

Anatomy in Upper Stalo Halkomelem,
A Morphosememic Study

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1. Introduction.

Upper Stalo dialects of Halkomelem are spoken along the Fraser River from Yale, B.C. to Chehalis, B.C., Derroche and Chilliwack, B.C. The Upper Stalo dialects share certain phonological and morphological features which allow them to be considered as a unit in contrast to Lower Stalo dialects and Vancouver Island dialects of Halkomelem. Within the Upper Stalo area are the Tait, Chehalis, and Chilliwack River dialects. Within each of these are microdialects whose differences are so far not well documented; Tait may include Yale, Hope-Katz, Seabird Island, Laidlaw-Cheam; Chehalis may include Chehalis and Scowlitz; Chilliwack River includes Chilliwack Landing (Pilalt), Sardis-Tzeachten, and possibly Soowahlie-Cultus Lake. This paper will only differentiate between Tait, Chehalis, and Chilliwack River dialects. In the Nooksack-Deming area of Washington, some members of the Nooksack tribe speak the Chilliwack River dialect (Sardis-Tzeachten) and some speak a dialect of Lower Stalo (Kilgard, Sumas, and Matsqui microdialects).

Anatomical terms are numerous and form a distinct semantic domain. There are at least 120 independent words for parts of the body and nearly one quarter of these have lexical suffix equivalents. The independent words are morphologically and semantically analyzable to a surprising degree, and that analysis is the focus of this paper. Also part of the domain of anatomy (besides independent words and suffixes) is a set of insult and joking words called *nésq^wtél*, which describe parts of the anatomy. Another part of the same domain is the set of terms for the anatomy of non-human creatures: fish, birds, animals, reptiles and insects: a game was even played with terms for fish anatomy--to see who could name all the parts of the fish (there are at least 35). A final part of this domain is the set of functions and dysfunctions of the body (including body functions, body products, illnesses, curing, and death).

If each morpheme has a meaning or range of meanings which are predictable from the semantic environment (allomorphemes), then the meaning of a morpheme can be called a *sememe*. As morphemes combine in derivation or inflection to form independent words, the shifts and adjustments in meaning and the resultant meanings can be described as *morphosememic* (Galloway 1971). Similar morphosememic shifts occur when words are combined in phrases, sentences and discourse. Meaningful word and sentence orders

and deliberate ambiguities have a function there too. In this paper space only permits the consideration of derivational morphosememics, not phrase or sentence morphosememics; the sememes will be taken as already established.

2. Lexical Suffix System.

Below are the lexical suffixes found so far referring to body parts (somatic suffixes). They are present in many of the words of the domain of anatomy, even in many of the independent words equivalent to the suffixes. They are also quite productive outside of anatomical words, sometimes also having a figurative meaning. At the present it is unclear whether the anatomical lexical suffixes developed historically from the independent words which have equivalent meaning or vice versa. It is important to note here that the Upper Stalo somatic suffixes are usually locative in nature, best translated by 'on or in the (body part)' everywhere except in body part words in section 3 where they are best translated by 'of the (body part)' and in body function words in part 6.1 where they are best translated by '(body part)' (usually subject of the verb root).

<u>Independent word</u>	<u>Somatic suffix</u>	(Examples)
sxáy·es, sxáy·es	-(el)eq ^w	'on top of the head' (k' ^w q ^w -
	éleq ^w t	'hit s-o (someone) on top of the head (with a
		stick-like object)', ck ^w f·meq ^w 'red-headed')

<u>Independent word</u>	<u>Somatic suffix</u>	(Examples)
sxéy·es, sxáy·es	-qel 'in the head' (sméθ'qel 'brain'	
	(blue in the head))	
sxéy·es, sxáy·es	-éléqel 'in the head' (xetéléqel 'have	
	a headache', téséléqel 'bump one's head')	
télmél	-álmél 'in the mind' (héyetálmél	
	'nauseated' (< héyet 'vomiting'))	
télmél	-wēt 'in the mind' (lex ^w -qél-wēt	
	'cranky, crabby, dirty-minded' (lit. 'always bad or	
	dirty in the mind')	
qél·ém	-á·les 'on the eye(s), eyelids' (k' ^w q ^w -	
	á·les 'hit on the eye(lid)(with stick-like object)')	
sʔá·θes	-á·s, -es 'on the face' (θ'q' ^w á·s	
	'punched in the face', xéyp'es 'scraped on the face')	
q' ^w ó·l	-é·lí·ye 'on the ear' (k' ^w q ^w é·lí·ye	
	'hit on the ear (with a stick-like object)')	
méqsəl	-é(l)qsəl, -e(l)qs 'on the nose'	
	(tə'álsəl 'cut on the tip of the nose', tíf·tík' ^w əls	
	'hook-nose')	
θá·θəl	-á·θəl, -eθəl 'on the mouth' (x ^w θ-á·θəl	
	'big mouth')	
c'emx ^y á·yθəl 'jaw'	} -á·vθəl, -eyəíl, -eyéθəl 'on	the lip or jaw' (tə'á·yθəl
sceťá·yθəl 'upper lip'		
sʔəbá·yθəl 'lower lip'		
(no word for 'lips')		
yél·és	-á·es, -elís 'on the teeth' (stəq ^w él·es	
	'gums (flesh in the teeth)', xəxelc'elísem 'grinding	

<u>Independent word</u>	<u>Somatic suffix</u>	(Examples)
the teeth')		
téx ^w θəɬ	-éx ^w θəɬ 'on the tongue'	(sxəməléx ^w θəɬ 'wild tiger lily ("crying on the tongue")')
tépsem	-əpsem 'on the back of the head and back of the neck'	(təméɬəpsem 'red-headed woodpecker' < tèmeɬ 'red ochre')
sq ^w élɬəɬ	-ɬél, -ɬəɬ 'on the front of the neck'	(p'iθ'ɬélt 'choke someone', sx ^w əhámélɬəɬ 'adam's apple')
sqəlx ^w é·lə	-əqəl 'in the throat'	(c'í·yx ^w əqəl 'dry in the throat')
sʔí·ləs	-í·ləs 'on the chest'	(k' ^w q ^w í·ləs 'hit on the chest (with stick-like object)')
t'é·ləw	-əlélxəl 'on the arm'	(k' ^w əq ^w əlélxəl 'hit on the arm (with stick-like object)')
céléx ^y	-əs 'on the hand or finger'	(k' ^w ésces 'burned on the hand or fingers')
ʔá·q ^w ələc	-əwíc 'on the back'	(k' ^w q ^w əwíc 'hit on the back (with stick-like object)')
ʔá·q ^w ələc	-í·cəl 'on the back (of animal or bird especially)'	(sxəp'í·cəl 'chipmunk ("stripe or scratch on the back")')
lówéx	-ówéx 'on ribs or slats'	(θ'ówéx 'cedar slat basket')
k' ^w él·é	-é·lwes, -élwes 'on the stomach, in	

<u>Independent word</u>	<u>Somatic suffix</u>	(Examples)
the stomach' (xəʔé·lwes 'have a stomach ache', ə'q ^w é·lwesəm 'he was punched in the stomach', qəlélwes 'cowardly, afraid to try' ("bad stomach"))		
k ^w él·é (?)	-eyá·ʔə 'on the stomach (?)' (only one example: əyqəp'eyá·ʔə 'lay on one's stomach')	
sx ^y éle or swíyeqe (penis') (male')	-é·q, -eq 'on the genitals' (əé·q 'big penis', q ^w éyleq 'pubic hair')	
sʔélec	-(e)lec, -léc 'on the bottom, on the rump' (k ^w q ^w élec 'hit on the rump (with stick)', sk ^w íylec 'lame', ʔeq'léc 'hip' ("wide on rump"))	
sʔélec, sc'elx ^w í·wel	-í·wel 'on the inside(s), in the rump, in the anus' (sq ^w éʔí·wel 'hollow, hole on the inside', c'iyx ^w í·wel 'constipated (dry in rump)')	
sx ^y él·ə	-x ^y el, -x ^y é·l 'on the foot or leg' (ʔék ^w x ^y el 'trip ("hooked on foot or leg"), lek ^w x ^y é·l 'broken leg or foot')	
slex ^w í·ws	-í·ws, -ews 'on the body, covering or skin' (ʔq'í·ws 'half the body', q ^w emí·ws 'plucked (of a bird)', q ^w eméwst 'pluck it (of a bird)')	

3. Independent Words for Body Parts.

In the following list {s-} nominalizer is not listed in the analysis after the first few examples, and r.m.u. means root meaning unknown. Throughout the paper examples are given in phonemic transcription. Morphosememic patterns are described in the conclusion (part 7).

whole body s-l^Wex^W-f^W·ws (s- nominalizer, r.m.u., -f^W·ws
'of the body')

half of body t^Wq'-f^W·ws (tseq' 'half', loss of s unex-
plained, -f^W·ws 'of the body')

head s^Wxéy·es, s^Wxáy·es (s- nominalizer, r.m.u., -es
'of the face')

crown of head, top of head s-q^Wát-eleq^W (r.m.u., -eleq^W
'of top of head')

soft spot on a baby's head Tait: s-qe[?]-áleq^W, Chill.:
s-qe[?]-á·ls (qe[?] from qéyqe 'soft', -eleq^W 'of top of
head', -á·ls 'fruit; round thing'; the Chilliwack
word also means 'juicy fruit' from homophonous qe[?]-,
bound form of qá· 'water')

scalp, top of head s-t'ém-leq^W (t'ém- 'chopped', -eleq^W
'of top of head')

hair on head méqel (possibly mé '(come) off', -qel 'of
the head')

red headed, red hair c-k^Wf^W·m-eq^W (c- 'color', k^Wf^W·m
'red, reddish-brown', -eq^W 'of top of head')(rare
Indians here were born with reddish-brown hair in pre-
contact times)

grey hair s-xá·lém (compare xá·lém-θet 'turn grey (of
hair)')

curly hair s-q'elq'élp'-eq^W (q'elq'élp' 'tangled (of
its own accord)', -eq^W 'of top of head')

sideburns s-xel-p-élε (xel 'to mark', perhaps -p is

- 'hair', perhaps -álε is 'container', related to -élε
'container')
- a braid s-t'εmx^y-é·lc' (t'émex^y 'to braid something',
-é·lc' 'twisting around')
- skull s-θ'á·m-εq^w (s-θ'á·m 'bone', -εq^w 'of top of head')
- forehead s-q'^wéméls (r.m.u. unless q'^wém 'come out at
roots (of hair)' and -éls 'intransitive' are involved)
- back of head and back of neck tépsem (-εpsem 'of back
of head and back of neck', r.m.u. or empty morph)
- side of head sx^w-?f·lε (sx^w- nominalizer, possibly x^w-
'pertaining to head', r.m.u. unless ?f·lε 'right here')
- eyebrow θá·mél (r.m.u.), eyebrows θemθá·mél (C₁εC₂-
reduplication 'plural')
- eye qél·ém (r.m.u.)
- eyelashes tép-tel (r.m.u. unless related to θ'ep- in
θ'éplex^w 'blink', -tel 'device' or 'reciprocal')
- pupil of eye q'áyx-á·les (q'áyx 'black', -á·les 'of
the eye')
- blue eyes c'-mεθ'-á·les (c'- 'color', mεθ' 'blue',
-á·les 'of the eye')(rarely full-blooded Indians were
born with blue eyes)
- freckles, spotted face λ'el-λ'élx-as (C₁εC₂- 'plural',
λ'élx- 'spot', -á·s 'of the face')
- face s-?á·θ-es (r.m.u. unless -?á·θ 'edge, point', -es
'of the face')
- ear q'^wó·l

hair in ear s-q^welq^wél-é·lí·ye (C₁əC₂- 'plural', q^wél-
'body hair', -é·lí·ye 'of the ear')

nose m-éqsəl (r.m.u. or empty, -éqsəl 'of the nose')

bridge of nose s-ə'ém-əsəl (s-ə'á·m 'bone', -qsəl 'of
the nose')

point of nose s-ʔélqsəl (r.m.u. ʔé or ʔél, -(l)qsəl
'of the nose' (also used figuratively for 'a point'))

nostrils (unattested except by Hill-Tout 1902 who has
what could be interpreted as steq^wéleqsəl or sleq^wél-
eəsəl, probably t́éq^w 'wet', -əl- or -lə- infix 'plur-
al', -eəsəl 'of the nose')

hair in nose s-q^welq^wél-qsəl (s-q^welq^wél 'hairs' as
above, -qsəl 'of the nose')

cheek s-t́eq^w-éle, sx^w-ʔíle (s-t́íq^w 'flesh', -éle 'con-
tainer', ʔíle r.m.u.), cheeks sx^w-ʔelʔíle (C₁əC₂-
'plural')

mouth əá·θəl (perhaps θ- 'big', -á·θəl 'of the mouth')

upper lip s-cə́t-á·yθəl (cə́t 'above, upper', -á·yθəl
'of the lip or jaw')

lower lip s-λ'ən-á·yθəl (λ'əp 'below, lower', -á·yθəl
'of the lip or jaw')

chin, jaw c'əm-x^y-á·yθəl (c'əm ~ c'əm 'bite on, close
teeth on, put in mouth', possibly the -x^y < -ex^y
'transitivizer', -á·yθəl 'of the lip or jaw')

tooth, teeth yél·és (r.m.u. or empty, -él·és 'of the
tooth')

