) in the original part is unstable. Since /ə/
must always be stressed, it either becomes /a/, receives secondary stress, or
drops out with reduplication (it is usually lost in CVCC roots). There is also
some irregular variation in other vowels under reduplication. A long vowel is

reduplicated as long, but the vowel in the original part of the word loses its length (and /ə/ may again drop out). Prereduplication indicates repeated action. Examples of prereduplication of CVC are: /xʷéyxʷeyʔ/ <u>stingy</u> from /xʷéy-/ <u>cut off</u>, /yólyolec/ <u>try to control</u>, /cé·xcxmɬ/ <u>show repeatedly</u> from /céxɬ/ <u>show</u>, /x̣ʷó·ʔx̣ʷoʔ/ <u>cough</u>, /šʔášʔom/ <u>cry hard</u> from /šʔóm/ <u>cry</u>, /méymayɬ/ <u>just come in</u> from /máyɬ/ <u>enter</u>, /sá·sà·ʔatn/ <u>do repeatedly</u> from /sá·ʔ/ <u>make</u>, /ƛ́əqƛaqɬ/ <u>tie up completely</u> from /ƛ́əqɬ/ <u>tie up</u>, /sméƛməƛmetn/ <u>it's aching</u> from /méƛmɬ/ <u>ache</u>, /x̣ʷálxʷlstos/ <u>keep (something) down</u> from /x̣ʷél-/ <u>keep (something) down</u>. Examples of prereduplicated CVCC roots are: /sʔé·lʔelann/ <u>he keeps on singing</u> from /ʔéln/ <u>sing</u>, /sɬéxʷɬxʷqʷtn/ <u>it's bobbing up and down</u>, /ƛ́ó·xʷƛxʷč̓/ <u>shake off</u>, /só·xsxpmɬ/ <u>scratch up</u>, /stə́qƛ́əqxʷtn/ <u>he's slapping it repeatedly</u> and /stə́·q̓ƛ́əqxʷtn/ <u>he's patting it repeatedly</u> both from /ƛ́əqxʷmɬ/ <u>slap</u>.

One type of terminal reduplication is used in the formation of the superlative form of a verb stem. In these, only the first consonant after the stressed vowel of the root is repeated: $C_1VC_2(C_3)$ becomes $C_1VC_2C_2(C_3)$. /w/ becomes /o/, and /y/ becomes /e/ when reduplicated. Examples of this type of terminal reduplication are /sxʷqə́xxs/ <u>most</u> from /qə́xɬ/ <u>many</u>, /sxʷmáq̓q̓s/ <u>oldest</u> from /máq̓ɬ/ <u>old</u>, /sxʷʔə́yest/ <u>best</u> from /ʔə́y/ <u>good</u>, /sxʷnáwos/ <u>oldest</u> from /náwɬ/ <u>old, big</u>.

At least one noun may be of this origin: /q̓ə́tt/ <u>tomorrow</u>, possibly from /q̓ét-/ <u>day</u> as in /sq̓étače/ <u>day(time)</u>.

The second type of terminal reduplication indicates slow or continuous action. The first consonant after the root vowel, and sometimes the root vowel too, is repeated: $C_1VC_2(C_3)$ becomes $C_1VC_2VC_2(C_3)$. I was able to get few examples of this, although my informant was familiar with them. One I did get is /sétetm/ <u>change into</u> from /sétɬ/ <u>change, transform</u>. Boas[1] also gives /ʔet yə́·ppɬ/ <u>he</u>

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[1]Franz Boas, "A Chehalis Text," IJAL, VIII (1933), 103-110. All examples taken from Boas are written according to my phonemic system.

walks slowly back and forth from /yépɬ/ walk, /ʔet p̓á·laɬ/ he awakens slowly
from /p̓áɬ/ awaken, /swaq̓áq̓awn/ it is opening slowly from /wáq̓ɬ/ open, /sx̣ʷéttqʷn/
it is getting hot slowly from /x̣ʷétqʷ/ heat, /m̓éccqʷtn/ he keeps on grinding it
slowly from /m̓écqʷ-/ to grind fine.

Stems may also be expanded from roots by means of an operator of length.
The lengthening of a root (or stem) vowel can have one of at least four possible
morphemic functions.

Vowel lengthening can change an imperfective verb or noun into a perfective
one. Examples are /tawé·lš/ be seated from /tawélš/ sit down, /x̣ʷó·qʷɬ/ be hungry
from /x̣ʷóqʷ/ get hungry, /kʷé·sown/ evening from /kʷés/ darken.

Diminutives of both nouns and verbs can be formed by lengthening the root
vowel (in the case of nouns, a lexical suffix may also be added). Examples are
/t̓ó·pmɬ/ tap from /t̓épɬ/ hit (as with a rock), /t̓ó·qt̓óx̣ʷn/ he pats it repeatedly
from /t̓éqt̓óx̣ʷn/ he slaps it repeatedly, /camé·n/ hold (affectionate) from /camén/
hold, /sɬá·nay̓/ girl from /sɬánay̓/ woman, /pé·špš/ kitten from /péšpeš/ cat,
/steqé·wɬ/ colt (/-ɬ/ offspring) from /steqéw̓/ horse.

A few nouns form their plurals by lengthening the root vowel. A plural suf-
fix may sometimes also be added. Examples are /spá·qn̓/ flowers from /spáqn̓/,
/ʔó·x̣ʷaɬte/ strangers from /ʔóx̣ʷɬ/.

Vowel lengthening is also used for emphasis of nouns, verbs, or particles,
e.g., /x̣ə́·s/ very bad from /x̣ə́s/ bad, /čə́·č/ all gone from /čə́č/ gone, /sx̣asé·ln/
it's raining hard from /sx̣aséln/ it's raining, /qə́·x̣ɬ/ lots and lots from /qə́x̣ɬ/
many, /čə́·sa̓/ come! (emphatic) from /čésa̓/ come!, /mé·ɬta/ emphatic negative
from /méɬta/ negative.

Compounding of major morphemes occurs frequently. All three major morpheme
classes are involved, both as members of compounds and as the class of the resulting

compounded form. This compounded form, without *affixes*, is considered to be *a* stem.

Particle subclasses conjunctions, possessive pronouns, *and* interjections do not enter into compounds. Compounds usually contain only two members, but *a* few types occur with three. Three types of these three-member compounds have been found: NDN, VDN, PPN (N = noun, D = article, V = verb, P = preposition); the class of the resulting form is *always* noun. In the first two, D is *always* the indefinite *article* /t/. In the third, *a* PP compound is combined with *a* noun. In two member compounds, the second member *may* not be *an* article. Resulting classes *are* verb, noun, preposition, or adverb. The following chart shows the possibilities of combinations of classes *and* the resulting classes: (A = *adverb*)

		Second member				
		N	V	P	A	D
First member	N	N				
	V	V,N	V		A	
	P	N		P		
	A	N	A			
	D		N			

Thus, there *are* nine types of compounds, one of which yields two *major* morpheme classes (VN = V or N).

The most common types of compounds *are* PN = N *and* VN = V; VN = N is *a* distant third in occurrence, *and* other types *are* fewer, *although* not necessarily statistically infrequent in us*age* (such *as* PP = P; the class P has only *a* few members, but compounds of certain of these prepositions occur frequently).

Examples of the possible types of compounds follow.

NN = N: /ʔacnàwⱥⱥtámš/ old man

VN = V: /sà·ʔcétpn/ build a fish-trap, /x̌á·ʔsteqèwʔ/ look for a horse, /qenálčowɬ/

want a wife, /kʷáccəne/ between (/cəne/ he)

VN = N: /céx̣ɬokʷɬ/ sunshine, /ɬə́qx̌č/ beaver (wide-belly)

PN = N: /ʔáɬsqʷayaeɬ/ at Mud Bay, /ʔáɬcəne/ to him

AN = N: /ʔə́·tqètače/ from evening to daylight, /tə̀mššále/ both (both-two)

VV = V: /námmàx̣nowt/ agree (finish-make up mind), /kʷpnax̣énowt/ make up mind

(straight-make up mind)

AV = A: /tewstéx̣/ right now (when-here), /panxʷšánx̣/ then, that time (time-there)

DV = N: /tetx̣té/ this (the-here)

PP = P: /šʔaɬ/ to, in, into, /toɬ/ from (of-in)

VA = A: /taq̇écx̣/ similar (there-thus)

NDN = N: /mósttəmš/ trillium (eye-an-earth)

VDN = N: /tanemáɬtmašmɬn/ measuring worm, /x̣ʷàqʷttám/ everything else (all-a-what)

PPN = N: /šáɬènm/ to us (/š/ plus /ʔaɬ/ plus /ʔeném/)

A great many stems are formed by the addition of a lexical suffix to a root

or another stem formed by one of the preceding processes (these suffixes precede

other verbal or nominal suffixes). Lexical suffix is used here to refer to the

large set of suffixes with lexical rather than grammatical functions; in many

instances, they could be considered object incorporating suffixes, but in many

other cases the referent of the stem created by one of the suffixes is different

from that of either of its component members. Only rarely is one of these suf-

fixes related to some independent root in the language (and when it is, it would

be possible to consider the form a compound, rather than a root plus a suffix).

An example of one of these is /ɬə́qx̌č/ beaver, literally wide-belly; belly is

/x̌áč/. Sometimes the independent root has a partial resemblance to the lexical

suffix with the same referent, in which case the former is probably derived from

some other root plus the latter, e.g., /máqʷm̓/, /-qʷm̓/ <u>prairie</u>, /sɬtáms̓/ <u>man</u>, /-ms̓/ <u>person, people</u>.

Some of these suffixes are quite common, but others occur in very few words (from this it can be inferred that other lexical suffixes exist that cannot be readily detached from forms for lack of segments of other words comparable to either the hypothetical suffix or the hypothetical root to which it is attached). /-ača/ <u>hand</u> (/čál?s̓/), /-če/ <u>water</u> (/qá·?/), and /-qs/ <u>nose</u> (/m̓ə́qsn̓/) each occur in over fifteen derived stems: /čočáča/ <u>cut off hand</u>, /c̓axʷáčm̓/ <u>wash hands</u>, /ɬaxáča/ <u>burn hand</u>, /x̌ak̓áča/ <u>break arm</u>, /xʷéqačač/ <u>cut hand</u>, /t̓ak̓ʷáča/ <u>bite hand</u>, /k̓áqača/ <u>long arms</u>, /sɬaxáyačas/ <u>finger</u>, /s̓ɬčtónwayača/ <u>thumb</u>, /q̓á·x̣ača/ <u>hurt hand</u>, /t̓q̓xʷáča/ <u>slap hand</u>, /papáyača/ <u>fingernails</u>, /q̓élačm̓/ <u>raise hand</u>, /qə́·x̣ača/ <u>crab (many arms)</u>, /kʷanátača/ <u>lead</u>, /wánača-/ <u>move hands and arms</u>, /q̓áx̣ača/ <u>paint the hand</u>, /t̓ak̓ʷáča/ <u>cold hands</u>, /kʷáčlača/ <u>handful</u>, /kʷaqá?ča/ <u>chapped hands</u>, /stayáqača/ <u>palm of hand</u>, /ɫačá·ča/ <u>one-armed</u>, /c̓əɬk̓ʷlača/ <u>lose hold</u>, /q̓áxʷača/ <u>freeze fingers</u>; /táwče/ <u>flood (big water)</u>, /xʷaléɬče/ <u>flowing water</u>, /xʷaléɬče/ <u>hot water</u>, /ɫə́q̓ʷče/ <u>falling water</u>, /yaláčče/ <u>edge of water</u>, /táleče/ <u>in the water</u>, /talečéáqʷ/ <u>river side of a prairie</u>, /sqéwɬče/ <u>salt water (stink water)</u>, /qewáɬče/ <u>water begins to stink</u>, /táleče̓nm̓/ <u>go toward water</u>, /ɬáče/ <u>down river</u>, /té̓xʷsče/ <u>spit</u>, /cépče/ <u>go after water</u>, /k̓áq̓ɬče/ <u>thirsty</u>, /ƛ̓oq̓ʷálsɬče/ <u>surface</u>, /céx̣ɬče/ <u>cold water</u>, /q̓améɬče/ <u>Skookum Bay (narrow water)</u>, /sqé·wɬčeams̓/ <u>Indians on Puget Sound (stink water people)</u>; /čawə́čqse-/ <u>cut off nose</u>, /q̓ʷə́t̓qs/ <u>burn nose</u>, /táwqs/ <u>big nose</u>, /ɬaqʷósqs/ <u>hit on nose</u>, /qʷelémqs/ <u>nose bleeds</u>, /ƛ̓aménqs/ <u>hair on face</u>, /x̣ə́k̓qs/ <u>break nose</u>, /xʷeyóyqs/ <u>automobile (cut off front end)</u>, /k̓áqqs/ <u>long nose</u>, /x̣ʷáqʷt̓amènqs/ <u>shave</u>, /cáqʷqs/ <u>paint nose</u>, /cénqs/ <u>fall on face</u>, /cénqsm-/ <u>push face on ground</u>, /snówqs/ <u>point of land</u>, /?áwqs/ <u>sneeze</u>, /s̓áx̣ʷqsme/ <u>snort</u>.

The majority of these suffixes refer to body parts, but many other concepts

are represented *as* well, such *as* house, fire, water, prairie, cloud, edge, top, offspring, *and many* others. Some semantic referents *are* represented by more than one suffix: /-qʷ/ *and* /-aqʷm/ for prairie (/máqʷm/), /-stq/ *and* /-čp/ for fire (/sq̓ʷə́twn/), /-axʷ/, /-otxʷ/, /-lwltxʷ/, *and* /-x̌š/ for house (/x̌áš/) (in *addition* to which *Boas* lists /-alxʷ/, /-alx̌š/, *and* /-olx̌š/). There is, however, no *appar*ent difference in the meaning of these *alternatives*.

All these suffixes *are* probably productive, but some *are* more so th*an* others. A suffix such *as* /-q̓/ language of c*an* be *added* to *any* noun referring to *a* band, tribe, or nation (it has other uses *as* well): /sq̓ʷayáel/ Upper Chehalis people, /sq̓ʷayáelq̓/ Upper Chehalis language; /ʔélamš/ Indian, /ʔélamšq̓/ Indian language; /pástn/ white man, /pásteng̓/ English; /x̣awə́q̓/ gossip; /yáɫq̓/ mock. But *a* suffix such *as* /-šq/ cloud has much more limited possibilities of occurrence: /pə́ɫšq/ fog (/pə́ɫ-/ drop). Words c*an* be coined for new concepts with the use of these suffixes: /x̌ʷeyóyqs/ *auto*mobile (literally cut off front end).

It is *also* possible to use some of these suffixes for special effects (such *as* humorous). In one text, the suffix /-lq/ penis is *added* to *all* sorts of im*probable words--various* parts of the body such *as* shoulder, back, hind-leg, etc. *And* to insult r*aven* (/sqʷáqʷ/), he is called /sqʷáqʷlq/.

But the use of these suffixes is unpredict*able*. Some expected forms do not occur. One finds /čočáča/ cut off h*and*, /čočán̓/ cut off ear, /čóčeyq/ cut off leg, /čawə́čqs-/ cut off nose; but for cut off head one gets /x̌ʷéyles-/, *and* for cut hair /k̓ə́člesm/, both using different roots for cut off. One finds /ɫax̣áča/ burn h*and and* /ɫə́x̣lnɫ/ burn mouth, but /q̓ʷə́tqs/ burn nose. There *are* no corre*lations among* the vari*ances*. *And* even though *a* suffix for *a* particular semantic referent exists, it is not *always* used: /qʷelə́mlnɫ/ mouth bleeds *and* /qʷelə́mqs/ nose bleeds, but /qʷelə́mq̓ʷln̓/ ears bleed (/-q̓ʷln̓/ reduced from /q̓ʷalán̓/ ear).

Sometimes the suffixed form may be used in both completive and continuative aspects, sometimes not: /ʔet nə́mqʷelémqs/ his nose bled, /sqʷelémqstn/ his nose is bleeding; but /ʔə́nca we ʔet łaqʷósqsnčn/ I hit him on the nose, /ʔə́nca we słaqʷósetanš šał t mə́qsns/ I'm hitting him on the nose.

Ordinary speech and narrative speech seem to prefer to use these lexical suffixes when possible; but since independent words exist for each of these suffixes, some things can be expressed two ways. A construction using independent words, when the use of comparable suffixes is possible, is used for emphasis, enunciation, or hypercorrectness. Such a case is /ʔə́nca we ʔet łaqʷósnčn šał t mə́qsns/ I hit him on the nose for an equally possible /ʔə́nca we ʔet łaqʷósqsnčn/.

A list of known lexical suffixes follows, with one or two examples of the use of each. Several have variant forms.

4201. /-ače/ definite time - /sqʲétače/ day(time), /tántače/ too late

4202. /-(a)čste/ insides - /ƛaqáčste/ smallpox, /čá·lčste/ sideache

4203. /-ača/ hand - /papáyača/ fingernails, /łaxáča/ burn hand

4204. /-álanos/ years past (?) - /qaxálanos/ many years ago

4205. /-alaxʷ/ people, years - /šʔómalaxʷ/ mourning dove, /kʷatálaxʷ/ every year

4206. /-áleyq/ bed - /ƛapayáleyq/ be under a bed, /mosáleyq/ four beds

4207. /-al(e)s/ eye - /łaqʷosáles/ hit on the eye, /q̓ʷlq̓áls/ cross-eyed

4208. /-alocn/ river mouth - /nsólapalocn/ mouth of the Chehalis River, /wałá·lnalocn/ mouth of Scatter Creek

4209. /-álom/ ? - /qaxálom/ many ? (/qə́xł/ many)

4210. /-álwn/ appearance, body - /ʔyálwn/ nice-looking, /čapálwn/ well-built, strong-looking

4211. /-amc/ side - /łakʷá·lamc/ other side of a tree, /taxʷámc/ half

4212. /-án?/ ear - /čočán?/ cut off ear, /łakʷán?/ earache

4213. /-ánxʷ/ weather - /sx̣asánxʷ/ bad weather

4214. /-áps/ neck - /x̣aƛápsm/ break neck

4215. /-apš/ river - /nsólapš/ Chehalis River, /p̓aq̓álapš/ Deschutes River

4216. /-aq/ voice - /x̣asáq/ ugly voice, /qʷá˙waq/ join in (singing)

4217. /-aqp/ voice, word - /tá˙laqp/ holler, /ƛawalólaqp/ leave word

4218. /-áqʷ/, /-qʷ/ prairie - /ƛaqʷáqʷ/ the other side of a prairie, /pótqʷ/ middle of a prairie

4219. /-ašn(s)/ time - /mósašns/ fourth time, /ʔek̓ʷénašn/ several times

4220. /-awq/ legs - /ƛ̓áqawq/ long legs, tall

4221. /-aws/ time (?) - /qéx̣aws/ many ?

4222. /-axʷ/ house - /p̓anáxʷ/ beside a house, /sƛ̓óq̓ʷaxʷ/ roof

4223. /-ax̣n/ arm - /č̓ópwax̣n/ squeeze with the arm, /ƛapálax̣n/ armpit

4224. /-ax̣n/ edge - /ƛačáx̣n/ sharp edge, /snámax̣n/ edge (as of a table)

4225. /-ax̣ʷc/ chest - /šáwax̣ʷc/ breastbone, /táx̣ʷc/ chest, breast

4226. /-ayes/ forehead - /pótayes/ middle of the forehead

4227. /-ayp/ sexual intercourse - /qénayp/ desire to cohabit, /sx̣ʷqʷáyp/ sex-hungry

4228. /-áyqs/ sharp article, source - /mosáyqs/ four sharp articles, /mosaláyqs/ four sources

4229. /-áy?s/ point - /ƛačáy?s/ sharp-pointed, /nawá˙y?s/ top of a tree, end of a road, under

4230. /-áytmš/ land - /ƛačáytmš/ get back to homeland, /sƛ̓ačáytmš/ plants

4231. /-eap/ hide - /q̓ʷóx̣ʷeap-/ tan a hide

4232. /-eaq̓(e)/ horn - /ʔeláx̣ʷeaq̓-/ lock horns, /póxʷeaq̓eml/ blow into a horn

4233. /-é˙č̓a/ blanket - /wané˙č̓a/ wear a blanket

4234. /-ečn/ back - /x̣aƛ̓éčn/ break one's back, /sq̓á˙yečn/ spinal fluid

4235. /-élals/ <u>side</u> - /łakʷélals/ <u>the other side</u>, /nešélals/ <u>this side</u>

4236. /-élals/ <u>together</u> - /łačélals/ <u>come together</u>, /potélals/ <u>middle</u>

4237. /-éˑlʔs/ <u>?</u> - /k̓apéˑlʔs/ <u>foot of a mountain</u>, /tawéˑlʔs/ <u>high tide</u>

4238. /-eł/ <u>offspring</u> - /ʔálseł/ <u>chief's son</u>, /qáˑx̱eł/ <u>puppy</u>

4239. /-énoʔs/ <u>belly, stomach</u> - /łak̓ʷénoʔs/ <u>stomach-ache</u>, /sk̓ʷénoʔsm/ <u>thought</u>

4240. /-enowt/ <u>mind</u> - /yolénowt/ <u>worry</u>, /ʔeyálnowt/ <u>friendly</u>

4241. /-énp/ <u>floor</u> - /poténp/ <u>middle of the floor</u>

4242. /-eps/ <u>tail</u> - /k̓áqeps/ <u>long tail</u>, /kʷanáteps-/ <u>hold by the tail</u>

4243. /-és/ <u>rock</u> - /tawés/ <u>big rock</u>, /xʷlq̓és/ <u>sharp rock</u>

4244. /-exʷ/ <u>waist</u> - /t̓éqexʷ/ <u>belt</u>

4245. /-eyq/ <u>berries, fruit</u> - /máqʷeyq/ <u>eat berries from the plant</u>

4246. /-eyq/ <u>leg</u> - /čóčeyq/ <u>cut off leg</u>, /sáˑwteyq/ <u>hind leg</u>

4247. /-eyq/ <u>water</u> - /námeyq/ <u>low tide</u>, /čácxʷeyq/ <u>puddle</u>

4248. /-ocn/ <u>river</u> - /laʔłólocn/ <u>mouth of a river</u>, /yalócn/ <u>beach</u>

4249. /-oł/ <u>canoe</u> - /talaqápoł/ <u>call for a canoe</u>, /ččówł/ <u>build a canoe</u>

4250. /-oq̓ʷa/ <u>tears</u> - /námoq̓ʷa/ <u>quit crying</u>, /nét̓oq̓ʷa/ <u>cry</u>

4251. /-ótxʷ/ <u>house</u> - /k̓apayótxʷ/ <u>under a house</u>

4252. /-óynʔ/ <u>noise, voice</u> - /česóynʔ/ <u>remote noise</u>, /łat̓óynʔ/ <u>echo</u>

4253. /-élows/ <u>together</u> - /x̱ʷoqʷélows/ <u>couple</u>, /łméšlows/ <u>Tenino tribe</u>

4254. /-če/ <u>body</u> - /wétče/ <u>waist</u>, /t̓álče/ <u>dress meat</u>

4255. /-če/ <u>water</u> - /táleče/ <u>in the water</u>, /céx̱łče/ <u>cold water</u>

4256. /-čp/ <u>fire</u> - /mátčp/ <u>get fire</u>, /q̓ʷáłčp/ <u>cinder</u>

4257. /-l(e)s/ <u>head, hair</u> - /séplesn/ <u>hit on the head</u>, /łóq̓ʷls/ <u>bald</u>

4258. /-lq/ <u>penis</u> - /táwlq/ <u>big penis</u>, /spélq/ <u>penis</u>

4259. /-lwltxʷ/ <u>house</u> - /tópalwltxʷ/ <u>spider-web</u>, /táčłačlwltxʷ/ <u>hospital</u>

4260. /-łnʔ/ <u>woman</u> - /čanókʷłnʔ/ <u>Chinook woman</u>, /kenčóˑčłnʔ/ <u>Englishwoman</u>

4261. /-ɬnač̓š/ <u>lung air</u> - /cə́·pɬnač̓š/ <u>boast</u>, /x̌ə́qɬnač̓š/ <u>breathe</u>

4262. /-ɬnač̓/ <u>tongue</u> - /tókʷɬnač̓/ <u>bite one's tongue</u>, /qá·maɬnač̓m/ <u>work mouth</u>

4263. /-ɬnɬ/ <u>mouth</u> - /táwɬnɬ/ <u>big mouth</u>, /ɬə́x̣ɬnɬ/ <u>burn one's mouth</u>

4264. /-ɬnɬ/ <u>time</u> - /x̌áqɬnɬ/ <u>long time</u>, /x̌áqɬnal̓s/ <u>a long time ago</u>

4265. /-mš/ <u>people</u> - /texʷə́nmš/ <u>hunter, killer</u>, /qá̓amš/ <u>water-people</u>

4266. /-namc/ <u>body</u> - /sq̓ʷlnámc/ <u>berry</u>, /náwnamc/ <u>tree-trunk</u>

4267. /-nč̓/ <u>hip, hind part</u> - /č̓ə́mnč̓tn/ <u>hip(bone)</u>, /x̣ʷə́mnč̓/ <u>buttocks</u>

4268. /-n̓ɬ/ <u>plant</u> - /q̓ápn̓ɬ/ <u>blueberry bush</u>, /q̓ewánn̓ɬ/ <u>kinnikinic</u>

4269. /-ns/ <u>tooth</u> - /ʔopə́lns/ <u>toothache</u>, /č̓ə́l̓x̣eans/ <u>few teeth</u>

4270. /-patq/ <u>step, pace</u> - /nač̓áwpatq/ <u>one step</u>, /yə́q̓ʷpataqm/ <u>walk</u>

4271. /-pš/ <u>anus</u> - /č̓é·mpše-/ <u>close anus</u>

4272. /-qs/ <u>nose, front end</u> - /cáqʷqs/ <u>paint one's nose</u>, /taménqs/ <u>hair on the face</u>

4273. /-qʷ/ <u>day</u> - /scámqʷ/ <u>Tuesday</u>, /kʷatá̓ɬqʷ/ <u>every day</u>

4274. /-qʷlš/ <u>something supernatural</u> - /ʔacʔə́x̣tqʷl̓š/ <u>medicine man</u>, /ɬačéqʷlš/ <u>sing one's medicine</u>

4275. /-qʷm/ <u>prairie</u> - /yaláqʷm/ <u>edge of a prairie</u>, /sɬax̣álaqʷm/ <u>prairie fire</u>

4276. /-q̓/ <u>language</u> - /pásten̓q̓/ <u>English</u>, /yáɬq̓/ <u>mock</u>

4277. /-(e)s/ <u>dollar</u> - /cám̓s/ <u>two dollars</u>, /móses/ <u>four dollars</u>

4278. /-s/ <u>face</u> - /cáqʷsm/ <u>paint one's face</u>, /ʔacx̣əcow̓s/ <u>wrinkled face</u>

4279. /-stq/ <u>fire</u> - /táw̓stq/ <u>big fire</u>, /lámstq/ <u>flames, blaze</u>

4280. /-šet/ <u>ground</u> - /c̓ə́q̓t̓ax̣ʷšetm/ <u>slap and slap the ground</u>

4281. /-šn/ <u>foot</u> - /papáysšn/ <u>toenail</u>, /nó̓qʷšn/ <u>horseshoe</u>

4282. /-šq/ <u>cloud</u> - /pə́ɬšq/ <u>fog</u>

4283. /-tomš/ <u>ten</u> - /mó·sɬtomš/ <u>forty</u>, /ʔó·č̓sɬpánč̓ɬtomš/ <u>one hundred</u>

4284. /-x̣š/ <u>house</u> - /náwx̣š/ <u>big house</u>, /mosál̓x̣š/ <u>four houses</u>

4285. /-y(a)q̓/ <u>foot</u> - /čá·lyaу̓eml̓/ <u>trip</u>, /páty̓q̓-/ <u>reach with the foot</u>

4286. /-x̌č/ <u>belly</u> - /l̓óq̓x̌č/ <u>beaver</u>

Boas cites a few more that I did not find.

