The position of Bella Coola within Salish: bound morphemes

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Abstract: Bella Coola is, etymologically considered, more conservative as regards its bound morphemes (fossilized roots, clitics, affixes) than it is in relation to its non-bound morphemes (particles and verbo-nominals). Here, elements borrowed from North Wakash are low in number, and no morphemes have been copied from (proto-)Athabascan. At the same time, while many Bella Coola fossilized roots, proclitics, deictic enclitics, and suffixes are clearly Salish in origin, both non-deictic enclitics and prefixes are generally not as transparent.

Keywords: Bella Coola language, genetic affiliation, typology, structural conservatism

1 Introduction

This report supplements Nater (2013), which dealt exclusively with Bella Coola non-bound morphemes (particles and verbo-nominals). In that paper, I stated that Bella Coola is affiliated closely with Coastal Salish in terms of significant lexical overlay (i.e. 15% of vocabulary with known origin), and several deictic and phonemic features. These features are: grammatical gender; proximal vs. distal; /t/ vs. /k/ (which have merged into /k/ in the geographically closest Interior Salish languages); absence of velar and pharyngeal resonants; absence of retracted vowels and /f, r/ (while the language has, in North Wakash fashion, continued originally velar /k, k’, x/ as palatals, which have not shifted further (front) to /č, č’, š/). However, Bella Coola differs profoundly from all non-Bella Coola Salish insofar as it is characterized by: absence of distinctive stress (as in the unrelated, but geographically close, Oowekyala (Lincoln & Rath 1980) and southern Dakelh (Nater 1973/1974) languages) and schwa (as in Oowekyala); absence of phonemically distinct glottalized resonants (as in southern Dakelh); innovative verb morphology; lengthy suffix and enclitic strings; a North Wakash-induced rigid PSO syntax and rich enclitical deixis; etymological aspects of particles and verbo-nominals (approx. 21% proto-Salish, 7% pre-Coastal Salish, 3% areal, 17% non-Salish (mainly North Wakash), 52% unknown). I inferred – in consideration of structural attributes, as well as etymological properties and diffusion patterns of its verbo-nominal vocabulary – that Bella Coola began to evolve after a pre-Coastal/Interior Salish split:

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In what follows, I contemplate the origins of all Bella Coola bound morphemes: fossilized roots, proclitics, enclitics, prefixes and suffixes.

2 The data, proto-Salish vs. pre-Coastal Salish provenience

The Bella Coola bound morpheme database, copied from Nater (1990), lists all fossilized roots, clitics and affixes recorded by myself. Other Salish data are from Kuipers (2002) (all Salish), Kuipers 1967–1969 (Squamish), Kinkade (1991) (Upper Chehalis), Kuipers (1974) (Shuswap), Van Eijk (1985, 2013) (Lillooet). My choice to posit a pre-Coastal Salish provenience for Bella Coola – Coastal Salish cognate pairs is based on the close connection between Bella Coola and Coastal Salish. On the other hand, I consider Bella Coola morphemes with Interior Salish cognates to be of proto-Salish origin, in view of the ancient, and geographically vast, divide between Bella Coola and Interior Salish (which rules out a direct borrowing relation).

3 Sound correspondence

As concerns regular sound matches, note that Bella Coola has been affected by several shifts:

(a) pre-suffix consonant elision (root-suffix and suffix-suffix fusion) (e.g. $qluq$’s ‘eye’ < $*qlu(m)-əq’-əs < $*qlum-aq’-us$, $sqma$ ‘chest’ < $*sqə(p)-mən$);

(b1) inversion (e.g. $tlmas$ ‘Indian paint’ < $*təmf$, $cipxs$ ‘fisher’ < $*cixəps$);

(b2) metathesis (Nater 1984:112) (e.g. $ʔank’p$c ‘mouse’ < $*k’anp’c$, $ʔaq’miixəłp$ ‘cottonwood’ < $*q’amíʔqa$);

(c) unstable glottalization (e.g. $qʷuc’ik$ ‘wolverine’ < $*q’ʷucik$, $paax’u$ ‘afraid’ < $*p(‘)aʔqʷu$);

(d) compensatory lengthening (($*VC’ >) $*VʔC > V’C$ (Nater 1994:187)) (e.g. $snaax$ ‘slave’ < $*snaʔq$, $q’aat$ ‘small baited hook’ < $*q’at$);
(e) spirantization of *q(ʷ) and vowel lengthening before χ(ʷ) (Nater 1994:188) (e.g. cʼyaaχʷ ‘flicker’ (bird) < *cʼyaqʷ, ?aaxqqa ‘urinate’ < *ʔaqqaq;

(f) mutation of *ǝn# to i# or (via *an#) to a# (e.g. kʷucxi ‘maggots’ < *kʷucǝn, nuqʷski ‘soapberries’ < *nuqʷsǝn(i)kǝn, qʷasta ‘mountain goat wool’ < qʷaston ~ qʷaston, ?ixa ‘lower leg, foot’ < *yǝxǝn ~ *yǝxan);

(g) *#yǝ, *#yi > #ʔi and *#wǝ, *#wu > ?u# (e.g. ?imanta ‘nest’ < *yǝman, ?ixa ‘lower leg, foot’ < *yǝxǝn ~ *yǝxan, ?utʼak ‘vomit’ < *wǝtʼ, ..., ?uqʼʷ ‘drift downstream’ < *wuq ʷ);

(h) *ns > nc (e.g. ʔica ‘tooth’ < *nǝ-n(ǝ)s-ǝn (for *-ǝn cf. maka ‘testes’ < *m-ak-ǝn, musa ‘face’ < *mǝʔ-us-ǝn (Kuipers 2002: 144-145)), maqʼʷanc ‘heron’ < Kwakiutl maq ʷns).

Of these, (d) and (e) underlie a few suffixes, e.g. -aaχ ‘lower part’ < *-aq’, -iiχʷ ‘head’ < *-iqʷ, and (f) has yielded e.g. -alqi ‘neck, nape’ (< *-al-qǝn) and (with (h)) -alic ‘tooth’ (< *-al-ǝns).