- gums s-^heq^w-^hél·^hés, s-^heq^w-^híl·^hés (s-^híq^w 'flesh', -^hél·^hés, -^hélís 'of the teeth', e and i metathesized in 2nd word)
- tongue t-^héx^wθ^het (r.m.u. or empty, -^héx^wθ^het 'of the tongue')
- uvula m^hélq^w, s-m^hélq^w-eq^hel (m^hélq^w also means 'fish heart', -eq^hel 'of the throat')
- beard, mustache, hair on face q^wil-iy^héθ^hel (q^wel or q^wil 'hair', -iy^héθ^hel < -^há·y^hθ^hel 'on the lip or jaw')
- front of neck s-^ho^wél-^htet, possibly s-q^wél-^htet, some say sx^w-^hél-^htet (q^wél 'talk', q^wél and ^hél r.m.u., -^htet 'of front of neck')
- adam's apple s-x^weh-ám^hél-^htet (x^weh r.m.u. unless 'big' or 'upstream', -ám^hél 'part or member', -^htet 'of front of neck')
- throat, gullet s-q^helx^w-^hél·^hlé (s-q^hél·^héx^w 'greedy, eats too much', -^hél·^hlé 'container')
- windpipe, air passage s-q^wehà·m^hélθ^heo^w (s-^ho^wé 'hole', possibly -^há·m^hél 'part or member')
- shoulder sx^w-^hí·^hlé·m-^hél·^hlé (^hí·^hlé·m 'carry on one's shoulder', -^hél·^hlé 'container')
- shoulder-blade k^wak^wéq'-tél or k^waq^wéq'-tél (r.m.u. unless k^waq^w 'club, hit with stick', -tél 'reciprocal' or 'device')
- arm t^hél·lów. t^helt^hél·lów 'arms' (C₁ec₂- 'plural')
- armpit sx^w-^hi-léx^hel (r.m.u., -élex^hel 'of the arm')
- elbow s-θ^hem-x^w-élex^hel (s-θ^hé·m 'bone', -x^w meaning unknown, -élex^hel 'of the arm')

wrist joint x^wəθ'əq^w-ces (also means 'sprained wrist')
(r.m.u., -ces 'of the hand')

wrist bone, lump of wrist q^wəmx^w-ces (q^wəmx^w 'lump',
-ces 'of the hand')

hand cəlélx^y

right hand s[?]əyíw-cēs (less common s[?]əyíws-cēs)(s[?]əyíws
'right (side)', -ces 'of the hand', s-[?]əy-íws itself
< s- nominalizer, [?]əy 'good', -í·ws 'of the body')

left hand s-ə'ík^wə-cēs (s-ə'ík^wə 'left (side)', -ces
'of the hand')

knuckles and joints of hand Chehalis: q^wəmq^wəmx^w-ces
(C₁əC₂- 'plural', q^wəmx^w 'lump', -ces 'of the hand or
fingers')

finger s-lélx-cēs (lélx 'widen', -ces 'of the hand'),
slélélxces 'fingers' has -lə- 'plural' infix)

finger nail q^wx^wél-cēs (r.m.u., -ces 'of the hand or
fingers')

thumb mek^w-á·mél-cēs (mek^w 'stout (in strength)', -á·mél
'part or member', -ces 'of the hand')

first finger (index finger) Tait: mét'es-əmél, Chill.

and Cheh.: mát'es-tél (mát'es 'point, aim', -á·mél

'part or member', -tél 'device, thing to, instrument')

second finger sx^wé·y-cēs (sx^wé·ye '(in) the middle',
-ces 'of the hand' or fingers')

third finger malyí-cēs (post-contact coinage)(malyí
'marry, married', -ces 'of the hand or fingers')

- little finger Tait: saseq^Wt-ále-cēs, Chill. + Cheh.:
 sáseq^W-cēs (sáseq^Wt 'youngest child', -ále possibly
 related to we?álewe 'most', -cēs 'of the hand, fingers')
- palm of hand sx^W-?áθēs-cēs (sx^W- nominalizer replacing
 s-, s?á·θēs 'face', -cēs 'of the hand')
- hollow of hand x^W-t'áx^W-ēs-cēs (x^W- meaning uncertain
 here, t'áx^W 'going downriver', -ēs 'on the face', -cēs
 'of the hand')
- collarbone s-t'ɬ-íléš-təl, t'ɬ-íléš-təl (t'et̚ ~ t'et̚
 'go across', -í·lēs 'of the chest', -təl 'device,
 thing to')(t' ~ ʔ in both citations)
- chest s?-í·lēs (s- nominalizer, ? probably empty root
 to allow suffix to be attached and to erase locative
 meaning in suffix, -í·lēs 'of the chest')
- breastbone θ'x-émél (r.m.u. but related to that in
 θ'x-í·lēs 'inside brisket of meat' where -í·lēs is
 'of the chest', -émél possibly related to -á·mél
 'part or member')
- woman's breast, nipple, milk s-qemá· (qemá· 'suckle'
 < qá· or qe(?) - 'water, liquid', possibly relevant
 is the slang term má?s 'milk' (· < *? before conson-
 ants)
- woman's breast s-q^Wemθ'-í·lēs (q^Wámθ' 'lump', -í·lēs
 'of the chest')
- stomach, belly k'^Wél·é (r.m.u., -él·é probably related
 to -é·lé 'container')

- navel, belly button mǎx^weyɛ, mǒx^weyɛ (r.m.u.)
- side of body Cheh.: s-tǎq'-ǎ·lwɛt, Tait: s-ʔí·lwɛt
 (tǎq'- as in tǎq'ét 'wide' or as in tǎq'í·ws 'half the
 body', -ǎ·lwɛt ~ ʔí·lwɛt 'side')
- right side of body sʔeyí·ws ʔí·lwɛt
- left side of body sθ'ík^we ʔí·lwɛt
- back ʔǎ·q^w-ɛlɛc, ʔǎq^w-ɛlɛc (ʔǎ·q^w probably 'comes out
 above or after', -ɛlɛc 'of the rump')
- lower back s-tǎq'-owɛt (tǎq' as in tǎq'ét 'wide',
 possibly -owɛt 'of a canoe')
- good figure, good shape ʔey-é:mec' (ʔéy 'good', -é·mec'
 ~ -é·mɛθ' 'standing up')
- brain s-mǎθ'-qel (mǎθ' 'blue', -qel 'of the head')
- heart θ'é·lǎ (r.m.u. or empty, -é·lǎ 'container')
- lungs s-p'ǎlx^wem (r.m.u., probably -em 'passive')
- liver s-cǎl·óm
- insides s-c'ǎlx^w-íwel (c'ǎlx^w 'go into a quieter
 slough or backwater', -í·wel 'of the inside of the
 body')
- gall bladder, bile lǎlɛc' (lǎc' 'full', possibly -ǎl-
 'plural')
- kidney smelt-ǎlǎqel (s-mǎlt 'stone', -ǎlǎqel 'in the
 head', 'head' is used in a figurative sense too, like
 'head of a river')
- intestines, guts q'eq'áy (r.m.u.)
- stomach (inside organ) k^wǎl·é (as above in 'belly')

- bladder sɛxʷɛ-tɛl, sɛxʷe-tɛl (Jimmy Harris 1966 has
kʷɛ̌.səl)(sɛxʷe 'urine', -tɛl 'device, thing for',
sɛxʷɛtɛl also means 'urinal'; -ɛ̌.lɛ̌ 'container';
Harris's word is unclear unless root is kʷɛ̌s 'burned
(of a person)')
- flesh s-tɪqʷ
- blood s-θɛ̌θiyɛl (r.m.u.)
- fat s-lás (also means 'grease, lard, oil')(lás 'be fat')
- bone s-θ'á.m
- marrow s-lés-xʷɛ̌l (s-lás 'fat', -xʷɛ̌l 'of the leg')
- backbone xəkʷ-áles, xəkʷ-ales-ewíc (xəkʷ 'narrow,
wedged in', -áles meaning uncertain unless 'eyes',
-ewíc 'of the back')
- rib lówɛ̌x (r.m.u. or empty, -ówɛ̌x 'of ribs or slats')
- cord, nerve cord, tendon, muscle ʔ'ěʔímɛ̌l, ʔ'ěʔí.mɛ̌l
(r.m.u.)
- vein tɛ̌tɛ̌θ (r.m.u.)
- pulse ɪkʷ-ém-éws (ɪá.kʷ 'to fly', -ém 'strength',
-éws 'of the body')
- skin, hide kʷɛ̌l.éw, kʷɛ̌l.ów
- hair on body qʷil-éws, qʷɛ̌yl-éws (qʷil ~ qʷɛ̌yl 'hair',
-éws 'of the body'), s-qʷɛ̌lqʷɛ̌yl-éws 'hairs all over
body' (C₁əC₂- 'plural')
- hip ɪəqʷ-lɛ̌c (ɪəqʷ 'wide', -lɛ̌c 'of rump or bottom')
- rump s-t-élec (r.m.u. or empty, -élec 'of the rump or
bottom')

penis s-x^yéle (possibly related to -x^yel 'of the leg or foot', possibly root x^y- refers to 'genitals' as in 'head of penis', 'have an erection' and 'vulva, vagina', see below)

head of penis (Jimmy Harris 1966 gives s-x^yá'-í.q^w 'head of penis' and x^yá.á 'have an erection'; the latter is obviously the root of s-x^yá'-í.q^w, while -eq^w 'of the top of the head' is probably the suffix)

foreskin (Jimmy Harris 1966 gives sx^w-?é.q 'foreskin', root is related to ?éq'əɬ 'choke on bone or something solid')

testicles mécel (may be singular), s-mémecel (may be plural)(r.m.u.)

vulva, vagina x^yé-wəɬ (x^y- or x^yé- probably 'genital', -wəɬ or -éwəɬ 'canoe or vessel')

pubic hair q^wéyl-eq (q^wéyl 'hair', -eq 'of the genitals')

womb, uterus s-mélè-tel (mélè ~ mélè 'child', -tel 'device, thing for')

afterbirth s-?á.q^w (?á.q^w probably 'comes out above or after')

thigh s-peté.lép (r.m.u.)

leg and foot s-xél.ə (r.m.u.), s-xəxéyle 'legs and feet' (irregular reduplication 'plural')

lower leg θ'em-í.wéc-x^yel (r.m.u. unless < s-θ'á.m 'bone', -í.wec meaning unknown unless related to -ewíc 'on the back', -x^yel 'of the leg and foot')

- knee s-q'ep'á·l-θe-tel (q'ep' 'cover over', -á·l unknown, -θet 'itself' or 'verbalizer', -tel 'thing for, device', compare q'ep'é·lectel 'a cover or lid')
- kneecap s-q'ep'ál-eq^w-tel-x^yel (q'ep' 'cover over', -á·l unknown, -eq^w 'on top of head', -tel 'thing for', -x^yel 'of the leg')
- shin s-θ'ém-x^yel (s-θ'á·m 'bone', -x^yel 'of the leg')
- calf of leg q'éλ'el-x^yel (r.m.u. but probably related to q'éq'ek' 'convulsions' via 'being wrung tight' or some such root meaning, -x^yel 'of the leg')
- ankle joint x^wθ'éq'^w-x^yel (also means 'sprained ankle')
- Tait: x^wλ'-eléc-x^yel (r.m.u. in both cases, -elec 'on the bottom', -x^yel 'of the foot or leg')
- lump of ankle q^wémx^w-x^yel (q^wémx^w 'lump', -x^yel 'of leg or foot')
- joints in foot Cheh.: q^wemq^wémx^w-x^yel (q^wémx^w 'lump', C₁θC₂- 'plural', -x^yel 'of the foot')
- top of foot cł-ícel-x^yel (ceł 'top, above, upper', -ícel 'on the back, of the back', -x^yel 'of the foot')
- toe s-léx-x^yel (léx 'widen', -x^yel 'of the foot'), slélex^yel 'toes' (-le- 'plural')
- big toe mek^w-á·mál-x^yel (mek^w 'stout', -á·mél 'member or part', -x^yel 'of the foot')
- little toes k^wemk^w-á·mél-x^yel (r.m.u., possibly mek^w 'stout', unusual reduplication C₂θ- 'plural' or 'diminutive', -á·mél 'part, member', -x^yel 'of the foot')

toenail q'^wx^wé1-x^yel (r.m.u., -x^yel 'of the foot')

sole of foot sx^w-?á·θes-x^yel (sx^w- nominalizer replacing s-, s-?á·θes 'face', -x^yel 'of the foot')

arch of foot x^w-t'áx^w-es-x^yel (x^w- meaning uncertain here, t'áx^w 'going downriver', -es 'on the face', -x^yel 'of the foot')

heel θ'-eléc-x^yel (r.m.u., -eléc 'on the bottom', -x^yel 'of the foot'), θ'aceléc-x^yel 'heels' (r.m.u., 'plural' by irregular reduplication, -eléc and -x^yel as above)

No words yet obtained for: lines on the hand, waist, spleen, appendix, or clitoris.