4287. /-á·l̓xʷ/ <u>house</u> - /pančstá·l̓xʷ/ <u>ten houses</u>

4288. /-ól̓x̌š/ <u>house</u> - /x̣asól̓x̌š/ <u>bad house</u>, /ʔayól̓x̌š/ <u>good house</u>

4289. /-áp/ <u>thigh</u> - /sp̓anáp/ <u>back side of thigh</u>

4290. /-ylps/ <u>back side, tail</u> - /šáwylps/ <u>bone of tail</u>, /tó·mylps/ <u>short-tailed</u>

More than one lexical suffix may be used simultaneously on the same root, but it is not often done. Some examples that did occur are /talaqápol̓/ <u>call for a canoe</u> (/-aqp/ <u>voice</u>, /-ol̓/ <u>canoe</u>), /taleče̓áqʷ/ <u>river side of a prairie</u> (/-če/ <u>water</u>, /-áqʷ/ <u>prairie</u>), /sqé·wʔl̓čeamš/ <u>Indians living along Puget Sound</u> (/-če/ <u>water</u>, /-mš/ <u>people</u>).

There are at least two suffixes with no discernable meaning of their own which frequently combine with many lexical suffixes to form additional stems: /-al-/ and /-ay-/. They never occur without a following lexical suffix. Only two forms have been found which contrast the presence and absence of one of these two suffixes: /mosáyqs/ <u>four sharp articles</u>, /mosaláyqs/ <u>four sources</u> (as streams). Some of the suffixes listed above might be divided into one of these plus a lexical suffix. Examples of these two suffixes are /mosálstq/ <u>four fires</u>, /ƛ̓oq̓ʷállatàm/ <u>be on a table</u>, /ʔeyálnowt/ <u>friendly</u>, /ƛ̓apayótxʷ/ <u>be under a house</u>, /ƛ̓apáylatàm/ <u>be under a table</u>, /qaqáyax̣n/ <u>shadow</u>.

The effect of a lexical suffix on the primary stress of a word is completely unpredictable. Sometimes the same root will have primary stress with one suffix, but with another suffix the stress may be on the suffix; conversely, the same suffix may or may not be stressed following different roots. Some suffixes vary in shape (by the addition of a vowel to bear the stress) between stressed and

unstressed variants or completive and continuative forms.

Examples of the same root with primary stress varying are /t̓éq̓ʷsm/ slap face, /t̓q̓ʷáca-/ slap one's hand; /čóčeyq/ cut off a leg, /čočáca/ cut off a hand. Examples of the same suffix with or without stress are /cax̌ʷósm/ wash the face, /t̓éq̓ʷsm/ slap one's face; /t̓ak̓ʷáca/ bite one's hand, /q̓áx̌aca/ hurt one's hand.

The difference in position of primary stress is distinctive in at least one pair of words: /wetáqʷ/ middle of a prairie, /wétqʷ/ out in a prairie.

IV. MORPHOLOGY OF VERBS

Three persons, two numbers and two aspects are indicated by pronominal subject suffixes: first, second and third persons, singular and plural, completive and continuative aspects. Independent pronominal forms also occur, but are not necessary to indicate the subject of a verb, whereas a pronominal subject suffix is necessary. The independent pronominal forms are considered nouns, and as such have only one form (except when compounded with another morpheme).

The forms of the subject suffixes and their corresponding independent pronouns are:

	completive	continuative	independent
1st sg.	-čn	-(a)nš	ʔə́nca
2nd sg.	-č	-š	nə́we
3rd sg.	zero	-n	céne
1st pl.	-čɬ	-stawt	ʔenə́m
2nd pl.	-čalp	-a(l)p	ʔelápa
3rd pl.	-yamš	-elt	cneáwmš

The third person plural independent pronoun is formed from the third person singular form with a stressed plural suffix; the vowel of /céne/ drops out with the shift of stress from it to the suffix.

Only second person plural and third person plural independent pronouns have anything in common with the suffixed subject forms. Second person plural /ʔelápa/ and the continuative form of the subject suffix have /ap/ in common, and third person plural /cneáwmš/ and the completive subject suffix have /-mš/, a common

noun plural suffix element. Only second person plural suffix forms have anything in common between the two aspectual forms: both contain /alp/. /č/ is common to first and second person forms, singular and plural, in the completive aspect. First and second person singular forms in the continuative aspect have /š/ in common.

Only two of the subject suffixes vary morphophonemically, one phonemically conditioned, the other (or both) morphemically conditioned. The first person singular continuative suffix is usually /-anš/, but after an object suffix ending in a vowel, it is reduced to /-nš/. Since the only object suffixes that end in a vowel are second person singular forms, this reduced form, /-nš/, might also be said to be conditioned by the second person singular object morpheme. Examples of this reduction of /-anš/ to /-nš/ are /ʔénca we sčésmecenš/ I'm coming after you (sg.) (subclass II; compare /ʔénca we sčésmesanš/ I'm coming after him), /sławámenš/ I'm leaving you (sg.) (subclass VI; compare /sławámolanš/ I'm leaving you (pl.)).

Second person plural continuative /-alp/ varies with /-ap/, depending on the person and subclass of objects it follows. /-alp/ was found to occur only when no object suffix occurred and after continuative third person objects of subclasses I, II, V, VII, and VIII. After continuative third person objects of subclass VI and after objects in all other persons, /-ap/ occurred. Examples are /ʔelápa we syéqʷpatqmetalp/ you (pl.) are walking (intransitive), /ʔelápa we stéqtalp/ you (pl.) are arresting him (subclass I), /tet ʔelápa we sčésmesalp tet céne/ you (pl.) are coming after him (subclass II), /tet ʔelápa we sqtényalp/ you (pl.) are meeting him (subclass V), /tet ʔelápa we smáytoalp tet céne/ you (pl.) are taking him in (subclass VII), /tet ʔelápa we sχáʿlstwalp tet céne/ you (pl.) are looking for him (subclass VIII), but /tet ʔelápa we sławálap tet céne/

you (pl.) are leaving him (subclass VI), /ʔacé t sʔéxcalap/ did you (pl.) see
me? (subclass I), /tet ʔelápa we scésmesolap/ you (pl.) are coming after us (sub-
class II), /tet ʔelápa we smáytomalap/ you (pl.) are taking me in (subclass VII),
/ʔelápa we sx̣áˑlstomalap/ you (pl.) are looking for me (subclass VIII).

A complete paradigm of an intransitive verb with the different subject suf-
fixes is: completive aspect /ʔénca we ʔet ʔélnčn/ I sang, /néwe we ʔet ʔélnč/
you (sg.) sang, /céne we ʔet ʔéln/ he sang, /ʔeném we ʔet ʔélnči/ we sang, /ʔelápa
we ʔet ʔélnčalp/ you (pl.) sang, /cneáwmš we ʔet ʔélnyamš/ they sang; /continua-
tive aspect /ʔénca we sʔélananš/ I am singing, /néwe we sʔélanš/ you (sg.) are
singing, /céne we sʔélann/ he is singing, /ʔeném we sʔélanstawt/ we are singing,
/ʔelápa we sʔélanalp/ you (pl.) are singing, /cneáwmš we sʔélanelt/ they are sing-
ing. The apparent redundancy of subject designation does not actually occur often
in normal speech or in a text. Ordinarily, only the subject suffes are used; the
independent personal pronouns and the copulative verb /we/ are not necessary, but
serve as emphasis or as positive designation of the subject.

Every verb must have a subject suffix. If the subject is non-personal, the
third person singular or plural suffix is used. Hence, a verb with a non-personal
subject frequently ends in the third singular completive zero. Third person plu-
ral is frequently not distinguished from a third person singular subject. Instead,
the independent personal pronoun /cneáwmš/ may be used with a singular third per-
son subject suffix on the verb. This is particularly common when there is an
object suffix on the verb.

Three types of aspect are used in Upper Chehalis, and are distinctly marked
by prefixes and particles. In addition, all personal object and subject suffixes,
intransitive suffixes, voice, inchoative and positional suffixes, and many lexi-
cal suffixes have two forms for use with the different aspects. One of these

two forms is used only with the continuative aspect, the other with both comple-
tive and stative aspects. Throughout this paper they are referred to as continua-
tive aspect forms and completive aspect forms respectively.

Aspect as used here indicates the kind of action expressed by the verb, and
the three kinds recognized in Upper Chehalis are continuing action, completed
action and customary action--these are the three that are formally marked.

The continuative aspect expresses action which occurs over a period of time,
present, past or future. It may have begun in the past and continue into the
future, it may have begun in the past and ended in the past, or it may begin and
end sometime in the future, but in any case, some limit to the action is expected--
it cannot go on indefinitely. Thus we have /tet sk̉aqᵂóšoⱡ we swaq̉áwn/ the door
is opening, /ʔénca we stólpstwanš tewstéx/ I'm beginning it now, /sčáwcoln/ he's
laying it down, /ʔénca we ta sʔéⱡnanš/ I was eating. As can be seen from these
examples, the continuative aspect generally corresponds to the so-called "pro-
gressive tense" of English.

The formal sign of a continuative aspect form is the prefix /s-/, although
it can be determined from many suffixes as well. Forms with this prefix are fre-
quently used as nouns, with or without suffixes in their continuative form, and
thus serve a function comparable to gerunds in English. /s-/ is also used on
verbs with certain suffixes in their completive aspect forms to indicate an
infinitive-like construction.

/s-/ may co-occur with two other prefixes. It may be preceded by /ⱡa-/ back,
again, as in /ⱡaswáqsn/ he is going again, or it may precede /txᵂ-/ get, become,
make, as in /stxᵂk̉élcešs/ he is holding still.

The completive aspect expresses an action which occurs at one point in time,
or repeatedly (but separately), in the past or in the future (for the completive

aspect and present time, see below). The completive aspect is marked by a definite or indefinite article immediately before the total verb form (one exception to this occurred). The article usually found to signal the completive aspect is /ʔet/, but /tet/ is not uncommon, and /t/ (indefinite article) also occurs occasionally. I do not know why the articles should be used to signal this aspect (if it matters). One might even suspect that this is a matter of homonymous forms if /ʔet/ were the only form to occur with completive aspect verbs. But since /ʔet/, /tet/, and /t/ all occur, and the articles have identical forms, it seems unlikely that all three are homonyms. And in both the articles and the completive aspect markers, distinction between the articles (other than /t/) is vague. It therefore seems best to consider the completive aspect markers and the articles the same.

As with the continuative aspect, the completive aspect is also marked by distinct verbal suffix forms, but they are not distinctly completive aspect, only distinctly non-continuative aspect. The same suffixes are used for both completive and stative aspects.

Examples of the use of the completive aspect are /ʔə́nca we ʔet ɫə́nnčn tet cə́ne/ I pushed him, /cə́ne we tet yáx̌ʷɫ/ he shook, /ʔə́nca we ʔet čə́·wnčn/ I thanked him.

The one exception to the normal position of /ʔet/ directly before the verb was /ʔet we tx̌ʷšáwɫn tat mấ·ʔans/ she played with her dolls. I have no idea why this reversal of /we/ and /ʔet/ occurred here; it might even have been a mistake.

The stative aspect expresses a state or condition, something that is or was habitually in one state; the concept expressed is not necessarily boundless, but does last over an extended period of time, unlike concepts expressed by the other two aspects, which are momentary or of relatively short duration. The stative

aspect is marked by a prefix /ʔac-/, but suffixes are identical with those used with the completive aspect. Examples of the use of /ʔac-/ are /céne we ʔacqéxʷɫ/ he is fat, /ʔénca we ʔacx̣aʔácecn/ I love you (sg.), /ʔacʔáctexʷcn tet céne/ I remember him, /céne we ʔactáčɫč/ he is sick, /céne we ʔacqáx̣aʔ/ he has a dog (/qáx̣aʔ/ dog is ordinarily a noun).

/ʔac-/ may co-occur with certain other prefixes, but /ʔac-/ and /s-/ are by definition mutually exclusive. /čt-/ comparative and /ɫa-/ back, again may precede /ʔac-/: /čtʔacnáwɫ/ older, /ɫaʔacqʷáʔstqlscn/ I have a headache again; /nkʷs-/ habitually may also precede /ʔac-/ by virtue of preceding, in turn, /ɫa-/, as in /tet ʔelápa we nkʷsɫaʔacx̣áɫšm nscštxʷn? #/ you folks used to live in Olympia (this is one of the few instances of three prefixes on one word). The only prefix which /ʔac-/ may precede is /txʷ-/ get, become, make, as in /tet qʷáˑyɫ we ʔactxʷx̣ónstm/ the boy was holding still.

It is possible to have one verb root used in all three aspectual forms. A few contrastive examples of this might be useful to illustrate the differences in the use of the three aspects. Examples will be given in the order the aspects were discussed above, continuative, completive, stative.

/céne we spálawn/ he is awakening, /céne we tet pálc/ he woke me up, /céne we ʔacpálɫ/ he is awake.

/tet sx̣aqʷóšoɫ we swaqáwn/ the door is opening, /tet sx̣aqʷóšoɫ we ʔet wáqɫ/ the door opened, /tet sx̣aqʷóšoɫ we ʔacwáqɫ/ the door is open.

/ʔénca we sx̣épštanš tet céne/ I am covering him, /ʔénca we ʔet x̣épx̣ncn tet céne/ I covered him, /céne we ʔacx̣éptače/ he is covered.

Upper Chehalis distinguishes three tenses, past, present and future. Present is unmarked, and unless past or future markers are present, the verb may be assumed to be in the present tense (although see the discussion of past tense

with completive aspect forms below). Future tense is marked by one of two particles.

The two future tense particles are /ł/ and /ḱa/. /ḱa/ is a free morpheme, but /ł/ is a clitic--sometimes it is a free morpheme, sometimes a prefix. Both morphemes are used with all three aspects. /ḱa/ is used in dependent constructions (where English uses an infinitive), and may serve as the indication of one. It may be used before a verb in any aspectual form, and frequently precedes a nominalized verb with a possessive affix, as in /ʔet cóncn mełta ḱas ʔéłns/ I told him not to eat (/-s/ his; literally I-said not future his-eating). As in this example, /ḱa/ is usually used with another morpheme /-s/, the function of which is not clear. It is not even certain that it is an affix; it sometimes seems rather to be a prefix on the following verb, especially if the verb is in the continuative aspect. But it also occurs before completive aspect forms, so it is probably not the continuative aspect marker /s-/, although I am sure it is somehow related. But if it is not this, then verbs in the continuative aspect occur without continuative /s-/ after /ḱa-s/. For example, /ʔet wáqscn ḱas ʔaxén #/ I went to see it is marked as completive aspect by the object suffix /-én/; /ʔet čéscł ča ḱas yapálxašn ł tet néwe #/ we came to visit you (sg.) is in the continuative aspect, as indicated by the continuative third person singular subject suffix /-n/ (this cannot be an object suffix, although the form would be the same, because the object is indicated here by a following prepositional phrase, and both types of object indication are not used together). This /-s/ is not part of the morpheme /ḱa/, as indicated by the following examples where it does not occur: /ʔet sáʔncn ḱa sncáˑyał/ I made it for myself (/sncáˑyał/ myself, from /ʔénca/ I) and /mełta łascés qétt qas ḱa mełtačn šánx #/ don't come tomorrow, because I won't be there, literally not your (/ʔa-/) coming tomorrow because

<u>future I-not there</u>. (This is *a* very unusual use of the negative particle /mélta/ *as a* verb, the only example I have of such *a* thing.)

Another *reason* why /-s/ should not be considered *part* of the /ƛa/ morpheme is illustrated by the following example: /?énca we tet cónceĕn ƛalas wáqs/ <u>I told you (sg.) to go</u>. Here, /la/, the second person singular possessive clitic, occurs <u>between</u> /ƛa/ *and* /-s/. Most possessive morphemes *are* suffixes, but first *and* second person singular possessive morphemes *are* clitics--sometimes prefixes, sometimes free *particles*--and the position of /ƛa/ in relation to them is different for each. /la/ is suffixed to /ƛa/, *as* in the preceding example; but /n/ occurs *as a* free particle <u>before</u> /ƛa/, *as* in /swáqsanš šaɬ n ƛas ?ax̣ə́n #/ <u>I'm going to see it</u> *and* /nə́we we sčə́·lecalš n ƛas wáqs/ <u>you (sg.) are ordering me to go</u>.

/ɬ/, the other future tense morpheme, is *a* prefix or free morpheme, depending *partly* on the *aspect* with which it is used. In the continuative *aspect*, /ɬ/ is prefixed directly to the verb root in *place* of the continuative marker /s-/, *and* is incompatible with other prefixes: /?énca we ɬwáqsanš/ <u>I will go</u>. With stative *and* completive *aspects*, /ɬ/ occurs *as a* free morpheme, except with the completive *aspect* marker /?et/, to which it is prefixed *and* fused--/ɬet/; this is the most common form for the completive *aspect*. Examples in stative *and* completive *aspects* are /?accóntm we ɬ ?acmólokʷɬ #/ <u>they say he's crazy</u> (here it has *a* conditional or subjunctive inference); /?énca we ɬ tet ?ax̣ə́nčn/ <u>I will see him again</u>; /?énca we ɬet ?élnčn/ <u>I am going to sing</u>.

Past tense is *marked* consistently only within the continuative *and* stative *aspects*, *and* in questions or expressions indicating location; it is ordinarily inoperative within the completive *aspect*, but *can* be indicated if necessary.

The only purely *past* tense morpheme is /ta/, *a* free particle. It is used

only in continuative and stative aspects (and occasionally with nouns). It precedes the verb form (including prefixes), as well as a second person singular possessive clitic, but it follows a first person singular possessive clitic. Compare /ʔə́nca we sʔélnanš/ I am eating and /ʔə́nca we ta sʔélnanš/ I was eating, both in the continuative aspect. An example in the stative aspect is /ʔeném we ta ʔacmósmčł/ we were sleeping. Illustrations of /ta/ with first and second person singular possessive clitics are /ʔacé tn ta swe sʔélann/ was I singing? (/-n/ my), /ʔacé ta la swe sʔélann/ were you (sg.) singing? (/la/ your).

In questions and in expressions indicating location, the aspect is not always determinable, or completive suffixes may be used without a particle preceding the verb to distinguish between completive and stative aspects. But /ta/ is used in these types of expression to indicate tense: /pnčá· ta ʔátmns/ when did he die? (aspect is here indeterminate; /-s/ his), /ta čá·č ʔokʷa/ where were you (sg.)? (/čá·/ where; /ʔokʷa/ be, a particle, not a verb), /ʔə́nca we ta šanx̣čn/ I was over there. The last two examples might be either stative or completive aspect, but are probably stative, although there is nothing to definitely indicate which they are.

As previously stated, the past tense is not necessarily indicated in the completive aspect, but it can be, if needed, in one of possibly three ways. Most commonly, the verb /nám-/ done, finished is compounded to the verb to be marked as past (and has secondary stress in this position): /ʔə́nca we ʔet nàmʔélnčn/ I ate, /céne we ʔet nàmcóx̣ʷč/ he washed (himself). But occasionally, my informant would insist that tense in completive aspect forms could be indicated in one or two other ways. These were uncommon, and possibly forced; I am not altogether convinced that they serve the function he claimed for them. One of these is the use of /ʔet/ versus /tet/ as completive marker to distinguish present from

past respectively, e.g., /ʔə́nca we ʔet čə́sčn ƛas ʔə́xce/ <u>I come to see you (sg.)</u> and /tet čə́sčn ƛas ʔə́xce/ <u>I came to see you (sg.)</u>. Generally, however, /tet/ and /ʔet/ seemed to vary freely to mark completive aspect, regardless of tense: I have both /cneáwmš we ʔet yə́q̓ʷpataqmyamš/ and /cneáwmš we tet yə́q̓ʷpataqmyamš/ translated as <u>they walked.</u>

The other distinction claimed by my informant was a contrast between sub-class I completive object suffix allomorphs /-c/ and /-ə́c/. The only example I have of this, or was able to elicit, is /cə́ne we ʔet ƛak̓ʷə́c/ <u>he bit me</u> versus /ʔet ƛə́k̓ʷc tat qáxaʔ/ <u>the dog bites me.</u>

The whole question of present versus past tense within the completive aspect may be wholly irrelevant. There is actually little reason to expect such a distinction in this aspect. Since the completive aspect implies an action which has been completed, or is not lasting over any period of time (for which continuative and stative aspects are used), a present tense completive form is illogical and not really to be expected. A present tense completive form translated into English would be "he bites me" (as above); but this phrase by itself does not mean much. Either it means "he is biting me (now)," in which case Upper Chehalis would use the continuative aspect, or it means "he bites me all the time" or "every time he sees me he bites me," in which case Upper Chehalis would use the stative aspect. I can think of no other meaning for this phrase, nor can I think of any possible sensible way of using a completive aspect form in the present tense. I think it would be best to consider the Upper Chehalis completive aspect as either in past or future time, in which case there would be no present tense form, and hence no need to mark a distinction between present and past. In this case, the use of /nám-/ in compounds would merely serve as an intensifier of past time.

Another reason to adopt this view might be drawn from my informant's English. In most regards, his English usage was quite good and acceptable, but he rarely used simple past tense forms such as "I came," "I ate," "I walked"; he did not bother to distinguish simple present and simple past, but normally used simple present forms only, even when he obviously meant past. He also consistently used similar forms whether I used a simple present or simple past tense in English. If I asked for an Upper Chehalis form using an English simple past tense such as "he bit me," he would translate the phrase into Upper Chehalis, and then, if I asked him to do so (to check to see if I had gotten what I wanted), translate it back into English using, like as not, a simple present tense, "he bite me." He apparently simply did not feel a distinction between the two tense forms in English, and used the present tense forms himself, although he certainly recognized simple past forms. His comments about /tet/ and /ʔet/, /-c/ and /-ə́c/ distinguishing present and past tenses were probably a result of my pressing for such a distinction (where none existed), or my trying to find a difference between these forms, where either no difference existed, or he could not express it-- probably the case with /-c/ and /-ə́c/.

Some verb stems have both singular and plural forms, but the plural was so little used by my informant that I am unable to draw complete conclusions on the formation of a plural. He knew plural forms, and did use them occasionally, especially in texts. Boas obtained a great many verb plurals, so it may be that some speakers simply use them more than others. The possibility exists that the use of verb plurals was diminishing, and when Boas collected his data over thirty years ago there were still some older persons who used them. However, my informant was over 85 years old, and should have been familiar with the same forms as Boas' informants. My informant did not seem to consider the use of plural verbs to be

necessary, particularly if something else in the sentence indicated number; even if nothing else did indicate number, he would not ordinarily use plural verbs. All told, I was only able to elicit a dozen verbs in plural forms. With the aid of Boas' material, I can draw some generalizations. Not all verbs have distinct plural forms.

The dozen verbs I was able to obtain do indicate one definite feature of the formation of plural verbs. That feature is an infix /a/; it is not the total plural morpheme, though, because some types of roots also undergo a vowel change as well. The /a/ is infixed within a post-vocalic consonant cluster of a <u>stem</u> (i.e., including a consonant cluster created by a suffix, such as intransitive /-ł/). If there are more than two consonants, the vowel is usually infixed between the first two. Examples are /yáƛ̣ał/ from /yáƛ̣ł/ <u>go home</u>, /ʔæcxʷélał/ from /ʔacxʷélł/ <u>hang</u>, /ṫólał/ from /ṫólł/ <u>arrive</u>, /q̇ʷáyał/ from /q̇ʷáył/ <u>wilt</u>, /wáqas/ from /wáqs/ <u>go</u>, /ʔátamn/ from /ʔátmn/ <u>die</u>, /táčałč/ from /táčłč/ <u>sick</u>. But some-times the /a/ occurs elsewhere in the cluster: /ʔáqʷtałyamš/ <u>they paddle</u> from /ʔáqʷtł/ <u>paddle</u>.

A few examples in context at this point may be helpful: /có˙ʔ | wáqasčł łapénčł #/ <u>let us go kill them</u>. The first verb here is plural, but the second is not (Boas indicates plurals of transitive verbs as well as of intransitive verbs), although both have the first person plural subject suffix. /ʔacq̇ʷáƛ̣aʔł tat pé˙psayo ʔacʔátamn x̣ʷáqʷ tat sčá˙ #/ <u>there were dead animals everywhere</u> (literally <u>lying-down the animal(s) being-dead all the where</u>). Here both verbs are plural. But in a parallel sentence, only one verb is plural: /ʔet ʔátmn x̣ʷáqʷo tat qx̣ʔáwmš tat ta ʔactáčałč #/ <u>the sick dogs all died</u> (literally <u>died all the dogs the past being-sick</u>). In other parallel sentences, <u>no</u> verb was plural.

There are other features of verb plurals besides the infix /a/. I shall take up intransitive verbs first. Glottalization may occur with this infix: /q̓ʷáƛa?ł/ lie down, /wáqa?s/ go, /néča?ł/ sink. If the vowel of a CVC root is /é/, it may change to /é/ or /á/ in the plural, or /é/ may change to /á/; glottalization may accompany the change. The only example I have of this is /néča?ł/ from /néčł/ sink; but Boas has many examples: /pétał/ from /pə́tł/ stick on, /x̣épał/ from /x̣ə́pł/ dry, /xʷé?na/ from /xʷə́nł/ tired, /x̣ʷétaqʷ/ from /x̣ʷə́tqʷ-/ heat; /yámax̣ʷł/ from /yə́mx̣ʷł/ round, /qə́łaxł/ from /qə́łxł/ angry; /kʷáyax̣ʷł/ from /kʷéyx̣ʷł/ oily, /q̓ʷáyaƛ̓/ from /q̓ʷéyƛ̓/ cut (I do not have these last two verbs at all; I could only get other morphemes for oily and cut).

Transitive verbs seem to use the same devices to form plurals, but in somewhat different patterns. Completive forms add the /a/ infix to the root as do intransitive forms: /?et pax̣aén/ from /?et pax̣ə́n/ pierce it, /paqʷaén/ from /paqʷə́n/ spill it, /x̣aƛ̓aén/ from /x̣aƛ̓ə́n/ break it. Continuative forms of these same verbs change the root vowel to /é/ in addition to adding /a/: /spéx̣atn/ from /spéx̣tn/, /spéqʷatn/ from /spə́qʷtn/, and /sx̣éƛ̓atn/ from /sx̣ə́ƛ̓tn/. Other verbs seem only to add a glottal stop somewhere near the root vowel (some of these Boas labels "plural object"): /?et ?oxʷ?ánaxʷ/ from /?et ?oxʷánaxʷ/ teach it, /?et ?as?óxʷ/ from /?et ?asóxʷ/ take it, /?et ?ax̣?én/ from /?et ?ax̣ə́n/ see it.