4 Data organization, alphabetical order, abbreviations

The data are presented in separate subsections under Section 5, where Bella Coola entries appear in the same order as in Nater (1990) (where /ʷ/ was rendered as w (except before u, where it was omitted), /c/ as ts, /x/ as tl’, /ʔ/ as lh, /x/ as c, /χ/ as x, the apostrophe was the last “letter” of the alphabet, and /ʔ/ (7) was ignored).


5 The data, entry numbering

The data are arranged as follows: Section 5.1 fossilized roots, Section 5.2 proclitics, Section 5.3 enclitics, Section 5.4 prefixes, Section 5.5 suffixes. Entry numbers are the same as in Nater (1990).

5.1 Fossilized roots

I have sixteen fossilized roots on record. They are – like most affixes and clitics – semantically vaguer than free verbo-nominals, and are associated with deixis, location, position or motion.

1 √a ‘distal’ (deictic constituent)
   cf. 1516 taₐ (in Section 5.2 below)
51 \sqrt[ʔaʔay]{a} ‘slight distance’ (deictic)
< \sqrt[ʔaʔay]{a} (cf. Section 5.3, Figure 2, and \sqrt[ʔay]{a} ‘increased distance’
(innovative nominal deictic))

153 \sqrt[ʔas, \sqrt[ʔass]{a} (followed by lexical suffix) ‘that which is …’
cf. Sq \sqrt[ʔac]{a} ‘surface’ (Ku67:390)

182 \sqrt[ʔatu]{a} ‘using, in contact with’ (deictic)
< \sqrt[ʔa]{a} ‘locative’ + \sqrt[-tu]{tu} CAUS

189 \sqrt[ʔaw(a)]{a} ‘proximate’ (deictic)
*\sqrt[ʔaw]{a} ‘follow’ (Ku02:20)

191 \sqrt[ʔawx][a]{a} ‘around here’ (deictic) (innovative)

222 \sqrt[xH]{x} ‘away from’
215 \sqrt[x]{x} ‘via’ + \sqrt[-H]{H} ‘separated’

255 \sqrt[i]{i} ‘proximal’ (constituent of deictics)
cf. 1556 \sqrt[i]{i} (in Section 5.2 below)

431 \sqrt[kʷul]{k} ‘that which is …, the very …’
(innovative) < \sqrt[kʷ]{k} ‘being very …’ (innovative)

683 \sqrt[m(...a)]{m} ‘formative’
pre-CS (Ku02:144: *makan, *mqasən, *mʔus)

1346 \sqrt[sqa]{s} ‘outside’
*...cq(aʔ) (Ku02:15)

1392 \sqrt[stx][a]{st} ‘inside’
pre-CS *...stxʷ (Ku02:136)

1647 \sqrt[tpi]{t} ‘next, adjacent, side, half’ (innovative)

1888 \sqrt[ula]{u} (preceded by spatial prefix) ‘over there’
< \sqrt[ul-a]{ul} (cf. 1880 \sqrt[ul-a]{ul}, 1 \sqrt[a]{a}, Sq \sqrt[ʔay]{ʔay} ‘enter’ (Ku67:396))

1897 \sqrt[uli]{u} (preceded by spatial prefix) ‘over here’
< \sqrt[ul-i]{ul} (cf. 255 \sqrt[i]{i} and 1888 \sqrt[ula]{ula})

1924 \sqrt[ʔus]{ʔus} (followed by lexical suffix) ‘directional’
syncretism of 153 \sqrt[ʔas]{ʔas} and 1880 \sqrt[ʔu]{ʔu}

Of these roots, four (51, 191, 431, 1647) are innovative, two (189 and 1346)
go back to PS, and ten have a pre-CS origin.
5.2 Proclitics

Of the twelve proclitics, three are prepositions, six are indefinite articles (often found in combination with the related enclitical definite deictics), two are pre-predicative morphemes, and one is found in several environments.

Prepositions

44 ʔal˽ ‘at’
cf. Ch ʔaɨ (Ki:4)
215 ch˽ ‘via, by means of’
Ch š ‘to, into’ (Ki:129)
1891 ʔu˽ ‘towards’
syncretic form: 44 ʔal˽ + 1880 ʔu-

Articles

295, 572 ʔi˽ = ʔa˽ ‘INDEF.FEM.REM.SG’
cf. Sq ɬa ‘DEF.PRES.WEAK.FEM’, ʔal ‘DEF.PRESENT.STRONG.DISTAL.FEM’ (Ku67:137), Ch ɬa- ‘DEF.FEM’ (Ki:365)
1516 ta˽ ‘INDEF.NON.FEM.REM.SG’
cf. Sq ɬa ‘DEF.PRES.WEAK.PLAIN’ (Ku67:137), Ch ɬa ‘DEF’ (Ki:136)
1556 ti˽ ‘INDEF.NON.FEM.PROX.SG’
Sq ɬi ‘DEF.PRES.STRONG.PROX.PLAIN’ (Ku67:137), Ch ɬi ‘DEF.NON.FEM’ (Ki:141)
1689 ci˽ ‘INDEF.FEM.PROX.SG’
cf. Sq ɬi ‘DEF.PRES.STRONG.PROX.FEM’ (Ku67:137), Ch ɬi ‘DEF.FEM’ (Ki:22)
1807 tu˽ ‘INDEF.REM.PL’
syncretic form: 1516 ta˽ + …u… ‘REM.PL’ (cf. ωtχ vs. ωtχʷ (1835-37) and t’aχ vs. t’aχʷ (1847-48)
1958 wa˽ ‘INDEF.PROX.PL’
cf. 1986 wi- ‘PL’, Li wi˽ ‘PL’ (with proper nouns) (VE85:223)

Pre-predicatives

381 kama˽ ‘if’, ‘should … be the case’
ka˽ + *˽maː: cf. Sq˽maː ‘well …’ (Ku67:209)
1973 wastu˽ ‘and so’ (innovative)
Other

371 ka˽ ‘hypothetical’: (1) ‘intention, future action’ (pre-predicatively),
(2) ‘if’ (in subordinate phrases), (3) ‘some, any’ (in nominal
constructions)
cf. Li˽ka, ka˽ ‘obligation, expectancy, would, should’ (VE85:233, 249)

Of the proclitics, two (1958, 371) have cognates in Lillooet, which is an
indication that they have PS origins; 1973 appears to be innovative; the remaining
nine, with cognates in CS only, derive from pre-CS.