4. Pésq^wtél 'anatomical insults'.

This category contains descriptions of the anatomy of people which are used as insults or jokes. Pésq^wt means 'to insult someone by referring to his body'. The list below is not complete since new examples are still turning up.

x^wθá·q^w 'big head' (x^w- prefix used only with the head and its parts, meaning unclear, θ 'big', -á·q^w ~ -eq^w 'in top of head')

x^wθá·s 'big face' (x^w- m.u., θ 'big', -á·s 'in the face')

x^wθá·θel ~ θehá·vθel 'big mouth' (x^w- m.u., θ and θe 'big', -h epenthetic intervocalic, -á·θel 'in the mouth', -á·yθel 'in the jaws or lips')

sx^wθí·qel 'loud voice' (s- or sx^w- nominalizer, perhaps x^w- as above, θí· 'big', -eqel 'in the throat')

θíθeq^w 'big heads' (θí· 'big', reduplicative infix -C₁é- 'plural', -eq^w 'on top of the head')

θíθeces 'big hands' (θí· 'big', -C₁é- 'plural', -ces 'in the hand')

θíθex^yel 'big feet' (θí· 'big', -C₁é- 'plural', -x^yel 'in the foot')

θíθehá·les 'big eyes' (θí·, -C₁é-, -h as above, -á·les 'in the eye')

θíθehí·ws 'big bodied people' (θí·, -C₁é-, -h as above, -í·ws 'in the body')

θehíwel 'big rump, big asshole' (θé 'big', -h epenthetic, -íwel 'in the inside, in the anus')

θehélec 'big rump' (θé, -h as above, -élec 'in the rump')

θé·q 'big penis' (θ 'big', -é·q 'in the genitals' or 'in the male' or 'in the penis')

sméqsəl 'big nose' (s- usually nominalizer but here 'big', méqsəl 'nose')

sk^wél·é 'big belly' (s- here 'big', k^wél·é 'belly')

q^wemθí·les 'big breast(s)' (q^wá·mθ 'large lump', -í·les 'in the chest')

Hík^w tɛ smélc^wəel. 'Your uvula is big. = You talk too much.'

qelá·mex^y ~ qeleþá·mex^y 'ugly, bad-looking, sloppy in looks, walk or dress' (qel 'bad', -əþ m.u., -á·mex^y 'in looks, -looking')

yeθéleq^w 'pointed head' (y-á·θ 'point', -éleq^w 'in the

top of the head')

sp'íp'ełeq^W 'flat head, flattened head (as with cranial deformation done to babies by some Northwest Coast tribes)' (sp'íp'eł 'flat, flattened' < p'íł 'flatten' + s- and -C₁e- participial adjective, -eq^W 'in the top of the head')

cíłeq^W 'bushy and uncombed hair' (cíł 'high, upper, above', -eq^W 'in the top of the head')

x^Wł'á·qtēs 'long face, morose' (x^W- m.u., ł'é·qt 'long', ablaut to a· derivational, -ēs 'in the face')

x^Wpapá·s 'hair all over the face' (x^W- m.u., r.m.u., -á·s 'in the face')

qéłēs 'bad face, cross face, bad expression on face' (qél 'bad', -ēs 'in the face')

c'épxēs 'dirty face' (c'épx 'dirty', -ēs 'in the face')

sk^Wawecá·łēs 'sturgeon eyes = blue eyes' (sk^Wáwec 'sturgeon', -á·łēs 'in the eyes')

mapelá·łēs 'marble eyes = blue eyes' (mápel 'marble (glass-type)', -á·łēs 'in the eyes')

słellēlp'é·łf·yē 'sloppy ears' (s-łēlp' 'sloppy, flabby', C₁eC₂- 'plural', -é·łf·yē 'in the ear')

słēlp'á·yēel 'sloppy lips, flabby lips' (s-łēlp' as above, -á·yēel 'in the lip')(applies mainly to lower lip)

c'ēpxélqsel 'dirty nose' (c'ēpx 'dirty', -élqsel 'in the nose')

łf·łk'^Wēlqēs 'hook nose' (łf·k'^W 'to hook', -C₁e- 'contin-

- uative', -elqs 'in the nose')
- sp'ólqsel 'flat nose' (s-p'ól 'flat', -qsel 'in the nose')
- słálex^wólqsel 'snot hanging from nose' (łex^wát 'to spit',
s- + -C₁e- participial adjective (thus słálex^w (with
metathesis) could be translated 'spat'), -ólqsel 'in
the nose')
- smetméteqsel ~ smetméteqsel 'snotty nose' (s-metá·qsel
'snot', C₁eC₂- 'plural')(s-metá·qsel < r.m.u., -qsel
'in the nose')
- Cheh.: k^wemá·yθel, Tait: k^wamá·yθel 'round mouth' (k^wem
~ k^wam must mean 'round', -á·yθel 'in the lips')
- x^wemóel 'eats too fast' (x^wém 'hurry, be fast', -óel
'in the mouth')
- sxeyxθ'á·yθel 'ugly grin, ugly expression in mouth,
disappointed and angry look in mouth' (sxéyxθ' 'dis-
appointed and angry looking', -á·yθel 'in the lips')
- słémegel 'tooth or teeth missing, toothless' (s-łém
'spray or moisture', -egel 'in the throat')
- λ'óqtəpsem 'long neck' (λ'ó·qt 'long', e ablaut, -əpsem
'in the neck')
- q^we?íq^wəpsem 'small neck, scrawny neck' (q^we?íq^w 'scrawny,
thin', -əpsem 'in the neck')
- spíyces 'crooked hand' (s-píy 'bent, crooked' (< páy
'make a bend or crook'), -ces 'in the hand')
- qelécēs 'dirty hand' (qel 'bad, dirty', -é m.u., -ces
'in the hand')

sə'émlec 'skinny rump' (sə'á·m 'bone', derivational ab-
laut to e, -lec 'in the rump')

sk'^wfylec 'lame (esp. hip from birth)' (s- nominalizer,
k'^wfy 'climb', -lec 'in the rump')

sʰ'ep'éléc 'tail' (q.v.) and spú? are both used in a
slang sense for 'rump'

c'epí·wél ~ sc'epxí·wél 'dirty asshole' (c'epx 'dirty',
-í·wél 'in the anus or insides')

sq'éyxí·wél 'black asshole' (s- nominalizer, q'éyx
'black', -í·wél 'in the anus or insides')

ʔeq'tíwél 'wide rump' (ʔeq'ét 'be wide', -í·wél 'in the
anus')

spiypívx^yél 'crooked leg' (spíy 'bent, crooked', C₁eC₂-
'plural'?, -x^yél 'in the leg and foot')

c'éléléc'x^yél 'short-legged runt' (c'éléc-əm 'sit down',
possibly derivational glottalization of c, -él- 'plu-
ral', -x^yél 'in the leg, on the leg')

c'épxx^yél, c'épx^yél 'dirty foot' (c'épx 'dirty', -x^yél
'in the foot')

5. Non-human Anatomy.

In the following lists H stands for "also in human
anatomy", A for "also in animal anatomy", B "also in bird
anatomy", F "also in fish anatomy", R "also in reptile
anatomy", and I "also in insect anatomy".

Fish anatomy:

sɣáy·əs, sɣáy·əs 'head' (HABRI)
 sɣəpəq^w 'gristle and everything else in head of fish'
 t'ɛwleq^w 'skin of fish head without gristle'
 qəlém 'eye' (HABR)
 ɸipéle 'fish cheek'
 sɬeq^wélɛ, sx^wʔíle 'cheek' (HABR)
 ɸá·θel 'mouth' (HABR)
 scəɬá·yθel 'upper lip or jaw' (HAR)
 sɬ'əpá·yθel 'lower lip or jaw' (HAR)
 yəl·és 'teeth' (HAR)
 c'əmɣ^yá·yθel 'jaw' (HAR)
 k^wəl·əw 'skin' (HABR)
 sɬíq^w 'flesh' (HABR)
 x^yè·y 'gills and boot shaped organ attached to gills'
 sc'élc' 'scales'
 stíx^yəm 'slime'
 q'ətmel 'fin, neck fin, possibly back fin'
 ɸ'ətmel 'belly fin'
 sɣəɬxəɬ 'tiny fin above tail'
 sɸ'á·m 'bone' (HABR)
 sɸ'əθ'elá·m 'small bones' (HABR)
 xək^wáles 'backbone' (HAB(R?))
 sɣəwe 'dried fish backbone'
 sɣəpx^yəl 'fish tail'
 sɸəθiyel 'blood' (HABR)
 sc'elx^wíwəl 'insides' (HABR)
 x^yíx^yx^wəlɛwə 'air bladder'
 q^wayəq^w 'stomach, organ with filaments next to air bladder'
 məsəl 'fish gall bladder'
 məlq^w 'fish heart'
 k^wəl·ɛ 'belly' (HABR)

Fish anatomy cont.)

qél·éx, qéwx 'salmon eggs'

sc'émex^y 'dried herring eggs (obtained in trade)'

q^wú·lé 'buried fish eggs, "stink eggs"'

λ'ínè 'eulachon oil'

λ'eq^wé·y 'fish milt'

no word for 'brain', just sxépeq^w above

Animal anatomy:

c'f·stél 'antlers, horn(s)'

sé·y 'fur, animal hair, wool, yarn'

(Hill-Tout 1902 has c'q'éycəs or c'q'éycəs 'paw')

words for 'foreleg' and 'hind leg' are said to exist but
have not been elicited yet

q^wx^wélces 'claw, fingernail' (HB)

reportedly 'hind leg' is used instead of a word for 'rump'

reportedly 'ribs' (lówéx)(HB) is used instead of 'chest'

k^wél·éw 'hide, skin' (HFBR)

sq^welq^wélx^yél 'tufts of hair on horse's legs (like on
the Clydesdale)'

st'ep'élec 'tail' (BR)

spéx^w 'animal tripe' (used in some dialects)

The remaining words confirmed in usage for animal anatomy
are the same as the following words used for human
anatomy (q.v.): head, eye, ear, nose, cheek, mouth,
upper lip/jaw, lower lip/jaw, tooth/teeth, tongue,
jaw, front of neck, back of head and neck, throat,
breast, rib, belly/stomach, back, flesh, blood, bone,
marrow, backbone, insides, guts, heart, liver, cord/
tendon/muscle, penis, testicles, vulva/vagina; possi-
bly also (but unconfirmed): brain, gums, lungs,
bladder, vein.

