

Stem modification in Alsea diminutives

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Alsea is a dormant language of the central Oregon coast, often classified as Penutian, although that relationship remains uncertain (BUCKLEY 1987, GOLLA 1997, GRANT 1997). In the only existing grammar of the language, FRACHTENBERG (1918: 249) identifies the Alsea suffix that he writes *-au* as the diminutive: “This suffix denotes SMALLNESS and, when added to a noun indicating sex or gender, it assumes the function of a term of endearment.” Although he notes an occasional “vocalic change” in the stem, only in the higher-quality transcriptions of Melville Jacobs can we see several significant phonological modifications that accompany the suffix. These include pervasive glottalization of the stem; raising of uvulars to velars; and (in some cases) the choice of a stem form that includes an additional vowel.

The paper is organized as follows. I first present an overview of the Alsea language and instances of diminutive suffixation that have no explicit addition of glottalization in the stem. I then move on to the explicit marking of glottalization in stems that have just a vowel, as well as those that also have a sonorant consonant. The next section addresses uvular raising, which is the second major correlate of diminutivity; this is followed by occasional differences in the stem shape, namely the inclusion of an additional vowel. Finally I review the examples with the augmentative, which do not show either stem modification. A residue of cases is addressed before a brief conclusion.¹

Overview

Except where noted, the forms cited in this paper all come from Jacobs’ manuscript notes at the University of Washington, based on fieldwork with John Albert in 1935; Albert was the last known speaker of Alsea when he died in 1951. The original transcriptions are presented in square brackets; they include noncontrastive information, such as vowel length, but also are not to be taken as flawless renderings of the detailed phonetics. Instead, these square-bracket representations are simply the best transcriptions that we have. Phonemicized representations are shown between slashes; but at the same time, these are only as definitive as the available information permits. They are intended to aid in the interpretation of the original “phonetic” transcriptions, rather than to replace them. Because

¹ This material was originally presented as Buckley (2005). I am happy to have the opportunity to publish it in this volume that honors Roy Rosenstien, since he was my French professor when I was an undergraduate at the University of Oregon, where I first began my study of the Alsea language. I would also like to thank Paul Krober and Larry Morgan for their comments on this work in previous years.

the phonemic status of glottalization in vowels and sonorants is not always clear, the slash representation of glottalization is tailored to reflect the specifics of this feature in the original transcription that it accompanies, rather than a more abstract theory of the glottal feature’s realization. In particular, it is not certain whether the glottalization is distributed over an entire root or truly does get realized on just one or two segments; see below for more discussion.

In the phonemicization of BUCKLEY (1988, 2007), Alsea includes the following segments: /p, p’, t, t’, k, k’, k^w, k^w’, q, q’, q^w, q^w’, c, c’, s, λ’, ɬ, x, x̣, x̣^w, h, h^w, ʔ, m, m’, n, n’, l, l’, w, w’, y, y’, a, aⁿ, i, iⁿ, u, uⁿ/. Minor notational changes have been made to modernize and clarify the phonetic symbols used by Jacobs, as explained in BUCKLEY (2007).² Jacobs often writes the small capitals [B, D, DJ, G, Ğ] for “lenis” versions of /p, t, c, k, q/, especially between two vowels or other voiced segments. Another noncontrastive notation is the fronting of velars such as [ḳ, x̣], which correspond to the phonemes /k, x/. Jacobs uses the apostrophe [’] to mark glottalization generally, whether on a vowel, sonorant, or ejective consonant, or an independent glottal stop; difficulties in its interpretation will be addressed below. Dashes before the suffixes under discussion are not in the original transcriptions, but are added here for clarity. To the best of my knowledge, this paper includes all the words for which Jacobs recorded a diminutive form.

Simple suffixation

A number of transcriptions do not show evidence of any particular changes to the stem in the presence of the diminutive suffix. This is due primarily to the fact that the stems lack the uvular consonants that undergo raising, and the basic stem may already have a notation of glottalization that is carried over to the suffixed form. Note the introduction of transitional glides when a stem-final high vowel is followed by the low vowel /a/ that begins the suffix, here phonemicized as /aw/.