5.3 Enclitics

Enclitics are divided into five classes: fifteen adverbs (post-predicative elements),
two imperative markers, three wh-question markers, two yes-no question markers
(used post-predicatively), and twelve deictics.

Adverbs

70 ˽ałtu ‘gradually’ (innovative)
91 ˽ału, ˽ałtu ‘tentatively’ (innovative)
257 ˽ʔi(t)...k(a) ‘contrastive’ (innovative)
427 ˽kʷu ‘attenuative’ (innovative)
440 ˽kʷ ‘quotative’
cf. Li˽kʷuʔ id. (VE85:234)
475 ˽kʷʷ, ˽kʷu ‘frequently’ (innovative)
674 ˽lu, ˽tu ‘still, yet’ (innovative)
689 ˽ma ‘maybe, possibly’ (innovative)
708 ˽mas ‘always, forever’ (innovative)
1455 ˽su ‘surprisingly, unexpectedly’ (innovative)
1712 ˽ck, ˽cki ‘inferential’ (innovative)
1746 ˽c’, ˽c’n, ˽c’i ‘now’ (innovative)
1751 ˽c’akʷ ‘optative’ (innovative)
1810 ˽tu ‘really, indeed’
cf. Li˽tuʔ ‘definite past’ (VE85:231)
1824 ˽tuu ‘exactly, definitely’
PS *˽tuʔ, cf. 1810
Imperative markers

349 ʔit ‘imperative’ (innovative)
782 na ‘imperative’ (innovative)
cf. na ‘there!’; Sq na id. Ku67:312

Wh-question markers

256 ʔi…
(probably innovative, but cf. Sh -y(’) in swety’ (beside swet) ‘who?’
(Ku74:261), stem’y (beside stem) ‘what?’ (Ku74:152))
425 ks (innovative)
547 (ʔ)l… (innovative)

Yes-no question markers

5 ʔa ‘is … the case?’
cf. Li ŋha (VE85:237)
2090 ʔya ‘eh?, right?’ (innovative, but probably < ya ‘good, right’)

Deictics

174 ʔace ‘DEM.PL.PROX’
296 ʔile ‘DEF.FEM.REM.SG’ (identical to 295 ʔile)
299 ʔilaʔile ‘DEM.FEM.REM.SG’
1547 ʔtx ‘DEF.NON.FEM.PROX.SG’
1659 ʔč ‘DEF.PROX.PL’
1683 ʔcx ‘DEF.FEM.PROX.SG’
1756 ʔč’ayx ‘DEM.FEM.PROX.SG’
1835 ʔč ‘DEF.NON.FEM.REM.SG’
1837 ʔč’ ‘DEF.REM.PL’
1847 ʔt’ay ‘DEM.NON.FEM.REM.SG’
1848 ʔt’ay ‘DEM.REM.PL’
1850 ʔt’ayx ‘DEM.NON.FEM.PROX.SG’

These deictics can be separated into minimal constituents as follows (cf. Nater 1984:44):
Figure 2 Components of enclitical deictics

Of the nine components, -(ʔ)a(y)- ‘DEM’, -c ‘PROX.PL’, and *-w- ‘REM.PL’ (fossilized, cf. t(-)u˽ (1807)) appear to be innovative; ḥi˽- (= -ʔhi) ‘FEM.REM’ and c- ‘FEM.PROX’ (cf. ci˽ (1689)) are pre-CS; t- ‘NON.FEM’ is also found in ti˽ (1556) and ta˽ (1516), and is pre-CS; -x ‘proximal’ versus -χ ‘distal’ may be innovative, but can also be compared with t(-)i˽ (1556) vs. t(-)a˽ (1516), a pre-CS distinction.

Of all enclitics, only three adverbs are of PS origin, while twelve are innovative; both imperative markers are innovative; all three wh-question markers are innovative; one yes-no question marker has a PS origin, and the other one is likely internally derived; of nine deictic components, five (three if we exclude -x and -χ) are innovative, while four (six if -x and -χ are included) are originally pre-CS. In summary: out of 31 entries, four go back to PS, four (or six) have a pre-CS provenience, and 23 (or 21) are innovative.

5.4 Prefixes

There are 43 prefixes. These can be divided into eight categories: reduced articles (three), verbalizers and adjectivizers (fifteen), somatic prefixes (two), grammatical prefixes (nominalizing, dualizing) (three), aspectual (pre-predicatives) (seven), spatial A (with locative bases) (five), spatial B (with non-locative bases) (six), circumfixes (two).
Reduced articles

1510  t-, ti- ‘SG.NON.FEM’
        cf. 1556 ti˽ (pre-CS)
1658  c-, ci- ‘SG.FEM’
        cf. 1689 ci˽ (pre-CS)
1986  wi- ‘PL’
        cf. 1958 wa˽ and Li wi˽ ‘PL’ (with proper nouns) (VE85:223) (PS)