Bird anatomy:

t'áp'els 'beak, bill; to peck'

t'át'ep'els 'beak, bill; pecking'

sq'áyes 'real fine feathers, down'

sx^yélc' 'small feather'

s^h'p'élqel 'long feather (from wing or tail)'

s^h'eq'é.l, s^h'q'é.l 'wing' (I)

mémeləhà.lɪ 'egg'

s^h'ep'élec 'tail' (AR)

'claw' not yet confirmed for birds

Also confirmed for birds are the following terms from

human anatomy: head, eye, back of head and neck, chest, back, leg, skin, flesh, blood, bone, little bones, heart, stomach, guts; possibly also (but unconfirmed): brain, front of neck, throat, lungs, and backbone.

Reptile anatomy:

s^h'ep'élec 'tail' (BA)

Also confirmed for reptiles are the following terms from

human anatomy: head, eye, jaw, tongue, back, leg/foot, flesh, skin, bone, blood, insides, stomach; possibly also (but unconfirmed): upper lip/jaw, lower lip/jaw, cheek (esp. for frog), chest, and backbone.

Insect anatomy:

sxéy.es 'head' (HAFBR)

s^h'eq'é.l 'wing' (B)

sxél.e 'leg and foot' (HABR)

qél.ém 'eye' (HAFBR)

6. Functions and Dysfunctions of the Body.

This semantic area can be subdivided into: human body functions, human body products, human body dysfunc-

tions (living or healthy/dead or sick, symptom/state/illness/disability, accident/injury, and possibly medicine/curing), and non-human body functions and dysfunctions. The following lists and analyses are not exhaustive. For example, emotions are omitted though many harmful ones are treated by Indian doctoring. Smells, sounds, looks, tastes and feelings are omitted because it is unclear that they belong in this domain. A number of grammatical affixes recur often and can be mentioned here to avoid repetition: -et ~ -t ~ -ét ~ -át 'action on purpose on third person object(s), him, her, it, them', -l 'happen to, manage to, accidentally', -st 'cause to' (the /t/ in this suffix and the first one listed becomes /θ/ when the object is first or second person singular), -ex^w (after -l or -st) 'third person object', -lá·mēt 'by oneself', -θēt 'oneself', -tēl 'each other, reciprocal', -ēm 'middle-passive voice', reduplication and ablaut of several types (Galloway 1973) 'continuative', 'plural', 'diminutive', s- + -C₁ə- reduplication (infix after first vowel of root) 'participial verb', and -ēls ~ -é·ls 'intransitive'.

6.1. Body functions.

x^wé sémēle 'bear a child', θē cmēle 'someone having a baby' (méle ~ mēle ~ mēle 'child')
 x^wé swíyēqe 'become a man'
 x^wé stē·lí 'become a woman'
 q^wéc'et 'belch'

q'élmet 'believe s-o. s-th', q'él 'believing'
 qep'á·sem 'bend or stoop down, bow from waist'
 q'éyk^wet 'bite into it'
 c'émet ~ c'émēt 'bite on it, put it in one's mouth or
 between the teeth'
 Ө'éplex^w 'blink', Ө'fӨ'eplex^w 'close one's eyes' (-l-ex^w),
 Ө'épӨ'eplex^w 'blinking' (reduplicative 'plural')
 pá·t 'blow'
 k^wemk^wímélésēm 'blushing', k^wf·mél tə s'á·Өes 'his face
 got red' (k^wf·m 'be red', -əl 'get, go, come', -es
 '(in) the face', C₁ӨC₂- 'plural')
 k^wál 'be born'
 spex^wəł·lém 'breathe' ~ pex^wł·lém 'breathe once' and
 pex^wəł·lém 'breathing'
 q^wəlł·lém 'make breathy noise, grumble under the breath'
 (q^wəl 'talk', -ł·l ~ -łəł '(in) front of throat')
 ʔá·t 'call s-o' (s-o = someone, s-th = something)
 s'ák^westex^w 'carry s-o or s-th on the arm' (purse, person,
 etc.)
 cémēt 'carry it on one's back, pack it'
 ʔí·l·l·mt 'carry it on one's shoulder'
 Ө'ém 'chew, chewing', Ө'ét 'chew it', Ө'əӨ'ét 'chewing it'
 xéyk^wet 'chew it (s-th hard, apple, candy, pill, etc.)'
 xépk^wt 'gnaw it, chew s-th hard', xəpxépk^wt 'chew it up'
 (xépk^wem 'make a crunching or cracking noise, crunch-
 ing, cracking (like chewing apple or ice breaking)'
 is related; ʔ'émq^wəls is synonymous with xépk^wem)
 Ө'fӨ'eplex^w 'close one's eyes' (compare 'blink')
 (tex^yqé·ylt 'comb s-o's hair', tex^yqéylém 'comb one's
 hair', téx^yəlqəylt 'comb s-th, card it (of wool)')
 q^wém 'come out (of hair)(as in comb, etc.)'
 x^yélx^wəet 'cool off (of a person)'
 t'et'ésəet 'creeping along', t'et'ésx^yələm 'creeping (of
 more than one)'
 xè·m 'cry, weep'

ʔá·ʔ 'defecate'

ʔéliyε 'dream, have a vision, have a trance', sʔéliyε
'dream, vision, spirit dream'

qá·qe 'drink', qá·qet 'drink it' (< qá· 'water')

lép'ex^y 'eat s-th' (-ex^y 'transitivizer, 3rd person obj.')

ʔéɬtel 'eat a meal' (perhaps -tel 'with each other')

há·yθel 'finished eating' (blend word of há·y 'finished'
and -á·yθel '(in) lips or jaws' or -eθel '(in) mouth')

lásθet 'get fat' (-θet may be the verb forming suffix
here instead of the reflexive)

téq' 'to fart'

qétɣt 'feel s-o or s-th', qétɣels 'feeling around'

mélq 'forget', méldlex^w 'forget s-th or s-o', méldqeles
'forget, forget s-o or s-th'

x^wex^wfléx^y 'get up with quick motion' (x^wex^w probably
'sudden', -f·l 'go, come, get', -ex^y 'upright')

c'f·sem 'grow'

k'^wá·yɣ^wem 'growling (of the stomach)'

k'^wemléx^wes 'he's grown up' (-l-ex^w, -es 'he (subj.)')
(see also 'raise s-o or s-th')

st'éwel, Chill.: stéʔéwel 'guess', st'éwélmet 'guess or
thinking about s-th' (stéʔé, st'é 'like, similar to',
-ewel '(in) the mind')

c'ic'ɬé·m (some dialects c'ec'ɬé·m) 'hear, hearing',
c'ɬé·met 'hear it'

hék'et 'to hiccough' (imitative)

k^welét 'hold s-th (in the hand)'

x^yéʔet 'hold a baby in arms'

sx^wá·x^welstex^w 'holding s-th up' (x^wá·x^we 'be lightweight',
-st 'cause to', -ex^w '3rd person object')

qelwíls 'hug', qelwílst 'hug s-o'

k'^wè·y 'hungry', k'^wák'^wiy '(being) hungry'

x^wix^weʔé(t) 'imitating (s-o)' (-eʔé also in stéʔé 'similar')

θíct 'have intercourse with s-o' (θícem 'have intercourse')

k'^wéɬ 'have intercourse'

c'ʰém 'jump'

lemé·t 'kick (s-o)', lemlemé·t 'kick it around',

leméʔfwét 'kick in the rump'

mék^weθ(t), x^wmék^weθ(t) 'kiss (s-o)', (x^w)mék^weθel 'kiss on the lips' (mék^w 'stout, thick', -eθel '(in) the mouth' with final -el lost before -t; x^w- 'pertaining to head or its parts')

θ'q'élɬém 'kneel down'

ɬq'él·ex^w ~ ɬéq'el·ex^w 'know' (ɬ- meaning unknown, q'él 'believe', -l 'happen to, manage to', -ex^w 's-th, s-o')

lɪyém ~ leyém 'laugh', lé·yem 'laughing', lɪyliyem 'lots of laughing' (root ʔéy 'good')

c'f·met 'lick s-th' (related to c'émét 'put it in mouth or between teeth')

k'^weʔfyeqel 'lie on one's back'

ʔéxəθ 'lie down' (ʔé·xəθ 'lying down')

qəyqep'əyá·ɬe 'lie on one's stomach' (qép' as in 'bend over, bow from waist')

x^wlélé· 'listen hard', x^wlélé·m 'listen', x^wélélè·m 'listening', x^wlélé·met 'listen to s-o'

k'^wécet 'look at s-o or s-th' (cp. 'see it' and 'stare')

lápɬ^wemstex^w 'make a noise' (lápɬ^wem 'noise')

ɬ^wix^weʔá·s 'making a face' (cp. 'imitate')

wec'él·lámét 'masturbate, bring oneself to a summit (of a mountain)' (wec'él· 'get to top or summit of a mt. < c'él 'top, on top')

x^yix^yq'á·m 'mouth hanging open' (x^yeq'á-θet 'hang s-th up' (-θet 'verbalizer'), -m or -á·m 'middle-passive', C₁i- 'diminutive')

sexéylém 'move' (cp. sɪx-et 'move s-th')(-éyl may < -f·l 'come, go', -em 'middle-passive')

lɪq^wesem 'nod one's head, bow once from neck', lɪléd^wesem 'nodding (in agreement)' (-es 'face', -em)

ɬél·eq't 'open one's eyes' (q' ~ q), ɬélɬeq't te sx^wex^wá·s 'lightning, thunder(bird) opening his eyes' (note that 'thunder(bird)' is 'sudden' + '(in) face')

- (x^wmícesem 'pass s-th by hand')
 (péleq^w 'peek over, rise (of sun)' (-eq^w 'top of head'))
 ʈéék^w 'pinch'
 syémyem 'pregnant'
 ʈeəfɿ^w 'girl at puberty'
 k^wémet 'raise s-o or s-th'
 cséces 'reach with hand' (csét 'send it', -ces 'hand')
 tél·ex^w 'realize it, learn it, understand it' (tél
 'learn', -l (> · after l), -ex^w)
 hék^wéles 'remember, remember it'
 qé·w 'to rest, relax'
 yéɿ'q't 'rub it, rub s-th or s-o'
 x^wámx^yélem 'run' (x^wém 'hurry, be fast', derivational
 ablaut to /a/, -x^yel 'feet', -em 'middle-passive'),
 (x^wemx^yélem 'running, racing (of people, animals, etc.)'
 shows 'continuative' ablaut even in suffix)
 xéyq'et 'scratch s-th (to itch)' (cp. xéyp'et 'scrape
 s-th, scratch s-th (leaving marks)')
 k^wécem 'scream', sk^wécem 'a scream'
 k^wéclex^w 'see s-th or s-o'
 síwélmét 'sense s-th (that will happen)' (-í·wel 'inside'
 or -éwél 'mind, thought', -mét 's-th (object)')
 (k^welcsè·ls 'shaking hands' (k^wel 'hold in the hand',
 -cés 'hand', -é·ls 'intransitive'), k^welécest 'shake
 s-o's hand')
 (q^weyxélecem 'shake or swivel one's hips' (q^weyx 'shake',
 -elec 'rump, hips', -em)
 sk^wéc 'sight'
 ʔemét 'sit, sit down (if standing), sit up (if lying),
 squat'
 c'élecem 'sit down, take a seat' (c'é 'on top', -lec
 'rump', -em)
 ʔítet 'sleep, go to sleep', ʔí·tet 'sleeping, asleep',
 ʔítetem 'sleepy', ʔítetlámet 'fall asleep'