- | | | | |
|--------|------------------------------------|------------------|-------------------------------|
| (1) a. | [la· ^(ʔ) wəs] | /law’s/ | ‘yellowjacket’ |
| | [la· ^(ʔ) wəs–au] | /law’s–aw/ | ‘little yellowjacket’ |
| b. | [Dʒi ^(ʔ) yε’lk’wɬən] | /ciy’alk’wɬn/ | ‘spruce root’ |
| | [Dʒi ^(ʔ) yε’lk’wɬən–au] | /ciy’alk’wɬn–aw/ | ‘little piece of spruce root’ |
| c. | [ha’mi’] | /ham’i/ | ‘pigeon’ |
| | [ha’mi’y–au] | /ham’i–aw/ | ‘little pigeon’ |

² In particular, Jacobs’ sibilant [c] is here written [s], but reflects the phonemic category /s/; when the phonetic symbol <c> appears in this paper, it is the affricate /ts/. Unlike in Buckley (2007), the length mark [·] used by Jacobs is here retained rather than replaced with a macron. In addition, the nasalization mark [̃] is kept in preference to a more modern notation on the vowel (such as a tilde or hook) because the raised [̃] seems, in some instances, to indicate that the nasalization extends over more than the immediately preceding vowel.

d.	[ʎa'mi'ʂu]	/ʎam'iʔsu/	'owl'
	[ʎa'mi'ʂəw-au]	/ʎam'iʔsu-aw/	'moth'
e.	[muGwa'ʂli]	/mk ^w aʔsli/	'woman'
	[muGwa'ʂliy-au]	/mk ^w aʔsli-aw/	'girl; young woman'
f.	[tʂGε ^{in'} (i)DJi ⁿ]	/cki ⁿ ʔci/	'mountain'
	[tʂGε ^{in'} iDJiy-au]	/cki ⁿ ʔci-aw/	'hill'

Because the transcription of some glottalization and glottal stops is inconsistent, the phonemicization of that feature must be treated as tentative. But a clear generalization about the region is that a glottal feature on a sonorant is usually realized as preglottalization (SAPIR 1938).

Some forms exhibit alternations in /h/, which appears to be deleted word-finally but can be seen in the suffixed diminutive. Here again, there is no added glottalization, but this may reflect momentary inattention, or a deeper pattern that will be difficult to determine at this point.

(2) a.	[aGi ^{n'}]	/ʔaki ⁿ h/	'dangerous thing'
	[aGi ⁿ hy-au]	/ʔaki ⁿ h-aw/	'little aGi ^{n'} '
b.	[k'wa'li']	/k ^w al'ih/	'poor orphan'
	[k'wa'li'hy-au]	/k ^w al'ih-aw/	'poor tiny little orphan'
c.	[t'k'wi ⁿ hi ^{n'}]	/t'k ^w i ⁿ hi ⁿ h/	'elbow'
	[t'k'wi ⁿ hi ⁿ · ⁿ hiy-au]	/t'k ^w i ⁿ hi ⁿ h-aw/	'tiny elbow'

These examples all have /i/ preceding the final /h/, which is responsible for the transitional [y] before the suffix.

Vowel glottalization

In the majority of diminutives recorded by Jacobs, we find glottalization of the stressed vowel, written as a doubled vowel with an apostrophe [V'V]. It is usually stressed on the second element, which itself is often written as long, typical of stressed vowels in Alsea. This cluster of properties is phonemicized here as laryngealization of a single vowel segment, /V̤/.

(3) a.	[k̤'i ^{(^o)p]}	/k'ip/	'grandchild'
	[k̤'i'i'B-au]	/k'ᶑp-aw/	'little grandchild (5 or 6)'
b.	[ʂi'p'al]	/sip'l/	'bracelet'
	[ʂi'i'p'l-au]	/sᶑp'l-aw/	'tiny bracelet'
c.	[ʂBa'i]	/spay/	'woman's privates'
	[ʂBa'a'y-au]	/spay-aw/	'girl's vagina'