Verbalizers and adjectivizers

130  ?anus ‘having lost one’s … (relative or spouse)’
        originally complex: < 124 ?anu- ‘out of’ + 1180 s- ‘nominalizer’
154  ?as- ‘have, have brought, use (food, tool, vehicle)’
        cf. Li ?as- ‘have, own’ (VE85:61) (cf. 336 ?is-)
156  ?asi- (with ya good or sx bad) ‘consider the taste of something as …’
        (innovative)
221  xl- ‘have, possess’ (innovative)
        possibly < 215 x˽ ‘by means of’ + 569 ṭ- ‘additional’
336  ?is- ‘gather, consume’
        cf. Li ?as- ‘have, own’ (VE85:61) (cf. 154 ?as-)
347  ?it- ‘speak the language of …’ (innovative)
        (but if the original meaning is ‘to use’, cf. following item)
348  ?it- ‘wear, clothing’ (innovative, and cf. preceding item)
377  kal-, kas- ‘pursue, collect’
        *kal ‘go after, follow’ (Ku02:36)
432  kʷul-, kʷus- ‘having much, being very …’ (innovative)
515  kʾil-, kʾis- ‘lacking’
        North Wakash √kʾi(s) ‘not there anymore, deprived of’ (Lincoln & Rath 1980: 246–247)
1395  sti- ‘asymmetrical’ (innovative)
1525  tam- ‘make, construct’
        cf. Sq taʔ- ‘undergo’, taʔ-s ‘to make’ (Ku67:263) (and cf. next item?)
1822  tu:tu- ‘work on something’ (innovative, or cf. tam-?)
1911  ?un- ‘fond of’ (innovative)
        (possibly inversion of nu- ‘inside’, or < ?u-n(u)- ‘direction-inside’)

73
1925 Ḫuś- ‘long for’ (innovative)
   (possibly < Ḫu- ‘direction-nominalizer’)

Somatic prefixes

433 kʷuł-, kʷus- ‘penis’ (innovative, and cf. 432 above)
1912 Ḫun- ‘waist, small of back’ (innovative)

Grammatical prefixes

569 Ḫ- ‘dualis, … and somebody else’ (innovative)
1180 s- ‘nominalizer’ (all-Salish)
1228 si- ‘paraphraser’ (innovative, but possibly < *
   ʔu- (all-nominalizer-inside’)

Aspectual prefixes

45 Ḫat-, Ḫa- ‘stative-progressive’ (innovative)
261 Ḫix- ‘intensive’ (innovative)
337 Ḫis- ‘intensive’ (innovative)
501 k’am- ‘equal, same’
   *√k’aʔm (followed by lexical suffix) ‘the very …, that which is …’
   (Ku02:166)
1318 sm- ‘from the beginning’ (innovative)
1524 tam- ‘iterative’ (innovative)
1637 tm- ‘only’ (innovative)

Spatial A

4 Ḫa- ‘locative’
   *ʔa- (Ku02:15,16,17)
1509 Ḫ- ‘locative’
   *t-…: Sh Ḫ(k)- ‘on’ (Ku74:71), Sq Ḫx- ‘direction’ (Ku67:260)
1546 Ḫx- ‘locative’
   pre-CS: Sq Ḫx- ‘direction’ (Ku67:260), Ch taš ‘at, across, through, around’ (preposition) (Ki:136)
1834 Ḫx- ‘locative’ (geographical)
   North Wakash, cf. He Ḫx… ‘the geographical place of …’ (Rath 2010, line 1661)
1880 ʔu- ‘directional’
  *ʔu- (Ku02:15,16)

Spatial B

124 ʔanu- ‘through’ (innovative)
  (possibly < ʔa-nu- ‘locative-inside’)

321 ʔinix- ‘more, in addition’ (innovative)
  (?cf. 261 ʔix- ‘intensive’)

378 kal- ‘under, below’ (innovative)

827 nu- ‘inside’
  *n(ǝw)-, nǝxʷ-: cf. Sq n-, nǝxʷ- ‘location’ (Ku67:310), Sh n- ‘at’ (Ku74:58)

1387 stam- ‘together with’ (innovative)

1926 ʔus- ‘top surface’
  *wǝs, *wis ‘high, above’ (Ku02:116)

Circumfixes

388 (ka)nus-....-m ‘having a … flavor/odor’ (innovative)

1914 ʔunus(i)-....-m ‘go somewhere in order to …’ (innovative)
  (possibly < ʔun:ʔus(i)-..., cf. 1925 ʔus- long for)

Of the 41 prefixes and two circumfixes, the reduced articles are Salish (two pre-CS, one PS); of the verbalizers/adjectivizers, four are Salish (one pre-CS, three PS), one is North Wakash, and ten are innovative; both somatic prefixes are innovative; of the grammatical prefixes, one goes back to PS, while two are innovative; of the aspectual prefixes, one goes back to PS, while six are innovative; four spatial A prefixes are Salish (three PS, one pre-CS), and one is North Wakash; of the spatial B prefixes, two have a PS origin, while four are innovative; both circumfixes are innovative.

5.5 Suffixes

Not counting complex (“stringed”) suffixes, I have 130 suffixes on record: thirty of these are pronominal elements (Na84:46–54); six are modifiers (Na84:76–82); 23 are verbal suffixes (Na84:82–104 and 177); 44 are lexical suffixes (Na84: 104–119); eight are nominalizing (Na84:120–121); the remaining nineteen are formatives (without a clear meaning or function) (Na84:122–124).
Pronominal suffixes

**Declarative (in)transitive**

133 -ap, -nap ‘2PL.SUBJ’
   cf. Sq -ap (Ku67:393), Sh -p (Ku74:281)

187 -aw, -naw ‘3PL.SUBJ.ITR’ (innovative)

297, 570 -(i)1 ‘1PL.SUBJ’
   derived (cf. lmi: ‘we’ = Sq nimal (Ku67:313), Li s-nimul (< CS) (VE13:122))

828 -nu ‘2SG.SUBJ.ITR’
   derived (cf. ṭimu ‘thou’ = Sq nǝw (Ku67:311), Li s-nuwa (VE13:132))

1182 -s ‘3SG.SUBJ/POSS’
   cf. Sq -s (Ku67:282), Sh -s (Ku74:282)

1660 -c ‘1SG.SUBJ’
   PS ‘1SG.OBJ’ (cf. Sq -c ‘1SG.OBJ’ (Ku67:273),
   Sh -c(e)m-, -c(e)l- ‘1SG.OBJ’ (Ku74:282), Li -c- ‘1SG.OBJ’ (VE12:420),
   and cf. ṭnc ‘1’ (= Sq ṭns (Ku67:387))