- há·q^wet 'smell it on purpose', há·q^wlex^w 'smell it accidentally, há·q^wem 'to give off a smell'
- x^wlíyéměs 'to smile' (x^w- 'pertaining to the head', líyém 'laugh', -es 'face')
- hěsem 'to sneeze' (imitative)
- x^wíq^wem 'to snore' (imitative)
- xyxè·m 'to sob' (//xíxè·m//, C₁í- 'diminutive', xè·m 'cry, weep')
- tx^wá·t 'spit it out', tēx^wēice 'spitting' (-ēice 'unclear liquid')
- p'íθ'et 'squeeze it'
- txéyléx^y 'stand up' (t- meaning unknown, xéyl- 'feet', -ex^y 'upright')
- k^wak^wecíls 'staring', k^wácest 'stare or look at s-o's face')
- ?ímet 'step on it' (cp. ?ímex^y 'walk')(cp. 'take a step') (st'ěqsel 'stick out, protrude' (st'ě 'like, similar to', -qsel 'nose')(included as it shows one Stalo conception of the function of the nose)
- ?át'ēθet 'stretch oneself' (?át' 'stretched')
- p'í·q^wt 'stroke it, pet it'
- θ'áq^wet 'suck it'
- qemá· 'suckle' (< qá· 'water' or its bound allomorph qe-)
- méq'et 'swallow it' (méq' 'full with food (in belly)')
- yá·q^wem 'to sweat'
- t'í·c(')em 'swim', t'ít'ec(')em ~ x^yíx^yk^wà·m 'swimming (of human)' (C₁í- 'diminutive', x^yá·k^wem 'bathe')
- tiqx^yélém 'take a step' (-x^yél is stressed version of -x^yel)
- q^wè·l 'talk, speak' (q^wáq^wel 'talking, speaking')
- t'ét 'taste, taste it, try, try it'
- tatílt 'thinking on it, pondering, studying, training' (tá·lt 'learn it', -C₁e- 'continuative', -í·l 'go, come, get', -t '3rd person object purposive')

sít't 'tickle s-o', sét'x^yt 'tickle s-o's feet' (-x^yel
 loses the el before -t 'purposive, 3rd person obj.')

téselex^w 'touch or bump s-o accidentally', táset 'touch
 s-o on purpose'

t'éc'lex^w 'turn or snap the eyes away (from s-o?) in
 disgust'

tel.á.met 'understand' (tel- 'learn', -lá.met 'by oneself')
 (cp. 'thinking', 'realize')

séx^we 'urinate; urine'

q^wíq^welémqel '(a boy's) voice is changing' (q^wáq^wel
 'tame', derivational ablaut to /i/, -ém 'middle-passive'
 or possibly 'strength', -eqel 'throat')

x^wíy 'wake', x^wíyθet 'wake up', sx^wex^wíy 'awake' (the
 root is //x^wéy//), x^wíylá.met 'wake oneself', x^wíyx^yet
 'wake s-o up'

?ímex^y 'walk' (?ím 'step', -ex^y 'upright')

tēqet 'whisper'

x^yá.pem 'whistle', x^yíx^ynà.m 'whistling'

θ'ík^wá.st 'wink at s-o', θ'ík^wá.stel 'wink at each
 other', θ'íθ'ík^wá.sēm 'winking', θ'ík^wá.léseṁ 'to
 wink' (-á.s 'face', -á.les 'eye', -tel 'reciprocal')
 (θ'éx^w 'wash', takes many somatic suffixes)

wíqes 'yawn' (wíqet 'spread or widen it (of a canoe for
 example)', -es 'face')

té.m(θt) 'yell, shout, holler' (-θt is apparently not
 the purposive suffix here), sté.m 'a shout or yell'

q'eyx^yelém 'to yell' (meaning may be too general)

6.2. Body Products.

leléc 'bile; gall-bladder' (léc 'full')

sθéθiyel 'blood' (s- + reduplication)

sléq^wem 'breath' (s-)

s?á.? 'excrement' (s-)

stéq 'a fart'

sxéyltel 'footprints, tracks' (s-, xéyl 'mark, write',
 -tel 'device, thing for')
 slás 'grease, fat, oil, lard' (s-)
 sqemá· 'milk; breast' (s-, qemá· 'suckle')
 má's 'milk (slang term)'
 sqíqew 'menstrual blood' (s-, qíqew 'menstruating')
 méθ'eł 'pus'
 qéyqeyxəłà· 'shadow' (q'éyx 'be black', derivational
 deglottalization, reduplication, -əłà· unknown unless
 related to -é·lé, -éle 'container')
 sméteqsəl 'snot' (s-, r.m.u., -eqsəl 'in the nose')
 sə'ələhé·lqsəl 'dried-up snot' (s-, r.m.u., -qsəl 'in
 the nose')
 słéx^wəłce(s) 'spit' (-s optional, s-)
 syá·q^wem 'sweat' (s-)
 qe'á·les 'tear' (qe(?) - ~ qá· 'water', -á·les 'in the eye')
 sq^wé·ləwel 'thoughts, feelings' (s-, q^wè·l 'talk', sq^wè·l
 'words', -ewel 'in the mind')
 séx^we 'urine; to urinate' (s- disappears before s)
 syé·t 'vomit' (s-)
 (no word yet obtained for 'sperm')

6.3. Body Dysfunctions.

6.3.1. Living or healthy/dead or sick:

?é·yelex^w 'alive, in good health' (?é·y 'keep on going')
 me ?é·yelex^w 'come alive, come back to life (lit. and
 figuratively); get better, get well' (me 'come')
 me ?é·yelex^wstex^w 'keep s-o alive' (-st, -ex^w)
 me ?é·yelex^wlex^w 'bring s-o back to life, save s-o's life'
 (-l, -ex^w)
 spaleq^wfə'e 'corpse; ghost' (s-, r.m.u., -fə'e 'clothing',
 perhaps spaleq^w represents a word for 'soul' or 'spirit')
 q'á·y 'die, dead'
 x^wè·y ~ x^wá·y 'died in a group (in epidemic, fire, etc.)'

- x^wé·lqcel 'I almost died' (x^wé·lq 'almost, nearly', -cel 'I (subject)')
- hf·qsel 'drop dead' (possibly root related to that in hfl^wem 'to fall from a height', suffix probably -qsel 'on the nose')
- wóq^w 'drown'
- lícx^w we?éy (?)a(1) 'how are you feeling?, are you doing good?', lícx^w wetu?éya 'are you feeling a little better?', cel tu ?éya 'I'm fine'
- q'éy^wθet 'it healed up' (q'éy^w 'heal', -θet 'itself')
- q'á·yt 'kill s-th or s-o'
- s^wf·k^w 'lost (and presumed dead)' (s-, ?f·k^w 'get lost')
- le q'ép^w 'he passed on a disease, he got addicted (to anything)' (le '3rd person subject, past tense')
- q'ép^wlex^w 'pass on a disease to s-o, get s-o addicted'
- k^wemlá·met 'pull through (an illness), pull through or raise oneself (from childhood through puberty to maturity)' (k^wémet 'raise s-o', -lá·met 'oneself')
- (me) ?i?éyel 'recover, get better' (me 'come' optional, reduplication prefix function unclear, ?éy 'good')
- q'áq'ey 'sick; dying' (q'á·y 'die', -C₁e- 'continuative')
- sq'áq'ey 'sickness; dead for awhile' (s- nominalizer or participializer)
- me q'áq'eystex^w 'make s-o sick' (-st, -ex^w)
- q'áq'eyx^yel 'sick foot or leg' (-x^yel 'in foot or leg', just one example of many)
- x^wé 'starve (and die)'

6.3.2. Symptom/state/illness/disability:

(A common suffix is -(e)tem which seems to mean 'state of (verb)' though it derives ultimately from the -et transitivizer plus -em 'middle-passive'.)

- sé·yem 'to ache, be sore, to pain'
- xé·p^wq^wtem tel sθ'á·m 'my bones are aching'

- xéɬ təl ɐ'è·lè 'my heart is aching'
 sɪ·si 'afraid, nervous'
 sɐ'á·q^weleq^w 'bald' (s-, r.m.u., -eleq^w 'on top of head')
 scɪyéléxəl 'strawberry birthmark on arm' (scɪyɛ 'straw-
 berry', -eléxəl 'on arm')
 caléx^wəm 'bleed', cá·lx^wəm 'bleeding'
 qéyxəs 'blind' (q'éyx 'be black', derivational deglottal-
 ization, -əs 'in the face')
 qá·cá·m 'a blister', qécəm 'be blistered'
 sq^wecém 'a boil'
 ʔewéɛ sɬék^wəm (k^w ~ q^w) 'breathless, no breath'
 st'áyx^w 'brooding' (symptom of spirit sickness)
 t'ɪqəl 'be bruised', t'ɪqəl tɐ qél·éms 'his eye is bruised',
 st'ít'eqəl 'a bruise', st'ít'eqá·les 'black eye, brui-
 sed eye'
 q'ewém 'walk with a cane', sq'ewé 'person with a cane'
 (q'éwe 'cane', s-, -é unclear, -(e)m or -ém 'middle-
 passive')
 sk^wéy 'can't, unable, impossible'
 k^weléx^wes tɐ sɐ'áɬəm 'he caught a cold', k^weléx^wes tɐ
 stá·q^wəm 'he caught a cough' (k^wel 'get', -l 'happen
 to, accidentally', -ex^w 'it', tɐ 'a, the', see below
 for 'cold' and 'cough')
 spél·ex^w 'chickenpox'
 ɐ'áɬəm 'chilled', ɐ'áɐ'ɐɬəm 'being chilled'
 (s)ɐ'áɬəm sq'áq'ey 'a cold' (lit. "chill sickness")
 q^wém 'come out (of hair)'
 xɛxək^wíwel 'constipated' (xéxək^w 'wedged in tight',
 -f·wel 'in the anus or insides')
 c'iyx^wíwel 'constipated' (c'iyx^w 'dry', -f·wel)
 t'ek^wíwel 'constipated' (t'ek^w 'mired', -f·wel)
 q'éq'əɬ 'convulsions, fits'
 tá·q^wəm 'to cough', stá·q^wəm 'a cough' (s-)
 q'éɬptəm 'to cramp, have cramps', q'é·ɬptəm 'cramped',

- q'Éq'elptem 'cramping' (p ~ p' in each case)(compare
 q'Élp't 'shrink it', q'Élp'θet 'shrink', and q'elq'elp'
 'tangled on its own (of net, hair, etc.)')
 sxá·lc'iyēθel 'to have a crooked jaw (from birth, injury,
 or from getting bumped by a ghost)' (s-, xÉ·lc' 'turn-
 ned the wrong way, twisted', -iyēθel < -á·yθel 'in
 the jaw')
 λ'Ék^wel·ε (k^w ~ q^w ~ k'^w) 'deaf' (r.m.u.)
 λ'Éx^ytem 'diarrhea' (possibly < λ'Éx^y 'ripped apart'),
 λ'x^yÉtem 'continuing diarrhea'
 sé·lθ'tem or sé·lc'tem 'dizzy'
 séles 'dizzy; drunk' (sel 'spin around', -es 'in face')
 c'fyx^weqel 'dry in the throat', c'fyx^weqθÈlēm 'my throat
 is dry'
 slālek^wf·wel 'dumbfounded, speechless, stupified, sur-
 prized' (s- + -C₁e- participial verb, lā·k^w 'to fly',
 -f·wel 'in the insides, in the anus, in the rump')
 sé·yem tel q'^wó·l 'I have an earache, my ear aches'
 scelÉ·l te sk'^wÉc 'eyesight is fading'
 melqf·wsem 'to faint' (melq 'forget', -f·ws 'in the body',
 -em 'middle-passive')
 q'θÉ·mtem 'forgetful, absent-minded' (q'θÉ·m 'short (of
 memory, of reach, of food, etc.)')
 lex^wmÉlqewet 'forgetful; passed out if drunk' (lex^w-
 'always', mÉlq (~ mÉlq) 'forget', -ewet 'in the mind')
 paleq^wfθ'etem 'he got ghosted' ('ghost' minus s- > paleq^w-
 fθ'ε 'to ghost', -et 'someone, he, etc.', -em 'passive')
 sméce 'goiter, lump on person or tree (burl)'
 xaxelc'elísem 'grinding one's teeth' (xÉlc' 'twist, turn
 around', -elís 'teeth' or 'in the teeth', -em)
 ?á·lθet 'to groan', ?i?á·lθet 'groaning' (compare ?á·-t
 'call s-o', -θet 'oneself')
 tséq' q'á·y 'half dead, half paralyzed'
 xlē·léqel 'headache' (' ~ ')(xet 'ache, hurt', -ē·léqel
 'in the head')

tsá·s 'heartbroken, poor, destitute'

yeq^w·fles 'heartburn' (yeq^w 'burn', -f·les 'in the chest')

θ·k^w·fíwel 'hemorrhoids, open sores in rump or genitals'

(compare s-θ·θ·fí·k^w 'open sore', -f·wel 'in the rump, anus, insides, genitals')(loss of vowel length seems to be due to speed of pronunciation and dialect; Tait dialect speakers seldom omit length even in rapid speech while Chehalis dialect speakers do much more readily, sometimes even in slow speech)

t'émíyε, t'émíyε 'hermaphrodite baby'

k^w·ák^w·es 'hot' (k^w·es 'get burned (of a person)')

sq^w·ám·è·cél 'hunchback, lump on the back' (s-q^w·ák·m 'lump', -è·cél < -f·cél 'on the back')

xó·t 'to hurt, ache (of head, ear, stomach, etc.)'