d.	[na ^(ʔ) t _ɕ]	/nat _ɕ /	‘river’
	[na’a’tG _ɕ –au]	/nat _ɕ –aw/	‘creek; spring’
e.	[t’šaiši ^ʔ ’nš]	/c’aysi ⁿ s/	‘pimple’
	[t’šaiši ^ʔ i ^ʔ ’nš–au]	/c’aysi ⁿ s–aw/	‘small pimple’
f.	[tGu’ts]	/tkuc/	‘niece’
	[tGu’uDJ–au]	/tkuc–aw/	‘little niece’
g.	[ši ^ʔ ’nGəm]	/si ⁿ km/	‘red cedar’
	[ši ⁿ ’i ^ʔ ’nGəm–au]	/si ⁿ km–aw/	‘tiny red cedar’
h.	[mihi ^ʔ ’nGwit’i]	/mihi ⁿ k ^w it’i/	‘grouse’
	[mihi ^ʔ i ^ʔ ’nGwit’iy–au]	/mihi ⁿ k ^w it’i–aw/	‘little grouse’
i.	[Da ^(ʔ) p]	/tap/	‘wing’
	[Da’aB–au]	/tap–aw/	‘little wing’ ³

Glottalization marked before voiceless stops in the coda is probably not distinctive, as suggested by a number of the non-diminutive forms here. Nasalization is maintained in the laryngealized vowel. The glottalization feature is normally marked by Jacobs on the stressed vowel; this indicates either that the feature is phonologically attracted to the most prominent vowel, or that the feature is more broadly associated to most clearly perceptible on the stressed vowel. The next set of examples suggests that the perceptual explanation is superior, because the glottalization is not restricted to the stressed vowel.

Sonorant glottalization

In what is presumably an expression of the same process of stem glottalization, Jacobs sometimes writes glottalization next to a sonorant consonant. In the great majority of cases, this transcription consists of an apostrophe before the consonant, which is the typical realization of glottalization on an intervocalic sonorant, as noted above. It can be found by itself, or together with the [V’V] notation.

(4) a.	[Bayə’m]	/paym/	‘fox’
	[Ba’a’yə’m–au]	/paym–aw/	‘little fox’
b.	[Dik’ε’li·m]	/tik’alim/	‘vine maple’
	[Dik’ε’li ^(ʔ) m–au]	/tik’alim–aw/	‘small vine maple’
c.	[ma’Dəl]	/matl/	‘pheasant’
	[ma’a’Də ^(ʔ) l–au]	/matl–aw/	‘little pheasant’

³ These forms are immediately followed by a set of similar words translated as both ‘wing’ and ‘small goose’, some of which include an additional /s/ or /sk/ after the /p/. I have not attempted to sort these out.

Where a transitional glide occurs between the stem and suffix, Jacobs often transcribes glottalization on that glide. Noncrucially, this is phonemicized here as a feature associated with the underlying vowel.

(5) a.	[ʃa·'Diyu]	/satiyu/	'comb'
	[ʃa'a'Di'w-au]	/satiy _u -aw/	'tiny comb'
b.	[ʃa·'yu]	/sayu/	'basket (?)'
	[ʃa'a'yu'w-au]	/say _u -aw/	'tiny basket'
c.	[kʰi'yu]	/kʰiyu/	'maul'
	[kʰi'yu'w-au]	/kʰiy _u -aw/	'little maul'
d.	[ʃiya ⁿ ']	/siya ⁿ /	'leg'
	[ʃi'a·'u ⁿ]	/siya ⁿ -aw/	'little leg'

The example (5d) shows that stem-final /a/ merges with the suffixal /a/, seen also below.

The Alsea pattern indicates a glottalization feature that can be realized (or perceived) on various [+sonorant] segments in the string – see COLE (1987) on Coeur d'Alene glottal harmony. Diminutive glottalization is found in many other languages of the Northwest, especially in the Salish family, located to the north of Alsea. In her survey of diminutive symbolism, NICHOLS (1971: 840) notes that “Glottalization is a northern, typically Salish, form of shift, concentrated particularly in the state of Washington and spread at least to neighboring Wishram.” Doubling of the vowel with insertion of an actual glottal stop, plus some sonorant glottalization, is described for Twana with somewhat similar patterns in Upper Chehalis and Quinault (references in NICHOLS 1971) and Coeur d'Alene (REICHARD 1938).