**Imperative**

201 -aχʷ, -nayʷ ‘2PL’
   derived (*-(n)aw-χ, cf. 187 -aw and 2016 -χ)

2016 -χ ‘2SG’
   North Wakash -χa, -χi (Rath 2010 Excel suffix list, line 587)

**Declarative transitive/causative**

233 -xʷ ‘2SG.SUBJ’
   cf. Sq -(a)xʷ ‘2SG.SUBJ’ (Ku67:85), Sh -(e)x ‘2SG.SUBJ.TR’, -axʷ ‘2SG’
   (Ku74:284)

260 -i- ‘3SG.OBJ.TR’
   modified (probably < PS *-n- ‘transitivizer’, cf. Sq -n-, -nawx
   (Ku67:310), Sh -n(t) (Ku74:282))

899 -p ‘2PL.SUBJ’
   cf. 133 -ap

1511 -t ‘3PL.SUBJ’
   pre-CS, cf. Sq -wit ‘3PL’ (Ku67:85)

1558 -ti- ‘3PL.OBJ’
   modified (probably < *-tǝn-, cf. 260 -i- and 1527 -tan)
1662  -c-, -can- ‘1SG.OBJ.TR’
         cf. Sq -c- (Ku67:273), Sh -c(e)m-, -c(e)l- (Ku74:282), Ch -c(al)- (Ki:366) (cf. 1660 -c and 687 -m-)
1692  -ci- ‘1sg.subj.tr’
         Sh -c(i)-n id. (Ku74:48), Ch -ci- ‘2SG.OBJ’ (Ki:366) (cf. 721 -mi-)
1814  -tul- ‘1PL.OBJ.TR’
         cf. Ch -tul- (Ki:366) (cf. 762 -mul-; for -t- ~ -m- cf. -tinic ~ -minic (1573 and 733 below))

Transitive participial

1512  -t ‘3SG.OBJ’ (the one who … him/her/it)
         pre-CS *-t- ‘transitivizer’, cf. Sq -t (Ku67:259)
1527  -tan ‘3PL.OBJ’ (the one who … them)
         cf. Li -tan-i ‘3PL.OBJ’ (and 1558 -ti-)

Transitive passive

313   -im ‘3SG’
         cf. Sq -...-m ‘passive’ (Ku67:68), Sh -(e)m ‘passive’ (Ku74:281) (cf. 686 -m)
1531  -tap ‘2pl.tr/caus’
         modified (*-t-ap ‘TR/CAUS-2PL ITR’)
1572  -tini ‘1PL’
         derived (*-tin- + -i, with -tin- copied from -tinic below)
1573  -tinic ‘1SG’
         modified (likely *-t-in- ‘TR-1SG.SUBJ’ + -ic ‘1SG.SBJ’, cf. 1692
         *-ci-n + -nu)
1730  -ct ‘2SG’
         *-c-t: cf. Ch -ci- ‘2SG.OBJ’ (Ki:366), Sh -c(i)-t ‘2SG.PASS’ (Ku74:48)
         (cf. 1692 -ci-)

Declarative causative

687   -m-, -man(c)- ‘1SG.OBJ’
         cf. Ch -mal- ‘1SG.OBJ’ (Ki:366) (cf. 1662 -c(an)-)
-mi- ‘1SG.SUBJ’
in *-tu-mi-nu ‘I cause you to …’ < pre-CS *-t-umi-n
(Ku67:88-91), Ch -mi- ‘2SG.OBJ’ (Ki:366) (and cf. 1692 -ci-)

-mud- ‘1PL.OBJ’
pre-CS, cf. Sq -umud- ‘1PL.OBJ’ (Ku67:395), Ch -mul- ‘1PL.OBJ’
(Ki:366)

Causative passive

-m ‘3SG’
cf. Sq –…-m ‘passive’ (Ku67:68), Sh -(e)m ‘passive’ (Ku74:281) (cf.
313 -im)

-minil ‘1PL’
derived (*-min- + -iI, with -min- copied from -minic below (cf.
1572 -tiniI)

-minic ‘1SG’
modified (likely *-m-in- ‘ITR-1SG.SUBJ’ + -ic, cf. 1573 -tinic)

-mt ‘2SG’
modified (contamination of -m- (as in 687 -m(an)- and 733 -minic) and
1730 -ct)

Modifying suffixes

-anaac ‘really, very’ (innovative)

-i, -ii ‘diminutive’
cf. Sh -éy’e ‘not real, for children, small’ (Ku74:285), Li -áz’
‘playingly, for fun’ (VE13:445)

-liwa, -liwn-, -lam-, -mul- ‘…like’
* -l-iwan, -l-iwən, -l-əwən ‘essence, spirit’ (cf. Sq -iwan ‘spirit, mind’
(Ku69:96), Li -aliwán’ ‘size, hulk’ (VE13:435))

-st ‘typical of’ (innovative, but possibly < *-səs-t ‘face-connected’)

-uks ‘plural’ (from Chinook -ukš (Nater 2010))

Verbal suffixes

-a ‘performative-intransitive, de-transitivizer’
probably < *-an, cf. Sh -n- ‘transitive’ (Ku74:282), Li -ən
‘transitivizer’ (VE13:425), Sq -n ‘transitive’ (Ku67:307) (and cf.
777 -n)
-alst ‘deprivative’ (innovative, but if from *‘solid, crucial’, cf. 671 -lst)

-am ‘to become’ (innovative, but possibly related to 685 -m)

-amxʷ ‘autonomously’
possibly < *-a(l)-maxʷ ‘person, individual’, cf. PS *-(al-)mixʷ
(Ku02:202-206), and 719 -mx

-amk ‘additionally’ (innovative)

-anm ‘become gradually’
pre-CS, cf. Sq -an(a)m ‘measure, time’ (Ku67:391)

-aw ‘emphatic imperative’ (innovative)

-ayx ‘having been …ed’ (innovative)
(possibly < *-alx, see 568 below)