sx^w·ák·x^w·θ 'to be insane, crazy', sx^w·ix^w·ák·x^w·θ 'a little crazy, stupid'

sk^w·éy k^w·s ?f·tet 'have insomnia, can't sleep'

xéy·xéc·em 'to itch', xéy·xéc·ém·θet '"real itching"'

léléc 'jaundice, bile trouble; bile; gall-bladder' (léc 'full')

sk^w·fylec 'lame (of hip, esp. from birth)' (s-, k^w·fy 'climbs', -lec 'on the rump (or hip)')

slék^w·elec 'lame hip or leg; to limp; cripple(d)' (s-, lók^w 'broken (bone)', -elec 'in the rump (or hip)')

q^w·ák·m·θ 'lump', sq^w·em·q^w·ák·m·x^w 'lots of lumps (any size); anthills')

qí·w 'menstruate', qí·qew 'menstruating', sk^w·x^y·ák·s sq^w·ák·ey 'menstruation' (sk^w·x^y·ák·s 'moon', sq^w·ák·ey 'sickness')

sk^w·éy k^w·s q^w·è·ls 'mute, he can't talk'

héy·et·élmél 'nauseated' (héy·et or héy·et 'vomiting', -élmél 'in the mind')

sí·si 'nervous, afraid'

x^w·ák^w·eltem 'numb' (x^w·ák^w·el 'get numb' (-el < -f·l 'get, go, come')), x^w·ák^w·el·x^y·el 'numb in the foot, one's

foot is asleep'
 pq^wf·les 'out of breath, overtired and overhungry (simultaneously)' (peq^w 'split in half by hand' (like of an apple)', -f·les 'in the chest')
 t'éq^w te s^ték^wem (k^w ~ q^w) 'run out of breath, break one's breath' (t'éq^w 'break (of a rope)')
 k^wesé 'overheated' (k^wes 'burned (of a person)')
 t'eq^wé^té^t 'pass out, faint' (t'eq^w 'break or split (of a rope)', -^té^t 'in the throat')(see also 'faint' and 'forgetful')
 q'á·y 'paralyzed; dead, die'
 syé^letem 'poisoned' (s-, yé^lé 'to poison', -t-em)
 xé·p'q^wtem 'rheumatism, aching (of bones)'
 é'áq^wem 'to rot'
 t^xé^wélqsel 'runny nose' (t^xé^w 'to spit', -élqsel 'nose' or 'in the nose')
 sq'éy^λ 'a scar' (s- nominalizer, q'éy^λ 'heal')
 tétxtem 'to shiver, shivering, trembling' (see 'tremble'),
 tétxé^lem 'I'm shivering'
 x^yá·l^f·s 'fatal shock (with vomiting)' (upon seeing a supernatural s^λé·leqem creature)
 sx^yiyf·ws 'smallpox' (s-, root possibly x^yé·y 'fish scales', -f·ws 'on the body')
 p'é^t, me p'é^t 'to sober up', sp'ep'f^t 'sober, sobered up' (s- + -C₁e- participial verb)
 se'ee'fk^w 'open sore', se'ek^we'fk^w 'open sores'
 xt'éls 'put/cast/throw a spell', xt'é^t 'put or cast a spell on s-o'
 yewf·lt 'cast an evil spell on s-o', syewf·l 'an evil spell; power to do witchcraft and predict future',
 syó·we 'witch, seer' (s-, yew ~ yó·w 'supernatural power', -f·l 'get, go, come')
 syéwel sq'áq'ey 'spirit sickness' (s-yéwel 'guardian spirit, spirit power, possession by spirit')(symptoms

of spirit sickness are: depression, insomnia, hearing songs and drumming not physically present, pain in the chest, and some others)

- xéysel 'get spooked, fear something behind one'
 sp'f^q 'white spotted skin' (s-, p'éq^q 'white', + ablaut for derivation), sp'eq^qp'f^q 'many white spots on skin'
 t'á 'to sprain', t'at'é tel s'f·lweþ 'sprain my side'
 c'íéq^wx^yel 'sprain one's ankle' (r.m.u.)
 x^wee'éq^wx^yel 'ankle joint; sprained ankle', x^wee'éq^wces 'wrist, hand joint; sprained wrist' (r.m.u.)
 télstem 'get staggered', (yi)té·lstem and x^wex^welá·ystem 'staggering' (r.m.u., -t-em)
 x^wé 'to starve, starving'
 xelé·lwes 'have a stomach-ache' (xéþ 'hurt', -é·lwes 'in the stomach')
 q'á·y te íq'f·ws 'a stroke, half the body paralyzed'
 s'éc'ec 'stuttering', ?éc'ec 'to stutter' (compare ?éc-l-ex^w 'hear about it')(imitative reduplication)
 cx^wétem 'swelling (of infected sore, of balloon, etc.)', cecíx^w 'swollen'
 Cheh.: íqá·le, Chill.: cqá·le 'thirsty' (í- ~ c- verb-forming, qá· 'water', -le unknown)
 k^weméet 'throw a tantrum, throw oneself on ground in a tantrum, drop oneself into a seat angrily' (k^wq^wem 'to club', -éet 'oneself')
 téx^wem tel e'è·lè 'my heart is thumping'
 ícf·ws, xíém 'tired' (-f·ws '(in) the body', xéþ 'hurt', -ém 'strength'), q'ayf·ws 'tired' (q'á·y 'dead or paralyzed', -f·ws 'in the body')
 memé (or me mé) te yél·és 'the tooth came out' (mé 'come out, come off', me- reduplication or me 'come')
 yélyelesem 'a steady toothache' (reduplication is 'plural' or 'continuative', yél·és 'tooth', -em verb-forming)
 sáémeqel 'tooth/teeth missing, toothless' (s-, íem 'rain

or spray' as in téméx^w 'to rain', téméméx^w 'rain-showering off and on', and $\text{sémx}^y\text{el}$ 'dew' ("rain on the feet"), $-\text{eqel}$ 'in the throat'; "rain in the throat" would refer to the juicier sound of speech by people with missing teeth)

tétxtém 'to tremble', tétxtém 'trembling, shivering' ('shiver(ing)' is to tremble more than once)

$\text{q}^w\text{eléqel}$ 'trenchmouth' ($\text{q}^w\text{él}$ 'cooked; ripe', $-\text{éqel}$ 'in the throat')

$\text{tateq}^w\text{á·mestem}$ 'tuberculosis' ($\text{táteq}^w\text{em}$ 'coughing', ablaut or $-\text{á·mes}$ (meaning unknown) or $-\text{es}$ '(in) the face', $-\text{t-em}$)

yé·t 'to vomit', héyst or héyet 'vomiting'

$\text{sc'épx}^w\text{el}$ 'wart' (s- , c'épx 'dirty', $\text{x} > \text{x}^w$ derivational?, $-\text{el}$ unknown)

qelé·m 'weak' (qel 'bad', $-\text{é·m}$ 'strength', ?eyém 'strong' < "good strength")

$\text{p'eq'éyl te s?á·θes}$ 'the face got white' (p'eq' 'white', $-\text{éyl}$ < $-\text{í·l}$ 'go, come, get')

sp'íq' 'white spotted skin' as above

6.3.3. Accident/injury:

Most of the verb roots below can be used with most of the somatic suffixes. What follows is merely a cross-section. Analysis is evident from suffixes already listed previously.

sq'éyk^w 'a bite' (s-)

$\text{lek}^w\text{át}$ 'break a bone', slí·k^w 'broken (of a bone)',

$\text{lék}^w\text{lek}^w$ 'all broken up (of all or many bones, also of sticks)', $\text{lek}^w\text{eléx}^w\text{el}$ 'break an arm', $\text{lek}^w\text{x}^y\text{é·l}$

'broke a leg', $\text{lek}^w\text{épsém}$ 'break one's neck', lek^wewfc 'break one's spine or back; have a hunchback'

$\text{k}^w\text{és}$ 'get burned, got burned', $\text{k}^w\text{sf·ws}$ 'singe hairs off'

- skin', k^wesá·yθel 'burned on lips', k^wés(ə)qel
 'burned in the mouth' (it appears from this that -eqel
 'in the throat' includes the inside of the mouth too),
 k^wésces 'burned on the hand', etc.
- ʔéq'əɬ 'choke on bone or s-th solid'
 t'k^wf·lés ~ t'ek^wfles 'choke on food', t'ék^weles 'choking
 on food' (t'ek^w 'mired', -f·lés 'in the chest')
 lex^wsłém 'choke on water or liquid' (lex^ws- 'always',
 łém < łem 'to rain or spray')
- p'iθ'łélt 'choke s-o' (p'iθ' 'squeeze', -łél ~ -łəɬ 'in
 the front of the neck', -t 's-o')
- t'émx^yel 'chop one's foot' (as with an ax), similarly
 t'émces, t'émqsel, etc.
- k^weq^weléx^wel 'club on the arm', many others (see exx^y of
 somatic suffixes)
- łíc'et 'cut s-th or s-o', léc'lex^w 'cut s-o accidentally',
 léc'ces 'cut a hand or finger', sx^włéc'ces 'a cut on
 the hand or finger', łec'eléx^wel 'cut one's arm'
- c'éq^w 'hit (with bullet, arrow, s-th shot); wounded,
 poked', c'eq^włéx^w 'hit (with arrow, etc.) accident-
 ally',
- x^wmólk^wes 'get hit in the face by s-th falling'
 tólces 'hit on the hand with a hammer, hammered on hand'
 lá·met 'hit s-th with s-th thrown', lá·m li tē tēpsem
 'hit in the neck with s-th thrown'
- mé·k^wɬ 'to get hurt, be hurt'
- Əq'ét 'poke, prick, or stab s-o, spear s-th (for ex.
 fish), pierce s-th'
- Ə'fq^west 'punch s-o in the face'
- λ'fq' 'run over (by car, train, etc.), get wedged (by
 falling tree), stuck in a trap'
- xéyp'et 'scrape s-o or s-th, scratch it (and leave mark)'
 ʔfɣ tē meqsel 'scratched on the nose, the nose is scratched'
 k^weléx^yt 'shoot s-o or s-th, sting s-o'

c'á·l tel célex^y 'skin my hand, peel the skin on my hand'
 sx^yéc'x^yel 'splinter or sliver in the foot', sx^yéc'ces
 'splinter or sliver in the hand or finger'
 t'á 'to sprain'
 sxé± 'a wound' (s-)

6.3.4. Medicine/curing:

q'ép'et 'bandage it up, tie it up' (the latter meaning
 is the basic one--there is no specific word just mean-
 ing 'to bandage')

q'éwe 'a cane'

±é·w 'cured, healed', ±é·wet 'cure s-o by Indian doctor-
 ing; chase s-th away from s-o', ±é·wetem 'cured by
 Indian doctoring', ±é±ewels 'curing by Indian doctor-
 ing, a medicine man "working"'

sx^wlé·m 'Indian doctor, medicine man, shaman'

k^wek^wíyeθet 'training oneself to be an Indian doctor
 or spirit dancer' (k^wek^wíy 'climbing', -eθet 'one-
 self')

tákte 'non-Indian doctor'

q'éy^hθet 'it healed up' (q'éy^h 'heal', -θet 'itself')

c'élx^yetel 'looking for lice in s-o's head' (perhaps
 'looking for lice in each other's head')(méx^yc'el
 'louse' + metathesis (derivational) > c'élx^y, -tel
 'reciprocal')

cel xé·yles 'I made it (if laxative finally works)'(r.m.u.)

st'élmex^w 'medicine' (r.m.u., unless st'í·lém 'song')

st'elmex^wá·les 'eye medicine'

st'elmex^wf·wel 'love medicine' (f·wel 'in genitals or
 insides')

x^weq^we^lé[?]éltel 'hangover medicine' (possibly x^weq^wéle
 'scouring rush, horsetail', -[?]éltel 'medicine' (incl.
 -tel 'device, thing for'))

θ'el[?]é·ltel 'heart medicine, juniper' (θ'éle 'heart',

-ʔél·ltel 'medicine')
 syé·ttel 'throw-up medicine' (s-yé·t 'vomit', -tel 'device or thing to')
 x^yáx^yelmet ʔe cméle 'looking after s-o having a baby, midwifing' (also without the reduplication)
 nérs 'nurse' (< English)
 sqíqemél 'puberty hut' (sqemél 'pit house', ʔ₁f- 'diminutive')
 meʔél·ésém 'pulled out (of a tooth or teeth)' (me 'take out, come out', -ʔél·és 'tooth', -em 'passive')
 méx^yes te yél·és 'he took out or pulled the tooth' (mé 'take out', -ex^y '3rd person object', -es '3rd person subject')
 Tait: mí ck^wéc, Chill: mí sk^wéc 'recover sight, sight came' (mí 'come')
 sák^wem 'outer cedar bark splint' (the word may also mean 'outer bark')
 qetí·wsem 'take a sweatbath' (qe 'water', -t unknown here, -í·ws '(on) the body', -em 'middle-passive')
 x^yex^yt'á·les 'trillium' (cataract medicine, possibly < x^yét'-em 'swim (of a fish)', -C₁e- 'continuative', -á·les 'in the eyes'; this may also be the word for 'cataracts')

6.4. Non-human Body Functions and Dysfunctions.

Fish:

c'á'ém 'jump' (HABRI)
 t'iléqel 'a spawning salmon with eggs loose and dangling'
 k^wámex^w 'salmon after spawning (no eggs left)'
 xéyqeye 'old salmon ready to die'
 cewétem 'spawning'
 x^yét'em 'swimming (of fish)'
 probably plus some verbs also used for humans like
 k^wéclex^w 'see it', lép'ex^y 'eat it', etc.

