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. /ƛ'/ (which have merged into /ƛ'/ in the geographically closest Interior Salish languages); absence of velar and pharyngeal resonants; absence of retracted vowels and /l̲, 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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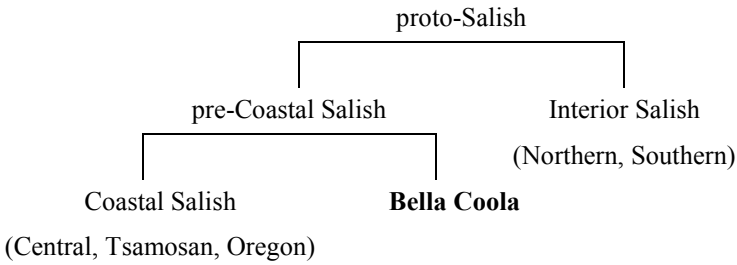

Figure 1 Bella Coola within Salish

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. *tɬmas* 'Indian paint' < **təmɬ*, *cipsx* 'fisher' < **cixəps*);

(b2) metathesis (Nater 1984:112) (e.g. *ʔank'pc* 'mouse' < **k'anp'c*, *ʔaq'miiχaɬp* 'cottonwood' < **q'amiʔqa*);

(c) unstable glottalization (e.g. *qʷuc'ik* 'wolverine' < **q'ʷucik*, *paaχʷu* 'afraid' < **p(')aʔqʷu*);

(d) compensatory lengthening ((*VC' >) *VʔC > V꞉C (Nater 1994:187)) (e.g. *snaaχ* '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. *c'yaaχʷ* 'flicker' (bird) < **c'yaqʷ*, *ʔaaχqa* 'urinate' < **ʔaqqan*);

(f) mutation of **ən*# to *i*# or (via **an*#) to *a*# (e.g. *k'ʷucxi* 'maggots' < **k'ʷəc'xən*, *nuχʷski* 'soapberries' < **nuχʷəs(i)kən*, *q'ʷasta* 'mountain goat wool' < **q'ʷastən* ~ **q'ʷastan*, *ʔixa* 'lower leg, foot' < **yəxən* ~ **yəxan*);

(g) *#*yə*, *#*yi* > #*ʔi* and *#*wə*, *#*wu* > *ʔu*# (e.g. *ʔimanta* 'nest' < **yəman*, *ʔixa* 'lower leg, foot' < **yəxən* ~ **yəxan*, *ʔut'ak* 'vomit' < **wət'*…, *ʔuq'ʷ* 'drift downstream' < **wuq'ʷ*);

(h) **ns* > *nc* (e.g. *ʔica* 'tooth' < **yə-n(ə)s-ən* (for **-ən* cf. *maka* 'testes' < **m-ak-ən*, *musa* 'face' < **məʔ-us-ən* (Kuipers 2002: 144-145)), *maq'ʷanc* 'heron' < Kwakiutl *maq'ʷn̓s*).

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-qən*) and (with (h)) *-alic* 'tooth' (< **-al-əns*).

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*, /ƛ'/ as *tl'*, /ɬ/ as *lh*, /x/ as *c*, /χ/ as *x*, the apostrophe was the last "letter" of the alphabet, and /ʔ/ (*7*) was ignored).

Abbreviations used in this report are: Ch = Upper Chehalis, CS = Coastal Salish, Li = Lillooet, PS = proto-Salish, Sh = Shuswap, Sq = Squamish; Ki = Kinkade (1991), Ku67 = Kuipers (1967), Ku69 = Kuipers (1969), Ku74 = Kuipers (1974), Ku02 = Kuipers (2002), VE85 = Van Eijk (1985), VE13 = Van Eijk (2013); CAUS = causative, DEF = definite, DEM = demonstrative, FEM = feminine, IMP = imperative, INDEF = indefinite, ITR = intransitive, OBJ = object, PASS = passive, PL = plural, PRES = present, PROX = proximate, REM = remote, SG = singular, SUBJ = subject, TR = transitive.