-i- ‘euphonic vowel’ (innovative)

-layx ‘circumstantial’ (innovative)
(if from *-l-ax, cf. 207 above)

-lx, -alx ‘inchoative’
*-(i)lx ‘body’, cf. Li -ilx (VE13:434), Sh -ilx (Ku74:283)

-lit ‘make the sound of …’ (innovative, but cf. 347 ñit-)

-m ‘medium’
cf. Sq -m ‘ITR’ (Ku67:254), Sh -m ‘ITR’ (Ku74:281)

-maxʷ ‘reciprocal’
cf. Sh -wéxʷ (Ku74:285), Li -atw’áxʷ (VE13:420)

-mut ‘reflexive’
cf. Sq -numut, -nam’ut (Ku67:95) (for -cut ~ -mut, cf. 1662 -can- ~ 687 -man-)

-n ‘transitivizer’
cf. Sh -n- ‘transitive’ (Ku74:282), Li -n- ‘transitivizer’ (VE13:425),
Sq -n ‘transitive’ (Ku67:307) (and cf. 7 -a)

-n- ‘unintentionally’
cf. Sq -n-, -naxʷ ‘transitive non-volitional’ (Ku67:310)

-nix, -nxʷ, -nxʷ ‘accidentally cause …, consider …’
cf. Sq -naxʷ ‘transitive non-volitional’ (Ku67:77)

-nm ‘habitual’ (-n=nm ‘CAUS.ITR-habitual’)
cf. Sq -n-m ‘passive’

-t- ‘intentionally’
cf. Sq -t ‘volitional’ (Ku67:77)
<table>
<thead>
<tr>
<th>Line</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1643</td>
<td>-tnm ‘CAUS.ITR habitual’</td>
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<td></td>
<td>&lt; -t-nm ‘CAUS-habitual’ (see 817 -nm above)</td>
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<tr>
<td>1737</td>
<td>-cut ‘reflexive’</td>
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<tr>
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<td>cf. Sq -t-sut (Ku67:95), Sh -cut (Ku74:282) (cf. 77 -mut)</td>
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<tr>
<td>1809</td>
<td>-tu-, -stu-, -t-, -st- ‘CAUS’</td>
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<td>*(s)-t(u)-, cf. Sh -st- (Ku74:282), Ch -(s)t(u)- (Ki:371,373)</td>
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### Lexical suffixes

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<tr>
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<td>16</td>
<td>-aaχ, -aaq ‘lower part, back(side)’</td>
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<td>pre-CS *-aq’ ‘crotch’ (Ku02:212) (cf. North Wakash -aq ‘crotch’ (Rath 2010 Excel suffix list, line 652))</td>
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<tr>
<td>17</td>
<td>-aaχla ‘berries, juice’</td>
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<td></td>
<td>derived (cf. qla ‘water’, qaαχla ‘to drink’)</td>
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<td>28</td>
<td>-ak, -aak ‘hand’</td>
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<td>*-ak (Ku02:204)</td>
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<tr>
<td>34</td>
<td>-al- ‘connective’ (constituent of complex suffixes)</td>
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<td>*-al-: Sq -ay- (Ku67:392), Sh -el- (Ku74:283)</td>
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<td>46</td>
<td>-aɬ, -aαɬ ‘foot, leg’</td>
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<td>possibly PS *-(w)aɬ ‘conveyance’ (Ku02:210 -wil ‘canoe’)</td>
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<td>52</td>
<td>-aɬɬ, -aaɬɬ ‘throat’</td>
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<td>*-aɬ… (Sq -aɬya ‘neck, throat’ (Ku67:391), Sh -elqʷl’t ‘front of neck’ (Ku74:283))</td>
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<td>76</td>
<td>-alii(x)c ‘tongue’</td>
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<td>*-al-i(ʔ)χx(c (Sh -ixʷeʔck (Ku74:284), Sq -alxʷcaɬ (Ku74:392))</td>
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<td>78</td>
<td>-alic ‘tooth’</td>
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<td>*-al-ons (Sq -ans (Ku67:122), Sh -en’s (Ku74: 282))</td>
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<td>80</td>
<td>-almx ‘breast’</td>
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<td>*-al-ma(w)x(ʷ) (Sq -ay’amixʷ (Ku67:393), Li -almixʷ (VE13:431)) (cf. 719 -mx, 1900 -ulmx)</td>
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<td>83</td>
<td>-alps ‘enveloped’</td>
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<td>*-al-ps ‘(neck) all around’, cf. 138 -apsm</td>
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<td>84</td>
<td>-alqi, -alji ‘neck, nape’</td>
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<td></td>
<td>*-al-qən (PS *-qin ‘head’ (also ‘hair, top; throat, voice, language’) (Ku02:208)) (cf. North Wakash -qya ‘head, top, hair’ (Rath 2010 Excel suffix list, line 521))</td>
</tr>
<tr>
<td>85</td>
<td>-als ‘surface, side’</td>
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<td></td>
<td>*-als ‘rock, round object (rounded surface)’ (Ku02:205) (cf. 671 -lsl)</td>
</tr>
</tbody>
</table>
-altm ‘season’ (hapax)
possibly < -*-alt-ǝwn (cf. 90 -altwa below)

-altwa ‘sky, weather, season’
innovative (? *-alt-wan ‘offspring of’ spirit’, cf. 672 -lt, 663 -liwa)

-ams ‘trap, wedge, jaw’
innovative (possibly < -*-(a)p-ǝms (shift (a), see section 3) < **-ap-nǝs ‘under/behind (Ku02:208) …-teeth’, cf. Sh -epne ‘jaw’, -epeʔs-qn ‘chin’ (Ku74:281))

-an ‘temple, collarbone, corner’
*-anaʔ ‘ear, side’ (Ku02:206), Li n-...-anaʔ ‘surface’ (VE13428)

-ank ‘front, side’
*-anak ‘belly (stomach, anus, buttocks)’, and cf. Colville -ink
‘stomach, inside, side, sidehill’ (Ku02:207)

