High consonants, articulatory transitions, and nonhigh vowels in Comox

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Like other Salish languages, the Comox language has an aud ible W glide after a labiovelar consonant before a nonround vowel. In addition, the Comox language has an analogous audible Y glide after a palatal consonant before a nonpalatal vowel. Furthermore, a W or Y glide after a word-initial consonant can and often does attract the primary stress away from the phonemic vowel.

1 Introduction

Evidence is presented that in the so-called Mainland Comox language (Homalco, Klahoose, and Sliammon) we might consider writing a raised Y as a diacritic mark after the palatal fricative and affricates before a nonhomorganic vowel, even though this glide appears at the subphonemic level and is not a phonemically distinguishing feature -- there is no /C/ versus /C^y/ phonemic distinction. (Here the capital /C/ is meant to stand for any consonant.) This analysis is an expanded restatement of a phenomenon I reported in my 1970 paper for the Fifth International Conference on Salish Languages. When I described the phenomenon to a colleague at work, his immediate reaction was to remark, "Oh, schwainsertion." His comment may indicate that University of Maryland professors teach their students to assume the concept of schwainsertion as the analysis of first resort. The evidence shows that this Y glide is not an instance of schwainsertion, but is parallel with the audible articulation of W after a rounded consonant before a nonround vow el.

Evidence is also presented that Homalco, K lahoose, and Sliammon lack underlying high vowels. The phonemes written as /i/ and /u/ are most frequently pronounced as $[\epsilon]$ and [0], but they can be mistakenly written for phonetic [i] and [u], even though the latter are most often the phonemic sequences /ey/ and /ew/.

2 The high consonants

High consonants are those whose articulation involves raising the tongue body. The high stops, affricates, resonants, and fricatives in the language spoken by the elders of the Homalco, Klahoose, and Sliammon Bands have been written so:

č	(k)	k ^w
č'	(k')	k' ^w
j	g	
у		w
ý		ŵ
ě		x w

The following paragraphs will focus on the first and third columns, palatal and labiovelar. It is standard procedure to use a raised W as a diacritic mark when writing these labiovelar consonants. For phonemic reasons, Salishanists have written this raised W even before a homorganic vowel, where it is inaudible, even though a non-Salishanist might opine that the audible glide is inserted before a nonround (this is, nonhomorganic) vowel (if such a process of insertion were to be acknowledged, labiovelars and labiopostvelars could be indicated by a subscript lower-case omega, as in the IPA, such as /k/, or by a raised omicron, to mimic Aert Kuipers in *The Squamish Language*, such as /k⁰/).

In addition to the above, two words have been recorded in the Homalco dialect with the segment $/x^y$ / (IPA symbol c). These are lift it up a little higher $/x^y$ ifet/ [xyiftt] (/sefet/ [siftt] in Sliammon) and deer hoof rattle, the latter transcribed from language consultant Noel George as qwelolaxyen in June 1961 by one of Wayne Suttles' students.

3 "Two and a half" syllables, said Bill Gallegos.

When I started fieldwork on Sliammon in February 1969, I was struck by the pronunciation of the word for no/x^wa ?/. The most frequent pronunciation is for the initial $/x^w$ / to be lengthened and the vowel pronounced as a caratrather than a full vowel. Indeed it seems that the consonant takes the stress rather than the vowel, so that the result sounds like a stressed voiceless vowel pronounced with friction followed by a carat -- [xůa?]. In October 2002, Wayne Suttles showed me transcriptions by one of his students while at Sliammon in 1961. She wrote no as xua (note the raised dot after the consonant). When I was there in 1969, none of the speakers was voicing the u, but otherwise her transcription captures what I was hearing.

One common word consistently pronounced with a seemingly extra syllable is dog/\tilde{c} anu/, regularly pronounced [\check{c} 'éxno]. In summer 1969 I ask ed Bill Gallegos, a speaker who had thought about the language, how many syllables this word has. Without hesitation, he said "two and a half." We who are not native speakers might say there are three syllables, but he was a native speaker. Possibly he was expressing his knowledge that without a glottal stop, there could not be an extra syllable.

