A research project, sponsored by NEH, to compile computerized dictionaries of two Salishan languages of B.C. and Washington has led to some interesting discoveries so far about Halkomelem (on phonological, morphological, syntactic, and semantic levels) and about semantics in general. First the project and its use of computers will be described, along with some samples showing the possibilities of completeness of indexing on all levels by the BANDSORT program within LEXWARE. Then some of the things discovered will be outlined, with examples.

Some discoveries so far include a more widespread presence of ablaut, metathesis, and infixing as both inflectional and derivational processes in Upriver Halkomelem, covert systems of aspect inflection, a new principle which may help in understanding the use of ablaut and metathesis in derivation, and a better idea of the membership of verbs, numerals, adverbs, adjectives, demonstratives, and pronouns in semantic domains, beside nominals and nouns. Some examples will be shown, followed by some examples of systematic semantic processes at work.

Interesting discoveries about semantics in general include the fact that allomorphs of a given word can be members of different semantic domains, and can also be members simultaneously of several semantic domains. Such interconnections probably facilitate the processes of thought. Semantic domains also appear to contribute at least one semantic component to each member (with the important logical consequences that entails). This all appears to be part of the brain’s information-filing system, directory paths, and information search and retrieval and processing systems. These networks of domains, subdomains, and linked components can be viewed more profitably as three-dimensional mobiles than two-dimensional diagrams.
SAMPLE UPRIVER HALKOMELEM FORMAT2 ENTRIES

<chökıməl>, dnom //cáxʷ=xʷel//, (lx <xəl> on the leg, on the foot), CLO /'cloth or warm material to wrap around the foot', ASM ['stockings'], semantic environment ['post-contact times, acculturated dress'], ACL /'stockings', syntactic analysis: nominal.

<chöiythet>, incs //cá'y-get//, (lx <yáth> become, get), MTH /'get quiet (of wind), stop (of wind')/, semantic environment ['wind'], syntactic analysis: intransitive verb, attested by AD.

<chökʷqwela>, dnom //cóʷqʷ=ələ/, (lxπ probably <əla> on the side of the head, by the ears), EZ /'Canada lynx', Elder's comment: "a big white cat about a foot and a half long that is found on the highest mountains", ['Lynx canadensis canadensis'], syntactic analysis: nominal, attested by Jimmy Peters of Katz Reserve, also <thökʷvela>, /cəqʷ=ələ/, attested by JL.

<chökʷläqęp>, ds //cqʷ-ələqęp//, (lx <ələqęp> sound, in sound), SD /'be loud in sound, a loud sound (?)', syntactic analysis: probably vaj for example, <mí xʷe chökʷläqęp>, /mí xʷe cqʷ-ələqęp/, /'sound getting louder'/.

<chth'eylem>, incs //cə-əl-em//, mds, (<əl> come, go, get, become, inceptive, <ə-em> middle voice), FSH /'spearing sqwēxem (silver spring salmon) in clear water after waiting for them', syntactic analysis: vi, attested by EL <Chth'eylem>, dnom //cə-əl-em//, (grammatical comment: zero derivation), PLN /'a point or bald hill on Harrison River where people waited to spear silver spring salmon'/. 

...
Sample Entries for Nooksack Dictionary.

Entries for Nooksack Dictionary.

Comments: drs, ds, and df are stem-type labels for "derivational suffix", "derived stem", and "derived form (root or derivational affix unclear)". DEM = semantic subdomain of DEMONSTRATIVES (probably subsumed under the domain of DIRECTIONS), WETH = WEATHER domain. GS = my transcription of George Swanaset from tapes, LT:LG = Laurence Thompson's transcription of Louisa George, LT:GS = Laurence Thompson's transcription of George Swanaset, PA:GS = Pamela Amoss's transcription of George Swanaset, PA:GS = my transcription of Sindick Jimmy. [-I-] = infixed plural -C1V1C1- reduplication. This sample also shows the incorporation of a source reference (Galloway 1982:27) and of forms from other languages. Semantic (morphosememic) derivation of the sentence meaning //There are lots of bones here.// is shown from the combination of sememes '/there are lots/'the'nominalizer-bone'here (in one place), this'/. A more interesting example is the morphosememic derivation of the sentence meaning //This is what the old people called it; they still call it a myth.//, including a nominal in the past tense, a stative + causative verb, a diminutivized lack-of-control verb in the passive, and a nominal with [-etic] semantic detail. In the last main entry /q\ means weak labialization or half-rounding.
### 3.2 ORGANIZATION & REPRESENTATION OF ENTRIES