-anɬ ‘side, corner’
< -an-ɬ, cf. 106 -an, 1892 -uɬ

-apsm ‘(side of) neck’
*-a(l)ps(m) (Ku02:208)

-aqʷs, -aaqʷs various meanings (‘eye, berry, soil, wood, fire, water’)
*-aqʷ-ǝs, *-aqʷ-ʷus ‘under/behind-surface/fire’ (Ku02:209,212)

-iiχʷ, -iiqʷ ‘top, head’
pre-CS *-iqʷ (Ku02:212)

-ik, -iik ‘top, upper surface (roof, table top, back)’
*-ik(n) ‘back’ (Ku02:204)

-il, -iil ‘ring-like, cycle, month’
derived (cf. √ʔil ‘go around’ < *yǝl ‘roll, turn over, round’ (Ku02:130))

-kʷp ‘fathom’
derived (cf. kʷp ‘straight’ < PS *kʷǝp (Ku02:49))

-k’mt ‘days’
derived (cf. k’matk ‘stay overnight’, possibly < *kʷǝm ‘grab a handful’ (Ku02:41))

-(s)la(n)xʷ ‘year’
*-l-anaxʷ (PS -ánaxʷ (Ku02:207))

-layx ‘projection, tubercle’
*-l-ɬax ‘body’ (cf. Sh -iłx ‘body’ (Ku74:283), Li -ilx, -lax
‘body’, -al’xor ‘tube’ (VE13:434), Sq -iłš petrified suffix found in ɬilš ‘stand up’ and q ‘yiilš ‘dance’ (Ku67:399))
-lq’ ‘…fold’
derived (cf. lq’ ‘to slap’ < North Wakash √lq (Nater 2013:119))

-lik ‘surface, appearance’
*-l-ik, cf. 284 -ik

-lic’, -liic ‘sheet, cloth, skin, bark’
*-l-ic’ ~ *-l-iʔc (PS -(al/ul-)ic’aʔ (Ku13:203))

-lst ‘rock, stone’
*-als(t) (Ku02:205)

-lt ‘offspring’
*-alt, -əlt (Ku02:205)

-ljs, -lqs ‘nose, point’
*-l-qs < PS *-qs (Ku02:208)

-nalus ‘between, joint’
*-l-anus < PS *-(al-)an-was ‘pair, middle’ (Ku02:210)

-nk ‘base, bottom’
*-anak, -nək (see 118 -ank, and cf. 834 -nnak)

-nnak ‘faeces’
*-anak (see 118 -ank, and cf. 815 -nk)

-ƛ’ap ‘times’
derived (cf. ƛ’ap ‘to go’, possibly related to Ch ƛ’áp’a ‘go and see if something is somewhere’ (Ki:73))

-t’q ‘span’
derived (cf. √t’q ‘spread over surface’, possibly < *t’aq’ ‘cross over’ (Ku02:111))

-uł, -uul ‘having bulk’
*-wil ‘canoe’ (Ku02:210) (cf. 46 -at)

-ułla, -uulkla ‘bulk, totality’
< -uł-la (cf. 1892 -uł, 549 -la)

-ulic’, -uliic ‘(through) hole; clothing’
see 661 -lic’

-ulmx ‘land, ground’
*-ul-mixʷ (Ku02:205) (cf. 719 -mx)

-us, -uus ‘face, appearance’
*-us ‘face’ (Ku02:209)

-uc, -uuc, -c ‘orifice, mouth’
*-uc ‘mouth’ (Ku02:203)
Nominalizing suffixes

27 -aʔiniχʷ ‘… at hunting’  
North Wakash -inuχʷ, -iníχʷ ‘expert at, belonging to…’ (Rath 2010 Excel suffix list, line 393)

95 -(a)ma, -(a)mn- ‘tool, instrument’  
*-(a)min, -(a)mən (cf. Li -mən, -amin (VE13:417), Sh -min (Ku74:281), Ch -min, -mn (Ki:357))

604 -lp, -alp ‘tree, plant’  
*-alp (Ku02:205)

651 -likʷ, -liikʷ ‘performer of action’ (innovative)

748 -mc ‘(collective) relatives’ (innovative)

719 -mx ‘population, native’  
*-mix(ʷ) ‘person’ (cf. 80 -almx, 1900 -almx)

1517 -ta, -tn-, -sta, -stn- ‘implement’  
*-(s)tən, cf. Sh -tən, -(ə)tn ‘means’ (Ku74:282), Sq -tn ‘implement’ (Ku67:260)

1526 -tam ‘time of …’ (innovative)

Formative suffixes

9 -aakas (in names)  
North Wakash -kas ‘big, mighty’ (Rath 2010 Excel suffix list, line 359)

36 -alas (in nuʔalkalas ‘geographical name’)  
North Wakash -alas ‘materialization of’ (Rath 2010 Excel suffix list, line 622)

43 -alxʷ ‘pointed’?  
innovative (or ?cf. Li -alxʷ ‘family’ (VE13:434), Sq -ayəxʷ ‘formative’ (Ku67:393))

75 -ali (in sxali jealous)  
North Wakash -ali ‘really, very’ (Rath 2010 Excel suffix list, line 623)

77 -alimck (innovative)

89 -alcwa (innovative, but possibly < *-als-wən ‘surface-spirit’)

107 -ana < North Wakash -ana? (Rath 2010 Excel suffix list, line 136)

116 -ani < North Wakash -ani? (Rath 2010 Excel suffix list, line 136)
-aqs, -ayqs, -gs (found mostly in names given to women) North Wakash -qs ‘woman, animate’ (Rath 2010 Excel suffix list, line 525)

-atwala (hapax) (innovative)

-ila < North Wakash -il’a ‘steep’ (Rath 2010 Excel suffix list, line 422)

-kʷ (innovative)

-la (in a few names) North Wakash -la, -ala ‘continuous action, process, state’ (Rath 2010 Excel suffix list, line 317)