The inchoative suffix, meaning become, get to be, is /-áw-/ for intransitive verbs, continuative and completive, and /-áwm-/ for transitive verbs; it implies a change of state or condition. The inchoative suffix always has primary stress. It immediately follows the verb stem, and is followed by subclass 2 intransitive suffixes and subclass VIII transitive object suffixes. Some examples of inchoative verbs in intransitive and transitive, completive and continuative forms are: /qéx̣ł/ many - /?et qax̣áwm/ it increased, /sqax̣áwmetn/ it is increasing, /?et

qaxáwmexʷ/ he increased it, /sqaxáwmstwn/ he is increasing it; /ʔet x̣ʷalá·ʔ/ it's hot - /ʔet x̣ʷalàʔáwm/ it got hot, /sx̣ʷalàʔáwmetn/ it's getting hot, /ʔet x̣ʷalàʔ-áwmexʷ/ he made it hot, /sx̣ʷalàʔáwmstwn/ he's making it hot. Some other inchoative verbs are /čapáwm/ get well from /čəp/ strong, /xasáwm/ get into trouble from /x̣əs/ bad, /čayax̣ʷáwm/ turn sour from /čayéx̣ʷ/ sour, /qyeqáwm/ loosen from /qyéq/ loose.

Upper Chehalis possesses several prepositions which function as prepositions do in English, but there are also several verbal suffixes which have the same purpose. These will be called positionals here. They follow the verb stem and are in turn followed by object and subject suffixes. Some have two forms, one for the completive aspect, the other for the continuative aspect; the latter is always a reduction of the former. The meaning of some of these is quite vague and general, but the suffixes can nevertheless be identified by their recurrence and their similarity in function to definitely recognizable positionals. In some instances, a preposition plus object can be substituted for a positional suffix.

{-élow-}. The meaning of this positional suffix is not altogether clear, but it has something to do with pieces, because all the verbs (except pierce) with it involve two or more parts being put together or disunited. This morpheme has four allomorphs: /-élow-/, /-álow-/, /-éllow-/, and /-állow-/. It is always followed by subclass VIII object suffixes. Some illustrations of the use of this morpheme are /ʔet łaq̓ʷélowaxʷ tat łaméɨnʔ/ he broke the rope in two, /skʷałélowstwn/ he's dividing it, /ʔet nàmpatálowaxʷ/ he welded it, /ʔet k̓aq̓ʷečnéllowaxʷ/ she piled them up, /ʔet k̓mx̣élowaxʷ/ he pierced it.

This morpheme may be misclassified—it is possibly a lexical suffix rather than a positional suffix. Both occur in the same position in a word. But intransitive verbs occur with {-élow-}, and by definition, positional suffixes should

have an object. For instance, the following occur: /ƛ̓aq̓ʷečnélows/ they're piled up, /ƛačélows/ they came together and /sƛačélowstn/ they're coming together, /ʔet ƛewáʔlloʔs/ it fell apart. All these have one thing in common: /-s/ follows the morpheme in question, but its significance is unknown. In spite of these intransitive forms, I choose to leave {-élow-} among the positional suffixes until further evidence occurs to warrant reclassifying it.

{-m-}. The meaning of this morpheme is quite uncertain. It may have some sort of a causative function. It occurs in only this one form, and has been found with at least eight verbs. Only subclass VIII object suffixes may follow it. Some illustrations of its use are /ʔet ʔócx̣ʷmex̣ʷ/ he stood him up and /sʔócx̣ʷmstwn/ he's standing him up, /ʔet ƛéx̣ʷmex̣ʷ tat sqʷayáeƛ/ he kidnapped the baby, /ʔet ƛóqʷmex̣ʷčn ʔaƛ tet qá·ʔ/ I dipped it in the water, /ʔet ƛélqʷmex̣ʷ/ he popped it.

{-še-}. This morpheme means for, to, on. It has two allomorphs, one for the completive aspect, /-š-/, and one for the continuative aspect, /-še-/; the former is a reduction of the continuative aspect allomorph. The continuative allomorph is also used before completive passive forms. This morpheme was found with at least a dozen verbs, and many more may have it with a less concrete and determinable meaning; it appears to be fairly productive. It is always followed by subclass I object suffixes. Some illustrations of it are /ʔet ʔélnšc/ she sang for me, /ʔénca we sʔélanšetolanš/ I'm singing for you (pl.), /céne we syósšetn/ he's working for him, /ʔet ččáx̣ʷšnčn/ I built a house for him, /cóh | ƛónqšetelaʔ/ everybody sing!, /sq̓ʷaƛó·ʔšetanš/ I'm writing to him, /ʔet só·pqšn tat qáx̣ns/ he whistled for his dog.

{-tox̣ʷ-}, to, for, is a morpheme which indicates an indirect object, and is used only when another (direct) object occurs or is implied. It is a common suffix, and occurs with a number of verbs; it is quite productive. There are

two *allomorphs*, /-tox^W-/ *and* /-tx^W-/, but they *are* not solely *aspectual, as are*
most *pairs* of suffixes. I do not *have* examples for *all* persons, but what I *have*
indicates that /-tox^W-/ is used only in the completive *aspect and* only before
first *and* third person objects. /-tx^W-/ is used before *all* continuative *aspect*
objects *as* well *as* second person singular completive objects. The pronominal
object suffixes following {-tox^W-} *are always* subclass I, but the third person
singular completive object is /-t-/ (continuative) *rather than* the expected /-n/
(completive) (*and may* be followed by the third person singular zero subject).
Thus the following sequences of {-tox^W-}, object suffixes *and* subject *suffixes*
occur: /-tx^Wcečn/ *and* /-tx^Wcenš/ I to you (sg.) (completive *and* continuative),
/-tox^Wtčn/ *and* /-tx^Wtanš/ I to him, /-tox^Wc/ *and* /-tx^Wcaln/ he to me, /-tx^Wce/
he to you (sg.) (completive), /-tox^Wt/ he to him (completive). To illustrate
{-tox^W-}: /tet čáɬtox^Wtčn t spatáln/ I gave him *a* rock, /ʔénca we sčáɬtx^Wtanš
t spatáln/ I'm giving him *a* rock, /ʔénca we ʔet čáɬtx^Wcečn načáws/ I gave you
a dollar, /céne we tet čéstox^Wc načáw q^Wót qáˑʔ/ he gave me *a* drink of water
(/načáw/ one), /céne we sčéstx^Wcaln t spatáln/ he's giving me *a* rock (the verb
for to give is suppletive in that one root, /čáɬ-/, is used when the subject is
first person singular *and* the object is third person singular, *and another* root,
/čés-/, when the subject is third person singular *and* the object is first person
singular; /čáɬ-/ *may have a* third person singular subject if the object is *also*
third person singular).

If the direct object is third person singular indefinite, i.e., <u>it</u>, it is
not stated, *and* forms such *as* the following *may* occur: /ʔet céxtox^Wtčn/ I showed
it to him, /stóntx^Wtanš/ I'm sending it to him, /ʔet k^Wóɬštox^Wtčn/ I gave it to
him, /ʔénca we sʔonátx^Wtanš/ I'm asking him for it, /ɬet čáɬtx^Wce/ he will give
it to you (sg.), /ʔet k̓^Wóptox^Wt/ he straightened it for him, /ʔet péttox^Wtčn/

I stuck it on him, /ʔet sáˑtxʷtm̩/ it was made for him.

In a few cases, alternate constructions were found, one using {-toxʷ-}, the other indicating the indirect object in a prepositional phrase following the verb. For example, /céne we ʔet tótxʷce/ or /céne we ʔet tóxʷ šʔáɬnawe/ he brought it to you (sg.) (/tó-/ bring is subclass VII).

{-tme-} is another positional the meaning of which is not clear. It was found with only half a dozen verbs, but it generally seemed to imply the transference of something from one person to another. The range of meaning of these verbs is strictly limited: ask for, give or hand to, and forbid. Only subclass V object suffixes occur after {-tme-}. It has only the one form. Examples of its use are /ʔet ʔonátmexʷ/ he asked for it, /sʔonátmeyn̩/ he's asking for it, /céne we ʔet čáɬtmexʷ nacáws/ he gave one dollar, /skʷə́ɬctmeyn̩/ he's giving it away, /ʔacx̣ax̣áʔtmexʷyanš/ they forbade it.

{-tače} upon is a positional, but functions somewhat differently from other positionals. It is not necessarily followed by an object suffix (which is subclass I when present), and the subject suffix or the following noun indicates the person or thing whose position is being given. For example, in /sx̣aséltačenanš/ it is raining upon me (from Boas), /-anš/ I is the subject in Upper Chehalis, but it is also I whose position is given. Similarly, /ʔet péntačečn̩/ it fell upon me (no object suffix is present), /kʷə́štačeneɬte/ darkness came upon them, /ƛa ʔacqə́lx̣tače t sšamálaxʷ/ light shall come upon the people (/sšamálaxʷ/ people is the subject of the Upper Chehalis sentence). All these examples are from Boas. I have only /céne we ʔacǩéptače/ he is covered and /tet ʔacqáx̣tače tet x̣ašáwmš | we čtšaláls to ʔaɬ tet ʔactàysq̓ax̣tače #/ the painted houses looked better than the unpainted ones (/tc ʔaɬ/ from; /x̣áš/ house is the subject of the sentence).

There is one other suffix which may be positional. This is /-ne-/. It only

occurred once, and I can derive no meaning for it from this one example. The one occurrence was /ʔénca we ʔet xʷáynexʷčn tet céne/ I lost him; the verb is derived from /xʷáy-/ be gone, lost.

Verbs in Upper Chehalis may be either transitive or intransitive. Transitive verbs are overtly marked by direct object suffixes. Special intransitive suffixes usually mark intransitive verbs, but sometimes intransitive verbs are unmarked (or marked by a zero suffix; zero is the interpretation that will be used here). These intransitive suffixes consist of three morphemes, one with two morphologically conditioned allomorphs (one for use in the completive aspect, one for use in the continuative aspect), one of which has three sub-allomorphs; one other of the intransitive morphemes has fourteen morphologically conditioned allomorphs, five of which have varying numbers of sub-allomorphs. Paradigmatically, these fourteen allomorphs appear as eighteen, due to the recurrence of zero in five positions in the paradigm (see below). These eighteen form nine pairs of suffixes. Each pair consists of one form used for the completive aspect and one for the continuative aspect. These nine pairs may serve to classify intransitive verbs into nine subclasses; I have been unable to find any lexical or semantic function distinguished by these nine pairs of suffixes (although a very few roots occur in identical form and with different meanings distinguished by these suffixes). Some of these allomorphs regularly follow certain lexical suffixes, but not exclusively, so that it is not usually possible to predict the subclass suffix of a given verb root or stem. These three intransitive morphemes, to be discussed in turn, are {-ɬ}, {-mɬ}, and {-é-}. Pronominal subject suffixes may (and in continuative forms, must) follow any type of transitivity marker (or absence thereof).

{-ɬ}. (This symbol has been arbitrarily chosen from its various allomorphs

merely because of its numerical preponderance.) There are vast differences in
the frequency of occurrence of the various pairs of intransitive suffix allomorphs
of {-ł}. Of 489 verbs for which both completive and continuative forms were found,
or which could be (tentatively) classified from one form, 313 belong to the first
two types listed below. These nine pairs of suffixes, with figures for the num-
ber of verbs found with each intransitive suffix allomorph, are:

	completive	continuative	number of members	
1.	-ł	-(V)w-	162	(V = vowel)
2.	-m	-met-	151	
3.	-∅	-V-	82	
4.	-∅	-n-	28	
5.	-∅	-t-	26	
6.	-∅	-∅-	25	
7.	-okʷn, -ekʷn	-kʷn-	12	
8.	-š	-élet-	4	
9.	-ẋ̣	-naẋ̣-	3	

Subclasses 3, 4, 5 and 6 are distinguishable only in continuative forms of the
verbs, the completive forms all having zero suffixes. In addition, 11 verbs were
found in both completive and continuative forms which could either be assigned
to none of these subclasses, or which appeared to cross classes—that is, had
a completive form assignable to one subclass and a continuative form assignable
to another. Several of these 11 verbs may reflect insufficient data or mistakes
in analysis (sometimes intransitive verbs are not easily distinguishable from
transitive verbs), but others are certainly independent of the above nine sub-
classes, and must be assigned to a tenth, irregular subclass.

A noun object following a verb form containing {-ł} must be preceded by a

preposition.

The largest subclass of intransitive verbs is marked by /-ł/ completive and /-(V)w-/ continuative. Nearly all members of this subclass have a simple CVC or CVCC root, or one of these reduplicated; only eight of 162 verbs are more complex, and these are either CVCVC or CVCV. The form of the suffix for completive aspect forms is consistently /-ł/ (e.g., /łánł/ button, /péłł/ thick, /mólokʷł/ drunk, /qéxʷł/ fat), but the form for continuative aspect forms has at least eight variations. These are /-w-/, /-aw-/, /-ew-/, /-ow-/, /-áw-/, /-éw-/, /-ów-/, /-é·w-/. /-á·w-/ and /-ó·w-/ might be expected too, but no examples of these possibilities occurred in my data.

The stressed vowel varieties occur only if a like vowel occurs as the last vowel in the completive form of a CVC or CVCVC root; the stress is shifted from the root to the suffix. The root vowel remains unchanged (except for loss of stress), except that /a/ is sometimes dropped from a root. Examples of the occurrence of the stressed suffix varieties are /kʷátł/ (completive) : /skʷatáwn/ (continuative) ford, wade; /łéšł/ : /słešéwn/ get cold; /x̣ʷóqʷł/ : /sx̣ʷoqʷówn/ gather; /sé·xʷł/ : /sexʷé·wn/ embarrassed. Instances of /a/ lost in the root of the continuative form are /kʷáx̣ʷł/ : /skʷx̣ʷáwn/ arrive; /yácł/ : /sycáwn/ turn back. But the stress is not always shifted; if not, /-ew-/ can only follow a CVC or CVCVC root (or one of these reduplicated) in which the last vowel is /e/, and /-aw-/ can only follow a root with /a/ as the last vowel, e.g., /cé·lł/ : /scé?lewn/ come up river and land; /qékʷqekʷł/ : /sqékʷqekʷewn/ limp; /náwł/ : /snáwawn/ big. If the root is CáCC, another /a/ is infixed between the two consonants when the /-aw-/ suffix is added, e.g., /yánx̣ł/ : /syánax̣awn/ come down river. /-ow-/ and /-w-/ occur in free variation after any type of root, e.g., /x̣ʷóqʷł/ : /sx̣ʷóqʷown/ get hungry; /swétwn/ boast; /yá·čał/ : /syá·čawn/ walk back and forth;

/téyc̓ł/ : /stéyc̓wn/ <u>travel together</u>; /mólokᵂł/ : /smólokᵂwn/ <u>drunk</u>; /sá?ł/ : /sá·wn/ <u>happen</u>; /c̓ółł/ : /sc̓ółwn/ <u>wake up</u>; /qə́łx̌ł/ : /sqə́łx̌ᵂown/ <u>angry</u>. /-ow-/ is particularly apt to occur after rounded velars or /p/.

It is possible that the shift of stress from a root to this continuative suffix is in itself morphemic. One pair of forms was found in which this was certainly the case, the stress shift indicating an intensive: /póc̓ł/ : /spócwn/ <u>flood</u>, /spocówn/ <u>flooding more</u>. But in all other instances of a shifted stress, these were the only forms found, i.e., no contrasting forms were found with the stress still on the root in the continuative aspect form. Perhaps the intensive morpheme is still there; perhaps these verbs only occur <u>with</u> it. Or they may be fossilized forms with this origin, but with the unshifted forms lost. With more evidence lacking, I choose to consider both stressed and unstressed forms of this suffix as unpredictable variants of the same allomorph (except insofar as the vowel, other than the freely varying /-ow-/ and /-w-/, is determined by the immediately preceding vowel of the root), except in the case of /spocówn/ where the intensive morpheme is known to be present.

The second-largest subclass of the morpheme {-ł} is marked by /-m/ completive and /-met-/ continuative. Many of the verbs of this subclass have lexical suffixes, and it includes inchoative verbs. The /ə́/ of roots with the phonemic shape CəC in this subclass undergoes a morphophonemic change to /a/ and is followed by a variant suffix /-ə́m/ in the completive aspect, e.g., /talə́m/ : /stə́lmetn/ <u>ring</u>, /lawə́m/ : /slə́wmetn/ <u>dig camas</u>. Otherwise, both the completive and continuative forms of the suffix are invariable: /manétm̩/ : /smanétmetn/ <u>kill</u>, /qanám̩/ : /sqanómetn/ <u>quarrel</u>, /téntenm/ : /sténtenmetn/ <u>make music</u> (reduplicated), /c̓x̣ᵂšə́nm/ : /sc̓x̣ᵂšə́nmetn/ <u>wash one's feet</u> (/c̓áx̣ᵂ-/ <u>wash</u>, /-šn/ <u>foot</u>), /qax̣áwm/ : /sqax̣áwmetn/ <u>increase</u> (/qə́x̣-/ <u>lots</u>, /-áw-/ <u>inchoative</u>). But a root, stem, or

lexical suffix may undergo a morphophonemic change before the continuative /-met-/. This change may be the addition of a vowel, stressed or unstressed, before /-met-/, e.g., /céqym/ : /scéqyemetn/ kick, /céqm/ : /sceqémetn/ scream, /panáqʷm/ : /spanaqʷámetn/ cross a prairie (/-áqʷ/ prairie), /ɫóʔm/ : /sɫomóˑmetn/ eat soup, /x̣áym/ : /sx̣ayémetn/ snarl, growl; or the stem or a lexical suffix may be reduced by the loss of a consonant or a vowel, e.g., /čawáˑlm/ : /sčawáˑmetn/ marry (man to woman; cf. /čówɫ/ wife), /qʷélm/ : /sqʷémetn/ bleed, /wánačanm/ : /swánačametn/ move hands and arms to talk, /páyenm/ : /spáynmetn/ foam, /walɔ́čm/ : /swɔ́lɔ̌metn/ glitter. Certain lexical suffixes regularly lose a vowel or consonant when /-met-/ is added: /pétkʷlesm/ : /spétkʷlsmetn/ fold over the head (/-les/ head), /qʷaɫnálm/ : /sqʷaɫnámetn/ have mouth open (/-ɫnal-/ mouth), /nax̣énowatm/ : /snax̣énowtmetn/ make a plan (/-enowat-/ mind).

Subclass 3 of the intransitive morpheme {-ɫ} is unmarked (or zero) in the completive, and the continuative aspect infixes a vowel, either /a/ or /e/, between the last two consonants of a stem (including lexical suffixes). Thus, the minimum possible stem or root in this subclass is CVCC. Eleven of the 79 verbs in this subclass have a CVCC root, six are CVCCC (none of which, as far as I can tell, is lexical suffix), and one is CCVCC. Four of this subclass involve compounds of a verb plus a noun or of a verb plus a verb: /sàˑʔcétpn/ build a fish-trap (/sáˑʔ/ make, /cétpn/ fish-trap), /sʔáʔšowɫ/ build a road (/šówɫ/ road), /sáˑʔx̣ʷéytn/ make a bet (/x̣ʷéytn/ bet, a verb), /talépetamn/ dress (/télp-/ put on, put against, /ʔetámn/ clothes).

The infixed vowel is usually /a/; /e/ occurs only eight times, four instances of which are in the compounds just mentioned. In one instance, the infixed /a/ receives the word stress (/šáwɫ/ : /sšawáln/ grow, raise). I find no pattern to indicate that the occurrence of /e/ is predictable. Examples of the use of

the infixed vowel are /ʔášq/ : /sʔášaqn/ <u>snow</u>, /x̣ʷák̉ʷtm/ : /sx̣ʷák̉ʷtamn/ <u>sweep</u>, /ččówɬ/ : /sččóweln/ <u>build a canoe</u> (cf. /wéɬ/ <u>canoe</u>), /néx̣ʷk̉č/ : /snéx̣ʷk̉ačn/ <u>become pregnant</u> (cf. /k̉ač/ <u>belly</u>), /q̉ʷatéčp/ : /sq̉ʷatéčapn/ <u>build a fire</u> (/q̉ʷáɬ-/ <u>burn</u> and /-čp/ <u>fire, firewood</u>), /čáwcɬstq/ : /sčáwcɬstaqn/ <u>put onto the fire</u> (/-stq/ <u>fire</u>), /ɬéq̉eyq/ : /sɬéq̉eyaqn/ <u>foot slips</u> (/-eyq/ <u>foot</u>).

Some stems and suffixes undergo morphophonemic changes in the continuative form of the verb when the vowel is infixed. If /ɬ/ occurs finally in a completive form, it becomes /l/ in the continuative, e.g., /sʔáʔšowɬ/ : /sʔáʔšoweln/ <u>build a road</u>, /ɬéx̣ɬnɬ/ : /sɬéx̣ɬnaln/ <u>burn the mouth</u> (/-ɬnɬ/ <u>mouth</u>) (see also /ččówɬ/ above). /táx̣ʷewe/ : /stáx̣ʷewayn/ <u>sell</u> would appear to be irregular, but not if the final /e/ of the completive form is considered morphophonemically changed from /y/ to /e/ after /w/; I consider this to be the case.

The fourth subclass of the {-ɬ} morpheme is again unmarked in the completive aspect, and adds /-n-/ before the continuative pronominal suffix. All the verbs in this subclass have stems or lexical suffixes ending in a vowel (or a vowel and a glottal stop); nine end in the suffix /-ača/ <u>hand</u>, six in the suffix /-če/ <u>water</u>, and two in the suffix /-će/ <u>body</u>. The subclass is small and simple, and no morphophonemic changes are involved. Examples of verbs in this subclass are /ʔésoʔ/ : /sʔésoʔnn/ <u>dive</u>, /x̣ʷóˑʔx̣ʷoʔ/ : /sx̣ʷóˑʔx̣ʷoʔnn/ <u>cough</u>, /ʔax̣éˑtpepa/ : /sʔax̣éˑtpepann/ <u>read</u> (/ʔéx̣-/ <u>see</u>, /pépa/ <u>paper, book, letter</u> from English <u>paper</u>; a verb-noun compound), /céɬk̉ʷlača/ : /scéɬk̉ʷlačann/ <u>lose hold</u>, /táwče/ : /stáwčenn/ <u>flood</u> (/táw-/ <u>big</u>), /tálče/ : /stálčenn/ <u>dress meat</u>.

The fifth subclass of the {-ɬ} morpheme is, as with the last two subclasses, unmarked in the completive aspect. /-t-/ is added to the stem in the continuative form before the pronominal suffix. About half of these verbs may be reflexive verbs, and, as such, would not belong in a subclass of intransitive verbs;

but this is not certain, and the class exists anyway, so they have been left here. Verbs with at least two lexical suffixes appear to belong here--those with /-qs/ nose (a common suffix, but I only have two verbs with it in both completive and continuative forms) and /-łnačš/ breath, lung air. As with subclass 4, this group is small and entails no morphophonemic changes. Examples from this subclass are /yós/ : /syóstn/ work, /łaxás/ : /słaxástn/ scream, /k̓ʷə́·čč/ : /sk̓ʷə́·ččtn/ listen (reflexive?), /xʷə́lč/ : /sxʷə́lčtn/ go downstream (reflexive?), /ʔáwqs/ : /sʔáwqstn/ sneeze, /cə́·płnačš/ : /scə́·płnačštn/ boast.

The sixth subclass of the {-ł} morpheme is marked by a zero allomorph in both the completive and continuative aspects. The two are distinguished only by the continuative prefix /s-/ and the subject suffix. Roots and stems are of various types, and no morphophonemic changes were found. A few verbs with lexical suffixes occur in this class, especially /-axʷ/ house. Two verb-noun compounds also belong here. Examples of verbs in this subclass are /łóp/ : /słópn/ faint, /łačáxʷ/ : /słačáxʷn/ get home, /q̓ʷácyaq̓als/ : /sq̓ʷácyaq̓alsn/ upside down (/-als/ head), /sá·ʔq̓laxanʔ/ : /sá·ʔq̓laxanʔn/ build a fence (/sá·ʔ/ make, /q̓láxanʔ/ fence). Two of the most common verbs in the language belong to this class: /wáqs/ : /swáqsn/ go, /čés/ : /sčésn/ come.

The seventh subclass of {-ł} contains only a dozen verbs, but they are quite distinct from other verbs. The completive forms are marked by /-okʷn/ or /-ekʷn/, and the continuative forms by a reduction of the same suffix to /-kʷn-/--the lost vowel might be considered a minus-feature. Some examples of verbs in this subclass are /yópokʷn/ : /syópokʷnn/ battle, /ʔáyenokʷn/ : /sʔáynkʷnn/ take revenge, /sáwlekʷn/ : /sáwlkʷnn/ ask about. Another verb with this suffix occurs with the stress on the suffix (/qalékʷn/ : /sqalékʷnn/ fight), but since the stress on the vowel of the suffix prevents the reduction common to verbs in subclass 7,

this verb has been assigned to subclass 6, where both completive and continuative stems are the same.

The eighth subclass of the {-ł} morpheme is very small--only four verbs have been assigned to it. There is a total change of suffix from completive to continuative. The completive suffix is /-š/, and the continuative is /-élet/. A shift of word-stress is involved in each case from the root to the suffix in the continuative form. These four verbs are /léxʷš/ : /slexʷéletn/ descend, /séq̓ʷš/ : /seq̓ʷéletn/ turn off a road, /tášš/ : /stašéletn/ follow, chase, /tók̓ʷlš/ : /stok̓ʷléletn/ dream. The verb root in each case is a simple CVC or CVCC.

The ninth subclass of {-ł} is even smaller than the eighth. Only three verbs are involved--and one of these is derived from another, so only two roots are involved. Again there is a marked change from completive to continuative. The completive forms end in /-x̣/. The continuative forms of these verbs end in /-nax̣-/, and the /-na-/ portion may be an infix. The three verbs of this subclass are /wé˙x̣/ : /swé˙nax̣n/ have, live, be, /cótx̣/ : /scótnax̣n/ say, /có˙tx̣/ : /scó˙tnax̣n/ say (derived from /cótx̣/). /wé˙x̣/ is derived from the copulative verb /we/ be, to which a morpheme of length indicating perfective has been added; this verb (in the derived form) occurs very frequently.

In addition to the nine subclasses of the morpheme {-ł}, each of which has three or more members, there are several verbs which cannot be assigned to any subclass. There are 15 of these. Two seem to be subclass 1 in their completive forms, but subclass 6 in their continuative forms: /čámł/ : /sčámn/ suckle, /x̣ə́k̓ʷł/ : /sx̣ə́k̓ʷn/ stick. These, and some of the other irregular verbs, may belong to one of the nine subclasses, but I cannot assign them on the basis of my data. Some verbs are certainly irregular. These are /šáwoye/ : /sšáwawn/ play, /tawélš/ : /stawélals/ or /stawélatwn/ sit down, /tólł/ : /stówn/ come,

arrive, /wé·nsx̣/ : /swéntn/ live, reside, /x̣asél/ : /sx̣asé·ln/ rain (possibly

subclass 6; the length phoneme may be the emphatic or intensive morpheme), /yánx̣/ :

/syánax̣awn/ come down to a river (possibly subclass 1), /téqmł/ : /stéqᵂown/ close

(possibly subclass 1, and the completive form has one of the other intransitive

morphemes, {-mł}), /s?ówleln/ : /s?ówłnn/ cook food (this may be incorrectly

recorded; the continuative form may properly have /l/ following the /w/, and the

verb might then fit subclass 6, although reduction of a stem does not otherwise

occur in that subclass), /có?stɑmešs/ : /scó?stɑmeštn/ look out for oneself (pos-

sibly reflexive; the final fricatives may be incorrectly recorded because of the

difficulty the informant had with his teeth when pronouncing sibilants).

{-mł} is a stable and common morpheme (found on about 100 verbs), with two

allomorphs, one used with the completive aspect (/-mł/), and the other with the

continuative aspect (/-mal-/). The continuative aspect allomorph has three vari-

ants, two of which were found with only one or two verbs each. These were /sámł/ :

/samáln/ make, /x̣ék̓ᵂmł/ : /sx̣ek̓ᵂmáln/ scratch, and /?étčmł/ : /s?étčmeln/ go after

firewood. Two other verbs were found in which the stem was reduced in the con-

tinuative form (making a fourth variant--that of reduction--of /-mal-/):

/?éx̣takᵂemł/ : /s?éx̣takᵂmaln/ look for lice, and /tawáqsemł/ : /stawáqsmaln/ stab.