NICHOLS (p. 838-839) suggests that glottalization is an expression of markedness as attested for various sound types in diminutive symbolism (including shifts to non-phonemes): “[The Salish] languages variously use glottalization of all sonants, glottalization of initial sonorants of reduplicated words, insertion of a glottal stop after reduplicative syllables without apparent conditioning factors, and glottalization of vowels.” Unlike in Salish, Alsea glottalization is not associated with reduplication, although this exists in some verb derivations. It also never affects obstruents, as attested for Wishram. See also below for further discussion.

Uvular raising

The uvular consonants /q, q', q^w, q'^w, x, x^w/ raise to their velar equivalents in the presence of the diminutive suffix. The higher resonant frequencies associated with velars are claimed as the basis of the shift, representing smaller size sound-symbolically (NICHOLS 1971).

(6) a.	[qwi'']	/q ^w i/	'boat, canoe'
	[Gwi·'y-au]	/k ^w i-aw/	'child's small canoe'
b.	[ʃa'q'al]	/saq'l/	'fish tail'
	[ʃa'a·'k'əl-au]	/sək'l-aw/	'tiny fish tail'
c.	[ʃi:'q ^u]	/siq ^w /	'abalone'
	[ʃi'i'Gw-au]	/sɪk ^w -aw/	'small abalone'
d.	[tʃq'ali·'m]	/cq'alim/	'willow'
	[tʃk'al'i·'m-au]	/ck'alim-aw/	'little willow'
e.	[k̥'ina'q]	/k'naq/	'snake'
	[k̥'in'a·'G-au]	/k'nak-aw/	'tiny snake'
f.	[q'i''ya]	/q'iy'a/	'torchlight'
	[k'i'i'yau]	/k'iy'a-aw/	'tiny torchlight'
g.	[q'u·ya'']	/q'uya/	'sardine'
	[k'u'u'yau]	/k'uya-aw/	'tiny sardine'
h.	[yε'ɫGwəlt']	/yaɫq ^w lt'/	'loon'
	[yε'ε'ɫGwəlt'-au]	/yaɫk ^w lt'-aw/	'young little loon'
i.	[GaDʒi''li']	/qacil'iʔ/	'wolf'
	[GaDʒi'i· ^(s) li ^(s) y-au]	/kacɪl'iʔ-aw/	'little wolf'
(7) a.	[p'ʃa·'x]	/p'sax/	'fish spear'
	[p'ʃa''ax-au]	/p'sax-aw/	'little spear'
b.	[x̣a·'ɫət']	/x̣aɫt'/	'timber squirrel'
	[x̣a·'ɫət'-au]	/x̣aɫt'-aw/	'little timber squirrel'
c.	[Gwa'i·'ṇxal]	/k ^w aʔi ^{ṇ} xal/	'butter clam'
	[Gwa'i·'ṇxa ^(s) l-a'u]	/k ^w aʔi ^{ṇ} xal-aw/	'little butter clam'
d.	[tʃqε'ṇx]	/cqiṇx/	'dog'
	[tʃGi'i(·)'ṇx-au]	/ckiṇx-aw/	'puppy'
e.	[ɬk̥'aGa'uɣamt]	/ɬk̥'aqawɣamt/	'dove'
	[ɬk̥'aGa'a'uxamD-au]	/ɬk̥'akawɣamt-aw/	'little dove'
f.	[q'a ^(s) la'xat]	/q'al'aɣat/	'butterfly'
	[k'a ^(s) la·'xaD-a'u]	/k'al'axat-aw/	'little butterfly'
g.	[ɬa·'p'aɣan]	/ɬap'aɣan/	'wart'
	[ɬa'a'p'axan'n-au]	/ɬap'axan-aw/	'little wart'
h.	[ɬi ^{ṇ} xayu]	/ɬiṇxayu/	'adze'
	[ɬi'i ^{ṇ} xai'w-au]	/ɬiṇxayu-aw/	'little adze'

Frachtenberg does not record this change in place of articulation, potentially because he was unsure of what he heard and imposed paradigm leveling in his analysis – JACOBS (1954: 47) describes him as “phonetically untrustworthy”. In other contexts, there are certainly examples of Frachtenberg’s handwritten <k> that become <q> in his published

texts, presumably because he realized that he must have misheard the sound when he first transcribed it.