Animals:

-élec 'animal or bird droppings' (< -élec 'in the rump')

k^wá·θet 'to gallop'

ṡéylém 'to growl (of an animal)' (cp. ṡéytem 'to growl
(of humans, under the breath)')

q'é·w 'howl'

q^wè·l 'talk' (HB and perhaps of frog also)

q^wáq^wel 'tame'

ṡ'ep'élecem (ε may ~ e) 'wagging its tail' (ṡṡ'ep'élec
'tail', possible ablaut may be 'continuative', -em
is verb forming suffix or 'middle voice')

sk^wík^wex^y 'wild'

plus many verbs also used for humans such as q'éyk^wet
'bite into it', c'émet 'bite on it, put in mouth',
lép'ex^y 'eat s-th', k^wéclex^w 'see it', tel·á·met
'understand', q'á·y 'die', etc.

Birds:

-élec 'animal or bird droppings'

ṡá·k^w 'to fly'

ṡ'x^wé·yṡem 'hatch eggs, brood, incubate or sit on eggs'
(ṡ'ex^w 'cover over', -é·yṡ unknown unless related to
-ṡá·lṡ 'young', -em 'middle-passive')

q^welayθé·lém 'make music' (q^wel 'talk', -á·yθel 'in lips',
-f·l 'go, come, get', -em 'middle-passive')

smímehá·lṡé·lé 'little bird's nest' (s-, C₁f- 'diminu-
tive', memehá·lṡ 'egg' (< mémehé 'children', -há·lṡ
'young'), -é·lé 'container (of)')

t'áp'els 'to peck'

t'f·lém 'sing'

q^wè·l 'talk'

plus many verbs also used for humans such as lép'ex^y,
k^wéclex^w, etc.

Insects:

q'eyk^wet 'bite s-o' (HAFBR)

lā·k^w 'to fly' (B)

c'ā'ém 'to jump' (HAFBR)

t'f·lēm 'to sing (used in place of a word 'to buzz')

k^weléx^yt 'sting s-o, shoot s-o or s-th' (k^weléx^y 'shoot
(with arrow, gun, etc.)' < k^wel- 'hold in hand',
-ex^y 'upright')

probably plus other verbs also used for humans like

k^wéclex^w, lēp'ex^y, etc.

Reptiles:

sq'elē·w 'coiled (of snake)' (s-, q'el as in q'elq'él-p'
'tangled (on itself)' or q'elq'él-q' 'tangled on s-th,
snagged', -ē·w unknown), sq'elē·w 'coiling (of a
snake), ready to strike' (reduplication 'plural/cont-
inuative')

c'ā'ém 'jump' (HAFBI)

probably plus other verbs also used for humans like

k^wéclex^w, lēp'ex^y, etc.

7. Conclusion.

In section 2 the somatic suffixes were presented, showing that about a third of them have a suppletive relationship to their equivalent independent words; the remainder are etymologically related to the independent word equivalents. The somatic suffix system is extensive in that about a quarter of all the independent words for body parts have somatic suffix equivalents. The systematic morphosememic feature shared by these somatic suffixes is that they are morphosememically locative ('on

or in the (body part)') except when used in independent body part words; in the latter case the meaning shifts to become partitive ('of the (body part)').

In section 3 the independent words for body parts were presented and morphosemantically analyzed. There are several systematic features that can be seen in the analysis. 1. As with somatic suffixes (for ex. -cēs 'on the hand or finger', -x^yél 'on the foot or leg'), the division of the body by the Halkomelem words is sometimes different from English divisions (tépsem 'back of the head and back of the neck', sɣél·ə 'leg and foot', etc.).

2. The independent words are extremely analyzable compared to the English equivalents.

3. There is marked morphosememic parallelism in the treatment of the parts of the hands and feet, of the knuckles, ankles and wrists, of the elbow and shin, of the hair (other than on top of the head), and of the genitals. Thus in both hands and feet: the fingers and toes 'widen' the limb, the thumb and big toe are the 'stout member' or 'stout part' of the limb, the palm and the sole are the 'face' of the limb, the hollow of the hand and arch of the foot are 'going downriver on the face' of the limb, and the nails of both hands and feet have the same root, q'^wx'^wél-. The knuckles, ankles and wrists are 'lumps' and the joints of the ankle and wrist can both

be named by a root that also means they are sprained. The elbow and shin are both called the 'bone' of their limbs (arm and leg), while the penis, head of the penis, and vagina/vulva all begin with the same root, x^y , and prefix s-. The hair other than on the top of the head is differentiated by the somatic suffixes and pluralized by reduplication.

4. All the independent body part words can be fit within ten derivational types: a. unanalyzable at present (no suffixes detectable, about 22 cases), b. root meaning unknown (suffixes segmentable, about 22 cases), c. root semantically empty (with somatic suffixes whose locative meaning is cancelled out; examples include the nose, mouth, tooth, tongue, back of head and neck, chest, belly, rib, rump, and possibly heart and heel--with roots m-, θ -, y-, t-, t-, ?-, k^w -, l-, \ddot{t} -, and possibly θ' - and θ'' -, respectively), d. verb roots describing an action or function of the body part (about 21 examples including: 'chop, mark, braid, come out (of hair), bite on, talk, greedy/eat too much, carry on shoulders, club, widen (2 cases), point/aim, marry, suckle, come out above (2 cases), go into quieter backwater, wedged in, fly strength, have an erection, and cover over'), e. adjectival verb roots of descriptive nature (about 15 examples including including: 'soft, red, tangled, black, blue (2 cases), spotted, wet, stout (3 cases), wide (3 cases),

good, full), f. adverbial verb roots (nine examples: 'above (2 examples), below, right, left, middle, down-river (2 cases), across'), g. body part roots (16 examples including only multiple examples of 'bone', 'hair', 'flesh', and 'face'), h. descriptive noun roots (about nine examples including five of 'lump', and one each of 'hole', 'half', 'stone' and 'fat'), i. noun kinterm root (one or two examples include 'youngest child' in 'little finger' and 'child' in 'womb'; if s-méle is 'have a child' then this latter example ('womb') belongs in group d.), and j. noun root to describe function (one example 'bladder' < 'urine container' < 'urine' root).

5. The suffixes used in the independent body part words are mostly somatic; the few that are not include: -á·ls 'round thing; fruit', -éle ~ -é·lé 'container', -é·lc 'twisting around', -tel 'device, thing to' or 'reciprocal', -ámél 'part, member', -oweł ~ -éweł 'canoe', -é·mec 'standing upright', -ém 'strength', possibly -θet 'itself'.

In section 4 we examined the pésq^wtel, the anatomical insult, and discovered 50 examples. These consist of an adjectival verb, a verb of another type or a noun, followed by a somatic suffix, with three exceptions ('big nose' and 'big belly' have prefixes on the independent body part word instead, and 'ugly' uses the suffix -á·mex^y '-looking, in looks, in appearance' which is not somatic but is close). The verb and noun roots have a morpho-

sememic pattern: they describe size and shape (32 examples including: 'big, sloppy, pointed, high, flat, long, hooking, round, scrawny, crooked, boney, wide, and short'), looks (nine examples including 'bad', 'cross' (< 'bad'), 'ugly' (< 'disappointed and angry looking'), 'dirty', and 'black'), anatomy (two examples, 'hairy' and 'snotty'); four examples use analogies (sturgeon eyes, marble eyes, climbing rump, and tail (> 'rump')), and three examples describe miscellaneous actions (fast mouth, spray or moisture in the mouth (> 'toothless: teeth missing'), and something spit out of the nose). The largest number of examples found with one root have the bound root θf · 'big', modified in several ways. $\theta \sim \theta eh$ 'big' sometimes appears (reduced ablaut grades), sometimes prefixed with x^w - 'pertaining to the head or part of the head', sometimes reduplicated for 'plural', $\theta f\theta e \sim \theta f\theta eh$. θf · only appears once (in 'loud voice') and is prefixed by x^w - 'pertaining to the head or part of the head' and then by s- 'nominalizer'. Still another variant exists for 'big' within the $p\acute{e}sq^w tel$, shifting the meaning of s- nominalizer to 'big' and prefixing it to two independent body part words ($m\acute{e}qs\acute{e}l$ and $k^w\acute{e}l\cdot\epsilon$); this could be like calling someone 'The Nose' or 'The Belly' with the implication of huge dimensions. A final variant uses the normal word for 'big', $h\acute{k}^w$, and applies it in a sentence to someone's uvula; the implication is that the person's

mouth is open so much that his uvula appears huge.'

Section 5 listed terms of non-human anatomy, along with some words that apply to human as well as non-human. For the fish there are 21 terms that apply only to fish plus 17 which can also refer to other living creatures. The 17 words have already been analyzed under human anatomy; the 21 words of exclusively fish anatomy contain two parallels: s-xép-eq^w 'soft gristle and insides of fish head' and s-xép-x^yel 'fish tail (including soft gristle)' both have the root s-xép- which apparently means 'soft edible gristle of fish'; q'étmel 'fin, neck fin, possibly back fin' and Ө'étmel 'belly fin' both have a rare lexical suffix which may mean 'fin'. The other thing to note about the set of 38 words is that they include the following somatic suffixes, all semantically extended to apply to the fish: -eq^w 'of the top of the head', -á.yθel 'of the jaw or lip', -x^yel 'of the foot or leg', and possibly -es 'of the face' (in 'head').

Of animal body terms 32 apply to humans as well, while only eight or so do not: 'tuft of hair on horse's leg', 'fur, animal hair', 'horn, antler', 'animal tripe', 'tail', 'paw', 'hind leg', 'foreleg'. The total 40 words include the following somatic suffixes: -x^yel 'of the foot or leg', -ces 'of the hand or fingers', -íwel 'of the insides', -elec 'of the rump', -ewíc 'of the back', -á.yθel 'of the jaw or lip', -él.és 'of the tooth or teeth', -éx^wθel 'of

the tongue', -~~le~~ 'of the front of the neck', and -~~owex~~ 'of the ribs'--all extended semantically to apply to animals.

There are about 24 words found so far for bird anatomy, eight of which do not also apply to human anatomy: 'egg', 'down, real fine feathers', 'small feather', 'long feather (of wing or tail)', 'wing', 'tail', and two words for 'beak, bill'. The sizing of feathers is a morpho-semantic feature of interest, as is the analysis of 'egg' as 'children' + 'young'. The somatic suffixes used in the set of 24 words are: -elec 'of the rump', -~~iwel~~ 'of the insides', -~~epsem~~ 'of the back of head and neck', -~~fles~~ 'of the chest', and possibly -~~elqel~~ which could mean 'of the wing' or just 'feather'.