<table>
<thead>
<tr>
<th>hw ahu</th>
<th>1ps n.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1df heap, mound</td>
</tr>
<tr>
<td></td>
<td>2df sacred mound used in certain rites</td>
</tr>
<tr>
<td></td>
<td>2il Tohinga mauritanga o papa ma ki mua ki te ahu (M. 248).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>hw ahunga</th>
<th>3ps v.t.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3df heap up</td>
</tr>
<tr>
<td></td>
<td>3il Katahi ka ahu raua i ta raua tuaahu (W. v, 75).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>hw whakaahu</th>
<th>4ps a.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4df heaped up</td>
</tr>
<tr>
<td></td>
<td>4il He mea ahu nga onepu e nga ringaringa o te tohunqa (M lxxxiii).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>hw whakaahu</th>
<th>ps n.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>df heaping up</td>
</tr>
<tr>
<td></td>
<td>il te ahunga oneone, te aponga ki punga ra (M. 127).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>hw whakaahu</th>
<th>2ps v.i.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2df swell up</td>
</tr>
<tr>
<td></td>
<td>3if be displeased, dissatisfied</td>
</tr>
<tr>
<td></td>
<td>3il Katahi te tangata whakaahu ki aku kai. --Whakaahu ana au i te pukapuka a Henare: ko taku whakaahu tenei, te haere ia ki Wharekahixa kati mai ai.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>hw ahuahu</th>
<th>1ps v.t.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1df heap up</td>
</tr>
<tr>
<td></td>
<td>1il He mea ahuahu nga puke hei taunga mo a ratou teka.</td>
</tr>
<tr>
<td></td>
<td>12df earth-up crops, etc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2ps n.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2df the process of earthining up</td>
</tr>
<tr>
<td></td>
<td>2il I u mai a Paikea ki enei motu ... i te wa i tupuketia ai te ahuahu (W. iii, 35).</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Meaning</td>
</tr>
<tr>
<td>--------------</td>
<td>---------</td>
</tr>
<tr>
<td>A</td>
<td>attested by</td>
</tr>
<tr>
<td>ABDP</td>
<td>animal body dysfunctions (incl. human) (subdomain)</td>
</tr>
<tr>
<td>ASFC</td>
<td>animal body functions (incl. human) (subdomain)</td>
</tr>
<tr>
<td>ASI</td>
<td>animal (incl. human) body insults (subdomain)</td>
</tr>
<tr>
<td>ACL</td>
<td>acculturated (post-contact) meaning</td>
</tr>
<tr>
<td>adem</td>
<td>adverbial demonstrative</td>
</tr>
<tr>
<td>alt</td>
<td>alternative name</td>
</tr>
<tr>
<td>ANA</td>
<td>anatomy</td>
</tr>
<tr>
<td>ANAA</td>
<td>anatomy—animal (subdomain)</td>
</tr>
<tr>
<td>ANAB</td>
<td>anatomy—bird (subdomain)</td>
</tr>
<tr>
<td>ANAF</td>
<td>anatomy—fish (subdomain)</td>
</tr>
<tr>
<td>ANAH</td>
<td>anatomy—human (subdomain)</td>
</tr>
<tr>
<td>ANAR</td>
<td>anatomy—reptile (subdomain)</td>
</tr>
<tr>
<td>ant</td>
<td>antonym</td>
</tr>
<tr>
<td>apas</td>
<td>ambiguous past</td>
</tr>
<tr>
<td>apcl</td>
<td>adverbial particle</td>
</tr>
<tr>
<td>asin</td>
<td>as in (example of affix in a word)</td>
</tr>
<tr>
<td>ASM</td>
<td>allophone</td>
</tr>
<tr>
<td>ASP</td>
<td>aspect (subdomain of TIME)</td>
</tr>
<tr>
<td>aug</td>
<td>augmentative</td>
</tr>
<tr>
<td>avop</td>
<td>active verb object pronoun</td>
</tr>
<tr>
<td>avps</td>
<td>past adverbial</td>
</tr>
<tr>
<td>bens</td>
<td>benefactive stem</td>
</tr>
<tr>
<td>bds</td>
<td>bound stem (root + affix(es) which still form a bound form)</td>
</tr>
<tr>
<td>BLDG</td>
<td>buildings (names, parts, functions, how to make them) (subdomain)</td>
</tr>
<tr>
<td>BOT</td>
<td>botanical scientific name (in Latin)</td>
</tr>
<tr>
<td>BSK</td>
<td>basketry (types, parts, functions, how to make) (subdomain)</td>
</tr>
<tr>
<td>CAN</td>
<td>canoes and other transportation (types, parts, functions, verbs for making, repairing and canoeing (strokes, etc.)) (subdomain)</td>
</tr>
<tr>
<td>cau</td>
<td>causative control (purposeful)</td>
</tr>
<tr>
<td>caus</td>
<td>causative control stem</td>
</tr>
<tr>
<td>cdia</td>
<td>see dialect form (fewer dialects have this form or dialects which are not the original source of the main form)</td>
</tr>
<tr>
<td>cf</td>
<td>compare with form</td>
</tr>
<tr>
<td>cfr</td>
<td>compare with root</td>
</tr>
<tr>
<td>cfs</td>
<td>compare with stem</td>
</tr>
<tr>
<td>CH</td>
<td>Christianity (subdomain)</td>
</tr>
<tr>
<td>chr</td>
<td>characteristic</td>
</tr>
<tr>
<td>chrs</td>
<td>characteristic stem</td>
</tr>
<tr>
<td>cj</td>
<td>conjunction</td>
</tr>
</tbody>
</table>
CJ  conjunctions and logical operators
ck  check Indian form
CK  check English form
CLO clothing and ornaments (names, parts, functions, how to make,
    may incl. WV as subsubdomain)(subdomain)
CM  linguist's commentary
cmdf see main dialect form (this form is found in more dialects or
    in a dialect which is the original source of the word)
CONV conversation and speech (domain)
cpds compound stem
cptv completive aspect
cpv comparative
cpvs comparative stem
CST change of physical state (inanimate)(domain?)
CSTR constructions other than buildings (names, parts, functions, how
    to construct them)(subdomain)
ct  continuative aspect
ctr  contrast (with following word or words of similar meaning)
cts  continuative stem
D  dialectal limitation
DEM demonstrative (domain)(prob. subsumed under DIR)
dema demonstrative article
demc demonstrative conjunction
demp demonstrative pronoun
DESC descriptive words (incl. diminutive)(domain)
df derived form (root or derivational affix unclear)
di derivational infix
DIR directions (general adverbs, prepositions and demonstratives)(domain)
dm diminutive
dmn diminutive nominal
dns diminutive stem
dmv diminutive verb
dnom derived nominal
dp derivational prefix
drs derivational suffix
drv directive (may only be in Nooksack)?
ds derived stem (root and affixes clear)
dst distributive
dur durative aspect
durs durative stem
EB  ethnobotany (common names)(domain of flora)
EPAM emotions, feelings, attitudes, mental processes, interjections
(domain)

**ETH**  ethnographic information

**EZ**  ethnozoology (common names)(domain of fauna, incl. man)

**FIRE**  fire features and functions (domain)

**FOLK**  folk classification (groupings and hierarchies)

**FOOD**  food (domain)

**FR**  borrowed from (lists language name, then "Indian word")(^ = cap6)

**FRP**  possibly borrowed from

**FRQ**  frequentative aspect

**FRQS**  frequentative stem

**FISH**  fishing (devices, parts, functions, processing the catch, making the devices)(subdomain)

**FUT**  future tense

**G**  gloss (of single-word example)

**GA**  grammatical analysis

**GNM**  games (domain)

**GC**  grammatical comment (incl. morphological categories)

**HARV**  harvesting (devices, parts and functions, techniques, how to make the devices, processing the harvest)(subdomain)