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 *ta␣* (in Section 5.2 below)

51 √ʔaɬay ‘slight distance’ (deictic)
< ʔa-ɬay (cf. Section 5.3, Figure 2, and ɬay ‘increased distance’ (innovative nominal deictic))

153 √ʔas, √ʔass (followed by lexical suffix) ‘that which is …’
cf. Sq √ʔac ‘surface’ (Ku67:390)

182 √ʔatu ‘using, in contact with’ (deictic)
< ʔa- ‘locative’ + -tu- CAUS

189 √ʔaw(a) ‘proximate’ (deictic)
*ʔaw ‘follow’ (Ku02:20)

191 √ʔawxʷ(a) ‘around here’ (deictic) (innovative)

222 √xɬɬ ‘away from’
215 x␣ ‘via’ + -ɬɬ ‘separated’

255 √i ‘proximal’ (constituent of deictics)
cf. 1556 ti␣ (in Section 5.2 below)

431 √kʷuɬ (followed by lexical suffix) ‘that which is …, the very …’ (innovative) < kʷuɬ- ‘being very …’ (itself innovative)

683 √m(...a) ‘formative’
pre-CS (Ku02:144: *makn, *məqsən, *mʔus)

1346 √sqa ‘outside’
*...cq(aʔ) (Ku02:15)

1392 √stxʷ ‘inside’
pre-CS *...stxʷ (Ku02:136)

1647 √tpi ‘next, adjacent, side, half’ (innovative)

1888 √ula (preceded by spatial prefix) ‘over there’
< ʔul-a (cf. 1880 ʔu-, 1 √a, Sq √ʔuy ‘enter’ (Ku67:396))

1897 √uli (preceded by spatial prefix) ‘over here’
< ʔul-i (cf. 255 √i and 1888 √ula)

1924 √ʔus (followed by lexical suffix) ‘directional’
syncretism of 153 √ʔas and 1880 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 *ʔałˌ* 'at'
cf. Ch *ʔałˌ* (Ki:4)

215 *xˌ* 'via, by means of'
Ch *š* 'to, into' (Ki:129)

1891 *ʔułˌ* 'towards'
syncretic form: 44 *ʔałˌ* + 1880 *ʔu-*

Articles

295, 572 *ʔiłˌ* = *łaˌ* 'INDEF.FEM.REM.SG'
cf. Sq *łaˌ* 'DEF.PRES.WEAK.FEM', *ʔałi* 'DEF.PRESENT.STRONG.DISTAL.FEM' (Ku67:137), Ch *łaˌ* 'DEF.FEM' (Ki:365)

1516 *taˌ* 'INDEF.NON.FEM.REM.SG'
cf. Sq *ta* 'DEF.PRES.WEAK.PLAIN' (Ku67:137), Ch *tat* 'DEF' (Ki:136)

1556 *tiˌ* 'INDEF.NON.FEM.PROX.SG'
Sq *ti* 'DEF.PRES.STRONG.PROX.PLAIN' (Ku67:137), Ch *tit* 'DEF.NON.FEM' (Ki:141)

1689 *ciˌ* 'INDEF.FEM.PROX.SG'
cf. Sq *ci* 'DEF.PRES.STRONG.PROX.FEM' (Ku67:137), Ch *cic* 'DEF.FEM' (Ki:22)

1807 *tuˌ* 'INDEF.REM.PL'
syncretic form: 1516 *taˌ* + …*u*… 'REM.PL' (cf. *ˌtχ* vs. *ˌtχʷ* (1835-37) and *t'aχ* vs. *ˌt'aχʷ* (1847-48)

1958 *waˌ* 'INDEF.PROX.PL'
cf. 1986 *wi-* 'PL', Li *wiˌ* 'PL' (with proper nouns) (VE85:223)

Pre-predicatives

381 *kamałˌ* 'if', 'should … be the case'
kaˌ + **ˌmał*: cf. Sq *ˌmał* 'well …' (Ku67:209)