Examples of {-mł} in its usual forms are /łónmł/ : /słónmaln/ push, /čáywelmł/ :

/sčáywelmaln/ waylay, /qᵂłšémł/ : /sqᵂłšémaln/ give a present, /póxᵂeaq̓emł/ :

/spóxᵂeaq̓emaln/ blow a horn (/-eaq̓e-/ horn), /táčmł/ : /stáčmaln/ sew.

Although this morpheme is here classified as an intransitive suffix, it is

in reality only formally intransitive, i.e., no transitive pronominal suffix is

incorporated in the verb form itself. The verb form with the {-mł} morpheme may,

in fact, be followed by a noun object, either directly or following a preposition,

e.g., /?et čóčmł tat šáwoyesyamš #/ they won their game (/-syamš/ their), /?et

čə́čm̓ł ʔaɬ tet šáwoyeʔ #/ he won the game (/ʔaɬ/ on, at, in, to); /ʔet ʔə́xm̓łčn ɬ t swáˑwaʔ #/ I saw a cougar; /ʔet k̓áˑm̓ł t sx̌ʷás #/ he looked for blackberries; /cə́ne we ʔet ləqm̓ł t máq̓ɬ t x̌ʷeyóyqs #/ he bought a used car (/ləq-/ buy, /máq̓-/ old, used--a verb, /x̌ʷeyóyqs/ automobile). If no noun object actually follows, one is at least implied, e.g., /ʔet q̓ʷə́x̌ʷc/ he cut me, /ʔet q̓ʷə́x̌ʷm̓ł/ he cut something. Hence, a better term for this morpheme would be implied transitive. It contrasts with one or another allomorph of {-ł}, as in the following examples: /ʔet q̓ʷə́tɬ/ it burned, /ʔet q̓ʷə́tm̓łčn/ I burned something; /ʔet čə́cɬ/ he got in, went in, /ʔet čə́cm̓ł/ he put something in (with an apparent change of meaning in English necessitated by the change from intransitive to transitive in English); /ʔet x̌ék̓ʷm/ he scratched, /sx̌ek̓ʷémetn/ he's scratching, /ʔet nə́mx̌ék̓ʷm̓ł/ he scratched (something), /ʔet x̌ék̓ʷc/ he scratched me (/-c/ me), /ʔet x̌ék̓ʷn tat mə́qsns/ he scratched his nose (/-n/ him, it, /mə́qsn/ nose, /-s/ his); /ʔet wə́šm̓ł ɬ tat k̓óšk̓š/ and /ʔet wašə́n tat k̓óšk̓š/ both he pulled a stick (completive) (/ɬ/ on, at, in, to, /k̓óšk̓š/ stick, tree, wood, /-ə́n/ him, it), /swə́šmaln ɬ t k̓óšk̓š/ and /swə́štn tat k̓óšk̓š/ both he's pulling a stick (continuative).

A completive form of either {-ł} or {-m̓ł} may also be used on a verb with the continuative aspect prefix /s-/ to create a form comparable to an infinitive in English. One would not ordinarily expect both these affixes on one verb root, since they represent different and contrasting aspects, but the combination does occur with this neutralizing, supra-aspect result. Examples are /stáčm̓ł/ to sew, /swə́šm̓ł/ to pull, /sx̌ə́wq̓m/ to speak, talk ({-ł} subclass 2), /spók̓ʷeyq/ to float ({-ł} subclass 3), /sʔéln/ to sing ({-ł} subclass 3), /stóˑlstok̓ʷn/ to hear ({-ł} subclass 7), /sk̓ə́qɬnac̓š/ to breathe ({-ł} subclass 5).

The classification of {-ə́-} as an intransitive morpheme is questionable, but no other function has been found to explain this affix. Eleven verbs were

found in which this morpheme occurred, and all eleven are derived from one root type: Cə́CC. In each case, the completive aspect was formed by infixing /ə́/ between the last two consonants of the root, and the original root vowel changed to /a/ with the transference of stress to the infixed vowel: /čalə́p/ whirl, /qalə́kʷ/ rapping noise. No special form occurred in the continuative aspect; all continuatives were formed with members of the {-ł} intransitive morpheme (either /-(V)w-/ or /-met-/): /scə́lpown/ whirling, /sqə́lkʷmetn/ rapping noise. Indeed, five of the eleven of these verbs also occurred in the completive aspect with both the {-ł} and the {-ə́-} morphemes, e.g., /qʷalə́x̣ʷ/ and /qʷə́lx̣ʷł/ go down to a river, /x̣awə́q̓/ and /x̣ə́wq̓m/ speak; in each case, differences in meaning were difficult or impossible to perceive. The extreme restriction of this infix to a particular root shape plus its very close relationship to the {-ł} morpheme lead one to suspect that the two are (in the completive aspect) free variants. I feel certain that this is not so, but I cannot prove either that it is or that it is not. Examples of verbs with {-ə́-} compared with the same verbs with {-ł} in context are: /céne we tet x̣ə́wq̓m/ he talked, /q̓ʷalə́nč tám ten x̣awə́q̓ #/ write down what I say; /ʔet ƛ̓ə́lqʷm tat sq̓ʷə́twn/ the fire crackled, /sƛ̓ə́lqʷmetn/ it's crackling, popping, /ʔet txʷƛ̓alə́qʷ/ it popped; /ʔet ƛ̓ə́sqʷł tet tə́mš taš ʔáčč tet x̣áš #/ dust flew around the room, /sƛ̓ə́sqʷown/ there's dust flying, /x̣ʷlá· sƛ̓asə́qʷ ł tet tə́mš #/ a little dust is flying around, /swenn sƛ̓asə́qʷ/ it's getting dusty.

Transitive verbs are marked by the addition of a pronominal object suffix to a verb root or stem. These object suffixes are then followed by subject suffixes. The roots and stems may be, and very often are, the same for transitive and intransitive verbs--the suffixes provide the distinction. Three persons and two numbers are indicated by object (and subject) suffixes: first, second and third persons, singular and plural. Reciprocal, reflexive, and a special type

of third person (obviative) suffixes are included with object suffixes. Non-personal and inanimate objects are indicated by a regular third person suffix (singular or plural, as appropriate); a noun indicating the object concerned then follows the total verb form, and is not preceded by a preposition, as is a noun object following a verb with an intransitive suffix.

There are at least eight sets of pronominal object suffixes; each set has different forms for use with completive and continuative aspects. These eight sets may serve to classify transitive verbs into subclasses. There are almost no roots which occur in two subclasses; those few that do have different meanings in the two subclasses, but there are so few that no functional or semantic distinction has been found between different sets of suffixes. Some of these suffixes occur with very few verbs: two subclasses contain only one verb each (for one of which I do not even have a complete conjugation), another has only two verbs, and another five. But they do contrast with the other sets, and must therefore be considered separate subclasses. The accompanying table gives the forms of these eight sets of pronominal object suffixes.

Spaces are left blank on the table for forms that were not elicited. Some would be difficult to elicit because of unnatural forms that might result (as in subclass IV, where continuative forms of the one member would not make much sense). Other forms were not obtained because of substitutions used for the expected forms; this is particularly true of third person plural forms. More often than not, the informant would use the third person singular object suffix, and the third person plural pronoun /cneáwmš/ as direct object after the verb to indicate a third person plural object. This always happened in the continuative aspect, so I was never able to elicit any expected suffixes. However, Boas lists three. /-t-yawmš/, /-l-yawmš/, and /-tw-yawmš/. These would correspond

COMPLETIVE	I	II	III	IV	V	VI	VII	VIII
1st sg.	-c	-mc	-cmš	-(m)smš	-mš	-mš	-tmš	-stmš
2nd sg.	-ce	-mece	-cme	-(m)sme	-me	-me	-tome	-stome
3rd sg.	-n	-mn/-men-	-c	-(m)s	-xʷ	-ł	-xʷ	-(e)xʷ
Obviative	-twale	-mswale	-cwale	?	-wale	-wale	-twale	-stwale
1st/2nd pl.	-tolł	-mesolł	-cmolł	?	-molł	-molł	-tomolł	-stomolł
3rd pl.	-nSyamš	-mnSyamš	-cSyamš	?	-(e)xʷSyamš	-łSyamš	-xʷSyamš	-(e)xʷSyamš
Reciprocal	-towš	-msowš	-cowš	?	-owš	-wš	-towš	-stowš
Reflexive	-c- / -č-	-mec- / -meč-	-cmeč-	?	?	?	?	-stomeč-
Passive	-tm	-mesm	?	?	-ym	-lm/-łstm	-tm	?
CONTINUATIVE								
1st sg.	-cal-	-mecal-	-cmal-	?	-mal-	-mal-	-tomal-	-stomal-
2nd sg.	-ce-	-mece-	-cme-	?	-me-	-me-	-tome-	-stome-
3rd sg.	-t-	-mes-	-tas-	?	-y-	-l-	-tw-/-to-	-stw-/-sto-
Obviative	-twal-	-mswal-	-cwal-	?	-wal-	-wal-	-twal-	-stwal-
1st/2nd pl.	-tol-	-mesol-	-cmol-	?	-mol-	-mol-	-tomol-	-stomol-
3rd pl.	?	?	?	?	?	?	?	?
Reciprocal	-twal-	-mswal-	-cwal-	?	-wal-	-wal-	-twal-	-stwal-
Reflexive	-čt-	-mečt-	-cmečt-	?	?	?	?	-stomečt-
Passive	-sč	-mesč	?	?	?	?	-tosč	?

TABLE I. Pronominal Object Suffixes

S = subject suffix

to subclasses I, VI, and VIII respectively in my classification. These may or may not be acceptable forms; Boas also gives /-n-awmš/ and /-ł-awmš/ (my subclasses I and VI) for completive forms, whereas I always got /-n-yamš/ and /-ł-yamš/ in these two cases. Apparently the third person plural is not always or necessarily formally distinguished, so there may be some confusion and variation by different speakers.

In addition to this non-use of third person plural object forms, certain other combinations of object plus subject suffixes were avoided by my informant. He nearly always avoided using a second person singular or plural object suffix with a first person plural subject suffix (/-čł/ and /-stawt/), and sometimes he avoided first person singular or plural object suffixes plus second person plural subject suffixes (/-čalp/ and /-alp/). The substitute construction for these was a third person singular object suffix, and the appropriate personal pronoun as an object of the verb, e.g., /ʔeném we ʔet ƛá·lexʷčł tet néwe/ we looked for you(sg.) (/néwe/ you, sg.; subclass VIII), /tet ʔelápa we ʔet ƛá·lstamolłčalp/ or /tet ʔelápa we ʔet ƛá·lexʷčalp tet ʔeném/ you (pl.) looked for us (/ʔeném/ we).

The third person plural object suffix is a discontinuous morpheme. It consists of a third person singular object suffix followed by the subject suffix, and finally a plural suffix. On the chart, the subject is marked by S between the two parts of the object suffix. E.g., /tet ławáłčłyamš/ we left them (subclass VI), /néwe we ʔacyóxʷnčyamš/ you (sg.) know them (subclass I).

In subclasses VII and VIII, the two third person singular continuative forms are morphemically conditioned allomorphs. In subclass VII, /-tw-/ occurs before first person singular and third person singular subject suffixes, and /-to-/ occurs before second person singular and plural and first person plural subject suffixes.

In subclass VIII, /-stw-/ occurs before first person singular, second person plural and third person singular and plural suffixes; /-sto-/ occurs before second person singular and first person plural subject suffixes. Examples of the use of the allomorphs are /ʔénca we smáytwanš tet céne/ <u>I'm taking him in</u> (/máy-/ <u>take in</u>, subclass VII), /céne we smáytwn tet céne/ <u>he's taking him in</u>, /néwe we smáytoš tet céne/ <u>you (sg.) are taking him in</u>, /tet ʔelápa we smáytoalp tet céne/ <u>you (pl.) are taking him in</u>, /ʔeném we smáytostawt tet céne/ <u>we are taking him in</u>; /ʔénca we sk̓á·lstwanš tet cneáwmš/ <u>I'm looking for them</u> (/k̓á·l-/ <u>look for</u>, subclass VIII), /tet céne we sk̓á·lstwn tet cneáwmš/ <u>he's looking for them</u>, /tet ʔelápa we sk̓á·lstwalp tet céne/ <u>you (pl.) are looking for him</u>, /tet cneáwmš we sk̓á·lstweɬt tet céne/ <u>they are looking for him</u>, /néwe we sk̓á·lstoš tet cneáwmš/ <u>you (sg.) are looking for them</u>, /ʔeném we sk̓á·lstostawt tet céne/ <u>we are looking for him</u>.

The alternate third person singular completive forms in subclass II are morphemically conditioned. The alternate /-men-/ was found only preceding an imperative suffix, as in /čésmenaʔ/ <u>come after him!</u> (sg.) and /čə́cčmenaʔ/ <u>ride it!</u> (sg.). Otherwise /-mn/ is used.

There is considerable overlapping among the classes, but third person singular forms (particularly in the continuative aspect) necessitate the separation of otherwise similar or identical sets. One might divide these eight sets into two broad classes, a T-group and an M-group, according to the consonant phoneme which characterizes first and second person forms (singular and plural, completive and continuative). The T-group consists of subclass suffixes I and II; the rest (III through VIII) belong to the M-group. Subclasses V and VI are identical except for the third person forms, singular and plural, completive and continuative. Excluding third person forms, subclasses III, IV, VII, and VIII differ

from subclass V by the addition of /c/ (or /ts/), /s/ (or /ms/), /t(o)/, and

/st(o)/ respectively to the forms found in subclass V; third person completive

forms (singular and plural) in subclasses V, VII, and VIII are all identical,

/-(e)x^W/. Subclass II differs from subclass I by the addition of /m/ or /me/

to the form found in subclass I, or by the replacement of any /t/ with /ms/ or

/mes/. Second person singular forms are always the same in both completive and

continuative aspect forms within each subclass. First and second person plural

forms are identical within each subclass and aspect.

Parts of these many suffixes are shared across all eight subclasses:

	completive	continuative	both
1st sg.	-c or -mš	-al-	
2nd sg.	-e	-e-	e
Obviative	-wale	-wal-	wal
1st and 2nd pl.	-olɨ	-ol-	ol
Reciprocal	-wš	-wal-	w
Reflexive		-č	

But third person forms are quite different in each subclass and have no element

in common (unless several share zero).

The obviative[1] suffix is a special type of third person singular object suf-

fix, and has several functions. Basically, it is a means of distinguishing a

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[1] The term _obviative_, although not altogether appropriate, was selected to
conform to other writers on Salish. Upper Chehalis {-wale} is probably analagous
to, and cognate with, Tillamook [-gel], which Edel finally decides to call obvia-
tive; its function seems to be somewhat like Upper Chehalis {-wale}. (May M.
Edel, "The Tillamook Language," _IJAL_, VIII (1939), 103-110.) Reichard also speaks
of "a sort of obviative" for Tillamook and Upper Chehalis, but seems to have
selected the wrong suffix in both languages. The Upper Chehalis /tx^W(t)/ to
which she refers is a positional or referential suffix, as she further suggests.
(Gladys A. Reichard, "A Comparison of Five Salish Languages," _IJAL_, XXIV (1958),
293-300, XXV (1959), 8-15, 90-96, 154-167, 239-253, XXVI (1960), 50-61.)

first from a second third person, e.g., /ʔet čǒmtwale/ he sneaked up on him (sub-class I), /céne we tet qténwale/ he met him (subclass V). In addition to this function, it is used to denote a human object when the subject of the verb is non-human (as a dog), e.g., /ʔet x̣áytwale tat qáx̣aʔ/ the dog growled at him (sub-class V), /ʔet q̓w̓éłtwale/ it made him itch (subclass I), /ʔacqénmswale tat qáx̣aʔ/ the dog wants him (subclass II), /sx̌áˑlstwaln tat qáx̣aʔ/ the dog is looking for him (subclass VIII), or indefinite human, e.g., /ʔacwéˑx̣ cotčn wáˑ t yáx̌twaln/ somebody took him home (subclass VII), /ʔacwéˑx̣ t wáˑ t sq̓éwcwale/ somebody called him (subclass III). It is also used when the subject and object of an antecedent clause become the object and subject respectively of a subsequent clause; but if the object in the subsequent clause refers to a third party, not previously mentioned (and **not** the subject of the antecedent clause), a regular third person object suffix is used, not the obviative. An example of this is /tat sʔékw̓taqtwaln ł tat sq̓estéx̣w̓ns/ he's stealing his kill from him (/téx̣w-/ kill, /-ns/ his); here /-twal/ refers to the **subject** of the preceding sentence (wren), and the subject of this sentence was the object of the preceding sentence (otter). Boas gives examples which show the distinctions more clearly: /ʔet táˑšes n yocáˑwalenn/ he chased it, then it killed him, /ʔet táˑšes n yocáˑyn/ he chased it, then he killed it; /tet q̓eyóˑc | hóy n ta ʔéx̣twale/ he called her and she saw the one who called, /tet q̓eyóˑc | hóy n ta ʔéx̣tn/ he called her and she saw it.

As previously mentioned, verbs are more numerous in some of the eight transitive subclasses than in others. Subclass I is by far the largest, but can be divided into two groups. Of 434 verbs, 211 belong to one subclass I group and 107 belong to the other, for a total of 318, or three-fourths of all transitive verbs. The next largest subclass is VIII with 43 verbs (including 8 causatives), followed closely by II with 33. Then come subclasses V with 15, VII with 7, III

and VI with 2 each, and IV with 1. One or two verbs occur in subclass V in the completive aspect, but in subclass VI in the continuative aspect: /ʔet ʔasóxʷ š?álcne/ he took·it to him, /s?asóln š?álcne/ he's taking it to him. One verb is in subclass VIII in the completive aspect, but in subclass VII in the continuative aspect: /ʔénca we ʔet nàm?élnxʷčn tet céne/ I fed him (/ʔéln/ eat, /nám-/ finished), /ʔet nàm?élnstomečn/ I fed you (sg.), /nə́we we s?élntomalš/ you (sg.) are feeding me. 15 verbs could not be assigned to a specific subclass; 13 of them were obtained only in third person singular completive forms, so it was impossible to tell if they belong to subclass V, VII, or VIII. One occurred only in first person plural forms, and could belong to either subclass V or VI. The other verb simply could not be assigned to a subclass.

These figures do not reflect frequency of occurrence, however. The lone verb in subclass IV is /qanóm-/ quarrel. One subclass VI verb is /ɬawá-/ leave. Neither subclass III verb is uncommon: /qʷán-/ fear, /q̓éw-/ call, name, invite. In subclass VII are /máy-/ take in, /yáč-/ take back, /yáx̌-/ take home. Six verbs in subclass V follow a suffix of unknown function, /-tme-/ (probably a positional; only subclass V suffixes were found to follow it): /čáɬtme-/ give, hand to, /x̣ax̣á?tme-/ forbid. Similarly, /-élow-/ and /-m-/ (both positionals) are always followed by subclass VIII suffixes (involving 15 verbs): /ɬaq̓ʷélow-/ break in two, /ƛ̓mx̣élow-/ pierce, /ƛ̓élqʷm-/ crackle, pop, /q̓ə́tx̣m-/ bump.

Some lexical and positional suffixes are always followed by a certain subclass of pronominal object suffixes, so the addition of one of these to a verb root may change the verb from one subclass to another. For example, the root /pát-/ extend is in subclass I, as in /ʔet pátn/ he stuck it out; when /-tme-/ is added to the root, it is in subclass V, as in /ʔet páttmexʷ/ he handed it to him; with /-t(o)xʷ-/ to it is subclass I, as in /spáttxʷtanš/ I'm handing it to

him; with the lexical suffix /-yq̓-/ foot it is subclass II, as in /ʔet p̓átyq̓mn/ he reached it with his foot. Similarly, /ʔéɬn/ eat is subclass VII: /néwe we sʔéɬntoš tet céne/ you (sg.) are feeding him; with the lexical suffix /-če/ body it is subclass I, as in /sʔéɬcetn tet céne/ he's eating him.

There are also a very few verb roots in two subclasses, with different meanings in each case, in which the only difference (if any) is a shift of stress to an (added) vowel or lengthening of the vowel. Examples of these are /céne we sšáwmecaln/ he's laughing at me (subclass II), /sšáwstwanš/ I'm playing with him (subclass VIII) (/šáw-/ play); /ʔackʷanán/ he's holding it (subclass I), /ʔet kʷónaxʷ/ he caught him (subclass V); /ʔet qʷanéˑn/ he scared him (subclass I), /ʔacqʷánc/ he's afraid of him (subclass III); /ʔet nàmɬaq̓ʷén/ she scolded him (subclass I), /stéq̓ʷstwanš/ I'm speaking to him (subclass VIII) (/ɬéq̓ʷ-/ speak).

Reference has been made to the possibility of subdividing subclass I into two groups. These subdivisions are almost morphophonemic, and consist of one group in which the pronominal object suffixes are added directly to the stem in both aspectual forms, and another group in which a vowel is added to the root before continuative aspect object suffixes are added. Except for a dozen roots and for roots with lexical suffixes, the phonemic shape of a root determines the group into which a verb will go. Roots with /ə/ as the vowel (CəC- or CəCC-), roots of the shape CVCV̆-, and reduplicated roots with /ə/ as root vowel constitute nearly the entire group of subclass I verbs which do not add a vowel in the continuative aspect. E.g., /ʔet ɬapén/ he put it out, he killed it, /sɬéptn/ he's putting it out, he's killing it; /ʔet péxʷqn/ he burst it, /spéxʷqtn/ he's bursting it; /ʔet q̓ʷalén/ he cooked it, /sq̓ʷalétn/ he's cooking it; /ʔet ʔéx̣ax̣n/ he examined it, /sʔéx̣x̣tn/ he's examining it (/ʔéx̣-/ see). But also in this group are at least one verb with a lexical suffix and at least five CVC or CVCC roots

with /ó/ as the root vowel (most roots with /ó/ add a vowel in the continuative aspect), e.g., /sqá˙maɬnačtn/ he's working his mouth to swallow (/-ɬna-/ mouth); /ʔet ʔómn/ he gave him food, /sʔómtn/ he's giving him food; /ʔet cónn/ he told him, /scóntn/ he's telling him.

Verbs in all other shapes add a vowel in the continuative aspect. However, there are also eight CáCC- or CáCCC- roots which do this; six of these may have positional suffixes on them as the last consonant or two (/-š-/ for or /-t(o)xʷ-/ to), but their meanings do not make this clear, if it is the case. Examples of some of these eight verbs are /ʔet ʔéxnn/ he watched him, /sʔéxnetn/ he's watching him; /ʔet téq̓ʷčn/ he shot him (with a gun), /stéq̓ʷčetn/ he's shooting him; /sɬéčtxʷetn/ he's attacking him; /ʔet némšn/ he buried him, /snémšetn/ he's burying him; /ʔet péxʷšn/ he told him a lie, /spéxʷšetn/ he's telling him a lie. If positional suffixes are involved, these verbs can be classed with roots with lexical suffixes, nearly all of which (the exception mentioned above) add a vowel in the continuative aspect, e.g., /ʔet péqʷstaqn/ he poured it on the fire, /spéqʷstaqetn/ he's pouring it on the fire (/péqʷ-/ spill, /-stq/ fire); /ʔet sačáytmašn/ he plowed it, /sačáytmašetn/ he's plowing it (/séč-/ split, /témš/ earth); /ʔet só˙pqšnčn/ I whistled to him, /só˙pqšetanš/ I'm whistling to him.

In the second group of subclass I verbs, the vowel which is added to a root in the continuative aspect is either /e/ or /a/, unstressed. The choice is not predictable, although /a/ usually follows CáC roots, /e/ all others. Examples with /a/ are /ʔet wáq̓n/ he opened it, /swáq̓atn/ he's opening it; /ʔet kʷá˙mn/ he warmed it, /skʷá˙matn/ he's warming it; /ʔet wáxʷwaxʷn/ he made horizontal stripes on it, /swáxʷwaxʷatn/ he's making horizontal stripes on it; but /ʔet ʔékʷn/ he went after him, /sʔékʷatn/ he's going after him. Examples with /e/ are /ʔet q̓ʷéčn/ he smashed it, /sq̓ʷéčetn/ he's smashing it; /ʔet čé˙wn/ he thanked

him, /scé·wetn̩/ he's thanking him; /ʔet ɬónn̩/ he pushed him, /sɬónetn̩/ he's push-
ing him; /ʔet čáčn̩/ he watched him, /sčáčetn̩/ he's watching him; /ʔet čawáln̩/
he married her, /sčawáletn̩/ he's marrying her; see also the examples with posi-
tional and lexical suffixes above.

There are also a few verbs in subclass I which undergo a reduction of stem
before continuative aspect suffixes. Verbs with the lexical suffix /-ɬnal-/
tongue drop the /l/: /ʔet čáčsnaln̩/ he smothered him, /sčáčsnatn̩/ he's smother-
ing him. An /n/ which is added to certain intransitive continuative forms and
transitive completive forms is dropped in transitive continuative forms, e.g.,
/ʔet ʔé·ɫonn̩/ he bathed him, /sʔé·ɫotn̩/ he's bathing him; /ʔet ʔéɫcenn̩/ he ate
him, /sʔéɫcetn̩/ he's eating him (/ʔéɫn̩/ eat, /-če/ body); /ʔet ʔə́·x̣nn̩/ he looked
at him, /sʔə́·x̣tn̩/ he's looking at him.

First and third person singular completive object suffixes /-c/ and /-n/
in subclass I both have stressed alternants; these alternants are morphophonemi-
cally determined. The stressed alternants are used when the root (without affixes)
has a CəC shape. When the alternant first and third singular completive object
suffixes are added to such a root, the root vowel, being unstressed (stress having
shifted to the suffix), changes to /a/. This phenomenon is common, as CəC roots
are common, as in /céne we ʔet ʔax̣ə́c/ he saw me, /ʔet ʔax̣ə́n/ he saw him, but /céne
we ʔet ʔə́x̣ce/ he saw you (sg.); /ʔənca we ʔet sapə́nčn̩/ I hit him (as with a club),
but /ʔənca we ʔet sə́pcečn̩/ I hit you (sg.).

However, /-c/ and /-ə́c/ did contrast one time. This happened with the verb
/ɫə́k̓ʷ-/ bite: /céne we ʔet ɫak̓ʷə́c/ he bit me, but /ʔet ɫə́k̓ʷc tat qáx̣aʔ/ the dog
bites me. My informant said that the difference was in tense--the example with
/-ə́c/ is past time, that with /-c/ present. But this is the only time this ever
occurred, and I never found another example of tense being indicated this way;

nor did I ever find another example of a contrast between the unstressed and the stressed varieties of /-c/ or /-n̩/. It may be that tense <u>can</u> be indicated in this way, but would be limited to verbs with first and third person singular objects. If it is an indication of tense, it is a distinction that is rarely made this way. At least two other explanations are possible, but they are no more satisfactory than an explanation as tense, and on the same grounds: (1) the stressed and unstressed varieties are infrequent (even rare) free alternants; (2) the type of subject indicates the form of this suffix, i.e., a human subject is followed by the stressed variant, a non-human subject is followed by the unstressed variant (except, again, that this is the only time such a distinction was ever made this way). I consider the reason for this contrast unknown.