**HAT**  human age terms (subdomain)

**HBT**  habitual aspect

**HRG**  household goods (names, parts, functions, how to make)(subdomain, prob. subsubdomain under BLDG)

**HPS**  historical past tense

**HUMC**  categories of humans (domain)(includes subdomains: HAT, KIN, STAT, N)

**HUNT**  hunting (devices, parts, functions, techniques, how to make devices, processing the catch)(subdomain)

**IC**  informant's commentary

**ICSP**  independent clause subject pronoun

**IDOC**  Indian doctoring (subdomain)

**IE**  in-context example (phrase or sentence)

**IECS**  indirect effect control stem

**II**  inflectional infix

**IJ**  interjection

**IL**  illustration (to show source)?

**IMP**  imperative

**INC**  inceptive aspect

**INCS**  inceptive stem

**IND**  indirective?

**INOM**  indefinite nominal

**INP**  independent nominal pronoun

**INS**  instrumental (creates words for devices, etc.)(need better label)
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>inss</td>
<td>instrumental stem</td>
</tr>
<tr>
<td>iopv</td>
<td>independent object of prepositional verb</td>
</tr>
<tr>
<td>ip</td>
<td>inflectional prefix</td>
</tr>
<tr>
<td>ipp</td>
<td>independent possessive pronoun</td>
</tr>
<tr>
<td>irq</td>
<td>irregular form(s)</td>
</tr>
<tr>
<td>is</td>
<td>inflectional suffix</td>
</tr>
<tr>
<td>it</td>
<td>iterative aspect</td>
</tr>
<tr>
<td>its</td>
<td>iterative stem</td>
</tr>
<tr>
<td>ivp</td>
<td>independent verbal pronoun</td>
</tr>
<tr>
<td>izz</td>
<td>intransitivized stem</td>
</tr>
<tr>
<td>KIN</td>
<td>kinterms (subdomain)</td>
</tr>
<tr>
<td>LAND</td>
<td>land features and functions (domain)</td>
</tr>
<tr>
<td>LIT</td>
<td>(=SMM) literal meaning (triggers semantic notation /' /)</td>
</tr>
<tr>
<td>LO</td>
<td>loanword (probably not needed, FR band will suffice)?</td>
</tr>
<tr>
<td>lx</td>
<td>lexical affix (not to replace semological band as main entry)</td>
</tr>
<tr>
<td>MC</td>
<td>material culture (domain) (incl. subdomains: BLDG, BSK, CAN, CLO, CSTR, FSH, HARV, HEG, HUNT, MUS, TOOL, WV)</td>
</tr>
<tr>
<td>md1</td>
<td>middle voice</td>
</tr>
<tr>
<td>mdls</td>
<td>middle voice stem</td>
</tr>
<tr>
<td>MED</td>
<td>medical information (techniques, medicines, functions, how to prepare, mainly secular) (subdomain, merges at edge with REL:IDOC)</td>
</tr>
<tr>
<td>MOOD</td>
<td>moods: interrog., subjunct., imperative, declarative (domain)</td>
</tr>
<tr>
<td>mos</td>
<td>motion stem (in ye-)</td>
</tr>
<tr>
<td>mpcl</td>
<td>modal particle</td>
</tr>
<tr>
<td>MUS</td>
<td>music (names, parts, functions, devices, techniques, techniques for making the devices and using them) (subdomain)</td>
</tr>
<tr>
<td>MYC</td>
<td>myth character name (subsubdomain of N)</td>
</tr>
<tr>
<td>N</td>
<td>personal names (inherited, nicknames) (subdomain of HUMC)</td>
</tr>
<tr>
<td>nca</td>
<td>numeral classifier affix</td>
</tr>
<tr>
<td>ncm</td>
<td>non-control middle ?</td>
</tr>
<tr>
<td>ncr</td>
<td>non-control root</td>
</tr>
<tr>
<td>ncrs</td>
<td>non-control reflexive stem</td>
</tr>
<tr>
<td>ncs</td>
<td>non-control stem</td>
</tr>
<tr>
<td>nct</td>
<td>non-control transitive</td>
</tr>
<tr>
<td>nctv</td>
<td>non-continuative aspect</td>
</tr>
<tr>
<td>ndem</td>
<td>nominal demonstrative</td>
</tr>
<tr>
<td>nmps</td>
<td>nominal past</td>
</tr>
<tr>
<td>NOG</td>
<td>no gloss</td>
</tr>
<tr>
<td>nom</td>
<td>nominal</td>
</tr>
<tr>
<td>np-a</td>
<td>nominal phrase minus article</td>
</tr>
<tr>
<td>npa</td>
<td>nominal phrase with apposition</td>
</tr>
<tr>
<td>npas</td>
<td>negative habitual past</td>
</tr>
</tbody>
</table>
npc  nominal phrase with conjoining
npm  nominal phrase with modifier(s)
mps  simple nominal phrase
ncps  negative interrogative past
NUM  numerals, their functions, and plurals (domain)
numc  numeral compound?
numr  numeral root
nums  numeral stem
o  orthography
oc  out-of-control?
OS  other sources (gives source ref. and form)
..p  paragraph
pasf  past affixed
pass  passive
pbf  probable form
PBG  probable gloss
pbr  probable root
PC  phonological comment (incl. phonological processes: backing or fronting (bof), consonant alternation (ca), consonant merger (cmrg), glottalization and deglottalization (gl), labialization and delabialization (lab), metathesis (m), ablaut (a), vowel merger (vmrg), stress-shift (\'-, \'-), lengthening (\'-, \'-)), etc.)
pcl  particle
pcr  purposeful control root
pcrs  purposeful control reflexive stem
pcs  purposeful control stem
pcsa  purposeful control structured activity
pcsi  purposeful control stem inanimate object preferred
per  persistent
pers  persistent stem
phm  phonemic transcription
phn  phonetic transcription
pl  plural
pln  plural nominal
PLN  place name (subdomain)
plr  plural root
pls  plural stem
plv  plural verb
pnc  psychological non-control
pncs  psychological non-control stem
posf  possible form
POS  possible gloss
possible root
spirits and powers
participle (=stative)
Proto-Central Salish
present tense
(professional)
pronouns (definite, indefinite, etc.)(domain)
perhaps related to root
preverative ?)
Proto-Salish
possessive
possessive pronoun affix
questionable ?
interrogative affix
interrogative past
qualifiers (general adverbial)(domain)
root (bound root form)
reciprocal
reciprocal stem
rejected form
religion (domain)(incl. subdomains: CH, IDOC, POW, SPD)
root form (free root form)
reflexive
reflexive stem
relative clause
repetitive aspect
resultative
resultative stem
source reference
structured activity
structured activity stem
subordinate clause
Salish cognate
sentence + coordinating conjunction + sentence
sentence comparative
senses and perceptions (domain)(incl. subdomains: LT, SD, SM, TAST, TCH)
sentence with interjection
stressed intransitivizer
subjunctive subject pronoun
semantic comment
semantic environment (which conditions allophones)(=old SMC band)
SMN  semantic transcription (narrow semantic info., semantic components, triggers semantic notation [' '])(allophones could be listed here but are usually listed under domains as subentries)
sna  sentence with nominal in apposition
spp  sentence with prepositional phrase
SPRD  spirit dancing (subdomain) (could use SPD)
SQ  posited source
ssjp  sentence with subjunctive phrase
sspv  sentence superlative
st  stative aspect (=ppl)
STA  syntactic analysis
STAT  status terms (social, occupational, tribal, national)(subdomain)
SOC  might be better; STAT includes social transactions, etc.
STC  syntactic comment
stca  stative causative control stem
stie  stative indirect effect control stem
stnc  stative non-control stem
stpc  stative purposeful control stem
stpn  stative psychological non-control stem
stvi  stative intransitive verb stem
strs  stative resultative ? stem
stz  stressed transitive
su  see under stem
svpa  sentence with verb phrase in apposition
syn  synonym
TIB  transitive verifiers, intransitive verifiers, benefactives (subdomain)
TIME  time periods and tenses (domain)
tlc  translational ?
tlcs  translational? stem
TN  translation of sentence example
TOOL  tools for making things (names, parts, techniques for making and using)(subdomain)
TV MO  travel and motion (domain)
uf  underlying form (morphophonemic, triggers /// notation)
us  unanalyzable stem
US  usage (sociolinguistic comments, etc.)
UX  unexplained form or problem
UXB  unexplained botanical identification or info.
UXG  unexplained grammatical detail
UXH  historical or comparative notes
UXP  unexplained phonological detail
UXPN  unexplained place name info.
UXQ  adjustments required between files ?
UXZ  unexplained zoological identification or info.
adv  adverbial verb
vaj  adjectival verb
VALJ value judgements (domain)
vaux auxiliary verb
vadem demonstrative verb
vir  intransitive verb root
vis  intransitive verb stem
VOIC voice (active, middle, reflexive, reciprocal, passive)(subdomain)
vpad verb phrase with adverbial verb, adverbial particle, or adverbial demonstrative
vpmd verb phrase with modal particle
vpn verb phrase with negative
vppa verb phrase with past tense
vpq verb phrase with yes/no interrogative
vpro pronominal verb, = verbal pronoun
vprp prepositional verb
vpv verb phrase with auxiliary
vq  interrogative verb
WATR water features and functions
WETH weather features and functions
WV  weaving (techniques, devices, parts, dyeing, designs, functions)
(prob. subsubdomain)
xpas auxiliary past
ZOO scientific zoological name (in Latin)
Figure 5: Some Sample Dzurion Balkonelem Entries