Nichols reports raising of at least some uvulars to velars in Wishram, Sahaptin, and Tillamook – which, as an adjacent language, is a likely source for transmission of this areal feature to Alsea.

Durative

Interestingly, Jacobs provides some evidence of glottalization occurring in the stem to which the durative suffix *-aw* is attached.⁴ It is homophonous with the diminutive.

- | | | |
|--------|--------------------|--------------------------|
| (8) a. | [Gali'h-tʂx] | ‘is tired’ |
| | [Ga'li'hy-au-tʂ] | ‘beginning to get tired’ |
| b. | [t'î'q'wə'l-a] | ‘undressed, naked’ |
| | [t-t'î'q'wl-au-ʂx] | ‘is undressing himself’ |
| c. | [’ilD-î'm] | ‘(going to) talk’ |
| | [t-i'î'D-au-x] | ‘is talking to him/her’ |

Note the lack of uvular raising, so the stem is not identical to the diminutive form. Although diminutive and durative seem like unrelated categories, a deeper connection is not impossible; for example, the Coeur d’Alene diminutive and “repeated action” are expressed by the same processes of reduplication and glottalization (Reichard 1938).

Tillamook, the Salish language that is Alsea’s immediate northern neighbor, does not appear to have diminutive glottalization, and the other Salish languages are some distance away. However, EGESDAL & THOMPSON (1998: 238, 259) report that the Tillamook infix /ʔ/, which marks the ACTUAL aspect for an “ongoing or incomplete” activity, has the effect of glottalizing an adjacent sonorant consonant. More broadly, many Salish languages have a process of glottal infixation in the stem, which is associated with the actual aspect. For instance, in Saanich, the majority of stems mark the actual in this manner; generally speaking, the stressed initial syllable takes a glottal stop coda, and any sonorant in the stem is glottalized: *ʔlən* ‘eat’ > *ʔiʔlən*’ (MONTLER 1998: 98).

The homophony between the diminutive and durative in Alsea, combined with the existence of actual-aspect glottalization in the adjacent language Tillamook, may have been crucial components of the development of a shared exponence of diminutive and durative aspect.

⁴ There is also evidence that Frachtenberg noted some glottalization in these contexts. For instance, in his notes he gives the transcription *pîyâ'x-a'x* for ‘is hiding’ but *λ-pîâ'x-a'-x* for ‘is in act of hiding it’. Based on his practice elsewhere, the spelling of two adjacent vowel letters indicates a glottalization feature of some kind, so these would be phonemicized as /pyax-x/ and something like /t-pyax-aw-x/. In general, though, such clues are absent.

Root vowels

Some diminutives show a longer stem form than the simple noun.

(9) a.	[Dəma·'mʂ]	/tmams/	'nephew'
	[Dəma''ma'ʂ-au]	/tmaʂas-aw/	'little nephew'
b.	[nu'nʂ]	/nuns/	'elk'
	[nu'nu·'ʂ-au]	/nuŋus-aw/	'tiny elk'
c.	[t'u·'lt'ə'l]	/t'ult'l/	'fish backbone'
	[t'u ^(ʰ) lu't'əl-au]	/t'u ^l ut'l-aw/	'tiny fish bone'
d.	[DJa·'mDju]	/camcu/	'tail'
	[DJa'ma·'Dju ^(ʰ) w-au]	/camacu-aw/	'little tail'
e.	[Duɣlənu'is]	/tq ^w ɫnuys/	'joint'
	[Duklənu'yū·'ʂ-au]	/tk ^w ɫnuỹus-aw/	'little joint'
f.	[ya'ixə'it']	/yayx-āyt'/	'tracks, trail'
	[ya ^(ʰ) ya·'xait'x-au]	/yayax-āyt'-x-aw/	'little tracks'
g.	[q'a'ifiyu]	/q'āyɫ-iy-u/	'grey squirrel'
	[k'a'ya·'fiy-au]	/k'āyɫ-iy-aw/	'little grey squirrel'
h.	[DJa'ut'ən]	/cawt'n/	'wedge'
	[DJa'wa·'Dən-au]	/cawāt'n-aw/ ⁵	'little wedge'

In most cases, the change is insertion of a vowel after the medial consonant that follows the stressed vowel in the short stem. Here that vowel is always a copy of the preceding vowel, but this is not necessarily the case in the language (BUCKLEY 2007).