Terms for reptiles found so far include 12 terms also applicable to humans and just one that is not, s~~h~~'ep'~~elec~~ 'tail' (applicable to humans however as a slang term). Somatic suffixes used are: -elec 'of the rump', -~~ay^hel~~ 'of the jaw', -~~ex^wel~~ 'of the tongue', and -~~iwel~~ 'of the insides'. Confirmed parts of insects include only three words, of which only s~~h~~'eq'~~el~~ 'wing' cannot also apply to humans. Neither the reptile nor the insect sets show anything systematic in semantic design.

In non-human anatomy there are a few interesting omissions: no word for brain of fish (just s~~x~~^w~~ep~~eq^w 'gristle and insides of head' is used), no word for rump

of an animal (just the word for 'hind leg' is used), and there is probably no word for chest of an animal (just the word for 'ribs' is used).

Section 6 covers functions and dysfunctions of the body. Most of these words are verbs; the main exceptions are body products, some illnesses and some medicines--these and a few other body dysfunctions are nominals. Body products include those resulting from both functions and dysfunctions. Body dysfunctions include the following subdivisions: living or healthy/dead or sick, symptom/state/illness/disability, accident/injury, and medicine/curing. One interesting semantic feature of these subdivisions is that words relating to living and healthy are semantically linked (*ʔé·yelex^w* 'alive, in good health', *me ʔé·yelex^w* 'get better, get well, come alive, come back to life'), as are words relating to dying and sick (*q'áq'ey* 'dying, sick', *sq'áq'ey* 'sickness; dead for awhile'). Another interesting feature is that what non-Indian doctors might regard as symptoms, dysfunctional body states and even psychological states are usually regarded as illnesses by the Upper Stalo and are treated by Indian doctors and by Indian medicines. Some of the psychological states are also treated by initiation into spirit dancing. The subdivisions of accident/injury and medicine/curing have been only sketched in outline here by very incomplete lists of words.

With the extensive use of somatic suffixes elsewhere one would expect much heavier use of them in the body function words than one finds. It seems there are a goodly number of body function roots which do not need (and do not allow) somatic suffixation. Those body function words which do use somatic suffixes show a clear morphosememic shift in the meanings of the somatic suffixes. The suffixes lose their locative meaning and become very nearly subjects of the verb root (for example, c'élecem 'sit down, take a seat' < c'é- 'be on top' + -lec 'rump' + -em 'middle-passive'). In some cases it is difficult to tell whether the somatic suffix has a subject or an object function (for example, mék^wəθ 'kiss' --is it < 'the mouth gets thick' or 'get the mouth thick'?). With body dysfunctions this same shifting occurs except when the somatic suffixes are attached to roots that can also be used without somatic suffixes; this latter set needs the locativeness to specify the location of the dysfunction (for ex., q'áq'eyx^yel 'sick in the foot', q'áq'ey 'sick'; lek^wépsem 'break one's neck', s-lík^w 'broken (of a bone)'). Somatic suffixes are used with almost all the accident/injury words and are there distinctly locative.

Morphosememic analysis of analyzable body function words shows several types of morphosememic derivation:

1. imitative, as in 'hiccough', 'sneeze', 'snore' and

possibly in 'blow', 'call s-o', 'cry, weep', 'defecate', 'growl (of stomach)', 'spit', 'whisper' and 'yawn'.

2. descriptive of appearance, as in 'stand up' < 'legs upright', 'walk' < 'step upright', 'yawn' < 'widen or spread face', 'kiss' < 'mouth thickens' or 'thicken the mouth', 'shake hands' < 'hold a hand (in one's hand)', 'smile' < 'laugh on face', 'stick out, protrude' < 'like a nose', 'make breathy noise' < 'talk in breath or throat', 'finished eating' < 'finish in lips or jaws', 'get up with quick motion' < 'suddenly go or come upright', and 'blushing' < 'getting red in face'.

3. description of function, as in 'swallow' < 'fill it with food', 'run' < 'feet hurry' or 'hurry the feet', 'thinking or pondering s-th' < 'go learning it on purpose', 'understand' < 'learn (by) oneself', 'realize it' < 'happen to learn it', 'know it' < 'happen or manage to believe it', 'sit down, take a seat' < '(put) rump on top, rump is on top', 'masturbate' < 'bring oneself to a summit', 'guess' < 'similar in the mind', 'one's voice is changing' < 'the throat is tamed' or 'tame the throat'.

4. diminutive, as in 'swimming' < 'little bathing', 'sob' < 'little cry(ing) or weep(ing)'.

5. pluralizing, as in 'expect' < 'look a number of times'.

Body products are mostly body function words nominalized with s- (at least eight and possibly 14 of the 19 words fit this description). The rest are mostly descrip-

tive of the product's function: 'thoughts, feelings' < 'talk in the mind', (incidentally a nice confirmation of the Whorf hypothesis), 'footprint' < 'thing that marks', 'milk; breast' < 'suckled thing'; three are descriptive: 'tear' < 'water of the eye', 'bile; gall-bladder' < 'full (+ unknown affix)', 'shadow' < 'black (+ unknown affix)'.

In the area of body dysfunctions, little other than anecdotal can be said about words relating to life/death/sickness/health: 'corpse, ghost' < 'clothing of (the soul?)', 'almost died' < 'almost' (verbal taboo?), 'drop dead' < '(fall?) on one's nose'.

Words relating to symptom/state/illness/disability, however, do contain some systematic morphosememic organization:

1. Fifteen of these words are formed with -tem 'state of (verb)', which derives morphosememically from the -t 'third person object, on purpose' + -em 'middle-passive voice'; all are descriptive of physical appearance or feeling and can be inflected for first or second person subject by changing the passive ending (1 sg. -θèlèm, 2 sg. -θà·m, 1 pl. -tálx^wes, 2 pl. -tàlèm, 3 -tem). Thus tétxtem is '(third person) is/are trembling or shivering' and tétxθèlèm is 'I'm shivering or trembling'.
2. Related to this is the large number of words ending in -em 'middle-passive' without the -t; there are 14 or 15 of these words (which seem to be conjugated with active

subjects).

3. Words descriptive of feelings: 'weak' < 'bad strength', 'rheumatism' < 'aching', 'dizzy, drunk' < 'face spins around', 'dumbfounded, speechless' < 'rump or insides flying up', 'tired' < 'hurt strength' and also < 'dead in the body', 'nauseated' < 'vomiting in the mind', 'blind' < 'black in the face', 'headache' < 'hurt in the head', 'stomach ache' < 'hurt in the stomach', 'to cramp' < either 'tangled on its own accord' or 'shrunk', 'constipated' (three words) < 'wedged or tight in the anus', < 'dry in the anus' and < 'mired in the anus', 'heartburn' < 'burn (of a fire) in the chest', 'trenchmouth' < 'cooked in the throat', 'faint' < 'the body is forgotten', 'passed out drunk; forgetful' < 'always forgetful in the mind', 'pass out, faint (probably due to lack of air)' < 'break or split rope in throat', 'run out of breath' < 'break or split rope of breath', and 'simultaneously out of breath, overtired and overhungry' < 'split (in) the chest' (as to split apple by hand). The last five show two subsystems at work: 'faint' and 'pass out (if drunk)' are derived from the root 'to forget', and three 'out of breath' words are derived from 'break or split rope' or 'split (by hand)'.

4. Words descriptive of appearance: 'black eye' < 'bruised on eye', 'tuberculosis' < 'coughing face', 'jaundice' < 'bile' < 'gall-bladder' < 'full', 'lame'

< 'climbing rump', 'hunchback' < 'lump on the back',
 'hemorrhoids' < 'open sores in rump', 'strawberry birth-
 mark on arm' < 'strawberry on arm', 'wart' < 'dirty (+
 unknown affix)', 'diarrhea' < 'ripped up', 'have a crooked
 jaw' < 'jaw twisted or turned wrong way', 'smallpox' <
 'gills on the body'.

5. Words descriptive of actions: 'grinding one's teeth'
 < 'twisting or turning the teeth the wrong way', 'throw
 a tantrum' < 'club oneself', 'scar' < 'something healed',
 'toothless, teeth missing' < 'moisture or spray in throat'
 (referring to the sound of spittle during talking), and
 'runny nose' < 'to spit from nose'.

6. Words descriptive of functions: 'paralyzed' < 'dead',
 'stroke' < 'half of body dead or paralyzed', 'cripple,
 to limp' < 'broken rump or hip'.

7. Plural-continuative derivation: 'shiver' < 'trembling'
 because a shiver is multiple trembles, 'steady toothache'
 < 'have a plural or continuous tooth', and 'stutter' has
 'plural' reduplication because a stutter is a repetition.

8. Words requiring the word 'sickness': 'menstruation' <
 'moon sickness', 'a cold' < 'chill sickness', and 'spirit
 sickness' < 'spirit power or possession sickness'.

9. Words requiring 'can't, impossible to': 'mute' <
 'can't talk' and 'insomnia' < 'can't sleep'.

Words relating to accident/injury show no morpho-
 sememic systems except that the roots are nearly all

verbs which can each be inflected with most of the somatic suffixes (the latter retaining their locative meaning as a set). A few anecdotal things are all that can be noted otherwise: 'choke on food' < 'mired in the chest' and 'hit (with arrow, bullet, etc.)', wounded' < 'poked'.

Words relating to medicine/curing show several ways of expressing the sememe 'medicine': st'álmex^w, -ʔé·ltel, and -tel; the first is used with somatic suffixes to specify where the medicine is to work, the second is used with roots for body parts or roots showing functions of the medicine, the third is only attested with a root showing the medicine's function ('vomit medicine'). Another way of specifying medicines is by naming a plant for the disease it cures: 'swamp gooseberry' < 'hemorrhoid plant', 'trillium' < 'cataracts (?)' < 'swimming like a fish in the eyes'. The word for curing is also interesting since it refers only to an Indian doctor's curing and is related to or derived from the word 'chase something away'. I have not yet had access to much of the vocabulary of Indian doctoring, but another interesting word from that area is k'^wek'^wfyəθet 'training oneself to be an Indian doctor or spirit dancer' < 'climbing oneself'. The training involves fasting, purification, and long hikes into the wilderness and so involves both physical and spiritual climbing of oneself.

Finally there is the area of non-human body functions and dysfunctions. This area shows a number of words specialized and generalized in different ways than in English. Greater specialization: three stages of spawning have distinct terms; 'swim (of a fish)' is a different word from 'swim (of a human)'; -élec with animals and birds means 'droppings' as distinct from human feces, sʔá.ʔ, and from the human suffix -élec, -(ə)lec 'on the rump'; an animal 'growls' with a different word than a human (though the roots appear related). Greater generalization: animals and birds can q^wé.1 ('talk') like humans; the word tʔf.lem 'sing' can be used of birds and insects as well as of people and with insects refers to buzzing; an insect uses the same word 'to sting' as a person uses 'to shoot (an arrow, gun, etc.)'; the vocabulary of bird eggs ('eggs', 'nest', 'sit on eggs') treats all three words by referring to the eggs as 'young children'. The corpus of words referring to non-human body functions and dysfunctions still is rather incomplete, but it shows some generalization of terms in the direction of considering fauna to have more human attributes than we do in English. This anthropomorphic trend is born out in legends, stories, and folk beliefs as well (for example in the legend of the Wealick brothers, the elder of whom became a bear, and in the refusal of some Stalo people to kill bears because they believe them to be people who

can take off their coats and become human, and in stories of wolves understanding and responding to human language).

References

- Elmendorf, William W. and Wayne Suttles. 1960. "Pattern and change in Halkomelem Salish dialects," Anthropological Linguistics, vol. 2, no. 7, pp. 1-32.
- Galloway, Brent D. 1971. "Some similarities between semology and phonology (with illustrations from Chilliwack Halkomelem)," a paper delivered at the Sixth International Conference on Salish Languages, Victoria, B.C.
- Galloway, Brent D. 1973. "Reduplication in the Chilliwack dialect of Halkomelem (with a sketch of phonemics)," a paper delivered at the Eighth International Conference on Salish Languages, Eugene, Oregon.
- Harris, Jimmy Gene. 1966. "The phonology of Chilliwack Halkomelem," Master's thesis for the University of Washington.
- Hill-Tout, Charles. 1902. "Ethnological studies of the Mainland Halkomelem, a division of the Salish of British Columbia," Report of the British Association for the Advancement of Science, vol. 72, pp. 355-490.