| .o   | chó:kw   |
| rf  | cá·'k"   |
| DIR | *far, be_*far_away, *far_off, way_in_the_*distance |
| STA | vadv     |
| A   | EB, BJ, AC, others |
| OS  | ES, JH /cá·'k"/ |
| 1alt | chó:kw |
| 1phm | cá·'k" |
| 1A  | AC, EB, others |
| 2ie | lí: chó:kw |
| 2phm | lí·e cá·'k" |
| 2PC | by a regular morphophonemic rule a stressed full vowel + schwa (here *interrogative, *yes/no_*question| suffix -/-e/ - the full vowel + length |
| 2TN | Is it *far? |
| 2A  | AC     |
| 3ie | lí te chó:kw |
| 3phm | lí te cá·'k" |
| 3TN | It's *far_away., It's *there_(*distant). |
| 3A  | AC, EB |
| 3US | this would be the answer to the question in the example just previous |
| 4ie | lí(;'') chòk:vw te lálem qa (- q'a) lí: stétis |
| 4phm | lí·e cá·'k" te lálem·s qa (- q'c) lí·e s=Re·te [=Ái·]s |
| 4TN | *Is *his *house *far *or is_it_*nearby? |
| 4PC | *sentence-*stress changes the stress from /chó:w/ to /chò:k/ after stressed interrogative lí(;''), length on lí is dropped in *allegro_ |
|     | speech; in slow pronunciations by AC lí is attested as líye, showing the |
|     | -e /*yes/no_*question| suffix |

| .o         | chóchekw |
| cpvs       | possibly cá[*R=']k" |
| ck         |                   |
| CK         |                   |
| 1le        | ley xxchóchekw - ley kw'e chóchekw |
| 1phm       | possibly 1s x"=cá[*R=']k" - 1s kw's cá[*R=']k" |
| 1IC        | speakers are unsure about the form of this sentence |
| 1TN        | It's going *farther. |
| ...o       | chóchkwó:les |
| dnom       | cá[*R=']k"=á·les |
| lx         | =ó:les /in_the_*eyes! |
| EB         | *goatsbeard |
| BOT        | *Aruncus_sylvester |
SMN a plant with white blooms in June which can be seen from far away, thus its name, literally "farther_in_the_eyes" or "far_away_in_the_eyes"