There are three allomorphs of the third person singular completive object suffix in subclass VIII: /-x̣ʷ/, /-ex̣ʷ/, and /-ax̣ʷ/. These allomorphs are unpredictable, but certain ones regularly occur after certain other suffixes, and are to this extent morphemically conditioned. For example, /-ex̣ʷ/ always occurs after the positional suffix /-m-/, as in /ʔet ʔócx̣ʷmex̣ʷ/ <u>he stood it up</u>, /sʔócx̣ʷmstwn̩/ <u>he's standing it up</u>, /ʔet łə́x̣ʷmex̣ʷ/ <u>he kidnapped him</u>, /słə́x̣ʷmstwn̩/ <u>he's kidnapping him</u>; and after the inchoative suffix /-áwm/, as in /ʔet qax̣áwmex̣ʷ/ <u>he increased it</u>, /sqax̣áwmstwn̩/ <u>he's increasing it</u> (/qə́x̣-/ <u>many</u>), /ʔet x̣ʷalaʔáwmex̣ʷ/ <u>he got it hot</u>, /sx̣ʷalaʔáwmstwn̩/ <u>he's getting it hot</u> (/x̣ʷalá·ʔ/ <u>hot</u>). /-ax̣ʷ/ always occurs after the positional suffix /-ə́low-/, as in /ʔet kʷałə́lowax̣ʷ/ <u>he shared it</u>, /skʷałə́lowstwn̩/ <u>he's sharing it</u>, /ʔet x̣mx̣ə́lowax̣ʷ/ <u>he pierced it</u>, /sx̣mx̣ə́lowstwn̩/ <u>he's piercing it</u>. But there are other instances of /-ex̣ʷ/ in which no preceding suffix is present or identifiable, as in /ʔet tólex̣ʷ/ <u>he heard him</u>, /stólstwn̩/ <u>he's hearing him</u>, /ʔet potálex̣ʷ/ <u>he watched him</u>, /spotálstwn̩/ <u>he's watching him</u>.

It will be impractical to try to give examples of all possible combinations

of subject and object suffixes, since there are 232 such combinations possible, excluding reciprocal and reflexive suffixes. So what follows, as examples of the combinations of object and subject suffixes, will be only a small selection of what is possible. Given here are complete conjugations of verbs from two object subclasses, usually with a third person singular subject (chosen because third person subjects, unlike first and second persons, can have objects in any person, even though the third person singular completive subject is zero), and more or less random examples from the other six subclasses to indicate the basis of setting up eight separate classes.

Subclass II, stative aspect (suffixes are the same as for completive aspect): /ʔacqénmc/ he wants me, /ʔacqénmece/ he wants you (sg.), /ʔacqénmn tet céne/ he wants him, /ʔacqénmswale tat qáxaʔ/ the dog wants him (obviative), /ʔacqénmesoli/ he wants us, /ʔacqénmesoli/ he wants you (pl.), /ʔacqénmnyamš/ he wants them. Continuative aspect: /céne we sčésmecaln/ he's coming after me, /céne we sčésmecen/ he's coming after you (sg.), /céne we sčésmesn tet céne/ he's coming after him, /tat qáxaʔ we sqénmswaln/ the dog is wanting him (obviative), /céne we sčésmesoln/ he's coming after us or you (pl.), /céne we sčésmesn tet cneáwmš/ he's coming after them.

Subclass VI, completive aspect: /tet ɬawámš/ he left me, /tet ɬawáme/ he left you (sg.), /tet ɬawáɬ tet céne/ he left him, /cneáwmš we tet ɬawáwale/ they left him (obviative), /tet ɬawámoli/ he left us or you (pl.), /tet ɬawáɬčɬyamš/ we left them. Continuative aspect: /céne we sɬawámaln/ he's leaving me, /céne we sɬawámen/ he's leaving you (sg.), /céne we sɬawáln tet céne/ he's leaving him, /céne we sɬawáwaln/ he's leaving him (obviative), /céne we sɬawámoln/ he's leaving us or you (pl.), /céne we sɬawáln tet cneáwmš/ he's leaving them.

Subclass I, stative aspect: /ʔacʔéxcečn/ I see you (sg.), /ʔacʔaxénčn/ I

see <u>him</u>. Continuative aspect: /nə́we we smó·lok^Wecalš/ <u>you (sg.) are cheating</u>
<u>me</u>, /nə́we we smó·lok^Weč tet cə́ne/ <u>you (sg.) are cheating him</u> (/-č/ morphophonemi-
cally from /-t-š/).

Subclass III, stative aspect: /cə́ne we ʔacq^Wə́ncmš/ <u>he's afraid of me</u>,
/ʔacq^Wə́ncčn/ <u>I'm afraid of him</u> (/ʔacq^Wə́noʔ/ <u>he's scared</u>). Continuative aspect:
/sq̇ə́wtasanš/ <u>I'm calling him</u>, /sq̇ə́wcmaln/ <u>he's calling me</u> (/ʔet q̇ə́wnok^Wn/ <u>he</u>
<u>called</u>). The /c/ of this object suffix is surely morphophonemic for /ts/, as
indicated by the third person singular continuative form /-tas-/.

Subclass IV, completive aspect: /ʔet qanómscn/ <u>I quarreled with him</u>, /cneá̇wmš</u>
we ʔet qanómsmšyamš/ <u>they quarreled with me</u> (/ʔet qanóm/ <u>he quarreled</u>, /sqanómetn/
<u>he's quarreling</u>). It is not altogether clear whether /-m/ is to be considered
part of the stem or always part of the suffix; it is perhaps simpler and best
to consider it part of the suffix. A similar verb, but rather irregular, is
/ʔóšmnɫ/ <u>suffer</u>. Transitively it means to <u>pity</u>, and its object suffixes are
irregular: /ʔet ʔóšmsmš/ <u>he pitied me</u> (perhaps subclass IV, but here the /-m/
must belong to the stem), /ʔacʔóšmsmececn/ <u>I pity you (sg.)</u> (apparently a combi-
nation of subclasses IV and II or I), /ʔacʔó·šmscn/ <u>I pity him</u> (subclass IV);
/sʔóšamecaln/ <u>he's pitying me</u> (subclass I, unless the /-m/ can be considered part
of the object suffix, then subclass II), /sʔóšamecenš/ <u>I'm pitying you (sg.)</u>
(subclass I), /sʔó·šmsanš/ <u>I'm pitying him</u> (subclass IV?). If the /-m/ of this
word can be considered part of the suffix rather than part of the stem, the object
suffixes will fit into subclass IV (except for the second person singular) in
the completive aspect, and into subclass II in the continuative aspect, except
for the third person singular continuative—or subclass II and IV continuative
forms are the same for first and second persons singular, and subclass IV third
person singular forms are identical in completive and continuative aspects (which

would be rather unusual, compared with the other seven subclasses). There is an interesting relationship here between subclass IV suffixes, however they are set up, and subclass II continuative third person singular /-mes-/, obviative and reciprocal /-mswal-/, and first and second persons plural /-mesoł/, all of which have an /s/ as compared to /c/ and /n/ in other forms.

Subclass V, completive aspect: /ʔet sáˑwlamolłčn/ <u>I asked you (pl.)</u>, /ʔet sáˑwlaxʷčn tet céne/ <u>I asked him</u>. Continuative aspect: /néwe we ssáˑwlamalš/ <u>you (sg.) are asking me</u>, /ʔénca we ssáˑwlayanš/ <u>I'm asking him</u>.

Subclass VII, completive aspect: /ʔelápa we ʔet máytmščalp/ <u>you (pl.) took me in</u>, /ʔeném we ʔet máyxʷčł tet céne/ <u>we took him in</u>. Continuative aspect: /néwe we smáytomolš/ <u>you (sg.) are taking us in</u>, /néwe we smáytoš tet céne/ <u>you (sg.) are taking him in</u>, /ʔénca we smáytwanš tet céne/ <u>I am taking him in</u>.

Subclass VIII, completive aspect: /ʔénca we ʔet ƛ́áˑlstomečn/ <u>I looked for you (sg.)</u>, /néwe we ʔet ƛ́áˑlexʷč tet céne/ <u>you (sg.) looked for him</u>. Continuative aspect: /cneáwmš we sƛ́áˑlstomoln/ <u>they are looking for us</u> or <u>you (pl.)</u>, /néwe we sƛ́áˑlstoš tet cneáwmš/ <u>you (sg.) are looking for them</u>, /tet céne we sƛ́áˑlstwn tet cneáwmš/ <u>he is looking for them</u>.

The reciprocal suffix also has forms for completive and continuative aspects in all eight subclasses. The same forms are used for all persons, and may be followed by first, second, or third person plural or third person singular subject suffixes. A few examples of the use of the reciprocal suffix are /cneáwmš we ʔacχaʔátowš/ <u>they love each other</u> (subclass I), /ʔeném we ʔet ʔéχtowščł/ <u>we see each other</u> (subclass I), /cneáwmš we ʔacqénmsowš/ <u>they want each other</u> (subclass II), /ʔacqʷáncowš/ <u>they are afraid of each other</u> (subclass III), /sqéwcwaln/ <u>they are calling each other</u> (subclass III), /cneáwmš we tet qténowš/ <u>they met each other</u> (subclass V), /sławáwalstawt/ <u>we are leaving each other</u> (subclass VI),

/cneáwmš we ʔet máytowšyamš/ they took each other in (subclass VII), /cneáwmš we sx̌á·lstwalelt/ they are looking for each other (subclass VIII).

There are two reflexive morphemes, each with completive and continuative aspect allomorphs (as well as different allomorphs for each of the eight object subclasses); the continuative allomorphs of each are identical, or merged into one form. One morpheme is a third person reflexive, the other is a first and second person reflexive. The first and second person morpheme is {-c-}, the third person morpheme is {-č-} (or possibly {-cš-}). Both merge to /-čt-/ in the continuative aspect. Forms in the various subclasses are formed by the addition of the characteristic phonemes of those subclasses, as /-mec-/, first and second person completive subclass II, /-cmeč-/, third person completive subclass III, /-stomeč-/, third person completive subclass VIII. Continuative forms are formed by the addition of /t/ to the third person completive forms, as /-mečt-/ from /-meč-/ (subclass II), /-stomečt-/ from /-stomeč-/ (subclass VIII). These reflexive morphemes are never final--a pronominal subject suffix must follow them (including third person singular zero), e.g., /ʔet sáqačØ/ he scratched himself, /ʔet sáqacčn/ I scratched myself, /sáqačtn/ he's scratching himself, /sáqačtanš/ I'm scratching myself (subclass I); /néwe we ʔet ləx̣cč/ you (sg.) burned yourself, /néwe we sləx̣čč/ you (sg.) are burning yourself (/-čč/ from /-čt-š/; subclass I); /ʔeném we ʔet šáwmeccł/ we laughed at ourselves, /ʔeném we sšáwmečtstawt/ we are laughing at ourselves (subclass II); /ʔet q̓éwcmečØ/ he called himself, /sq̓éwcmečtn/ he's calling himself (subclass III); /ʔet tə́q̓ʷstomečØ/ he talked to himself, /stə́q̓ʷstomečtn/ he's talking to himself (subclass VIII).

Forms with a reflexive suffix are occasionally nominalized by the addition of a possessive suffix. Examples of this were found only for subclass I verbs, and only for third person reflexive forms. But in these examples, the reflexive

suffix /-č-/ changed to /-ceš-/ before the possessive suffix. For example, in /ʔet t̓áq̓aweč poténp ɫ tet seɫáʔlax^wenp/ he stood in the middle of the floor, /t̓áq̓aweč/ is a verb (meaning stand, move to); in /céne we ʔet tawélš méɫtat st̓áq̓aweceš/ he sat still (or not standing, moving), /st̓áq̓aweceš/ is a noun with the third person singular possessive suffix /-s/. Another example of the /-ceš-/ reflexive is /x̌^wáq^w ʔéˑnm t sáˑsaʔaceššyamš #/ they do all kinds of things (/x̌^wáq^w/ all, /ʔéˑnm/ how, ways, /-syamš/ their).

There are two imperative suffix morphemes, each with two phonemically conditioned allomorphs. The two morphemes are singular and plural, both second person. The singular imperative morpheme is {-laʔ}, with allomorphs /-laʔ/ following vowels (or a vowel plus glottal stop) and /-aʔ/ following consonants, except /ʔ/. The plural imperative morpheme is {-nelaʔ}, with allomorphs /-nelaʔ/ after vowels (or a vowel plus glottal stop) and /-elaʔ/ after consonants, except /ʔ/. Thus, both post-consonantal allomorphs involve a reduction (or minus feature) of the morpheme which is determined by the nature of the verb stem. Aspect is not indicated in the imperative morphemes; other affixes, if present, may indicate that, if it is indicated at all. Imperative morphemes are word-final, following the object suffix or intransitive suffix, whichever is present on the verb stem.

In a form such as /čésaʔ/ come! (sg.), aspect is not indicated. In /háy ɫacótx̣aʔ/ say it again! (sg.) or /tet q̓áx̣aʔ cə́k^wɫaʔ #/ dog, you lie down!, aspect is indicated by the form of the intransitive suffixes /-x̣/ and /-ɫ/ respectively, in these cases completive. In /ɫaménaʔ/ tie it! (sg.) and /ɫə́mtelaʔ/ tie it! (pl.), aspect is indicated by the object suffixes /-n/ and /-t-/, completive and continuative respectively. Any subclass of the object suffixes may precede the imperative morphemes: /cóh q̓éwcaʔ tet céne/ call him! (sg.) (subclass III),

/yáx̌x^wa?/ take him home! (sg.) (subclass VII), /yócax^wa?/ kill him! (sg.) (sub-class V), /ławáła?/ leave him! (sg.) (subclass VI), /čésmena?/ come after him! (sg.) (subclass II).

Showing the post-vocalic allomorphs of {-la?} and {-nela?} are /cóh q^wó·la?/ drink! (sg.) and /cóh q^wó·nela?/ drink! (pl.), /cóh ?éso?la?/ dive! (sg.) and /cóh ?éso?nela?/ dive! (pl.). The /cóh/ in these examples is an expletive par-ticle used only to indicate an imperative, and gives an indicative verb impera-tive force, especially when the verb has a first person plural subject, as /cóh waqásčł łapénč· #/ let us go kill them! (/wáqs/ go, walk, /łép-/ kill). An allo-morph of /cóh/ is /có·/, as in /có·nà wáqs/ let's go!

The exhortatory particle /x̌áq̓^w/ well! may be used as a substitute for impera-tive morphemes; if this particle is used, the verb uses indicative suffixes, not imperative, e.g., /x̌áq̓^w ?et tálcč toł ?éłnčn #/ let me go so I can eat!, /x̌áq̓^w ?et sá?syaléqetm #/ you'd better make a wall! (passive).

If two verbs occur together, both may have imperative suffixes, e.g., /wáqsa? yáx̌ła?/ go home! (sg.) and /wáqsela? yx̌áwela?/ go home! (pl.) (/wáqs/ go, walk, /yáx̌-/ go home). The first of these examples is in the completive aspect, the second is continuative. /wáqs/ is an intransitive verb in subclass 6, hence is the same in both aspectual forms; /yáx̌-/ is intransitive subclass 1.

Two voices are marked in Upper Chehalis, active and passive. The use of the passive voice is comparable to English usage. There is one passive morpheme, with completive and continuative aspect allomorphs for each of the eight subclasses of object suffixes. These suffixes, completive and continuative, are added to the verb stem to which continuative object suffixes are added: /?et łónšetm/ he was blamed, he blamed him, /słónšesč/ he's blaming him, he's being blamed (sub-class I), /céne we tet x^waq^wé?šlčmesm/ he was killed accidentally (subclass II),

/sx̣ʷálmesč/ he's getting _away_ (subclass II), /céne we tet yocáym/ he _was killed_
(subclass V), /ʔet łéyčtmyamš/ they _are parading_ (subclass VII), /tet steqéwqʷlʔš
we stayéčtosč/ the horses _are being paraded_ (subclass VII). For subclass IV,
I have /ʔet txʷławáłstm/ he _was left_ and /tet ʔopá˙lm/ it _was eaten_; whether both
/-łstm/ and /-lm/ are used I cannot tell, since verbs in subclass IV are so hard
to find.

The subject of a passive verb is indicated by the addition of a subject suf-
fix to the completive form, as /stak̓ʷáčatmčn/ my _hands are cold_, /sk̓áx̣ʷtm/ it
stings, _it was stung_. The subject of a passive in the continuative aspect is
indicated by an **object** suffix preceding the passive suffix /-sč/, which is final:
/sx̣ʷó˙ʔx̣ʷóʔecalsč/ I'm _catching cold_, /sqaqʷə́lyanesecalsč/ my _teeth are chattering_.

The agent or instrument, which would be the subject of the sentence if it
were in the active voice, if expressed, follows the verb, and is introduced by
the preposition /ł/: /ʔet k̓áx̣ʷtmčn ł tat céčs #/ I _was stung by the bee_, /ʔénca
we nk̓ʷsk̓ʷacéletmčn ł t _John_ #/ I _am called John_, /ʔet q̓étx̣etm ł tat spatáln #/
he _was hit by a rock_.

What is ordinarily called an adjective or adverb in English is a verb or
a noun derived from a verb in Upper Chehalis. As a verb, it is treated just as
any other verb as regards aspect, tense, pronominal endings, etc. For instance,
in /ʔénca we ʔacnáwłčn/ I _am old_ and /ʔénca we ʔactáčłččn/ I _am sick_, the intran-
sitive form of the verb (here in stative aspect) is used. The Upper Chehalis
verb for very (also meaning straight) is similarly used, but is used with another
verb when it has this meaning. In this case, either verb (or possibly both) may
have the pronominal subject suffix: /ʔénca we k̓ʷóp ʔacnáwłčn/ or /ʔénca we k̓ʷópłčn
ʔacnáwł/ both meaning I _am very old_. An English adjective directly modifying a
noun may either be a verb in Upper Chehalis, as in /tetx̣táyomš we ʔəy steqéwqʷlʔš/

those are good horses, or a noun derived from a verb, as in /tat ʔacqélxł tasnáˑwaʔ/
the angry parents (/qélxł/ angry). English predicate adjectives are always verbs
in Upper Chehalis: /tet qáx̣aʔ we čsnéq/ the dog is black. A series of descrip-
tive adjectives may be variously handled. In /náw ʔacčsnéq qáx̣aʔ/ it's a big,
black dog, the verb is /náw/ big; /ʔacčsnéq/ black is a noun derived from the
verb /čsnéq/. In /ʔet čawáłns we ʔet qéx̣ʷł n wen x̣syálwn/ his wife is a fat,
ugly woman, woman is not actually stated; instead, we have his wife is fat and
is ugly.

A subclass of verbs may be made either comparative or superlative by the
addition of certain affixes and operators. Obviously, many verbs would not lend
themselves to comparison.

The formation of the comparative is very simple and regular. A morpheme
/čt-/ is prefixed to the verb root, as in /čtmáqł/ older from /máqł/ old, /čtmayén/
newer from /mayén/ new, /čtqéx̣tn/ more from /qéx̣-/ many (/-tn/ nominalizer),
/čtʔéy/ better from /ʔéy/ good, /čttáw/ bigger from /táw/ big. If the verb is
in a stative aspect form, /čt-/ precedes the stative prefix /ʔac-/: /čtʔacnáwł/
he is older from /náw/ old, big. /čt-/ may even occur on a transitive verb form:
/čtʔacqénmnčna/ do you prefer... (/qén-/ want, transitive subclass II, /-na/ inter-
rogative). /ʔac-/ was the only prefix found to co-occur with /čt-/. Examples in
sentences are useful to show the verbal nature of even a comparative form: /tetx̣té
we čtʔéy to ʔał tet ʔóˑčs/ this is better than that (/to ʔał/ from, than, /ʔóˑčs/
one), /tetx̣té tet qáx̣aʔ we čtqéˑc to ʔał tet ʔóˑčs/ this dog is smaller than that
one.

The superlative is formed by adding a discontinuous morpheme to the verb
root: /sx̣ʷ-s(t)/ and a reduplication operator. /sx̣ʷ-/ is prefixed to the root,
and is incompatible with other prefixes; the first consonant after the stressed

vowel of the root is reduplicated; and /-s/ or /-st/ is suffixed to the whole form. Using the same verbs as in the examples of comparative forms above, I have /sxʷmáq̓q̓s/ oldest, /sxʷmayénnest/ newest, /sxʷqéx̣x̣s/ most; also /sxʷɫáƛ̓ƛ̓ps/ lowest from /ɫáƛ̓p/ low, /sxʷƛ̓ók̓ʷk̓ʷst/ highest from /ƛ̓ók̓ʷ/ high, up. /w/ and /y/ morphophonemically become /o/ and /e/ respectively when reduplicated: /sxʷʔéyest/ best, /sxʷtáwoʔs/ biggest. In context, I have /tetx̣té tet qáx̣aʔ we sxʷtáwoʔs tet qáx̣aʔ/ this is the biggest dog and /tetx̣té we sxʷmayénnest nsnóʔq/ this is my newest knife. Whether /-s/ or /-st/ will occur is unpredictable, and the two constitute morphemically conditioned allomorphs, determined by the preceding root morphemes, which must be listed to determine the allomorph to be used.

There are relatively few prefixes in Upper Chehalis, although some recur very often (particularly the aspectual prefixes /s-/ and /ʔac-/). There are only twelve verbal prefixes and even fewer noun prefixes. Verbal prefixes are of five types: aspectual, tense, comparison, modal, and adverbial. The two aspectual prefixes, the one tense prefix, and the two comparison prefixes have already been discussed; the only verbal prefixes left are the one modal and the six adverbial prefixes. All of these six adverbial morphemes have only one form each, but they occur in different positions with regard to aspectual prefixes and to each other. None co-occurs with tense, modal or comparison prefixes. They are not affected by aspect, and may be used with any aspect. The six are /ɫès-/ take part in, /čs-/ color, /nkʷs-/ habitually, /ƛ̓a-/ back, again, /tàys-/ negative, and /txʷ-/ get, become, make. /ɫès-/ and /čs-/ occurred only a few times, and never with other prefixes (except, perhaps, /s-/). All the others may co-occur with aspect prefixes; /tàys-/ and /txʷ-/ follow them, all the others precede them. No more than two of these adverbial prefixes have been found on one verb form, but more than one at a time is not common. They occur in the following order (but not

all on one verb form at a time): /nkᵂs-/, /ťa-/, /s-/ (continuative) or /ʔac-/ (stative), /tàys-/ or /txᵂ-/, then the verb root itself.

/łès-/ take part in, as stated, did not occur often. That it is not a verb root compounded to another verb is indicated by the lack of a continuative aspect /s-/ prefix before continuative forms, as is the case with compounds. Presumably, the continuative /s-/ prefix is fused with the /s/ of this prefix, since no form was found with /s/ repeated. Examples of /łès-/ in the continuative aspect are /łèsʔélann/ he's taking part in the singing and /łèswčénmetn/ he's taking part in the dance. /łès-/ also occurs (without other prefixes) in the completive aspect: /ʔet łèsʔéln/ he took part in the singing, /ʔet łèswčénm/ he took part in the dance, /ʔet łèsšáwoye ʔał tet šáwoyeʔn/ he took part in the game.

/čs-/ is a prefix limited to a very few words. It was not found to co-occur with any other prefix. All words with /čs-/ are colors, and none was found without it, except in derived forms. It seems to have no function except to indicate a color-word. An example of its use is /tet qáx̣aʔ we čsnéq/ the dog is black.

/nkᵂs-/ indicates habitual action, and is one of the three most common adverbial prefixes. As with /łès-/, the continuative /s-/ prefix is merged with the final consonant of this morpheme; in one instance, not only the continuative /s-/ prefix was merged with the /s/ of /nkᵂs-/, but both /s/ phonemes were merged with the initial /s/ of a verb root. Thus the form /nkᵂsókᵂetn/ he is skinning it consists of the following five morphemes: /nkᵂs-/, /s-/, /sókᵂ(e)-/, /-t-/ it, object, and /-n/ he, subject. That /nkᵂs-/ does precede /s-/ is shown by forms with /ʔac-/ stative aspect, which occurs in the same position as /s-/: /nkᵂsťa-ʔacx̣áłšm/ you used to live (somewhere). A few other illustrations of the use of /nkᵂs-/ are /nkᵂstáxᵂewayn/ he is selling, /nkᵂsqtx̣énowaystwaln/ he is disagreeing with him (/-twal-/ obviative, continuative), /ʔet nkᵂstxᵂq̓ʷéťł/ it always

burns, /ʔə́nca we nkʷskʷacéletmčn ɬ t John/ _I am called John_ (passive), /nkʷsmáyɬ

šaɬ tat yómtn sʔópɬ tat sq̓estéxʷns ʔé tano mátn nkʷsɬawáɬ #/ _he (repeatedly) goes_

into the fish-trap and eats what he caught and leaves nothing but the heads (/yómtn/

fish-trap, /téxʷ-/ _kill_, /-ns/ _his_, /mátn/ _head_, /ɬawá-/ _leave_).

Were it not that suffixes in either continuative or completive aspect form

may be used on verbs beginning with /nkʷs-/, and /ʔac-/ occurs with it, this might

well be considered a fourth aspect marker. This type of meaning is similar to

that indicated by the aspects. The usual sign of the completive aspect, a defi-

nite article, is not used when /nkʷs-/ is used.

/ɬa-/ _back, again_ is also quite common. It may, but does not necessarily,

co-occur with other prefixes. Only /nkʷs-/ may precede /ɬa-/. /ɬa-/ is used

with any aspect, as indicated by suffixes, but the aspectual markers /s-/, /ʔac-/,

and /ʔet/ are not necessarily used when /ɬa-/ is present: /ɬaʔacqʷáʔstqlsčn/

I have a headache again, /ɬasyáčsč/ _it's being returned_, but /ɬak̓əqʷown/ _he is_

going back out (continuative aspect, indicated by /-ow-/ _intransitive_ and /-n/

_he_), /ɬayák̓ɬaʔ/ _go back home!_ (completive aspect, indicated by /-ɬ/ _intransitive_).

/ɬa-/ may also precede the second person singular possessive clitic (which is a

prefix in this case): /ɬaʔaswáqs/ _your going again_.

/tàys-/ _negative_ or _without_ is used with both verbs and nouns. /s-/ continua-

tive does not occur when /tàys-/ is present. Examples are /ʔet tóɬ tàyswanátn #/

she came uninvited (/waná-/ _invite_) (continuative), /tàyspótnčn/ _I don't know_

(completive), and /tàysʔéx̣čn/ _I'm invisible_ (from /ʔéx̣-/ _see_) (completive).

/tàys-/ follows /ʔac-/ stative aspect: /ʔactàysq̓áx̣tače/ _unpainted_.

/tàys-/ is not altogether synonymous with the usual negative particle /méɬta/.

Sometimes the same thing can be stated in phrases using either negative morpheme,

as in /tàyspótnčn ɬwáqs/ literally _not-know-it-I future-going-his_ or /méɬta

nspótnos ʔet yépɬ/ literally not my-knowing-it he-go, both translatable as I don't know when he went away. But a different meaning can also be indicated by contrasting the two morphemes, as /tàyspótnčn ɬwens ʔet ʔátmn/ I don't know that he died (literally not-know-it-I his-future-being died) as opposed to /méɬta tn spótn ɬwens tet ʔátmn/ I don't know when he died (literally not that-my knowing-it his-future-being died).

/tàys-/ is related to a verb root /tày-/, found only with the lexical suffix meaning mind, /-nowt/: /ʔet táynowt/ he refused, /stáynowtmetn/ he's refusing, /stáynowtšetn/ he's refusing it.