A similar alternation is robustly attested in the Alsea verb system, where (simplifying a bit) the FULL stem contains a vowel absent from the SHORT stem (BUCKLEY 1989, 2007). Interestingly, one common context for the similar stem is the durative suffix *-aw*: /yáls-x/ 'go home!', /yalás-aw/ 'is returning'. The semantic force of the stem alternation for verbs requires further investigation, but seems largely aspectual. This stem choice for the diminutive may be the result of analogy based on the suffixal homophony.

Note that FRACHTENBERG'S (1918, 1920) less precise transcriptions do not indicate any stem modification in vowel or sonorant glottalization (which he rarely transcribes in any context) or uvular raising (a feature on which he often differs with Jacobs). He does, however, confirm the presence of the full stem, or "vocalic change" as he calls it.

⁵ Jacobs gives two different transcriptions for the /t/ in this word, with and without glottalization. FRACHTENBERG (1920: 265) writes plain /t/ for a word defined as 'chisel', but since this appears only in his vocabulary at the end of the volume, rather than in his texts, it may come from work in 1900 by Livingston Farrand whose notes Frachtenberg incorporated.

(10) a.	[məha'it]	/mhayt/	'old man'
	[məhaya'd-au]	/mhayat-aw/	'little old man'
b.	[tsûdaï's]	/cutays/	'salmon'
	[tsûdayâ's-au-tuxs]	/cutayas-aw-tx ^w s/	'small salmon' (COLLECTIVE)
c.	[qâ'alt]	/q'alt/	'strong, man'
	[qala't-au]	/q'alat-aw/	'boy'

These phonemicizations are partly based on Jacobs' transcriptions, which are not reproduced here.

Augmentative

FRACHTENBERG (1918: 250) identifies the Alsea suffix he writes *-tsLō* as the augmentative: "It expresses LARGENESS and is also used as a derogatory suffix, especially when following nouns that denote age and sex." Jacobs most often writes the suffix *-t'slu* with an ejective affricate, phonemicized here as /c'lu/. No changes to the stem in glottalization or raising are attested, confirming that those processes form part of the diminutive symbolism.

(11) a.	[na ^(ʔ) tḵ]	/natk/	'river'
	[na''tGi-t'slu]	/natk-c'lu/	'the Siletz River'
b.	[Gwa'i·'nḵal]	/k ^w aʔi ⁿ ḵal/	'butter clam'
	[Gwa'i·'nḵal-t'slu]	/k ^w aʔi ⁿ ḵal-c'lu/	'big butter clam'
c.	[la·'p'axan]	/lap'axn/	'wart'
	[la·'p'axa'n-t'slu(·)]	/lap'axn-c'lu/	'big wart'
d.	[ša·'Diyu]	/satiyu/	'comb'
	[ša ^(ʔ) Diyu-t'slu']	/satiyu-c'lu/	'big comb'
e.	[ši·'nGəm]	/si ⁿ km/	'red cedar'
	[ši ⁿ Gəm-t'slu]	/si ⁿ km-c'lu/	'big red cedar'
f.	[k'wa'li']	/k ^w al'ih/	'poor orphan'
	[k'wa'li'hi-t'slu]	/k ^w al'ih-c'lu/	'nasty little orphan'
g.	[lGu'u'xst]	/lk ^w uxst/	'it's light'
	[lGu'u'xšDi-t'slu]	/lk ^w uxst-c'lu/	'it's very light'
h.	[yahaya ^(ʔ) t]	/yahayat/	'a big one'
	[yahaya ^(ʔ) t'slu]	/yahayat-c'lu/	'biggest, too big'
(12) a.	[ši·'qu]	/siq ^w /	'abalone'
	[ši·'Gwə'-t'slu]	/siq ^w -c'lu/	'big abalone'
b.	[tʃqε ⁿ ḵ], [tʃGi ⁿ ḵ]	/cqinḵ/	'dog'
	[tʃGi ⁿ ḵə'-t'slu]	/cqinḵ-c'lu/	'ugly dog'

c.	[qʂa'u ^{n(°)} t]	/qsaʔu ^{nt} /	‘it’s heavy’
	[qʂa'u ^{n(°)} t'ʂʌ]	/qsaʔu ^{nt} -c'ʌ/	‘it’s too heavy’
d.	[p'ʂa·'x]	/p'sax/	‘fish spear’
	[p'ʂa'xa-t'ʂʌ]	/p'sax-c'ʌ/	‘big spear’

A few forms occur with both suffixes.