MED used as eye medicine

STA nom

A SP, AD

..o telchókw

ds tel-cák

lx tel= /*from|

DIR *from_*far_away

STA vadv

A BITTC

..o chekwílem

mdls cák=îl-əm

incs


is -əm /*middle_voice|

TVMO /*go_ _far_away

DIR

STA vi

lie éwechexw we'ol chekwílem

lphm ?éwa-c-sx we-ʔal cák=îl-əm

lTN Don't /*not /*imperative /*go /*too _far (away).

llLT don't-you contrast-just/too _far=go-oneself

...o xwetskwí:lem

incs xʷś-cákw=íl-əm

lx xwə= /*go, *come|

TVMO *(go)_ _far_away

DIR

STA vi

A AC

..o chokwí:lt

pcs cák=í-1-T

lx =í:1 /*go, *come, *get, *become|

is -t(h) /*purposeful_ _control_ _transitivizer|

TVMO *followBehind_s-o, *trail_s-o

DIR

STA vt

A BITTC

lalt chokwí:lt

lphm cák=í[=Au=]·1-T

1D Chill., Tait: Peters and Lorenzetto families on Peters Reserve or Squatits Reserve (Skw’átets)
1A AC, JL, MJ
2asin chokwú:ltóxəs
2phm cák=í·l-T-áx̌-əs
2G *He *followed *me.
21alt chokwú:ltóxəs
21phm cák=í[-Aú-]·l-T-áx̌-əs
21D Chill., Tait: Peters and Lorenzetto families at Skwátets
21A IMITTC
...o chokwú:lt
cts cák=í[-Aú-]·l-T
ii ú- ablaut /*continuative|
TVMO *following_s-o
DIR
STA vt
D Chill., Tait: Peters and Lorenzetto families at Skwátets
1asin chokwú:ltəs
1phm cák=í[-Aú-]·l-T-əs
1G *He_was_ *following_ *it
1A AC
2asin chokwú:ltóxəs
2phm cák=í[-Aú-]·l-T-áx̌-əs
2G *He_ *s_ *following_ *me.
2A Elders 3/15/72 (prob. JL)
3asin chokwú:ltóme
3phm cák=í[-Aú-]·l-T-əmə
3G *chasing_after_me (*following_me, *trailing_me)
... o chokweḷlqem
ds cák=əl=əleq=əm
lx =əl _*go, _*come, _*get, _*become, _*inceptive|, _eleq _*occupational|,
  _em _*middle_voice| or _*intransitivizer|
HUNT _*tracking_an_animal
DIR
STA vi
A IMITTC
1TVMO *follow_after, *coming_behind_(the_one_ahead_knows)
1A EB
...o xwchokwel
ds x=cák=əl
lx xw _meaning_unclear_here_unless _*interrogative|, _əl _*come, _*go,
  _*get, _*become, _*inceptive|
TVMO _*where_is_s-o_ _*going?, _*where_is_s-o_ _*travelling?, _*where_is_s-o_
  _*headed_for?
asked for example as you see the person heading for his car, wondering where he is going today

A

AD, EB, AC, others

1as

xwchókwelchexw

1ph

x̌ =cákʷ =əl-c-x̌ 

1G

Where are you travelling?, Where are you going?

1A

EB

11alt

xwchókwelchexw

2ie

echxw ye xwchókwel

2phm

?e-c-x̌ ye x̌ =cákʷ =əl

2TN

Where are you headed for?

2A

EB

3ie

echxw yálh xwchókwel - échxw kw̌ e úlh xwchókwel

3phm

?e-c-x̌ yíí x̌ =cákʷ =əl - ?e-c-x̌ kw̌ úá x̌ =cákʷ =əl

3TN

Where are you going *now_(*this_time)?

3A

EB

4ie

li xwchókwel

4phm

li x̌ (e)=cákʷ =əl

4TN

Where is he going?

4A

AC

.o

chó:1 (bound form)

us

vcáꞌ(ə)ə1

lx

probably =əl /*go, *come, *get, *become, *inceptive*/

r

possibly chó(:) as in chó:kw - chó:kw /*far, *distant*/

DIR

possibly *go_a_distance*/

.o

chó:lqem

mdls

cáꞌ=laq=əm

lx

=eleq /*occupational*/, =em /*middle_voice*/ or /*intransitivizer*/

TVMO

*follow_along_after_(the_oneAhead_knows)

STA

vi

A

EB

..o

chichéloqtel

pcrs

R= cáꞌ=ls[=M:]=q-T-əl

dms

dp

R= (here chi=) /*diminutive*/

lx

=eleq /*occupational*/, =metathesis; (switches preceding two vowels)

/*continuative*/

is

-t(h) /*purposeful_ control_ transitive*/, -əl /*reflexive*/

TVMO

*walking*_single-file

PC

*metathesis
Some Interesting Halkomelem Finds So Far:

PHONOLOGY: more widespread ablaut, metathesis, and infixing than thought
1. See handout pp. 19-22 /k'ε'/: as in /k'ε'-'st/ , /k'ε'kε'et/ ,
   /k'ε'-'bat/ , /st'kak'ε'-'t/to/ /k'ε'-'lx/ , /k'ε'al'ma't/ , /k'ε'al'ma't/ ,
   /k'ε'-'bat/ , /k'ε'-'bat/ , /k'ε'kε'v'bat/ , and /sk'ε'-'k'ε'at/.
2. See handout p. 16 /ca'-'lqam/ /ca'-(1)'=lq-=-am/ /'follow along after (with the person ahead's knowledge)'/ → /cicala'qatal/ /R'='ca'-'a1[=M'H'=]qatal// /'walking single file'/ < /'diminutive =follow=occupational=purposeful control=reciprocal'/
3. /k'ε'at/ /'grasp'/ as in /k'ε'at=lax'/ /'get something, catch it (disease), have something' (=lax'/ 'non-control transitivizer (happen to, accidentally, manage to)' , /k'ε'at/ /'grasp s-th, hold s-th' (=at /'purposeful control transitivizer'/ , /'ablaut infixed /'durative aspect'/ ,
   /k'ε'at/ /k'ε[a-R'='e)tall //I'hang onto s-o'// (=ls
   /'psychological non-control transitivizer'//) , /k'ε'[at=a'='l/ /'to wrestle'// (=l /'purposeful control transitivizer'// , a'.
   /'reciprocal'// , /k'ε'[at=a'='l/ /R'='k'ε'[at=a'='l/ /'wrestling'// (reduplication type 4 , Ci'- usually diminutive, here /'continuative aspect') , and /k'ε'kε'v'at/ /k'ε'[a[M'H'=]=at'a='l/ // /'play-fighting'// with metathesis type 2 (switches preceding vowels) /'diminutive'/
MORPHOLOGY: complex systems of aspect and control inflections and derivations
4. see examples just above

SYNTAX: use of adjectives, adverbs, prepositions and pronouns as main verbs (for focus) or modifiers
5. vaj: /hi'k'ε'-c-at-ca/ /'I'll be big.'/ vs. /ta hi'k'ε' x'a'tas masti'gax/ /'a big heavy person'/
6. vadv: /wieya='0 k'ε'a-1-s di'[-da-j']t'at/ /'I'm always biting it.'// lit. /'it's always that-I-nominalizer am biting it'/ vs.
   /'s[=M'=]o-x' x'm'/ 'You're really fast.'
7. vprep: /tali'-'c-at k'ε'p's'tal/ /'I'm from America.'// vs.
   /k'ε'-'st-am tali' te qid'='wtx/ /'He was let go from jail.',
   He was set free/tumed loose from jail. , They let him go from jail. // < /'past let go=purposeful control transitive-3rd person passive from the apprehend/detain/building' /
8. vpron: /la'wa-s-1t/ /'Let it be you.'/ < /'be you-3rd person subject-2 person sg. imperative' vs. /le'm-c-x' te-1a'wa/ /'You're going.' < /'going-non-subord.subj.-2 sg. the-you sg. (emphasis)' /

SEMANTICS: systematic semantic shifts (with pattern congruity) applying to body parts, place names, kinterms and words for people, etc.;
9. The set of 32 body part suffixes have allosemes which all shift in parallel fashion in certain semantic (semetic) environments; there are at least four allosemes for each suffix: ['(body part)(usually subject of the verb root they are attached to)'] in the environment (subdomains) of body function/dysfunction words and many place names—with place names the suffixes have allosemes ['(feature in shape of body part)'] (neck of land, throat of cliff, head of river, nose/point of land, etc., ['of the (body part) (partitive)'] in independent words for body parts,
and ['on or in the (body part)'] elsewhere (lit. thousands of examples).

10. -(p)[t] /'past tense' has alloseme ['deceased, late'] within
the semantic environments of ['kinterms, personal names, demonstrative
pronouns, people, fauna']

11. All terms for flora which can appear with or without the suffix
-\(\text{-lip} /'tree, plant/' have allosemes ['fruit of the plant'] when
the suffix is absent
different allosemes of a morpheme or word being members of different
semantic domains;

12. /k'x'lsx'yx\(\text{-t}[/'shoot s-o/s-th with arrow'] in domains of HUNT,
SOC, in free variation with ['shoot s-o/s-th with gun'] in semantic
(semetic) environment of TIME circa 1850-1900, replaced by the latter
alloseme in environment of TIME circa after 1900, ['sting s-o/s-th']
in domain of ABFC (animal body function) for ex. with ['bee, snake']

13. /ix'qam/ ['whisper'] in domains of CONV, SOC with ['human'],
['hiss'] in domain of ABFC for ex. with ['snake, feline']

14. /sk'i'xw/ ['personal name'] in domain of N, ['place name']
in domain of PLN, ['word for s-th'] in domains of CONV, SCH (conversa-
tion and speech, schooling) for ex. with ['inanimate']

15. /k'i'xw\(\text{-at}[/'name s-o in ceremony'] in domains of SOC, REL,
MED, ['call s-o's name'] in domain of CONV, ['read s-th'] in domain
of SCH

individual allosemes with simultaneous membership in more than one
semantic domain;

16. /s:tx'x/ ['waterfall'] in domains LAND, WATR

17. /s:ti'k'/ ['lost and presumed dead'] in DIR, SOC, ABDF (direction,
social relations, animal body dysfunctions)

18. /pi'q\(\text{-at}[/'rub s-th off, wipe s-th off'] in domains MC, CLO,
REL, GAM, MED, TCH, ABFC (material culture, clothing, religion, games,
medicine, touch, animal body functions)

semantic environments conditioning many allosemes being statable,
those conditioning many others being deducible by informal logic
from domain membership and/or knowledge of the language and culture
and/or pragmatics during use

19. see examples above

"3D Semantics":
A suggestion for notation for three levels of semantics:

\[\text{Semetic: ['alloseme, componential analysis, semantic information']}\]

\[\text{Sememic: '/sememe, range of meaning of a word or morpheme'/}\]

\[\text{Morphosememic: '//morphosememe, new meaning resulting from shifts of}\]
\text{sememes in combination within a word or phrase'//}\]
entries from HKW1 file

Showing examples of ablaut, inflecting, reduplication, aspect, control, allomorphemes, domains, sememes, morphosememic changes, semantic environments

.o  kwa'
rt  k'w'

MDUD  *anyway; *ever, (*new_information as in NStraits)

CK

STA  mpol

A  EB, others
1ie  ewa'1hchxw kwa'xw st'l'itl'qelh
1phm  ?awa-a'z-c-x w k'x'-x' s=R'=Xxq=a
1TN  *Here'n't you ever a *child?
1A  EB