/txʷ-/ get, become, make occurs frequently, but seldom with any other prefixes. It was found only with (and following) continuative or stative aspect prefixes and /nkʷs-/, but aspect prefixes are not consistently present when /txʷ-/ occurs. /txʷčémšetn/ he is covering him is certainly continuative aspect, as indicated by the object and subject suffixes, but /s-/ is lacking. It does occur, however, in /stxʷtaléčstome/ he is helping you (sg.), and the stative aspect prefix occurs in /ʔactxʷx̌énstn/ he is holding still. The completive aspect is usually marked when /txʷ-/ is used: /ʔet txʷtépxʷ tat čá°less/ he bumped his arm, /ʔet txʷx̣ə́k̓ʷ/ it got stuck, /ʔet txʷwáɬ/ it came loose, /ʔet txʷséw/ he went too far (/séw/ too), /ʔet nkʷstxʷq̓wóɬ/ it always burns.

The only other verbal prefix is the modal prefix /q̓es-/. This prefix, however, is only one allomorph of the modal morpheme, which may be written {q̓aɬ}. The other allomorph is not a prefix, but a particle, /q̓aɬ/. The modal morpheme is used in Upper Chehalis in constructions in which English uses or implies a subjunctive, one of the modal auxiliaries (may, can, must, etc.), verbs of liking or wanting before a subordinate verb (infinitive), or in conditional (if...then) expressions. The following illustrate some of these uses: /méɬta n q̓aɬ sʔéln/

I won't sing, /mélta tn q̓es?éln/ I can't sing, /?acqénmmčn t q̓ał s?éln/ I know how to sing, /cotčn q̓ał t ?éłnč tanen/ you (sg.) ought to eat now (/cotčn/ maybe, /tanen/ now), /tám t q̓ał sá?ac t q̓alał we ?áls #/ what would you (sg.) do if you were chief?

As shown in the last example, the second person singular possessive clitic is infixed in /q̓ał/ thus: /q̓alał/. Another example of this occurs in /?ačé t q̓alał s?éln q̓alał we ?é txʷ?éłnč #/ would you eat if you could? (/?é/ interrogative verb).

/q̓es-/ and /q̓ał/ are in complementary distribution. /q̓es-/ is used phrase initially, after the definite article, or after an article (definite or indefinite) plus the first person singular possessive clitic /n/: /q̓eskʷáxʷsyamš | nkʷscó·tełt/ when they arrived, they decided, /céne we ?et ?éln xʷáqʷo tat q̓es?élns š?áłnawe/ she sang all the songs she knew to you (sg.) (/xʷáqʷo/ all, /š?ał/ to), /?énca we ?ac?ó·yxʷčn tat n q̓es?ó·x̣nn tat steqéwqʷl?š/ I like to look at horses (/?ó·yxʷ-/ like to, /?ó·x̣n-/ look at), /mélta tn q̓es?éln/ I can't sing. The continuative prefix /s-/ is not usually used with /q̓es-/, but it may be, and then precedes it (many of the forms used with the modal morpheme have been nominalized and are used with possessive suffixes, so the aspectual markers are not always relevant): /nkʷsmáył šał tat yómtn? s?ópł tat sq̓estéxʷns/ he goes into the fish-trap and eats what he caught.

/q̓ał/ is used in all other instances, including following an indefinite article, following the first person singular possessive clitic /n/ when not accompanied by an article, and with the second person singular possessive clitic. Examples of the use of /q̓ał/ are /?acqénmmčn t q̓ał syapál?x̣ašecs/ I want him to visit me, /mélta n q̓ał s?éln/ I won't sing, /mélta t q̓ał stxʷx̣álcešs/ he couldn't hold still, /q̓ał čt?yélax̣cčł ?ama céne ta?áls #/ things would be better if he

<u>were our chief</u> (literally <u>conditional comparative-well off-we if he past-chief</u>).

In addition to lexical, positional, transitivity, and pronominal suffixes, there are six or seven adverbial suffixes which may be attached to verbs. Some of these are verbal only part of the time, but it is felt best to classify them all together here because of their limited number and their similarity of function and use. All occur in absolute final position on a word, even after subject suffixes. None were found to co-occur, and except for the interrogative /-na/, they may be considered mutually exclusive. All are indifferent to aspect, and may occur with any one of the aspects.

/-ex^{w}o?/ <u>still, yet</u> is used to indicate an action or state continuing into the present, perhaps unexpectedly. It may have secondary stress. One variant of this suffix was found: /-o?/. This occurred in a text, and may be misrecorded or mispronounced, or it may actually constitute a separate allomorph. Examples of /-ex^{w}o?/ are /néwena we syósčex^{w}o? #/ <u>are you (sg.) working yet?</u> (/-na/ interrogative), /?elápa we ?acx̣ál̓šmč̓alpex^{w}o? nsč̓ótx^{w}n? #/ <u>you folks still live in Olympia</u>, /céne we k^{w}áx^{w}k^{w}x^{w}ex^{w}o?/ <u>he's still alive</u>, /syétx̣^{w}ownèx^{w}o? t sk^{w}emó·mš/ <u>he's still busy, the wren.</u> The questionable occurrence of /-o?/ was /máq^{w}eaqno?/ <u>still eating berries</u>.

/-ex^{w}o?/ also occurs with the negative /mél̓ta/ meaning <u>still not</u> or <u>without</u>: /céne we mél̓taex^{w}o? t̓ól̓l̓ #/ <u>he's still not here</u> or <u>he's not here yet</u> (/t̓ól̓l̓/ <u>arrive</u>), /céne we mél̓taex^{w}o? #/ <u>he's still gone</u>, /céne we ?et sá?n mél̓taex^{w}o? t sk̓^{w}néno?sms #/ <u>he did it without thinking</u> (/sá-/ <u>do</u>, /k̓^{w}néno?sm/ <u>think</u>, /-s/ <u>his</u>).

/-ex^{w}o?/ also occurred once without a verb--or as a verb: /k̓sw̓ánenate cél̓n ?ac̓ex^{w}o? t sq̓wél̓s #/ <u>look to see if the food is cooked yet</u> (/k̓sw̓án-/ <u>go and see</u>, /cél̓n/ <u>food</u>, /q̓wél-/ <u>cook</u>, /-s/ <u>his</u>). As a verb, it would have to begin with a

glottal stop (no vowel begins a word), and this glottal stop has been assimilated to the preceding stative aspect prefix (although this is not ordinarily done).

/-čsa/ is one of three affixes meaning <u>again</u> (see also /ła-/ and /-ače/; there is also a verb /ʔáys/ meaning <u>again</u>), and may occur on the same verb with /ła-/ <u>again, back</u>. It does not occur often, as /ła-/ does, perhaps because both serve the same purpose. Examples of /-čsa/ are /tet ʔaqx̣ʔáwmš we tat łascéqʷmalnčsa ʔał ten q̓ʷáx̣młn?/ <u>your dogs have been digging in my garden again</u> (/céqʷ-/ <u>dig</u>, /ʔał/ <u>in</u>, /q̓ʷáx̣młn?/ <u>garden</u>), /ła?acqʷá?stqlsčnčsa #/ <u>I have a headache again</u> (/qʷá?stqls/ <u>headache</u>), /sšáwawnčsa tet manó·mš #/ <u>the children are playing again</u>.

{-na} is an interrogative morpheme which occurs when no interrogative word such as /čá·/ <u>where</u>, /tám/ <u>what</u>, /wá·/ <u>who</u>, or /ʔé/ (interrogative verb) is present without /ʔokʷa/, a copulative particle. It is not strictly a verbal suffix, because it can occur on nouns and particles as well, even on more than one word in a sentence. The suffix goes on the word or words about which the question is being asked. Examples are /tetx̣té tet qáx̣a? we snawéyałna/ or /tetx̣téna we snawéyałna ʔaqáx̣a?/ <u>is this dog yours?</u>, /ʔet ʔéx̣tolłčna/ <u>did you see us?</u>, /ʔacqénmnčna t čatésa? now | we yétwa?na #/ <u>do you want strawberries or salmon-berries?</u> (/now/ <u>or</u>, /qén-/ <u>want</u>), /néwena we t čós yósč #/ or /néwe we t čósna syósč #/ <u>are you still working?</u> (/néwe/ <u>you, sg.</u>, /čós/ <u>still</u>).

{-na} has a special form /-ana/ after /ʔokʷa/, a copulative particle, in questions beginning with interrogative words. The second /a/ in the resulting /ʔokʷaana/ is not mere lengthening of the first /a/; it is rearticulated, but not set off by a glottal stop. Illustrations of this usage are /čá· ʔokʷaana t x̣áłc/ <u>where is his house?</u>, /ʔet ʔé ʔokʷaana to yépł/ <u>why did he leave?</u> (/yépł/ <u>walk</u>).

/-x̣/ indicates definiteness. It occurs frequently, but only with two types

of words--locative verbs and demonstrative compounds (which are nominal). Locative verbs without /-x̣/ do not indicate definite location, and the use or non-use of /-x̣/ with these verbs can create some subtleties of expression which are almost impossible to translate; my informant was often unable to explain the difference between forms with and forms without /-x̣/, although he insisted that there was a difference. For example, compare /céne we šán?/ with /céne we šán?x̣/ <u>he is there</u>; the latter would indicate a definite location, perhaps pointed out. In /t́éx̣ ṕə˙nnàwe/ <u>there it is by you</u>, <u>by you</u> tells the exact location. /céne we swáqsn šén?x̣ tewstéx̣/ <u>he is going there now</u> implies that you know just where he is going; /tet qáx̣a? we syac̓áwn? ta šén?/ <u>the dog is walking around (over) there</u> merely indicates some general location.

The definite article /tet/ followed by /-x̣/ and /té/, /t́és/, or /tá/ forms the demonstratives /tetx̣té/ <u>this</u>, /tetx̣́tés/ <u>that</u> (near), and /tetx̣tá/ <u>that</u> (not near) and their plural and feminine forms. These are then treated as nouns, and have been further discussed under compounding.

/-ƛ̓e/ means <u>evidently</u> and is sometimes used to translate English <u>must</u>, but does not occur very frequently, probably because there is a verb with a similar meaning, /nə̓˙?ɬo?/ <u>look like, seem</u>. Both may· be used together, or each may be used to form alternative, but synonymous, constructions. /-ƛ̓e/ may also occur more than once in one sentence. This and the use of both /nə̓˙?ɬo?/ and /-ƛ̓e/ are demonstrated in /nə̓˙?ɬo?ƛ̓e ɬ tet séx̣ʷɬƛ̓e/ <u>it looks like it got wet</u> (/séx̣ʷ-/ <u>wet</u>); the same sentence may also occur without one or both /-ƛ̓e/ suffixes without any change in meaning: /nə̓˙?ɬo? ɬ tet séx̣ʷɬ/. The sentence <u>it must have gotten warm</u> may be either /nə̓˙?ɬo? ɬ tet we x̣ʷalá˙?/ or /?et x̣ʷalà?àwmƛ̓e/ (/x̣ʷalá˙?/ <u>hot</u>). Both also occur together in /?acnə̓˙?ɬo?ƛ̓e wes ?et ?ékʷtaqn #/ <u>they evidently stole it</u>, and /?acnə̓˙?ɬo?ƛ̓e wes ?et wá˙nac̓ #/ <u>evidently he's lost</u>

(/-č/ reflexive).

/-ače/ is another suffix meaning <u>again</u>--probably. Only one occurrence of it was found: /tasčésnače qétt/ <u>he'll be coming again tomorrow;</u> here /ta-/ also means <u>again</u>, so /-ače/ may be something else, perhaps Boas' quoative (see below).

Boas cites one more verbal suffix which could be classified as adverbial, but I was unable to elicit it. It is /-ače/ quotative; the preceding suffix may be an instance of it. Boas' examples are /sčésnače/ <u>it is said he came</u> and /ʎáqʷ-ače/ <u>good, it was said</u>.

A common way for nouns to be formed from completive forms of verbs is by prefixing /s-/ to the completive form. /s-/ also forms nouns from verb roots-- without intransitive or pronominal suffixes. This is the most common method of forming nouns from verbs: /séln/ <u>song</u> from /ʔéln/ <u>sing</u> (initial glottal stops are lost in these formations), /séln/ <u>food</u> from /ʔéln/ <u>eat</u>, /skʷácł/ <u>name</u> from /kʷácł/ <u>be named</u>, /skʷápmł/ <u>court (of law)</u> from /kʷápmł/ <u>straighten</u>, /sláx̣ʷ/ <u>laugh</u> from /láx̣ʷł/ <u>laugh</u>, /słéčeyq/ <u>wind</u> from /łéčeyq/ <u>wind blows</u>, /spós/ <u>a swelling</u> from /pósł/ <u>swell up</u>, /sx̣ʷóqʷ/ <u>crowd</u> from /x̣ʷóqʷmł/ <u>gather</u>. These may have possessive affixes like any other noun: /nséln/ <u>my song</u>, /sélns/ <u>his food</u>, /sélnčł/ <u>our food</u>.

Some nouns formed this way are not easily translated into English as nouns, but a gerund may often be used: /séx̣ns/ <u>his watching</u> (from /ʔéx̣-/ <u>see</u>); it is usually best to translate them as verbs: <u>he watched.</u> Even transitive verbs-- either completive or continuative--may be nominalized this way: /skʷénays/ <u>his wanting it</u> (or <u>what he wanted</u>), /nskʷénax̣ʷ/ <u>my wanting it</u> (or <u>what I wanted</u>). No subject suffix occurs on the verb in these instances. Such forms are very common: /ʔascó·tx̣/ <u>your (sg.) saying</u>, /ʔasyós/ <u>your working</u>, /sčéss/ <u>his coming</u>, /nstáčłč/ <u>my being sick.</u> An illustrative sentence using two of these forms is

/méɫta t ʔasčés | ʔama ʔet námn ɫ tet ʔasyós #/ <u>don't come unless you are finished working</u>, literally <u>not your-coming unless finished-it your-working</u>. Another is /méɫta nspótn ʔéˑnm to méɫta t sčéss cótčn ʔactáčɫč #/ <u>I don't know why he did'nt come unless he was sick</u>, literally <u>not my-knowing-it how of not a his-coming maybe he is sick</u>.

Even the copulative verb /we/ may be nominalized by prefixing /s-/ <u>continuative</u> or /ɫ-/ <u>future</u> (this would indicate that this nominalizing /s-/ is the same as the continuative aspect /s-/, and they may be considered one morpheme, since they are in complementary distribution). This particular nominalized verb is especially common: /ƛa swens/ <u>his future being</u> (/-ns/ <u>his</u>, one of the two allomorphs of the third person singular possessive suffix), /ɫwens/ <u>his future being</u>, /nswe/ <u>my being</u>, /ɫwečɫ/ <u>our future being</u>, /ta swenaps/ <u>your (pl.) past being</u>, /ta la swe/ <u>your (sg.) past being</u>. These are used thus: /ʔačé ta swens sʔélaneɫt/ <u>were they singing?</u> (literally <u>question past their-being they-are-singing</u>), /ʔačé t swens ʔacʔéxce/ <u>does he see you (sg.)?</u>

There are five nominalizing suffixes with different, but sometimes overlapping, functions. Four of these are quite common. There are probably many more instances of these than I have listed, but verbs from which some are surely derived were not found, and they were not listed as derivatives. Occasionally some other change occurs in the verb root when a nominalizer is added (such as vowel length), but such changes are sporadic and secondary. Some of these derivatives also have an /s-/ prefix.

/-alača/ is a nomen actoris morpheme, equivalent to English -<u>er</u>, as in <u>farmer</u>, <u>singer</u>, <u>traveller</u>. At least a dozen nouns were found which were formed with this suffix. Some of them are /yósalača/ <u>worker</u> from /yós/ <u>work</u>, /waqálača/ <u>runner</u> from /wəq-/ <u>run</u>, /ʔə́ˑkʷtqalača/ <u>thief</u> from /ʔékʷtq/ <u>steal</u>, /ʔélnalača/ <u>singer</u>

from /ʔéln/ sing, /q̓ʷóx̣ʷnalača/ barker, a dog that barks a lot from /q̓ʷóx̣ʷn/ bark, /mané·ʔtmalača/ killer from /manétm/ kill.

/-ln?/ forms nouns that can be classed as implements: /šáwln?/ toy from /šáw-/ play, /téq̓ʷčln?/ gun from /téq̓ʷč-/ shoot with a gun, /x̣álkʷmln?/ rattle from /x̣álkʷm/ rattle. There are several other nouns that certainly have this suffix, but no verb was found from which they were derived, e.g., /ƚáx̣ln?/ blanket, /stáq̓ʷln?/ bow, /snó·qʷoln?/ wire, metal, /x̣ʷálq̓mln?/ wedge.

/-n?/ too may designate implements, but it also indicates place: /yósn?/ tools from /yós/ work, /sačáytmčn?/ plow from /sačáytmaš-/ plow, /x̣ʷákʷtamn?/ broom from /x̣ʷákʷtm/ sweep, /q̓áx̣mln?/ paint from /q̓áx̣-/ paint, /šáwoyen?/ game from /šáwoye/ play, /mákʷtmn?/ cemetery from /mákʷt/ dead, /q̓ʷáƚmln?/ garden from /q̓ʷáƚ-/ plant, /q̓álmn?/ campsite from /q̓ól-/ camp, /ččáx̣ʷn?/ building site from /ččáx̣ʷ/ build a house. This is by far the most productive of the nominalizing suffixes.

/-tn/ forms a variety of noun types, frequently abstract nouns: /lé·ʔtn/ distance from /lé·ʔ/ far, /sƚóq̓tn/ width from /ƚóq̓-/ wide, /sx̣áqtn/ length from /x̣áq-/ long, /séytn/ goodness from /ʔóy/ good, /x̣óq̓ʷtn/ ladder from /x̣óq̓ʷ-/ climb, /cókʷtn/ bed from /cókʷ-/ lie in bed, /čámtn/ breast from /čám/ suckle. This suffix, as can be seen from some of the examples, frequently corresponds to English -th or -ness.

Boas cites one more nominalizing suffix, but I was never able to elicit it from my informant. This is /-anom/ by means of. Boas' examples are /ʔeƚánom/ by eating and /taš ʔaƚ tn smólqanomš/ on account of my forgetting.

V. MORPHOLOGY OF NOUNS

Nouns are relatively uninflected in Upper Chehalis. There are only fourteen morphemes affixed to nouns, other than lexical suffixes, but some of them have several allomorphs. Possessive affixes average two allomorphs each, and the plural affix has four allomorphs.

Possessive affixes occur for the same three persons and two numbers as do verbal object and subject suffixes. Only the first person singular and plural possessive morphemes have only one allomorph each; all the others have two or more each. The possessive morphemes are {n-} first person singular, {ʔa-} second person singular, {-s} third person singular, {-čł} first person plural, {-nalp} second person plural, and {-syamš} third person plural. The first two precede the noun, the others are suffixes.

Perhaps it is best to consider {n-} first person singular possessive and {ʔa-} second person singular possessive as clitics, rather than as affixes. They may be either prefixes, suffixes, or free forms, depending on what other morphemes precede the noun, but they always occur somewhere before the noun. Nor do the two occur in the same position relative to prenominal prefixes and particles. {n-} is suffixed to /méłta/ negative, indefinite articles, and the definite article /tet/ that precede a noun, especially nominalized verbs. /tet/ plus {n-} becomes /ten/. Examples of {n-} in these positions are /méłtan saxén/ I didn't see him, /méłta tn séxce/ I don't see you (sg.), /ten čáˑlš/ my hands. After several particles and before certain prefixes, {n-} is a particle, affixed to nothing, as in /tat n qeséˑʔxnn/ my looking at, /ʔénca we xéweč n swe ʔactáčłč/

I am very sick, /swáqsanš šał n ƛas ʔaxén #/ I'm going to see it. {n-} always precedes the particles /ta/ past, /ƛa/ future, and /q̓ał/ modal: /šʔał tn ƛa sé·ʔx̣n?/ my future seeing, /ʔamo n q̓ał we ʔáls/ if I were a chief, /n ta čówł/ my former wife (from Boas). Otherwise {n-} is prefixed to the noun possessed: /tat npéšpš/ my cat, /tac npé·sn/ my younger sister, /nstáčłč/ my sickness.

{ʔa-} is a free particle /la/ after the particles /ƛa/ future and /ta/ past: /ƛa la swáqs/ your future going, /ʔačé ta la swe sʔélann/ were you singing?, /ʔał ta la sɫawáł/ when you left. It is an infix /-la-/ within the modal particle /q̓ał/, as in /q̓alał we ʔet ɫawáł/ if you left, /t q̓alał we ʔáls/ if you were chief, /t q̓alał séłn/ would you eat? {ʔa-} occurs as a suffix to the indefinite article in the form /-a/, and causes the /t/ to be glottalized: /čá· t̓a qx̣ʔáwmš/ where are your dogs?, /mélta t̓a sčáɫtoxʷ/ don't give it, /t̓a swe ʔet x̣alámstmš/ your future being ready (i.e., when you are ready). The same in form as this allomorph is the usual one, a prefix /ʔa-/: /ʔax̣ʷáł/ your older brother, /ʔaqáx̣a?/ your dog, /ʔasteqéw?/ your horse.

Both {n-} and {ʔa-} are affected in both form and position by the presence of particular particles, particularly /q̓ał/ modal, /ta/ past, and /ƛa/ future.

{-s} third person singular possessive has several allomorphs, all morphemically conditioned and unpredictable. /-s/ is the most common allomorph; but there are a good many other variations, especially among names for body parts and certain other personally related nouns. Examples of /-s/ are /mátns/ his head, /stáq̓wɫn?s/ his bow, /cékʷtns/ his bed, /pépas/ his book, /q̓ʷalán?s/ his ear, /sq̓ʷéts/ its burning.

/-ns/ is an allomorph of {-s} that occurs on at least one common nominalized verb: /swens/ his being or /ɫwens/ his future being from /we/ be. It also occurs on one noun: /čéɫns/ his older brother. Other instances of /-ns/ involve a

change of the noun stem, creating two other allomorphs. One is an infixed vowel with stress shifted to it, plus /-ns/; only one noun has this allomorph, and that is /čawáɨns/ his wife from /čə́wɨ/. The other allomorph involves a reduction of the stem and the addition of /-ns/. The only two nouns which take this allomorph, dropping a final /-aʔ/, are /qáx̣ns/ his dog from /qáx̣aʔ/ and /čó ʔp̣ns/ his grand-father from /čó ʔp̣aʔ/.

Another similar group of allomorphs of {-s} involves nouns ending in a consonant cluster, the last consonant of which is /s/ or /š/. In each of these, a vowel is infixed between the last two consonants and /-s/ is suffixed to the noun. The infixed vowel may be /e/, /é/, /ó/, or /á/, creating four allomorphs. Examples of nouns with these possessive allomorphs are /yénkʷess/ his pack-rope from /yénkʷs/, /sqə́lness/ his jaw, chin from /sqə́lns/, /spókʷess/ his forehead from /spókʷs/, /yanéss/ his teeth from /yéns/, /taméšs/ his land from /tə́mš/ land, earth, /qanóšs/ his mouth from /qə́nš/, /matóss/ his kidney from /mə́ts/, /čalášs/ his cat-tail mat from /čə́lš/. In each case where the infixed vowel is stressed, the stress has been shifted from the root vowel, which in all but two cases is /ə/; these two exceptions are /taʔnéss/ his knee from /tán ʔs/ and /sxʷayóss/ his hat from /sxʷáys/. The /ə/ becomes /a/ in each instance that stress shifts.

Three other nouns form their third person singular possessives as if they belonged to the preceding group, i.e., ended in /Cs/. But they do not end in /s/, so their possessive affixes must constitute two more allomorphs of {-s}. One is /-éss/, as in /sšanéss/ her husband from /sšə́n/ and /sc̣aséss/ his hair from /sc̣ə́s/. Again, stress is shifted from /ə/ to the suffix, and the root vowel becomes /a/. The other allomorph is again discontinuous, and infixes /e/ in the midst of a four-consonant cluster at the end of the noun, and suffixes /-ess/: /sópsenčess/ its tail from /sópsnč/.

Three nouns drop a final /-ł/ and add an allomorph /-as/: /skʷácas/ <u>his name</u> from /skʷácł/, /sq̓ʷáx̣maʔs/ <u>his seeds</u> from /sq̓ʷáx̣mł/, and /téx̣ʷcas/ <u>his tongue</u> from /téx̣ʷcł/.

Six more nouns form third person possessive forms in other irregular ways, constituting six more allomorphs of {-s}. These are /nə́·ʔsčos/ <u>his younger brother</u> from /nə́·ʔsče/, /ʔémacaws/ <u>his grandson</u> from /ʔémc/, /čaléss/ <u>his arm</u> from /čálʔš/, /cóles/ <u>his foot</u> from /cół/, /wéss/ <u>his canoe</u> from /wéł/, and /x̣áłc/ <u>his house</u> from /x̣áš/.

Only one plural noun was obtained with a third person possessive suffix, and it proved to be irregular. Actually, two forms were found, but they were formed from different plurals; one of these possessive forms is regular, and just adds /-s/: /nsčálštns/ <u>his arms, hands</u> from /nsčálštn/. The other form is /čálaʔess/. Both are from a singular /čálʔš/.

{-čł}, the first person plural possessive morpheme, is invariable. It is identical with the first person plural completive aspect subject suffix. Some examples of {-čł} are /x̣ʷáłčł/ <u>our older brother</u>, /qáx̣aʔčł/ <u>our dog</u>, /čáʔłalmčł/ <u>our leaders</u>, /ná·wčečł/ <u>our bodies</u>, /séłnčł/ <u>our food</u>, /t sax̣énčł/ <u>our seeing him</u>.

I have as many allomorphs of {-nalp}, second person plural possessive, as I have instances of the morpheme, and Boas provides another. It does not occur often. All allomorphs, however, have /ap/ in common. The following are the allomorphs and the words on which each occurred: /-nalp/ - /qáx̣aʔnalp/ <u>your dog</u>, /-alp/ - /wéłalp/ <u>your canoe</u>, /-nap/ - /ta swenap sʔélann/ <u>your past being singing</u> (i.e., <u>you were singing</u>), /-a-alp/ - /łéptamalp/ <u>your being killed</u>, /-e-alp/ - /wentenalp/ <u>your home</u>, and /-awap/ - /x̣ášawap/ <u>your house</u> (from Boas). One noun has an irregular second person plural possessive form: /x̣áłtawalp/ <u>your house</u>

(from /x̣áš/ house; cf. /x̣ałc/ his house, also irregular).

{-syamš}, third person plural possessive, has two, or possibly three, allo-morphs. Boas gives /-sawmš/ for this, which could be a fourth allomorph. Ordi-narily, /-syamš/ is used: /qx̣ʔáwmšsyamš/ their dogs, /nstéx̣ʷstnsyamš/ their ene-mies, /šáwoyesyamš/ their game, /séłnsyamš/ their food. Another allomorph is /-nsyamš/: /čétnsyamš/ their older brother, /t swensyamš/ their being. /mósas/ (from /mós/ eye) was translated as their eyes, but it is probably a third person singular possessive form, rather than plural, and would fit in with the nouns which take the /-s/ allomorph of {-s}.

There is one noun plural morpheme in Upper Chehalis, but it has twelve or thirteen distinct allomorphs, and four of the five principal allomorphs have sev-eral sub-varieties each. One allomorph is used for nominalized verbs only. Two of the more common allomorphs may have contrasted at one time, and would then have been separate morphemes. Boas labels /-qʷlʔš/ a collective plural and /-Vmš/ a partitive plural, but my informant made no such distinction. Some words can even occur with either of these two, allomorphs with no difference in meaning, e.g., /póˑsq̇qʷlʔš/ or /póˑsaq̇ʷomš/ balls from /póˑsq̇/, /x̣éłłapqʷlʔš/ or /x̣éłłapamš/ open-weave baskets from /x̣éłłp/. /wéł/ canoe has three plural forms: /wéłØ/, /wełáwmš/, and /wéłqʷlʔš/. There are others with two plurals using different allomorphs, such as /čálešamš/ and /nsčálštn/ hand, arm from /čálš/, /x̣ʷóˑmtqʷlʔš/ and /nsx̣ʷóˑmtn/ paddles from /x̣ʷóˑmt/. Plural affixes may co-occur with posses-sive and diminutive affixes only.