1973 *wastuˌ* '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 *␣alu, ␣ału* 'tentatively' (innovative)

257 *␣ʔi(t)...k(a)* 'contrastive' (innovative)

427 *␣kʷu* 'attenuative' (innovative)

440 *␣kʷ* 'quotative'
cf. Li *␣kʷuʔ* id. (VE85:234)

475 *␣k'ʷ, ␣k'ʷu* 'frequently' (innovative)

674 *␣lu, ␣łu* '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 ␣*a* ‘is … the case?’
cf. Li ␣*ha* (VE85:237)

2090 ␣*ya* ‘eh?, right?’ (innovative, but probably < *ya* ‘good, right’)

Deictics

174 ␣*ʔac* ‘DEM.PL.PROX’

296 ␣*ʔiɬ* ‘DEF.FEM.REM.SG’ (identical to 295 *ʔiɬ*␣)

299 ␣*ʔiɬaʔiɬ* ‘DEM.FEM.REM.SG’

1547 ␣*tx* ‘DEF.NON.FEM.PROX.SG’

1659 ␣*c* ‘DEF.PROX.PL’

1683 ␣*cx* ‘DEF.FEM.PROX.SG’

1756 ␣*c’ayx* ‘DEM.FEM.PROX.SG’

1835 ␣*tχ* ‘DEF.NON.FEM.REM.SG’

1837 ␣*tχ*^{w} ‘DEF.REM.PL’

1847 ␣*t’aχ* ‘DEM.NON.FEM.REM.SG’

1848 ␣*t’aχ*^{w} ‘DEM.REM.PL’

1850 ␣*t’ayx* ‘DEM.NON.FEM.PROX.SG’

These deictics can be separated into minimal constituents as follows (cf. Nater 1984:44):

		t-/c-	ʔiɬ-	-(ʔ)a(y)-	-ʔiɬ	-x	*-w-	-χ	-c
174	Ø-			-ʔa-					-c
296	Ø-				-ʔiɬ				
299			ʔiɬ-	-a-	-ʔiɬ				
1547		t-				-x			
1659	Ø-								-c
1683		c-				-x			
1756		c-		-ʔay-		-x			
1835		t-						-χ	
1837		t-					-χ^{w}		
1847		t-		-ʔa-				-χ	
1848		t-		-ʔa-			-χ^{w}		
1850		t-		-ʔay-		-x			

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; *ʔiɬ-* (= *-ʔiɬ*) '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 *ʔanus* 'having lost one's … (relative or spouse)'
originally complex: < 124 *ʔanu-* 'out of' + 1180 *s-* 'nominalizer'

154 *ʔas-* 'have, have brought, use (food, tool, vehicle)'
cf. Li *ʔəs-* 'have, own' (VE85:61) (cf. 336 *ʔis-*)

156 *ʔasi-* (with *ya* good or *sx* bad) 'consider the taste of something as …' (innovative)

221 *xɬ-* 'have, possess' (innovative)
possibly < 215 *x␣* 'by means of' + 569 *ɬ-* 'additional'

336 *ʔis-* 'gather, consume'
cf. Li *ʔəs-* 'have, own' (VE85:61) (cf. 154 *ʔas-*)

347 *ʔit-* 'speak the language of …' (innovative)
(but if the original meaning is 'to use', cf. following item)

348 *ʔit-* 'wear, clothing' (innovative, and cf. preceding item)

377 *kaɬ-, kas-* 'pursue, collect'
**kal* 'go after, follow' (Ku02:36)

432 *kʷuɬ-, kʷus-* 'having much, being very …' (innovative)

515 *k'iɬ-, k'is-* 'lacking'
North Wakash √*k'i(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 *ʔun-* 'fond of' (innovative)
(possibly inversion of *nu-* 'inside', or < *ʔu-n(u)-* 'direction-inside')

1925 *ʔus-* ‘long for’ (innovative)
(possibly < *ʔu-s-* ‘direction-nominalizer’)