-ɬala (in two words referring to birds) North Wakash -ƛala (as in Oowekyala nƛƛala ‘have flexible limbs, be double-jointed’ (Rath 2010 Excel suffix list, line 297))

-lq ‘around’ derived (cf. √χlq ‘cause something to go around or across something’ < PS *χǝlǝq ‘turn, whirl, roll’ (Ku02:125))

-cwa (innovative) (cf. 89 -alcwa)

-ul (in sχiƛ’ul = ƛiƛ’ ‘skinny’) cf. Sq -ul ‘diminutive’, -ulɬ ‘young specimen’ (Ku67:396)

-χin (in two words associated with ‘head’) *-qin ‘head’ (Ku02:208)

Of the 30 pronominal suffixes, one (2016) likely has a North Wakash origin; two (187 and 201) are innovative (the latter originally a fusion of 187 and 2016); six (297, 1511, 1814, 1512, 721, 762) appear to stem from pre-CS; the remaining 21 go back to PS. One modifying suffix (258) is of PS descent; another one (663) is pre-CS; one (1881) has been adopted from Chinook; the remaining three modifiers appear to be innovative. Of the 23 verbal suffixes, sixteen are Salish (five pre-CS, eleven PS), while seven are innovative. Of all (44) lexical suffixes, 35 have a PS origin; four go back to pre-CS; four are innovative; one has been derived from North Wakash. Out of eight nominalizing suffixes, one is originally North Wakash; three are innovative; four go back to PS. Among the 19 formative suffixes, nine have a North Wakash origin; six are innovative; four are Salish (three PS, one pre-CS).
6 Concluding notes and observations

A number of Bella Coola lexical suffixes have been derived from verbo-nominals: 298 -it ‘round’ < √ʔil, 490 -kʷp ‘fathom’ < kʷp ‘straight’, 533 -k’mt ‘days’ < k’mak ‘(stay) overnight’, 612 -lq’ ‘…fold’ < lq’ ‘slap’, 669 -lq’ ‘around’ < √ɬlq’ ‘cause to go around’, 1600 -ɬ’ap ‘times’ < ɬ’ap ‘go’, 1864 -t’q ‘span’ < √t’q ‘spread’. Similarly, two pronominal suffixes (with no cognates in other Salish) have evolved on the basis of independent pronouns: 828 -nu ‘2SG.TR’ < ʔinu ‘2SG’ and 297 -it ‘1PL’ < tni’t ‘1PL’.

The two other types of pronominal suffix derivation are fusion (as in -aɬ’w ‘2PL.IMP’ from 187 -aw ‘3PL’ + -ɬ ‘IMP’) and analogy-based patterning (-tiniɬ ‘1PL.PASS’ from -tinic ‘1SG.PASS’ minus -ic plus -it and -miniɬ ‘1PL.PASS.CAUS’ from -minic ‘1SG.PASS.CAUS’ minus -ic plus -it).

Modified pronominal suffixes typically consist of a petrified morpheme or morpheme string. Such units have been functionally recast and/or expanded with an additional suffix:

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<tr>
<th>Contemporary</th>
<th>Origin</th>
<th>Modification(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-i- ‘3SG.OBJ.TR’</td>
<td>*-n- ‘transitivizer’</td>
<td>*ən &gt; i, valency marker &gt; argument marker</td>
</tr>
<tr>
<td>-c ‘1SG.SUBJ’</td>
<td>*-c(-) ‘1SG.OBJ’</td>
<td>object &gt; subject</td>
</tr>
<tr>
<td>-...inic ‘1SG-PASS’</td>
<td>*-...in ‘1SG.SUBJ’</td>
<td>petrifaction of *-...in, addition of -ic ‘1SG’</td>
</tr>
</tbody>
</table>

Figure 3 Modified pronominal suffixes

There are a few bound morphemes that Bella Coola has in common with Chehalis in particular: the prepositions ?ału (= Ch ?ał) and xu (= Ch š); causative -(s)t(u) ( = Ch -(s)t(u)-); allomorphic pairs such as -tul/-mul- ‘1PL.OBJ’ (= Ch -tul/-mul-), -(c)an/-m(an)- ‘1SG.OBJ’ (= Ch -(c)al(-)/-mal-), *-ci/-*mi-‘2SG.OBJ’ (= Ch -ci(-)/-mi(-)). Are these elements pre-CS retentions, or do they have a more recent origin? If the latter setting applies, the Bella Coola language has its roots in a region on or near the Olympic peninsula (cf. Nater 2010/2013).
Below, I summarize the proportional distribution of the different types of bound morpheme, as well as their provenience in terms of Salish vs. non-Salish vs. unknown origin (“innovative”).

<table>
<thead>
<tr>
<th>Category</th>
<th>Provenience</th>
<th>root</th>
<th>proclitic</th>
<th>enclitic</th>
<th>prefix</th>
<th>suffix</th>
<th>PS</th>
<th>pre-CS</th>
<th>non-Salish</th>
<th>innovative</th>
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<td>16</td>
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**Figure 4** Distribution of fossilized roots, clitics, and affixes

The above table shows that affixes (173) play in Bella Coola a greater role than clitics (43), suffixes (130) outnumber prefixes (43), and enclitics (31)
outnumber proclitics (12). These hierarchies, in addition to the 60% Salish etymological content, attest to the essentially Salish nature of Bella Coola.

Taking into account earlier observations (Nater 2013, repeated in section 1 above) and the findings in this paper, we see that in Bella Coola the degree of borrowing from non-Salish sources varies between different linguistic tiers, with phonology and lexicon having been deeply affected by outside pressure, (morpho-)syntax less so, and morphology being rather conservative:

**Phonology:** significant North Wakash (mainly Oowekyala) influence: velar series preserved as palatal, absence of shwa and stress, extreme obstruent clustering

**Morphology:** some non-Salish impact in affixation, none in clisis

**Morphosyntax:** detailed deixis having evolved under North Wakash pressure

**Syntax:** Salish sentence structure limited to PSO due to North Wakash influence

**Lexicon:** extensive borrowing from North Wakash

**References**