Plural forms of nouns are not always used even when a plural is implied or intended. Sometimes the plurality is indicated by something else in the sentence; sometimes the distinction is not important, and therefore is not indicated.

The allomorphs, here given with figures indicating the number of nouns known

to form plurals using *any particular allomorph*, are /-qʷl?š/ 131, /-Vmš/ 119

(V = a vowel), /-∅/ 56, /nš-tn/ 28, /-V-/ 12, suppletion 6, /ta-/ 5, /-a?/ 2,

and 1 each of /-neoš/, /n-/, /-aln/, length, and /-te/. /-Vmš/, /-∅/, and /-qʷl?š/

are undoubtedly used with a great many more nouns, and are probably by far the

commonest devices in the language for forming noun plurals. Each of these allo-

morphs will be taken up in turn.

/-qʷl?š/. In most cases, this suffix is added to the stem with no other

changes. But at least eight variations do occur: /-e-qʷl?š/, /-a-qʷl?š/,

/-ensqʷl?š/, /-e-nqʷl?š/, root vowel lengthened plus /-qʷl?š/, root vowel length-

ened plus /-e-qʷl?š/, final consonant change plus /-qʷl?š/, final consonant loss

plus /-ewqʷl?š/. The first of these occurs several times, especially if the stem

ends in /n/ (as the last member of a consonant cluster). Several of these are

discontinuous, with a vowel infixed in the stem and a suffix added to it. Examples

of these variations are /cə́kʷtenqʷl?š/ beds from /cə́kʷtn/, /qenónɬenqʷl?š/ wolves

from /qenónɬn/, /mác̓ɬenqʷl?š/ fleas from /mác̓ln?/; /x̣ə́ɬɬapqʷl?š/ open-weave bas-

kets from /x̣ə́ɬɬp/, /skʷénamqʷl?š/ pheasants, chickens from /skʷénm/; /má·ncensqʷl?š/

minnows from /má·nc/; /sc̓ác̓enɬnqʷl?š/ wild rose bushes from /sc̓ác̓nɬ/; /pac̓ə́·mqʷl?š/

wildcats from /pac̓ə́m/; /sqʷó·x̣ʷsenɬqʷl?š/ buckbrush bushes from /sqʷó·x̣ʷsnɬ/;

/pə́tkʷɬ?qʷl?š/ sea-otters from /pə́tkʷɬ/; /tawásnewqʷl?š/ ash trees from /tawásenɬ/.

Other examples of plain /-qʷl?š/ are /ƛ̓əq̓ʷtnqʷl?š/ ladders, /péšpešqʷl?š/ cats,

/wenáwqʷl?š/ horns, /latámqʷl?š/ tables (from French la table), /sá·q̓emmqʷl?š/

pillows, /sq̓ʷlná·mcqʷl?š/ berries.

/-Vmš/. There are at least 22 non-predictable varieties of this suffix:

/-mš/, /-a-mš/, /-amš/, /-a-amš/, /-e-amš/, /-yamš/, /-aɬamš/, /-eɬamš/, /-e-ɬamšn/,

/-n-amš/, /-omš/, /-a-omš/, /-e-omš/, /-awmš/, /-áwmš/, /-á·wmš/, /-a-awmš/,

/-a-áwmš/, /-e-awmš/, /-o-áwmš/, /-yawmš/, and /-a-š/. Several are discontinuous,

and infix a vowel between the last two consonants of the stem. The three most common varieties, in order of frequency, are /-áwmš/ (18 occurrences), /-e-amš/ (13 occurrences), and /-a-amš/ (12 occurrences). A root may be reduced in some fashion in addition to gaining a suffix, e.g., /qáx̣a?/ dog becomes /qx̣?áwmš/, /téx̣ʷcł/ tongue becomes /texʷcáwmš/, /sópsnč/ tail becomes /sópsenamš/, /čé·č/ widow becomes /čečáwmš/. Examples of the various varieties of /-Vmš/ are /słax̣áyačamš/ fingers from /słax̣áyača/; /wayé·x̣ax̣awmš/ bats from /wayé·x̣ax̣o/ (/o/ becomes /w/); /šówłamš/ roads from /šówł/, /xʷeyóyqsamš/ automobiles from /xʷeyóyqs/; /cá·lałamš/ lakes from /cá·lł/, /x̌óšx̌ašamš/ trees from /x̌óšx̌š/; /mátenamš/ heads from /mátn/, /słtámešamš/ men from /słtámš/; /kʷekʷéwela?yamš/ drums from /kʷekʷéwela?/; /staq̇ʷéłnałamš/ bows from /staq̇ʷéłn?/; /ká·sełamš/ trains from /ká·s/ (from English cars); /łó?qʷeyapenłamšn/ scrapers from /łó?qʷeypn?/, /čeyóxʷnesamš/ Oregon grape bushes from /čeyóxʷe?s/; /x̣ax̌é·?qʷnomš/ fighters from /x̣ax̌é·?qʷn/; /spatálanomš/ rocks from /spatáln/; /?álesomš/ chiefs from /?áls/; /sx̌éq̇ławmš/ wings from /sx̌éq̇ł/, /lalámawmš/ oars from /lalám/ (from French la lâme); /x̣ašáwmš/ houses from /x̣áš/, /wenawáwmš/ horns from /wenáw/; /q̇etá·wmš/ fishhooks from /q̇é·ł/; /x̌óšx̌ašawmš/ trees from /x̌óšx̌š/ (also see above); /sxʷayaq̇ʷáwmš/ joints from /sxʷayéq̇ʷ/; /cétpenawmš/ fish-traps from /cétpn/; /x̣ʷóq̇ʷx̣ʷóq̇ʷáwmš/ windpipes from /x̣ʷóq̇ʷx̣ʷéq̇ʷ/; /mósmoskeyawmš/ cows from /mósmoske/; /čáyčayalaqʷamš/ Indian paint brushes from /čáyčayalaqʷm/. In two instances, glottalization of the final consonant of the stem accompanied the plural suffix: /yámaċomš/ Douglas firs from /yámc/ and /mó·łaċamš/ springs from /mó·łac/. When a stressed variant is added to a stem, the stem loses its stress, and if the stressed vowel of the stem was /ó/, it becomes /a/.

/-∅/. Many nouns are unchanged in the plural. A few examples of these nouns are /łaċés/ star(s), /yéns/ tooth, teeth, /?élamš/ Indian(s), /payócpayc/ cone(s),

/sqʷóˑqʷsteml/ egg(s), /sɫtálaxᵂ/ cloud(s), /šapáyʔ/ comb(s), /čátɫeqeml/ police-
man, policemen.

/nš-tn/. This discontinuous allomorph is used primarily for kinship terms.
Only one or two kinship terms do not form their plurals using this allomorph,
and several words, such as those for chief, enemy, hand, eyebrow, toenail, side,
paddle sometimes use it. /nš-/ is prefixed to the noun and /-tn/ is suffixed:
/nšʔémctn/ grandsons from /ʔémc/. There are two phonemically conditioned vari-
ants of /nš-/: /nš-/ occurs before /p c k kᵂ ʔ ɫ k̓ᵂ s x̣ m y/, /ns-/ occurs before
/t č q p̓ š x̣ᵂ n/; if the singular noun begins with /sC/ (C = any consonant), the
second consonant (C) determines the prefix, and the /s-/ does not occur in the
plural form. An example of this is /nsčáwtn/ sisters-in-law from /sčáw/. Fur-
ther examples of this allomorph are /nsčéwltn/ wives from /čéwl/, /nškéytn/ grand-
mothers from /kéy/, /nšméntn/ sons from /mán/, /nšpasóˑntn/ younger sisters from
/péˑsn/, /nšyáx̣ᵂtčtn/ brothers-in-law from /yáx̣ᵂtč/, /nštátatn/ uncles from /tát-/,
/nšʔálstn/ chiefs from /ʔáls/, /nstéx̣ᵂstn/ enemies from /téx̣ᵂs/, /nšpapáystn/
toenails from /papáysšn/ (/-šn/ foot). As can be seen, several roots undergo
changes of various sorts in addition to adding this plural allomorph. These
changes are quite irregular and unpredictable, and vary considerably from noun
to noun.

/-V-/. There are five variants of this allomorph, which is an infix. In
each instance, a final consonant cluster is interrupted by a vowel, /a/, /á/,
or /e/. The vowel goes between the first two consonants after the stressed vowel
of the stem; in one case it goes between a consonant and /e/, which then becomes
/y/. One variant involves a shift of stress from the stem vowel to this infixed
vowel; if the stem vowel is /ə/ it becomes /a/. Another variant involves a change
of the stem vowel from /ə/ to /é/. Examples of /-V-/ are /pásatn/ white men from

124

/pástn/ (from English Boston), /cólayʔs/ his feet from /cóles/, /mák̓ʷat/ dead people from /mák̓ʷt/, /péˑšepš/ kittens from /péˑšpš/, /q̓ʷeɫáp/ roots from /q̓ʷéɫp/, /sepx̣ʷayán̓ʔ/ secrets from /sepx̣ʷáyn/, /ʔactéqaɫ/ prisoners from /ʔactéqɫ/, /ʔacʔéx̣atqʷlš/ medicine men from /ʔacʔéx̣tqʷlš/.

Suppletion. Only *a* few noun plurals *are* suppletive, but some of them *are* rather common. They *are* /manóˑmš/ children from /qʷáyɫ/ child, /čawaɫómš/ women from /sɫánayʔ/ woman, /čawaɫóˑmš/ girls from /sɫáˑnayʔ/, /sɫax̣áysšn/ toes from /šɫčtónwaysšn/. Two other nouns *are* suppletive, but with *a* different distribution of the suppletive members. /x̣ʷáɫ/ older brother *and* /qáˑseʔ/ uncle *are* used with first *and* second person singular possessive *affixes* only; with third person singular *and* *all* plural possessive *affixes*, *and* when no possessive *affix* is used, the forms /čéɫ-/ *and* /ɫáɫ-/ *are* used, *and* *are* the basis of the only plural forms, /nsčéɫotn/ older brothers *and* /nšɫáɫatn/ uncles.

/ta-/ is *added* to five nouns to form their plurals. One *also* compounds /qéx̣ɫ/ many to the root before /ta-/ is *added*: /taqéx̣ɫskʷácɫ/ names from /skʷácɫ/. The other instances of /ta-/ *are* /taʔetámn/ clothing, /tayéptn/ tracks, /tayalácče/ beaches, *and* /tasnáˑwas/ parents.

/-aʔ/ is suffixed to two nouns to form their plurals. Both *also* involve *a* vowel change in the stem: /nkʷyépaʔ/ followers from /nkʷyép/, *and* /ʔacpéx̣ʷaʔ/ liars from /póx̣ʷ/ (with the stative aspect prefix /ʔac-/ *also* *added* to the plural form).

The next four plural types contain one member each. They *are* /-á-neoš/ plus root vowel change from /é/ to /a/, /tax̣ʷásneoš/ enemies (also /nstéx̣ʷstn/ *and* /nstax̣ʷástn/) from /téx̣ʷs/; *a* prefix /n-/, /nmanéˑʔtmalača/ killers; *a* prefix *and* suffix /s-aɫn/, /snawáˑysaɫn/ treetops from /nawáˑys/; lengthening of the stem vowel, /spáˑqnʔ/ flowers from /spáqnʔ/.

The nominalized verbs used as adjectives have a special plural allomorph. The starting point for forming these plurals is the nominalized verb, i.e., with an intransitive suffix on the verb, e.g., /táwɫ/ big, /ʔóx̣ʷɬ/ strange, /c̓apósɸ/ strong. If the intransitive suffix is zero, /-te/ is suffixed to the stem and the stressed vowel may be lengthened: /c̓apó·ʔste/ strong ones, /ʔə́·yte/ good ones from /ʔə́yɸ/ good, /mayə́·nte/ new ones from /mayə́nɸ/ new. A superlative form is treated the same way, except that the /-te/ suffix precedes the /-s/ suffix of the superlative: /sx̣ʷʔə́yetes/ best ones from /sx̣ʷʔə́yes/ best. If the intransitive suffix of the nominalized verb is /-ɬ/, /a/ is infixed between the root and /-ɬ/, and /-te/ is suffixed to this; again, the vowel may be lengthened: /tá·waɫte/ from /táwɫ/ big, /ƛ̓á·q̓aɫte/ from /ƛ̓áq̓ɬ/ long, /ʔó·x̣ʷaɫte/ strangers from /ʔóx̣ʷɬ/ strange, and (slightly irregularly) /čƛ̓óʔq̓ʷeaɫte/ from /čƛ̓óq̓ʷ/ gray. Two nominalized verbs have irregular plurals: /ná·was/ from /náwɫ/ big, and /q̓é·ce/ from /q̓é·c/ little. These are used thus: /tat ƛ̓á·qaɫte ƛ̓əx̣ƛ̓š/ the tall trees.

There remain only a few affixes used with nouns. There are three prefixes and three suffixes; none occur often. Only one suffix was found to co-occur with other suffixes, but another undoubtedly does. None of the prefixes can co-occur with any other prefix.

/ɫa-/ is a feminine definite article, but it occurs with only two nouns. Most feminine nouns use regular articles (/tet/, /tat/, /ʔet/, /t/) or the feminine forms of them (/tec/, /tac/, /ʔec/, /c/). /ɫa-/ occurs with /k̓ʷóy/ mother and /kə́y/ grandmother: /ɫak̓ʷóy/ the mother, /ɫakə́y/ the grandmother. /ɫa-/ is not used if a possessive affix is present; instead, a feminine form of the regular article is used: /c nkə́y/ my grandmother, /tec kə́ys/ his grandmother.

/nkʷ-/ is quite uncommon, and its meaning is not at all clear, but it may

mean something like <u>with</u>. The only two words on which it occurred were /nkʷmáˑnm?/
<u>half-brother, half-sister</u>, derived from /mə́n/ <u>child</u> (vie /mán?/ <u>son</u>), and /nkʷyə́p/
<u>follower, traveling companion</u> (plural /nkʷyə́pa?/), derived from the verb /yə́pɬ/
<u>walk</u>.

A more common noun prefix is the morpheme {ns-}, which indicates place-names.
It has three phonemically determined allomorphs: /ns-/ occurs before stems begin-
ning with the consonant phonemes /č ƛ̓ q̓ʷ š/; /nš-/ occurs before /p ? x̣/; /n-/
occurs before /s/. Other combinations did not occur. Not all place names use
this prefix, but I have nine names which do. Sometimes the stem to which {ns-}
is added has a known meaning, sometimes not. The following occurred: /nsólapš/
<u>Chehalis River</u> (meaning unknown), /nscə́txʷn?/ <u>Olympia</u> (from /scə́txʷn?/ <u>black bear</u>;
Olympia was also called /stačás/ <u>rocks</u>), /nsq̓ʷánx̣tn/ <u>Mima Creek, Mima Prairie</u>
(from /q̓ʷánx̣/ <u>drying rack</u> and /-tn/ <u>nominalizer</u>; the name means <u>place to dry hides</u>
<u>on a frame</u>), /nsš?ómš/ meant <u>weeping prairie</u> (from /š?óm/ <u>cry</u>; I do not know its
English name, but it is located just north of the town of Chehalis), /nsƛ̓óˑlm?/
<u>Clallam Indians</u> (this is also the word for a <u>cockle</u>, but it is undoubtedly bor-
rowed), /nš?ákʷ/ <u>Mt. St. Helens</u> (literally, <u>water coming out</u>), /nš?ákʷeyqɬ/ <u>Mt.</u>
<u>Rainier</u> (literally, <u>fountain</u>; the names for Mt. St. Helens and Mt. Rainier are
related, both having to do with a <u>fountain</u>; the /-eyq-/ in the name for Mt. Rai-
nier may be the lexical suffix for <u>water</u>), /nšpéstl?š/ <u>Scatter Creek Prairie</u>
(meaning unknown), /nsx̣áq̓ʷm/ <u>Chehalis Creek</u> (from /sx̣áq̓ʷm/ <u>carrot</u>).

{-a?ste?} <u>at a time</u> occurs only with numeral stems. It follows the compound-
ing forms of <u>one</u>, <u>two</u>, and <u>three</u>. There are three morphemically conditioned allo-
morphs: /-a?ste?/ occurs after the stems for <u>one</u>, <u>two</u>, and <u>seven</u>, /-ya?ste?/
after the stem for <u>four</u>, and /-ste?/ after the stem for <u>three</u>. The examples I
have are /načáwa?ste?/ <u>one at a time</u>, /cáma?ste?/ <u>two at a time</u>, /čánawste?/ <u>three</u>

at a time, /mó?sya?ste?/ four at a time, /čó·pa?ste?/ seven at a time.

/-qas/ wish for is a desiderative suffix. It is usually added to nominalized verb forms, and follows possessive suffixes. Examples of its use are /sx̣asél?sqas/ he's wishing for rain (/x̣asél/ rain), /sášqsqas/ he's wishing for snow (/?ášq/ snow), /sx̣asánx̣ʷmsqas/ he's wishing for a storm, /nséɫnqas/ I'm wishing to eat (/?éɫn/ eat), /nsččáx̣ʷqas t mayén t x̣áš/ I'm wishing for a new house (/ččáx̣ʷ/ build a house, /x̣áš/ house, /mayén/ new), /ƛ́áq̓ʷqas ?et x̣asél?/ I'm wishing for rain (/ƛ́áq̓ʷ/ well!, I'd better!).

/-m?/ is a verbalizer. This is the only formal affix in the language to make a verb of a noun, and it is not used often. The following examples were found: /teqé·?ʷm?/ he acts like a horse (from /steqéw?/ horse), /wáqsčn nsčə́·?txʷenm?/ I go to Olympia (from /nsčə́txʷn?/ Olympia), /kʷólm?/ go to school (from English school), /?et má·nm?/ she gave birth (from /mén/ child). These verbs are subclass 2 verbs, as indicated by the continuative aspect form of the last example: /smánmetn/.

The diminutive morpheme in Upper Chehalis is length, but there are several allomorphs, some involving glottalization, vowel change, vowel addition or reduction, and one case each of an added consonant and suppletion. In addition to, or instead of, the diminutive morpheme, a lexical suffix /-eɫ/ or /-ɫ/ meaning offspring may be used to indicate the small or young of a living being. Most diminutives are formed by adding a phoneme of length to the stressed vowel of the stem; sometimes /?/ is added, sometimes a combination of length and /?/, and sometimes two phonemes of length.

Glottalization plus vowel length produces some features peculiar to diminutive forms. One of these is an overlong vowel always strongly marked by "creakiness," or strong pharyngealization; this creakiness has a rather wide range of

stricture, from almost no disturbance of the vowel tone to complete, sometimes temporary, glottal closure. This temporary, complete glottal closure with a long vowel produces an "echo vowel" after the glottal closure, i.e., a faint re-articulation of the vowel preceding the glottal closure. Other writers on Salish, notably Gladys Reichard[1], have commented on echo vowels as common to many Salish languages, but it seems to be restricted in Upper Chehalis to diminutive forms. I consider it a feature of a long vowel plus glottal closure, or phonemically length plus a glottal stop. One feature of a double phoneme of length is that its presence causes /ə́·/ to merge with /é·/, i.e., /ə́··/ and /é·/ are both phonetically [ǽ·]. The reverse of this also happens in diminutive forms; /é·/ ([ǽ·]) is shortened (usually by a glottal stop) and becomes the same as /ə́·/ ([ǽ] rather than [é]). This has of necessity been interpreted as a vowel change from /é/ to /ə́·/ to form these particular diminutives.

The various allomorphs of the diminutive morpheme, with examples of each, follow. The lexical suffix /-eł/ or /-ł/ offspring is not part of the diminutive morpheme, but often co-occurs with it. /·/: /spatá·łn/ little rock from /spatáln/, /ʔalašé·keł/ baby turtle from /ʔalašék/, /sčə́·txʷn̓/ little black bear from /sčə́txʷn̓/. /··/: /yé·ns/ (or /yə́··ns/) small tooth from /yə́ns/, /qaqé·meł/ (or /qaqə́··meł/) baby woodpecker from /qaqə́m/. /ʔ/: /sčá̓ʔtqłm̓/ little grizzly bear from /sčátqłm̓/, /mó̓ʔs/ four (diminutive) from /mós/. /·ʔ/: /smá··ʔneče/ little mountain from /smá·neče/, /mə́·ʔsčm̓/ baby mink from /mə́sčm̓/, /p̓ayə́·ʔq̓ʷ/ baby bluejay from /p̓ayə́q̓ʷ/. /é/ becomes /ə́·/: /čə́·kcek/ little wagon from /čékcek/; /é/ becomes /ə́·ʔ/. /wə́·ʔł/ little canoe from /wéł/, /łačə́·ʔs/ little star from /łačés/. /é/ becomes /ə́·ʔ/ plus infixed /e/: /xʷlə́·ʔtpenł/ baby hoot

[1] Gladys A. Reichard, "Grammar of Coeur d'Alene," Handbook of American Indian Languages, III (1938), 517-707.

owl from /xʷlétpn/. /é/ becomes /ə́·ʔ/ plus infixed /a/: /swə́·ʔsq̣́aq̣eʔɬ/ baby robin from /swésq̣q̣/. /é/ becomes /á·/ plus consonant loss: /qelá·teɬ/ elk-calf from /q̇életn/. Infixed /-e-/: /sáxʷeyenɬ/ baby otter from /sáxʷeynʔ/. /·/ plus infixed /-e-/: /tawá·senɬ/ little ash tree from /tawásnɬ/. /·ʔ/ plus infixed /-e-/: /paqá·ʔlenɬ/ baby eagle from /paqáln/. /·/ plus loss of /a/: /xʷó·mt/ paddle from /xʷómat/ steamboat paddle-wheel. Infixed /-a-/: /sx̣átx̣ateɬ/ baby duck from /x̣átx̣t/. Infixed /-áe-/: /sqʷayáeɬ/ baby from /qʷáyɬ/ child. Loss of /-a/: /ʔána ʔaneɬ/ baby magpie from /ʔána ʔana/. /·s/: /cé·sɬn/ food, fish (diminutive) from /céɬn/. Suppletion: /t́é·lq̇ah/ fawn from /sk̇aláš/ deer.

VI. NOTES ON SYNTAX

The negative particle /mélta/ is the only particle which ever has affixes. Three suffixes have been found to occur with /mélta/: /-t/, /-w/, and /-ws/. However, it was not possible to determine the function of these affixes, although they surely have one. They do not seem to be in free variation, and whatever their purpose is is not apparent. An example of the use of each follows. /?ə́nca we méltaw s?élann/ I am not singing; this may also be said /mélta tn swe s?élann/. /méltaws lé·? to nə́·?x̣/ it's not far from here. /cə́ne we ?et yə́pɬ méltat yá?šns t wá·/ he left without telling anyone (/yá?šn/ tell, /-s/ his, /wá·/ who). The /-t/ suffix may be an indefinite article rather than an affix.

Although it is not the purpose of this paper to present a full discussion of Upper Chehalis syntax, a few notes on the subject are in order to supplement the morphology.

Several inflectional categories are present in Upper Chehalis, some indicated morphologically, others syntactically. The morphologically indicated categories have already been discussed: number (singular and plural, of both nouns and verbs), person (first, second and third, singular and plural), aspect and tense (of verbs), voice (of verbs), and modality (of verbs).

Other categories, indicated syntactically (or lexically), are gender, articles and demonstratives. Only two genders are distinguished in Upper Chehalis, and that not consistently. The two are best labeled (as by Boas) feminine and non-feminine. A few (but not all) nouns with natural feminine gender are so indicated by special forms of the articles and demonstratives, or, in the case of /k̫óy/

mother and /kéy/ grandmother, by a prefix /ła-/. All other nouns (that is, the vast majority) are preceded by the non-feminine forms of the articles and demonstratives. By non-feminine is meant only that a special feminine article, demonstrative or prefix is not present, and the term includes some nouns with natural feminine gender.

A complete paradigm of feminine and non-feminine markers (except /ła-/) includes both articles and demonstratives, since both show the distinction, although not throughout among the demonstratives. The forms are:

	non-feminine	feminine
indefinite article	t	c
definite articles	ʔet	ʔec
	tet	tec
	tat	tac
this	tetx̣té	tecx̣cé
that (near)	tetx̣tés	-
that (not near)	tetx̣tá	tecx̣cá
these	tetx̣téomš	-
those	tetx̣táyomš	-
this one (pointing)	tetaté	-
that one (pointing)	tetatá	-

Feminine forms do not exist for that (near), these, those, this one, and that one. Nouns before which feminine articles and demonstratives occurred include /céne/ him (/tec céne/ her), /słá·nay?/ girl, /čawałó·mš/ girls, /smá·taxʷn?/ mother-in-law, /?émc/ grandson (/tec ?émc/ granddaughter), /mén?/ daughter, /kéy/ grandmother, /kʷóy/ mother, /pé·sn/ younger sister, and nouns with the lexical suffix /-łn?/ woman, as in /c pástenłn?/ an American woman, /c q̓ʷayáełaqłn?/ an

Upper Chehalis woman. My informant was not always consistent, however; he occasionally used a non-feminine form before some of these, particularly /čawaɬóˑmš/. Other naturally feminine nouns such as /yáynʔ/ older sister were regularly preceded by non-feminine articles and demonstratives. The same form of an article is used with both singular and plural nouns.

There are several particles in Upper Chehalis comparable to certain particles in other Salish languages. These particles have traditionally been called articles, and are in many ways comparable to English articles, except that the indefinite article (/t/ a) may be used with plural as well as singular nouns, in which case it must be translated some. These articles have no meaning in themselves, but serve more or less as pointers, although usually vague ones. Sometimes, though, the pointing is more definite (especially with /tat/), and approaches the demonstratives /tetx̣té/, etc.

Most nouns are preceded by an article or a demonstrative, and even when a demonstrative is used an article is usually present too: /tetx̣té tet qáx̣aʔ/ this dog, /tecx̣cá tec sɬáˑnayʔ/ that girl. The difference between the three definite articles is very subtle, especially that between /ʔet/ and /tet/. Three positions are indicated by demonstratives, and this may be the purpose of the three definite articles as well. /tat/ usually seems to be something rather definite, and perhaps even removed from the speaker. It was occasionally translated as that. The difference between /ʔet/ and /tet/ is most unclear, although there is definitely a difference. Once or twice a temporal difference was indicated, /ʔet/ being past time, as /ʔec sɬáˑnayʔ/ the girl (past time). But the distinction may also be physical proximity to the speaker, as with the demonstratives. Perhaps the two are not incompatible, and the distinction may be /tet/, close to the speaker in time and space, vs. /ʔet/, somewhat removed from the speaker in

time and space. Pattern would indicate this, and a feasible paradigm could be set up as follows:

	definite article		demonstrative			
	non-fem.	fem.	"pointers"	non-fem.	fem.	plural
by speaker	tet	tec	tetaté	tetx̣té	tecx̣cé	tetx̣téomš
near speaker	ʔet	ʔec	-	tetx̣tés	-	-
not near speaker	tat	tac	tetatá	tetx̣tá	tecx̣cá	tetx̣táyomš

The three-way distinction does not exist in the plural, feminine, or pointing demonstratives.