Somatic prefixes

433 *kʷuɬ-, kʷus-* ‘penis’ (innovative, and cf. 432 above)

1912 *ʔun-* ‘waist, small of back’ (innovative)

Grammatical prefixes

569 *ɬ-* ‘dualis, … and somebody else’ (innovative)

1180 *s-* ‘nominalizer’ (all-Salish)

1228 *si-* ‘paraphraser’ (innovative, but possibly <
**s-(ə)n-* ‘nominalizer-inside’)

Aspectual prefixes

45 *ʔaɬ-, ʔa-* ‘stative-progressive’ (innovative)

261 *ʔix-* ‘intensive’ (innovative)

337 *ʔis-* ‘intensive’ (innovative)

501 *k’am-* ‘equal, same’
**√k’a/əm* (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 *ʔa-* ‘locative’
**ʔa-* (Ku02:15,16,17)

1509 *t-* ‘locative’
**t-*...: Sh *t(k)-* ‘on’ (Ku74:71), Sq *txʷ-* ‘direction’ (Ku67:260)

1546 *tx-* ‘locative’
pre-CS: Sq *txʷ-* ‘direction’ (Ku67:260), Ch *taš* ‘at, across, through, around’ (preposition) (Ki:136)

1834 *tχ-* ‘locative’ (geographical)
North Wakash, cf. He *tχ…* ‘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 *kaɬ-* ‘under, below’ (innovative)

827 *nu-* ‘inside’
**n(əw)-, nəx^{w}-*: cf. Sq *n-, nəx^{w}-* ‘location’ (Ku67:310), Sh *n-* ‘at’ (Ku74:58)

1387 *stam-* ‘together with’ (innovative)

1926 *ʔus-* ‘top surface’
**wəs, *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)ɬ* '1PL.SUBJ'
derived (cf. *ɬmiɬ* 'we' = Sq *nímaɬ* (Ku67:313), Li *s-nímuɬ* (< CS) (VE13:122))

828 *-nu* '2SG.SUBJ.ITR'
derived (cf. *ʔinu* 'thou' = Sq *nəw* (Ku67:311), Li *s-núwa* (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. *ʔnc* 'I' (= Sq *ʔəns* (Ku67:387))

Imperative

201 *-aχʷ, -naχʷ* '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', *-əxʷ* '2SG' (Ku74:284)

260 *-i-* '3SG.OBJ.TR'
modified (probably < PS **-n-* 'transitivizer', cf. Sq *-n-, -nəxʷ* (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 < **-tən-*, 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’
in *-ci-nu* ‘I … you’ < PS *-ci-n* ‘2SGOBJ-1SGSUBJ’ + 828 *-nu*, cf. Sh *-c(i)-n* id. (Ku74:48), Ch *-ci-* ‘2SG.OBJ’ (Ki:366) (cf. 721 *-mi-*)

1814 *-tuł-* ‘1PL.OBJ.TR’
cf. Ch *-tul-* (Ki:366) (cf. 762 *-muł-*; 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 *-tinił* ‘1PL’
derived (*-tin-* + *-ił*, with *-tin-* copied from *-tinic* below)

1573 *-tinic* ‘1SG’
modified (likely *-t-in-* ‘TR-1SG.SUBJ’ + *-ic* ‘1SG.SUBJ’, 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)-*)

721 *-mi-* '1SG.SUBJ'
in *-tu-mi-nu* 'I cause you to …' < pre-CS **-t-umi-n* 'TR-2SG.OBJ-1SG.SUBJ' + 828 *-nu*, cf. Sq *-…t-umi* 'TR-2SG.OBJ' (Ku67:88-91), Ch *-mi-* '2SG.OBJ' (Ki:366) (and cf. 1692 *-ci-*)

762 *-muɬ-* '1PL OBJ'
pre-CS, cf. Sq *-umuɬ-* '1PL.OBJ' (Ku67:395), Ch *-mul-* '1PL.OBJ' (Ki:366)