2ie  tsel kwa' welh la'm
2phm  o- e1 k'es' wai le'=m
2TN  I *began to *go.
2LIT  I *anyway *already go

2A  EB

.r  kwa':
..o  kwa':t = kwa't
pos  k'w'='T ~ k'es'='T

ABFC  *let go of s-th/s-o, *drop s-th, *set s-o *free, *turn s-o/s-th *loose

SOC

EB, Elders Group
1ie  tsel le kwa':t
1phm  o- e1 la k'es'='T
1TN  I set him free,, [I turned him loose.]
1A  EB

2ie  lachxw kwa't te stame'st'wo
2phm  le-c-x' k'es'='T ta s=tem=a's-t'wa
2TN  Let go of *something!
2LIT  you're *going to! let go of it *whatever it must be
2PC  t'wo *evidently, *must be, I *guess! is usually pronounced t'wa

by most speakers; the <o> /a/ here may be Thompson influence since Thompson /a/ corresponds to Halkomelem /e/ historically in a number of words

2A  EB

3ie  le kwa':tem
3phm  la k'es'='T-am
3TN  He got turned loose,, He was set free.
3STA  xpas, pass

3A  EB

4ie  q'wechxw la'mexw temkwa't
4phm  ?o'wa-c-x' le'=m-ox' tamek'w'='T
4TN  *Don't let him go *yet!
4A  EB 6/24/76 correcting
4ck  tem=' %time_to! --> %yet!?
4all  Don't go yet!, Hold on!
4A  Elders Group 6/16/78

kwo':thet

pors  k'w'[=R=]''='T-at

ABFC  to *gallop

LIT  set oneself free, loose oneself
entries from HKW1 file

S. wing examples of ablaut, infixing, reduplication, aspect, control, allomorphs, domains, sememes, morphosememic changes, semantic environments
di  o-ablaut %derivational
drs  =t %purposive %control %transitivizer
is  -et %reflexive
STA  vi
A  AC
.... o kuekwo\'i\'et
cts  R^5-k^\text{e}[^{Ra=}]='=T-\at
phn  k\text{uk}a\,'\@\at
ABFC  \#galloping
ip  R^5- %continuative
STA  vi
A  AC
ialt  kuekwo\'i\'et
iphm  R^5-k^\text{e}[^{Ra=}]='=T-\at
iiie  kuekwo\'i\'et te stiqi\'w
iiphm  k\text{ak}a\,'\at te s=tiqi\'w
iiTN  The \#horse is galloping.
iIA  EB
.... o kwikwe\'a\'t
dmv  R^4=k^\text{w}[^{Ra?}]=T\at
phn  k\text{ik}\text{e}'\at
SOC  \#leave s-o-alone, \#stop \#pestering s-o
dp  R^4 = %diminutive
=^{e^{'}}(a')= %comparative \ or this may be merely a phonological alternative to a' (preserving 'for' and \#maphesizing)
drs  =t %purposive %control %transitivizer
lie  sk\text{u}a\'y k\text{u} tu kwikwe\'a\'tes te sqiqa\'qs
iphm  s=R^4\text{e}^{'\prime} y k\text{w\-'s} tu R^4=k\text{w}\text{e}'='T-\at
ta  s=R^4=qs^{'\prime} q-s
iTN  He \#never stops pestering \#his \#little \#brother. He never leaves his little brother alone.
iLIT  it \#can\#t be \#that he \#really he stops pestering him/he leaves him alone the \#male his \#little \#younger \#sibling
iA  AD, EB
.... o skwekwo\'i\'et
rcps  s-R^3=k^\text{e}[^{Ra=}]='=T=\@
stpc
phn  sk\text{uk}\text{u}a\,'\at
KIN  \#separated in \#marriage
SOC  
ip  s- %stative
dp  R^5= %completive?]
di  o-ablaut %derivational
drs  =t %purposive %control %transitivizer], \ =e\% %reciprocal
STA  vi
A  Elders Group
ialt  skwekwe\'i\'et
iphm  s=R^3=k^\text{e}[^{Ra=}]='=T=\@
i  EB
  k\text{w\-'i\'x}
ncs  k\text{e}[^{Ra=}]=1\text{ex}
ABFC  \#drop s-th (\#accidentally), \#let s-o-go
Real entries from HKW1 file

winding examples of ablaut, infixing, reduplication, aspect, control, allosememe, domains, sememes, morphosememe changes, semantic environments

di o’-ablaut #derivationals

drs =lexw #non-#control #transitivizer|

STA ut

A AD

ialt kwo’1xw

1phm k”e=Ra'= lax”

1A EB

iiasin kwo’1xwes

1iphm k”e=Ra'= lax”-as

1iphn k”a’lax”as

1IG He dropped it.

1IA EB

2asin kwo’lo’me”

2phm k”e=Ra’= l-a’m’a”

2G let me go

2A DF

2alnt kwa’lo’me”

2iphm k”e’=l-a’m’a”

2IA EB

...o kwo’lo’m’et

drs =l allomorph of =lexw #non-#control #transitivizer|, =o’me’et

#reflexive|

STA ut

A AD, Elders Group 3/72

1ie kwo’lo’me’t a’1htel

1phm k”e=Ra’= I a’m’a” ?e’=1tal

1TN They escaped.

1A AD

1IC sh has heard this used

...o kwa’lo’me’t

1ors k”e’=l a’m’a”

TVHO #escape, *get_out

SHN may be used by the speaker about him/herself, in contrast to kwo’lo’me’t which may be used about people other than the speaker

IC probably used for oneself

SHE previously trapped by physical or social environment: snowed in, snagged in the river in one’s canoe, as a slave, etc.

icl = ablaut #derivationals

drs = allomorph of =lexw #non-#control #transitivizer|, =o’me’et

#reflexive|

STA ut

A AD

...o kweth’e’thet

1ncs k”e=Ra= x=a’bat
entries from HKWh file

- linking examples of ablaut, infixing, reduplication, aspect, control, allomorphs, domains, sememes, morphosememic changes, semantic environments

phn  kʷʷəXʷə büt
ABFC  # start_to.*struggle, start_to.*flip_around_to_escape (fish esp.)
drs  e-#ablaut #derivation(al), #tl' meaning unknown (#stem-extender?), #e'thet #inceptive, #start_to!