But this three-way contrast of position in relation to the speaker is significant, and exists in the demonstrative adverbs (which are classed with verbs) as well. There are eleven of these meaning here or there, and distinctions are sometimes hard to find. There are two distinct groups of them, however, one indicating motion, the other rest. The three-way relationship of position with regard to the speaker exists only among the seven adverbs of rest:

	specific	general	
here, by speaker	té·ʔ	né·ʔ	
there, near speaker	łé	néš	łákʷ
there, not near speaker	łá	šán ʔ	

The four indicating motion are:

definite		indefinite	
šé·ʔ	to here	šé·mʔ	this way
šénʔ	to there	šó·q̓ʷmʔ	that way

I could never discover the distinction between /néš/ and /łákʷ/, although one exists. My informant was, in general, unable to translate these adequately into English so that they were ever completely clear. Another member of the Upper

Chehalis tribe was able to help me a little on these when I cited them to her--
she recognized them, but no longer remembered enough to speak the language or
produce forms. Most of these can also occur with the suffix /-x̣/ indicating defi-
niteness.

A sentence in Upper Chehalis ordinarily consists of two major constituents,
a subject and a predicate. By subject, an expressed noun subject is meant; the
subject of the verb may also be indicated by means of a verbal subject suffix
only, without a noun in the same sentence to which this pronominal subject refers.
Thus the sentence may consist of a predicate alone.

The expressed subject is the less complex constituent of the sentence. It
consists of a noun or a noun phrase. A noun phrase is a series of two nouns,
which will be referred to here as noun A and noun B. There are two ways in which
these two nouns may occur together in the phrase. Noun A must always be preceded
by an article or a demonstrative. Noun B may either (1) immediately follow noun
A with nothing intervening, or (2) it may follow with an intervening article.
If the first type of construction is used, noun A serves to modify noun B, and
is usually a nominalized verb. This is the closest Upper Chehalis comes to having
a formal adjective. An example of this type of noun phrase is /tat ƛ̓á·ʔqaɬte
ƛ̓əšx̣š/ the tall trees, in which /ƛ̓á·ʔqaɬte/ is the plural of a nominalized verb
/ƛ̓áqɬ/ tall, long. In the second type of construction, noun A may again be adjec-
tival, or it may be entirely nominal with noun B as a possessor of noun A, i.e.,
a genitive construction marked solely by the order of the two nouns. This is
the only way a genitive construction can be formed. An example is /tat yə́mceš
tat qéletn/ the fat of the elk. Noun A may be used adjectivally in this same
type of construction in /tat ʔacq̓ʷá·ɬqʷlʔš tat sólčs/ the wounded soldiers
(/q̓ʷá·ɬ-/ wound, /-qʷlʔš/ plural). The two are actually quite different. In

the genitive construction, noun A is the head, but noun B is the head of both types of adjectival constructions. In adjectival constructions, noun A is a nominalized verb, but in genitive constructions, neither noun may be a nominalized verb (unless the verb has been nominalized by means of one of the special nominalizing suffixes; this type is quite different from verbs nominalized by the mere addition of an article, as are the nominalized verbs of these adjectival constructions).

A noun phrase can also consist of a series of nouns connected by conjunctions or a noun followed by a prepositional phrase which modifies the noun. There are at least eight prepositions in Upper Chehalis, and two common compounds of prepositions. The difference between some of the prepositions is not always clear, but the use of them in Upper Chehalis is rather idiomatic, as in other languages. The known prepositions are /ʔaɬ/ in, on, into, /ča/ with, /ɬ/ in, to, at, into, /š/ to, into, /ta/ with, in, to, /tač/ with, by, /taš/ from, at, across, through, around, /to/ of, from; the two compounds are /šaɬ/ or /šʔaɬ/ to, on, into (/š/ plus /ʔaɬ/) and /toɬ/ for, to (/to/ plus /ɬ/). Various clusters of prepositions may also be used, such as /ta šaɬ/, /to ʔaɬ/. A prepositional phrase consists of a preposition followed by an article and a noun, e.g., /ʔaɬ tat wéɬ/ in the canoe, /to léˑʔ/ from afar.

The predicate of a sentence usually consists of at least a verbal (which is the major constituent of a predicate), but may also contain noun objects and prepositional phrases. A verbal is a verb (including all its affixes) and any tense or aspectual markers present. Intransitive verbs may be followed by noun objects and prepositional phrases. Examples are (a) of an intransitive verb: /ʔet čóčstq tač sqʷétwn/ it was destroyed by fire, (b) of an implied transitive verb: /ʔet čóčmɬ tat šáwoyeʔ/ or /ʔet čóčmɬ ʔaɬ tet šáwoyeʔ/ he won the game,

(c) of *a* transitive verb: /ʔet x̣ék̓ʷn tat mə́qsns/ <u>he scratched his nose.</u>

Noun objects have no special form to identify them as such, and are identifiable only by their position following *a* transitive or implied transitive verb.

Word order is relatively fixed in Upper Chehalis and determines certain interrelationships, as between nouns (see above). Only the position of the subject may vary. Word order in the sentence is quite commonly verbal-subject-object, e.g., /ʔacłə́q̓ʷł tat t̓améłnʔ/ <u>the rope is broken,</u> /spə́łwn tet q̓ʷłóyʔ to ʔał tet ƛ̓ə́šƛ̓ašamš/ <u>the leaves are falling from the trees.</u> But the subject may come first: subject-verbal-object, e.g., /tat qáx̣aʔ we ʔet laqʷə́n tat qáˑʔ #/ <u>the dog lapped up the water.</u> If the subject precedes the verbal, the copulative verb /we/ must follow the subject (without aspectual, tense, personal or any other affixes), and then comes the verbal. A noun subject need not be present, however. In questions, an interrogative word, if present, begins the sentence, followed by the verbal, and then the subject, e.g., /ʔéˑnm t čés šə́ˑʔx̣/ <u>how did he come here?,</u> /wáˑ ta nə́ˑʔx̣/ <u>who was here?</u> If no interrogative word is used, word order is as in *a* declarative sentence (the interrogative being indicated by *a* verb /ʔé/ or affix /-na/), e.g., /ʔačé tet céne ta swens ʔélann/ <u>was he singing?</u> (/ʔačé/ from /ʔac-/ stative aspect plus /ʔé/), /ʔet ʔə́x̣tolłčna/ <u>did you see us?</u> In *a* negative sentence, the negative particle /mélta/ immediately precedes the verbal, as in /ʔə́nca we méłtaws ta sʔélananš/ <u>I wasn't singing.</u>

There are, of course, many other possible sentence-types, but subject-verbal-object, as the commonest, is the only type which will be discussed here.

VII. TEXTS

THE BATTLE BETWEEN THE UPPER CHEHALIS AND THE LOWER CHEHALIS

(1) /ʔaɬ tat x̌áq-ɬnɬ | ʔac-x̌áɬš-m tet q̓ʷayáeɬ-q̓ nə́·ʔ-x̣ | ʔaɬ tet x̌aqáyqɬ | yá·ʔčmš ɬ tat ɬačés #/ At the long-time (ago) | stat-reside-intr the Upper Chehalis-language here-def | on the Long Prairie | near to the Star. (2) /we ʔéto nkʷs-cél·ʔ-ew-n | t sša·ʔm-álaxʷ to ɬá-če #/ Be then hab-come up river and land-intr-they | a people from down-river. (3) /hóy | ɬ-ɬó·qʷ-n tat sša·ʔm-álaxʷ nə́·ʔ-x̣ #/ And then | fut-bully-they the people here-def. (4) /x̣ʷáqʷ ʔé·nm t sá·-saʔa-ceš-syamš #/ All ways a redup-do-refl-their. (5) /s-čə́ɬq-t-eɬt k̓ʷə́lm-syamš | ʔaɬ t s-we-ns s-x̣apé-t-eɬt s-q̓ʷl-námc | ʔaɬ t s-we-ns s-x̣apé-t-eɬt t s-éɬn | sšéc we s-čə́ɬq-t-eɬt | x̣ʷáqʷ ʔé·nm s-x̌á·qe-ceš-syamš | x̌áq-ɬnɬ #/ Cont-break up-it-they drying rack(s)-their | at a cont-be-their cont-dry-it-they cont-ripe-body (berries) | at a cont-be-their cont-dry-it-they a cont-eat (food) | meat be cont-break up-it-they | all ways cont-make disagreeable-refl-their | long-time. (6) /ʔéto céx̣-mesč tanen #/ Then tired of-pass now. (7) /hóy | x̣ʷó·qʷ-twal-n tet q̓ʷayáeɬ-q̓ | cót-eɬt | x̌áq̓ʷ tanen ʔet ɬap-ə́n-čɬ tet sná·sčos #/ And then | gather-recip-they the Upper Chehalis-language | say-they | "we'd better now compl kill-them-we the two brothers. (8) /senémaɬ man-ó·mš we hóy méɬta t s-we-ns ʔac-ʔošám-s-tn? | t čósos s-x̌á·qe-čt-eɬt š-ʔáɬ-ènm #/ Our child-pl be then not a cont-be-their stat-have pity-it(obj)-nom | a always cont-make disagreeable-refl-they to-on-us. (9) /x̌áq̓ʷ ʔet ɬéw-xʷ-čɬ tanen to ʔaɬ tet tə́mš #/ We'd better compl remove-them-we now from on the earth." (10) /hóy | x̣ʷó·qʷ-twal-n tanen tet q̓ʷayáeɬ-q̓ #/ And then | gather-recip-they now the Upper Chehalis-

language. (11) /wé·-x̣ ƚa-s-we-ns né·ʔ-x̣ tat snáʔsčos | célačs q̓óx̣-tn-s t wéƚ |
s-celʔ-éw-n to ƚá-če | ƛá·qe-t-n tat sša?m-álaxᵂ | s-nš-mán-tn-syamš #/ Be-intr
again-cont-be-their here-def the two brothers | five many-nom-their some canoe |
cont-land-intr-they from down-river | make disagreeable-it-they the people | cont-
pl-relation-pl-their. (12) /hóy | cón-t-syamš tat s-náw-ƚ-t-ʔamš | nš-ʔémc-tn |
ʔac-nám-nax̣-nowt tet s-né·ʔ-x̣-amš | šaƚ ƛa s-ƚép-tam-alp #/ And then | tell-it-
their the cont-old-intr-a-people (old lady) | "pl-grandchild-pl | stat-done-plan-
mind the cont-here-def-people (local people) | to future cont-kill-pass-your(pl).
(13) /ʔac-x̣ɘlm-ƚ tanen tews-ƚé-x̣ we čt-ʔéy | t q̓aƚ s-we-nap ʔet čɘč-ƚ ʔaƚ tet
wéƚ toƚ ƛa-xᵂɘ́l-čt-alp | čá· ʔet wén-ten-alp #/ Stat-prepare-intr now when-there-
def (right now) be more-good | a modal (if) cont-be-your(pl) compl get in-intr
into the canoe for back-go downstream-refl-you(pl) | where the home-nom-your(pl)."
(14) /we méƚta-exᵂoʔ s-x̣alá·lq tɑt s-náw-ƚ-t-ʔamš | ʔéto | ʔɘ́w-met-n t qenónɬnʔ #/
Be not-yet cont-finish talking the cont-old-intr-a-people (old lady) | all at
once | howl-intr-it a wolf. (15) /we čósos cón-ƚ tat s-náw-ƚ-t-ʔamš | tó·l-exᵂ-
č-naʔ #/ Be right away tell-intr the cont-old-intr-a-people (old lady) | "hear-
it-you(sg)-?. (16) /ʔac-x̣ɘlm-ƚ tanen ƛa s-ƚép-tam-alp | čɘ́č-w-elaʔ šaƚ tet
wéƚ-alp | ƛa-xᵂɘ́l-čt-alp tews-ƚé-x̣ #/ Stat-prepare-intr now future cont-kill-
pass-your(pl) | get in-intr-imper(pl) into the canoe-your(pl) | back-go downstream-
refl-you(pl) when-there-def (right now)." (17) /hóy | čɘ́č-ow-eƚt #/ And then |
get in-intr-they. (18) /xᵂɘ́l-čt-eƚt | ƛa-s-x̣ᵂoqᵂ-ów-n tanen tat sša?m-álaxᵂ #/
Go downstream-refl-they | again-cont-gather-intr-they now the people. (19) /tó·l-
exᵂ-yamš s-ɘ́w-mƚ tat támče tɑt qenónɬnʔ we s-qᵂáw-q-syamš #/ Hear-it-they cont-
howl-intr the that thing the wolf be cont-answer-voice-their. (20) /s-qᵂáw-q-
syamš q̓ecx̣ t p̓ayéq̓ᵂ | q̓ecx̣ t skᵂenóɬčec | q̓ecx̣ t snačɘ́lʔ | x̣ᵂaq̓ᵂ-t-tám tet
pé·psayo s-yá·ƚa-q̓e-t-eƚt #/ Cont-answer-voice-their thus (like) a bluejay |

thus *a* hoot owl | thus *a* coyote | all-*a*-what (everything else) the animal(s) cont-mock-language-them-they. (21) /hóy | ʔet x̌ʷóqʷ-n tanen t qə́x̌-ɬ #/ And then | compl gather-they now some many-intr. (22) /we ʔac-wéˑ-x̌ tat táˑšmš | ta šaɬ tet qáˑʔ | n-sól-apš #/ Be stat-be/have-intr compl follow | to to the river | place-Cheha-lis-River. (23) /we ta-ʔac-wéˑ-x̌ tanen taš ʔéx̌ɬ | ta-s-wáqs ɬáčw-m s-čáywel-n #/ Be again-stat-be/have-intr now along shore | again-cont-go downstream-intr cont-waylay-they. (24) /we šán? ɬ tet sáˑ-claɬ-alocn ɬáčoq ɬ céne | ta s-we-ns | tet qtén-m-yamš #/ Be there at the make-lake-river mouth (Black River Prairie) Lower Chehalis to him/it | past cont-be-their | compl meet-intr-they. (25) /šán-x̌ tanen ta sáʔ-ɬ t s-qal-ékʷn | t yóp-okʷn #/ There-def now to make-intr *a* cont-fight-intr | *a* battle-intr. (26) /hóy qal-ékʷn-elt šán-x̌ | we ʔac-wéˑ-x̌ t ʔóˑčs | ʔáles-s čátalm-s tet s-nə́ˑʔ-x̌-amš | q̓ʷayáeɬ-q̓ #/ And then fight-intr-they there-def | be stat-be/have-intr *a* one | chief-their leader-their the cont-here-def-people (local people) | Upper Chehalis-language. (27) /ʔac-čáyo-ɬ | čáywel-n | čátalm-s tat to ɬá-če | ʔac-táˑqacšn-yamš #/ Stat-waylay/wait-intr | waylay-he | leader-their the from down-river | stat-shield(s)-they. (28) /we ʔet nax̌áy-qs-n tet s-nə́ˑʔ-x̌-amš | s-x̌lx̌áʔs | s-čáˑ ka s-cáx̌ʷ-s-m-s | tat tax̌ʷásn-s | n ɬ-ʔélape-t-n #/ Be compl aim-point-he the cont-here-def-people (local people) | cont-arrow | cont-where future cont-stick up-head-intr-his | the enemy-his | so that fut-shoot-him-he. (29) /we mélta-ws k̓aq-lnɬ n cáx̌ʷ-s-met-n náx̌ʷloʔ | hóy ʔélape-t-n šaɬ t mós | we čósos ʔátmn-s #/ Be not long-time and stick up-head-intr-he true | and then shoot-him-he in an eye | be right away die-his. (30) /we s-wáˑymačes-s tat nkʷ-yép-a-s | t ʔátmn-s tat čátalm-syamš #/ Be cont-give up-their the fol-lower-pl-their | *a* die-his the leader-their. (31) /we čáˑɬe t wéɬ | tat tx̌ʷ-palówʔ | s-ɬóx̌ʷ-met-elt ɬáčw-m #/ Be three some canoe(s) | the get-through | cont-get away-intr-they downstream-intr. (32) /sále t wéɬ tat čóč-tm | x̌ʷáˑˑqʷ ʔacáwɬ |

pə̀s sále tat sná?scos #/ Two some canoe(s) the all gone-pass | all(emph) in canoe |
including two the two brothers. (33) /hóy | x̌ʷól-čt-eɬt | to šánm-x̣ tanen | n
ɬa-nám-aw-n tanen t s-we-ns nkʷs-čés-n | t ɬáčoq šə́ˑm?-x̣ | ɬ tet čócea ɬ s-ƛ̌a?áˑqeč #/
And then | go downstream-refl-they | from then on-def now | and again-end-intr
they now a cont-be-their hab-come-they | some Lower Chehalis here-def | to the
upstream to cont-raise trouble. (34) /we ?et ɬóp-ɬ tat nš-?áls-tn-syamš | tat
čáɬalm #/ Be compl kill-intr the pl-chief-pl-their | the leader. (35) /to šán?-x̣
tanen | n we-n ?ac-ɬanemáɬ-tm?š | n méɬta-ws ta šaɬ nax̣-énowt-s | tet čócea ɬ
sša?m-álaxʷ šaɬ tet ɬá-če ?aɬ tet n-sól-apš #/ From there-def now | and be-it
stat-measure-earth (landmark) | and not to to plan-mind-their | the upstream to
people to the down-river on the place-Chehalis-River. (36) /?éyo | tet ƛ̌ʷóp-ɬ
?aɬ ƛ̌ʷn-éno?s-m-s ?et ɬáčoq | ?éyo šə́ˑ? tanen ɬ-et sá-capš | ƛa s-x̌ʷéɬ-syamš to
stáx̣ʷo? #/ Just | the straighten-intr in count-stomach(think/mind)-intr-their
the Lower Chehalis | just to here now fut-compl make-stream (Satsop River) |
future cont-go upstream-their only. (37) /we tet s-nə́ˑ?-x̣-amš tet q̌ʷayáeɬ-q̌ q̌aɬ
wáqs-yamš sá-capš | šénam-x̣ | q̌es-kʷáxʷ-syamš nkʷs-cóˑt-eɬt ?eƛ̌áq̌ʷ š ɬá-če ɬayéč-
čɬ | qas ?aɬ ta ?óˑcs s-q̌ét-ače | we ta néš ɬ tet ɬaq̌ʷélm ta s-we-ns ?ac-nám?-ɬ |
taméš-s tet ɬá-če ča tet q̌ʷayáeɬ-q̌ #/ Be the cont-here-def-people (local people)
the Upper Chehalis-language modal (when) go-they make-stream (Satsop River) |
as far as-def | mod-arrive-their hab-decide-they enough to down-river travel-we |
because in past one cont-day-time | be past here at the Cloquallam Creek past
cont-be-their stat-end-intr | land-their the down-river and the Upper Chehalis-
language. (38) /to stéx̣ʷo? #/ That's all.

Free translation: A long time ago, the Upper Chehalis lived here on Long
Prairie near the Star Mound. Then some people from downstream kept coming up-
river and landing here. They began to bully the people here. They did all sorts

of things--they broke up their drying racks, where they were drying berries and food--they broke up their meat, and made themselves disagreeable in all sorts of ways for a long time. Then the people got tired of it. The Upper Chehalis assembled and said, "We'd better kill those two brothers. They have no pity on our children, they always make themselves disagreeable to us. We'd better remove them now from the earth." And the Upper Chehalis assembled. The two brothers were back here with five canoes, landing from down-river, making themselves disagreeable to the people--their relations. Then an old lady told them, "Grandchildren, the local people have planned to kill you. You'd better prepare right now to get in your canoes and go back downstream to where you live." The old lady was scarcely finished talking, when all at once a wolf howled. Right away the old lady told them, "Do you hear that? Get ready now to be killed. Get into your canoes and go back downstream right now." Then they got in and went downstream. The people got together. They heard that thing--the wolf--howl, and they answered it. They answered like a bluejay, like a hoot-owl, like a coyote, and they imitated all the animals. Now then, many people gathered. They followed to the Chehalis River. Some went along shore, going downstream to waylay them. The Lower Chehalis were there at Black River Prairie, and they met them there. There they were going to make a fight--a battle. And they fought there. One of the local people--the Upper Chehalis--was their chief--their leader. The leader waylaid those from downstream. They had shields. The local man aimed an arrow at the place where the enemy would stick his head up (above his shield) so that he could shoot him. It wasn't long until he stuck his head up all right, and then he shot him in the eye, and he died right away. His followers gave up when their leader died. Three canoes got through, they got away downstream. Two canoes were all gone--everyone in the canoes, including the two brothers.

Then they went downstream from there, and they quit coming up all the time--the Lower Chehalis coming upstream here to raise trouble. They killed their chiefs--leaders. And they had a landmark there on the Chehalis River, not planned by (council of) the upstream people with the downstream (people). It was just decided in the minds of the Lower Chehalis to only go upstream as far as the Satsop River in the future. When the local people--the Upper Chehalis--go as far as the Satsop River, when they arrive, they decide they have traveled far enough downstream, because in days past, Cloquallam Creek was the end of their territory--of the Lower Chehalis and the Upper Chehalis. That's all.

THE FIRST WHITE MEN AT MUD BAY

(1) /ʔaɬ tat k̓áq-ɬnɬ | we | ʔac-wé˙-x̣ | tat sšaʔm-álax̣ʷ | ʔaɬ tet ʔáɬ-s-q̓ʷayaeɬ #/ At the long-time (ago) | be | stat-be-intr | the people | at the at-cont-Mud Bay. (2) /ʔéto ʔə́x̣-t-eɬt | čés-n t wéɬ #/ Then see-it-they | come-it a canoe. (3) /t ʔáqʷtol-n tat ʔac-čéčaɬ | ʔáwɬals | Mm˙˙ tat s-ʔáqʷtɬ-yamš | n pé˙n wéɬ | čá˙ tat sšaʔm-álax̣ʷ #/ A paddle-they the stat-those in the canoe | backwards | long time the cont-paddle-they | and land canoe | where the people. (4) /ʔó˙x̣ʷ-a-ɬ-te | k̓ʷóp ʔó˙x̣ʷ-a-ɬ-te t sšaʔm-álax̣ʷ #/ Strange-pl-intr-pl | very strange-pl-intr-pl a people. (5) /hóy | ta šaɬ t s-we-ns s-wán-č-met-eɬt | we ʔet k̓ʷpyáloc-n tat ʔélamš | q̓ʷayáeɬ-q̓ | tám tat s-qén-mn-yamš #/ And then | to at a cont-be-their cont-move-hand-intr-they | be compl understand-it the Indians | Upper Chehalis-language | what the cont-want-it-they. (6) /hóy ta-wán-č-met-eɬt s-có˙n-tn-s | k̓áq̓ʷ | naɬʔéns | q̓écx̣ #/ And then again-move-hand-intr-they cont-tell-nom-their | they'd better | give consent | thus. (7) /kʷas qéns s-q̓él-met-eɬt | ʔaɬ tat témš | we sáwl-ekʷn-yamš ʔac-ʔé t q̓aɬ q̓al-ém-čɬ #/ Be want cont-camp-intr-they | on the land | be ask-intr-they stat-? a modal (may) camp-intr-we.

(8) /cóˑn-t-syamš | x̌áq̇ʷ | ta šaⱡ s-wán-ačá-n-n #/ Tell-it-their | all right |
to at cont-move-hand-intr-they. (9) /hóy wáqs-eⱡt š ⱡakʷ-élals | tat snówqs |
šán-x̣ #/ And then go-they to other-side | the point of land | there-def. (10)
/t s-we-nsyamš ʔet q̇ʷaté-čp | ʔet ʔóx̣-tm s-q̇ʷóx̣ʷ #/ A cont-be-their compl burn-
fire (build a fire) | compl see-pass cont-smoke. (11) /hóy čén-ʔx̣ʷ-ow-n tat
sša-ʔm-álaxʷ | ʔet x̣ʷóˑqʷ-towš #/ And then discuss-intr-they the people | compl
gather-recip. (12) /čén-ʔx̣ʷ-ow-eⱡt | sáwl-kʷn-twal-n | tám ʔok̇ʷa t s-we-ns sša-ʔm-
álaxʷ teⱡóms-mol-n #/ Discuss-intr-they | ask-intr-recip-they | what be a cont-
be-their people come to-us-they. (13) /ʔéto | ⱡ-we-n-n méⱡta-ws ʔéy š-ʔáⱡ-ènm #/
Then | fut-be-? not good to-to-us. (14) /ʔac-čs-x̌óq̇ʷ tet mós #/ Stat-color-clear
(gray) the eyes. (15) /s-k̇ʷéq̇ tet cmós #/ Cont-pale the face. (16) /tet mós-a?
s-we ʔac-čs-x̌óq̇ʷ #/ The eye-pl cont-be stat-color-gray. (17) /mák̇ʷt-yamš #/
Dead people-they. (18) /to šán ⱡ t mák̇ʷat-č | s-čés-syamš #/ From there in a
land of dead-? | cont-come-their. (19) /cneáwmš we méⱡta-ws ʔéy š-ʔáⱡ-ènm t q̇aⱡ
s-we-ns ʔac-wéˑ-x̣ | néˑ-x̣ #/ They be not good to-to-us a modal (if) cont-be-their
stat-be-intr | here-def. (20) /q̇aⱡ x̣ax̣á | š-ʔáⱡ-ènm | t q̇aⱡ s-we-ns ʔet ⱡóms-moⱡ
t mák̇ʷt #/ Modal (may) forbidden | to-to-us | a modal (may) cont-be-their compl
come to-us a dead person. (21) /cóˑʔ | waqás-čⱡ ⱡap-én-čⱡ #/ Let us! | go-pl-we
kill-them-we. (22) /to wáqs-yamš | x̣ʷóqʷ-twal-n tat čáˑⱡe tat sša-ʔm-álaxʷ | n
ⱡáp-t-eⱡt #/ To go-they | gather-recip-they the three the people | and kill-them-
they. (23) /q̇ačáˑ s-x̌áq-ⱡnⱡ ʔéto x̣ʷoqʷ-ów-n tanen tet páˑsatn | ok̇ʷa to šán?
ⱡóⱡn-x̣ tat sša-ʔm-álaxʷ #/ Long cont-long-time then come in numbers-intr-they now
the white man-pl | be from there come-def the people. (24) /we méⱡta-t s-pót-
syamš to čáˑ tat čés-as tat čáˑⱡe | to ʔaⱡ šaⱡ tet s-q̇ét-ače #/ Be not cont-know-
their from where the come-pl the three | from at to the cont-day-time. (25) /tám
t s-we-ns sša-ʔm-álaxʷ #/ What a cont-be-their people. (26) /méⱡta-t s-pót-syamš

ʔaɬ tet s-q̓ét-ače #/ Not cont-know-their to this cont-day-time.

Free translation: A long time ago there were people living at Mud Bay. All at once they saw a canoe coming toward them, and the people were paddling backwards, and kept coming until they landed where the people were. Strange people--very strange people. And through signs with their hands, the Indians-- the Upper Chehalis--came to understand what they wanted. And they made signs asking for their consent to camp on their land. And the Indians, by giving them signs, said it would be all right. And so they went on the other side of a point. That was where they built a fire, because that was where they saw the smoke. That was when the people got together and began discussing. Then they began to discuss among themselves and ask one another, "What kind of people have come here? They may not be good for us. Their eyes are clear. Their faces are pale. Their eyes are gray. They are dead people. They came from the land of the dead. It isn't good for us for them to come to us. It is forbidden for a dead person to come to us. Let's go over there and kill them." So they went to where those people were camping and killed all three of them. It was some time after that that the white people came, and they (found out that those three men who had landed there at Mud Bay) belonged to that race. And they don't know from where those three men ever came to this day. What kind of people they were they don't know today.

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