Causative passive

686 *-m* '3SG'
cf. Sq *-...-m* 'passive' (Ku67:68), Sh *-(e)m* 'passive' (Ku74:281) (cf. 313 *-im*)

732 *-miniɬ* '1PL'
derived (**-min-* + *-iɬ*, with *-min-* copied from *-minic* below (cf. 1572 *-tiniɬ*)

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

756 *-mt* '2SG'
modified (contamination of *-m-* (as in 687 *-m(an)-* and 733 *-minic*) and 1730 *-ct*)

Modifying suffixes

108 *-anaac* 'really, very' (innovative)

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

663 *-liwa*, *-liwn-*, *-lun-*, *-nul-* '…like'
**-l-iwan*, *-l-iwən*, *-l-əwən* 'essence, spirit' (cf. Sq *-iwan* 'spirit, mind' (Ku69:96), Li *-aliwán'* 'size, hulk' (VE13:435))

1301 *-sɬ* 'typical of' (innovative, but possibly < **-əs-ɬ* 'face-connected')

1881 *-uks* 'plural' (from Chinook *-ukš* (Nater 2010))

Verbal suffixes

7 *-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*)

87 -*alst* ‘deprivative’ (innovative, but if from *‘solid, crucial’, cf. 671 -*lst*)

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

99 -*amx*^{w} ‘autonomously’
possibly < *-*a(l)-məx*^{w} ‘person, individual’, cf. PS *-*(al-)mix*^{w} (Ku02:205-206), and 719 -*mx*

100 -*amk* ‘additionally’ (innovative)

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

188 -*aw* ‘emphatic imperative’ (innovative)

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

259 -*i-* ‘euphonic vowel’ (innovative)

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

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

659 -*lit* ‘make the sound of ...’ (innovative, but cf. 347 *ʔit-*)

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

696 -*max*^{w} ‘reciprocal’
cf. Sh -*wéx*^{w} (Ku74:285), Li -*atw’áx*^{w} (VE13:420)

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

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

778 -*n-* ‘unintentionally’
cf. Sq -*n-*, -*nəx*^{w} ‘transitive non-volitional’ (Ku67:77,310)

805 -*nix, -nux*^{w}*, -nx*^{w}*, -anx*^{w} ‘accidentally cause …, consider …’
cf. Sq -*nəx*^{w} ‘transitive non-volitional’ (Ku67:77)

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

1514 -*t-* ‘intentionally’
cf. Sq -*t* ‘volitional’ (Ku67:77)

1643 *-tnm* 'CAUS.ITR habitual'
< *-t-nm* 'CAUS-habitual' (see 817 *-nm* above)

1737 *-cut* 'reflexive'
cf. Sq *-t-sut* (Ku67:95), Sh *-cut* (Ku74:282) (cf. 77 *-mut*)

1809 *-tu-, -stu-, -t-, -st-* 'CAUS'
-(s)*-t(u)-*, cf. Sh *-st-* (Ku74:282), Ch *-(s)t(u)-* (Ki:371,373)

Lexical suffixes

16 *-aaχ, -aaq* 'lower part, back(side)'
pre-CS *-aq'* 'crotch' (Ku02:212) (cf. North Wakash *-aq* 'crotch' (Rath 2010 Excel suffix list, line 652))

17 *-aaχla* 'berries, juice'
derived (cf. *qla* 'water', *qaaχla* 'to drink')

28 *-ak, -aak* 'hand'
*-*ak* (Ku02:204)

34 *-al-* 'connective' (constituent of complex suffixes)
*-*al*-: Sq *-ay-* (Ku67:392), Sh *-el-* (Ku74:283)

46 *-aɬ, -aaɬ* 'foot, leg'
possibly PS *-*(w)aɬ* 'conveyance' (Ku02:210 *-wil* 'canoe')

52 *-aɬɬ, -aaɬɬ* 'throat'
*-*aɬ*… (Sq *-aɬχa* 'neck, throat' (Ku67:391), Sh *-eɬqʷl't* 'front of neck' (Ku74:283))