(13) a.	[t'au'a'i ^(°) y-au]	/t'aw'ay'-aw/	‘little horse, colt’
	[t'a'wa'i ^(°) y-au-t'ʂʌ]	/t'aw'ay'-aw-c'ʌ/	‘ugly little horse’
b.	[tʂGi'i ^(°) 'n _x -au]	/ckj ⁿ x-aw/	‘puppy’
	[tʂGi'i ^(°) 'n _x -au-t'ʂʌ]	/ckj ⁿ x-aw-c'ʌ/	‘ugly puppy’

DRUCKER (1939: 82), reporting on work with Leona Ludson and John Albert in 1933, gives the form *natkiautclo* ‘Big Creek’, i.e. /natk-aw-c'ʌ/, as the name of a campsite “a short distance up Big Creek (above modern Waldport)”.⁶ This word shows the two suffixes in the same order, although in this case the augmentative apparently denotes literal size rather than derogation as in the two examples from Jacobs.

The diminutive is to my knowledge attested only inside the augmentative; but since their cooccurrence is uncommon, this could be an accidental gap. It is perhaps unknowable at this time whether the opposite ordering, with the diminutive taking scope over the augmentative (e.g. ‘small ugly dog’), was a grammatical possibility.

Residue

A few words have complications in the length of the stem: elements added or deleted under suffixation, of uncertain function or meaning. Both the diminutive and augmentative show such examples, although ‘horse’ is the only stem for which both suffixations are attested.

(14) a.	[t'a'wa'y ^u]	/t'aw'ay'-u/	‘horse’
	[t'au'a'i ^(°) y-au]	/t'aw'ay'-aw/	‘little horse, colt’
	[t'a'wa'i-t'ʂʌ]	/t'aw'ay'-c'ʌ/	‘ugly horse’
b.	[k'i·'l]	/k'ilh/	‘rock’, ‘stone’
	[k'i·'lhuw-au]	/k'ilh-u-aw/	‘seed’
c.	[Da·'Diḵ'au]	/tatik'-aw/	‘deadfall trap’
	[Da·'Diḵ'iw-au]	/tatik'-iyu-aw/	‘little deadfall trap’

⁶ It is not clear what “above” means in this context, whether north up the coast or east up the Alsea River. The Siletz River, which is called /natk-c'ʌ/, is to the north but outside Alsea territory.

d.	[Ḡa·'DJəmʂt']	/qacmst'/	'spider'
	[ḠaDJəmʂthə-t'ʂlu]	/qacmst'-a?-c'lu/	'big spider'
e.	[t'ʂaiʂi·'nʂ]	/c'aysi ^{ns} /	'pimple'
	[t'ʂaiʂi' ^{nʂ} lə-t'ʂlu]	/c'aysi ^{ns} -lə-c'lu/	'big pimple'

Some of these forms may simply be irregular, but a combination of phonological and morphological factors might account for others. For example, the final /u/ of 'horse' (borrowed ultimately from Spanish *caballo*) is likely to be identified with the element found in the sometimes-nominalizing suffixes *-ayu*, *-iyu*; it can also be seen to drop in *q'a'iliyu* 'grey squirrel' above, although not in *ʂa-'Diyu* 'comb'.

Conclusions

Because Frachtenberg's published data do not include either the glottalization or the uvular raising in diminutives, these processes are available for study only in Jacobs' notes. The two processes are individually well-attested in the Northwest, although they do not seem to occur together with great frequency. Their presence in Alsea is presumably from contact, but while uvular raising is plausibly from Tillamook, glottalization may be from a more distant source, or from a nearer language that is not well recorded.

The precise relation between the diminutive and continuative *-aw*, and the role of stem augmentation (i.e. its source and exact function), remains a topic for future study.

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