STA  vi
A  IHTTC
...
kw t'lw t'het
outs  kʷʷ[-Ra-]_tF=αał=xamework
ABFC  #flipping_around_(of_fish), #struggling_(of_anything_alive_ trying_to_get_free)

FSH
HUNT
i a
o-#ablaut ##continuative
STA  vi
A  IHTTC
...
kw t'lw t'het t'ws
plus  R^4=kʷʷ[-Ra-]_F=αał=xamework
phn  kʷʷəXʷə Xʷa_ə=αał=xamework
NATR  #water_#jumping (as it goes over a rough bottom in a river)
dp  R^4= #plural] or ##frequentative] or ##iterative]
i a
o-#ablaut ##continuative]

PLN  a_#stretch_of_water_in_the_#Fraser_River_on_the_C.N._side_by_ #Strawberry_Island

STA  nom
A  AK, SP, AD (all on raft trip)
S  place names file reference #248
...
kw t'lw t'het t'ws
plus  R^4=kʷʷ[-Ra-]_F=αał=xamework

EZ  #baby_#sockeye_#salmon
ZOO  #Oncorhynchus_nerka
dp  s= #nominalizer], R^4= #diminutive]
lx  =xel #on_the_#foot, #foot, #tail_(of_fish)
posx  e-#ablaut ##derivation(al)
PC  either a shift to #schwa-#grade in the root due to the stressed prefix, or derivational #ablaut

STA  nom
A  AC
...
kw t'lw t'het t'ws
plus  R^4=kʷʷ[-Ra-]_F=αał=xamework

TIME  #time of the #baby_#sockeye's coming, early_#spring_(usually April), #April_moon
EZ  l' means "time when the baby sockeye free their feet"
dp  tem= #time_of, #season_of], R^4= #diminutive]
lx  =xel #foot, #tail_(of_fish)
MED #put on a #poultice, #warm it [with steam esp.], (#cook or #heat with #steam)

FOOD

STA prob. vi
A Deming and JL and NP (Fish Camp 7/19/78)
SCQ Squamish /qa-t-a'n/ #give a steam bath, cause to take a steam bath

W73:251, K67:353, K68:78, Lushootseed root /qa'?t(a)/ #get warm
as in /la-qa'?t-ox/ % (His body) is getting warm now (that
you've given him blankets). (Said as you touch him.)! and /qa'?t-ad/
#warm it (as s-th on a stove, not an open fire)! W76:372

ialt qa't

iphm qa't

iIC BHTTC
...o qeta's
df qa't±=[H2±]s

FOOD #bake #underground, (#steam-cook #underground, #cook in a #steam-pit)

SMN steam-pits have not been used for about fifty years in the Sto'li6
area, but were dug in sand or light soil and a fire was built in the bottom;
when it was burned down to coals a few long sticks were stood upright in
the pit and layers of skunk cabbage or similar leaves were piled in,
alternating with the food to be cooked; dirt, sand or rocks were put on
top and water was poured down the sticks to cause the steam; steaming
was often done overnight; the following were some of the things steam-cooked:
wild onions, bulbs of tiger lily, chocolate lily, rice root, wapato/arrowleaf,
blue camas, wild caraway, spring gold, domestic carrot, black tree lichen
(prob. Bryoria fremontii) often sweetened with berries (it cooked up into
a licorice-flavored "moss-bread", and probably meats; many of these the
vegetable bulbs and corms were roundish

lx =es %round_thing; on the %face

POSt metathesis %derivative| or %resultative| or %non-continuative|

PC *metathesis

STA vi

A BHTTC, Elders Group
...o qa'tes
cTs qa'=[R±^±]t±as

FOOD #baking #underground
iIC e'-ablaut %continuative|

PC e'-ablaut on root a'

STA vi

A BHTTC

ialt qa'tetes

iphm qa'[-R1-]t±as

iiC probably

iIC Elders Group (1/25/78)
21e i'†htsel qa'tes.

"hm ?i'†-X-o-ta1 qa'=[R±'=]t±as

I was baking underground.

2A BHTTC

...o qeta's

dnom s=q=±=[H2±]s

FOOD stuff #steam #cooked #underground, what is #baked #underground
dp s = %nominalizer
bottom of a tree, trunk of a tree: s'ale'ts.

twenty: ts'kw'e'x.

upstream
(be) upstream: ahi'w - ehi'w.
go upstream: xwehi'wel.
he's going upstream: ahi'w - ehi'w.

used to
I used to think: a' - e'.

want
do you want some tea?: -a(') - a.

waterfall
small waterfall: Ci'-.

we
I'm going to Ala'mex so that we (can) pick hops: Ala'mex.
we ate: a' - e'.

where
I know where he came (arrived) from: tel'ale'tsa - tel'ele'tsa - tel'e'tsa - tel'e'cha (EB) - te'ele'cha (EB).
where (is it)?: ale'tsa - le'tsa (EB).
where are you from?: tel'ale'tsa - tel'ele'tsa - tel'e'tsa - tel'e'cha (EB) - te'ele'cha (EB).
where did you make it?: ale'tsa - le'tsa (EB), ale'tsa - le'tsa (EB).
where have you been?: ale'tsa - le'tsa (EB).
where is he (anyway)?: ale'tsa - le'tsa (EB).
where is he from?: tel'ale'tsa - tel'ele'tsa - tel'e'tsa - tel'e'cha (EB) - te'ele'cha (EB).
where is he/she/it from?, from where?: tel'ale'tsa - tel'ele'tsa - tel'e'tsa - tel'e'cha (EB) - te'ele'cha (EB).

where it is.
I know where it is: ale'tsa - le'tsa (EB).

wherever
wherever he's got it: ale'tsestxwes.
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