76 *-alii(x)c* 'tongue'
*-*al-i(ʔ)xʷc* (Sh *-ixʷeʔck* (Ku74:284) , Sq *-alxʷcaɬ* (Ku74:392))

78 *-alic* 'tooth'
*-*al-əns* (Sq *-ans* (Ku67:122), Sh *-en's* (Ku74: 282))

80 *-almx* 'breast'
*-*al-mə(w)x(ʷ)* (Sq *-ay'amixʷ* (Ku67:393), Li *-almixʷ* (VE13:431)) (cf. 719 *-mx*, 1900 *-ulmx*)

83 *-alps* 'enveloped'
*-*al-ps* '(neck) all around', cf. 138 *-apsm*

84 *-alqi, -alχi* 'neck, nape'
*-*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))

85 *-als* 'surface, side'
*-*als* 'rock, round object (rounded surface)' (Ku02:205) (cf. 671 *-lst*)

88 *-altm* ‘season’ (hapax)
possibly < **-alt-əwn* (cf. 90 *-altwa* below)

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

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

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

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

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

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

148 *-aq’ʷs, -aaqʷs* various meanings (‘eye, berry, soil, wood, fire, water’)
**-aq’ʷ-əs*, **-aq’-ʷus* ‘under/behind-surface/fire’ (Ku02:209,212)

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

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

298 *-iɬ, -iiɬ* ‘ring-like, cycle, month’
derived (cf. √*ʔil* ‘go around’ < **yəl* ‘roll, turn over, round’ (Ku02:130))

490 *-k’ʷp* ‘fathom’
derived (cf. *k’ʷp* ‘straight’ < PS **k’ʷəp* (Ku02:49))

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

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

565 *-layx* ‘projection, tubercle’
**-l-alx* ‘body’ (cf. Sh *-ilx* ‘body’ (Ku74:283), Li *-ílx*, *-ləx* ‘body’, *-al’xən* ‘tube’ (VE13:434), Sq *-ilš* petrified suffix found in *ɬχilš* ‘stand up’ and *q’ʷiílš* ‘dance’ (Ku67:399))

612 *-łq'* '…fold'
derived (cf. *łq'* 'to slap' < North Wakash √*λq* (Nater 2013:119))

650 *-lik* 'surface, appearance'
*-*l-ik*, cf. 284 *-ik*

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

671 *-lst* 'rock, stone'
*-*als(t)* (Ku02:205)

672 *-lt* 'offspring'
*-*alt*, *-*ələt* (Ku02:205)

681 *-lχs, -lqs* 'nose, point'
*-*l-qs* < PS *-*qs* (Ku02:208)

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

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

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

1600 *-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))

1864 *-t'q* 'span'
derived (cf. √*t'q* 'spread over surface', possibly < **t'aq'* 'cross over' (Ku02:111))

1892 *-uł, -uuł* 'having bulk'
*-*wil* 'canoe' (Ku02:210) (cf. 46 *-ał*)

1894 *-uła, -uuła* 'bulk, totality'
< *-uł-la* (cf. 1892 *-uł*, 549 *-la*)

1899 *-ulic', -uliic* '(through) hole; clothing'
see 661 *-lic'*

1900 *-ulmx* 'land, ground'
*-*ul-mix*^{w} (Ku02:205) (cf. 719 *-mx*)

1929 *-us, -uus* 'face, appearance'
*-*us* 'face' (Ku02:209)

1940 *-uc, -uuc, -c* 'orifice, mouth'
*-*uc* 'mouth' (Ku02:203)

Nominalizing suffixes

27 *-aʔiniχʷ* '… at hunting'
North Wakash *-inuχʷ* , *-iniχʷ* '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*, *-amín* (VE13:417), Sh *-min* (Ku74:281), Ch *-min*, *-mn* (Ki:357))

604 *-łp, -ałp* 'tree, plant'
**-ałp* (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 *-ulmx*)

1517 *-ta, -tn-, -sta, -stn-* 'implement'
**-(s)tən*, cf. Sh *-tén*, *-(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 *nuχalkalas* '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)

143 *-aqs, -ayqs, -qs* (found mostly in names given to women)
North Wakash *-qs* ‘woman, animate’ (Rath 2010 Excel suffix list, line 525)

183 *-atwala* (hapax) (innovative)

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

441 *-k*^{w} (innovative)

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

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

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

1513 *-t*
cf. Li *-t*, *-it*, *-ut* ‘formative’ (VE13:418), Sh *-t* ‘status form’ (Ku74:54–55)

1741 *-cwa* (innovative) (cf. 89 *-alcwa*)

1887 *-ul* (in *sχiƛ’ul* = *χiƛ’* ‘skinny’)
cf. Sq *-ul* ‘diminutive’, *-ulɬ* ‘young specimen’ (Ku67:396)

2041 *-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 *-iɬ* 'round' < √*ʔil*, 490 *-k'ʷp* 'fathom' < *k'ʷp* 'straight', 533 *-k'mt* 'days' < *k'matk* '(stay) overnight', 612 *-łq'* '…fold' < *łq'* 'slap', 669 *-lq'* 'around' < √*χlq'* 'cause to go around', 1600 *-ƛ'ap* 'times' < *ƛ'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 *-iɬ* '1PL' < *ɬmiɬ* '1PL'.

The two other types of pronominal suffix derivation are fusion (as in *-aχʷ* '2PL.IMP' from 187 *-aw* '3PL' + *-χ* 'IMP') and analogy-based patterning (*-tiniɬ* '1PL.PASS' from *-tinic* '1SG.PASS' **minus *-ic* plus *-iɬ*** and *-miniɬ* '1PL.PASS.CAUS' from *-minic* '1SG.PASS.CAUS' **minus *-ic* plus *-iɬ***).

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:

Contemporary	Origin	Modification(s)
-i- '3SG.OBJ.TR'	**-n-* 'transitivizer'	**ən* > *i*, valency marker > argument marker
-c '1SG.SUBJ'	**-c(-)* '1SG.OBJ'	object > subject
-ci-nu '1SG-2SG'	**-ci-n* '2SG-1SG'	petrifaction of **-cin*, addition of *-nu* '2SG', **-cinnu* > *-cinu*
-tu-mi-nu 'CAUS-1SG-2SG'	**-t-umi-n* 'TR-2SG-1SG'	petrifaction of **-tumin*, addition of *-nu* '2SG', **-minnu* > *-minu*, …*tu*… reinterpreted as *-tu-* 'CAUS'
-…inic '1SG-PASS'	**-…in* '1SG.SUBJ'	petrifaction of **-…in*, addition of *-ic* '1SG'

Figure 3 Modified pronominal suffixes

There are a few bound morphemes that Bella Coola has in common with Chehalis in particular: the prepositions *ʔaɬ␣* (= Ch *ʔaɬ*) and *x␣* (= Ch *š*); causative *-(s)t(u)-* (= Ch *-(s)t(u)-*); allomorphic pairs such as *-tuɬ-/-muɬ-* '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").

	Category					Provenience			
	root	proclitic	enclitic	prefix	suffix	PS	pre-CS	non-Salish	innovative
root	16					2	10		4
preposition		3					3		
article		6				1	5		
pre-predicate		2				1			1
miscellaneous		1				1			
adverb			15			3			12
imperative			2						2
wh-?			3						3
yes-no?			2			1			1
deictic			9				6		3
article				3		1	2		
verbalizer				15		3	1	1	10
somatic				2					2
grammatical				3		1			2
aspectual				7		1			6
spatial A				5		3	1	1	
spatial B				6		2			4
circumfix				2					2
pronominal					30	21	6	1	2
modifying					6	1	1	1	3
verbal					23	11	5		7
lexical					44	35	4	1	4
nominalizing					8	4		1	3
formative					19	3	1	9	6
	16	12	31	43	130	95	45	15	77
	7%	5%	13%	19%	56%	41%	19%	7%	33%

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

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