As my fieldwork progressed and I spoke with more and more native speakers, more and more of these words came into my field notes. For example, although the word root/kwamnač/ is sometimes pronounced [kwamnač], it is also often pronounced [kuamnač], reminiscent of the pronunciation for the word no. (This is also reminiscent of the old joke that a visitor to Mercy, Australia, could not complain about hair floating on the surface of a mug of the koala teaserved to him because everyone knows that the koala tea of Mercy is not strained.) The word for three /čalas/ is consistently pronounced [čéalas], similar to the word for dog. Examples of this phenomenon include, but are not limited to

rounded velar

	/k ^w amnač/	[k ^w ámnʌč]~[kúʌmnʌč]	root
	/k' ^w asta/	[k' wástn]~[k' únstn]	cup
	/x ^w a?/	[xúʌʔ]~[xúːʌʔ]	no
	/x ^w a?/	[xʊáʔa]	emphatic no
palatal			-
_	/čalas/	[čéʌlʌs]	three
	/č'anu/	[č'éʌno]	dog
	/č'agay/~/č'agəy/	[č'éʌgʌy]~[č'éʌgi]	spoon
	/jaja/	[ʃíʌʃ ^y ɪ]~[ʃ ^y ɛ́ʃ ^y ɛ]	cousin
	/jasu+/	[j*éso+]	yesterday
	/šat/	[š ^y ɛt]~[šíɛt]	high, up
	/yaθut/	[ίνθοt]~[yέθοt] do so	mething (for oneself)

The root of this last word also appears in the expression thanks for what you did for me, literally what you did for me is/was good

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/ʔəỷmut tə\theta ya\theta/ [ʔi mot th\theta iæ\theta]
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A raised vowel to show length when the vowel is not pure was used by Edward Sapir. It remains a useful device.

Of additional interest is the variation between the full and more common reduced forms of the pronominal enclitics

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/čax^{w}/_{cox}^{w}/_{cox}^{w}/_{cox}^{w} [\overset{c}{c}^{v}^{w}]^{c}[\overset{c}{c}^{v}^{w}]^{c}[\overset{c}{c}^{v}]^{w}] you (singular) /huhu^{t}^{v}4t/ [hóho^{t}^{v}5t] ^{w}4t/ [hóho^{t}5t] we went
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The words listed above have the low vowel /a/ immediately following the initial high consonant. The articulatory transition from the high consonant to the low vowel passes through an audible glide.

One remarkable feature of the pronunciation is that a word initial stress can and often will be moved from the phonemic vowel onto the consonantal offglide.

Many words presented so far have been of more than one syllable. Most single syllable words have not been observed to move their stress onto the consonantal offiglide, although the glide is still audible

/č'ax/	[č' ^y ɛxǐ]	ripe, cooked
/č' aἠ/	[č'' ^y ɛq๋]	fence
/ča/	[č ^y ε]	where?
/čam/	[č ^y ɛm]	how?

But when /čam/ is part of a longer phrase, the offglide can be pronounced as a full vowel

/x^wə čaməs/ [x^wʊ čéʌmɨs] cannot (nohow)

Here the word not $/x^w = 0$ is the reduced form of no $/x^w = 0$, functioning here as a proclitic.

Note the following reduplicated forms, where the initial offglide can take the accent:

Another piece of evidence that we could consider writing a raised Y in Sliammon is that the high consonant does not have to be word initial. For example, the suffix /- \tilde{s} a?/, used to derive multiples of ten, is often pronounced as [- \tilde{s} \tilde{y} \tilde{s} ?] or [\tilde{s} i \tilde{a} ?].

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On those occasions when an extra syllable is not heard, there is still a noticeably audible Y offglide.

One word not fitting this pattern is /čayeš/ [čéyiš] hand

however, the main vowel /a/ between two palatal consonants has already been raised and fronted to [e], the same sound as the expected offglide -- as in *three* and *dog* above.

This Y offglide also occurs after the plain velar /k/ in the loan words

and after the glottalized velar /k'/ in the native words

/k'əyk'ak'/ [k'^yi'k'^yæk'] crow

/k'awk'awnač/ [k'yawk'yawnač]~[k'yewnač] oystercatcher (When asking names of birds, I did so with the aid of an Audubon Society book with pictures. I do not know the name for oystercatcher in the local variety of English.)

This phenomenon of offglide before a nonhomorganic vowel can also be heard in the sequences /šu/, /ču/, and /č'u/, as in

/fišusem/[féš^yusɨm]the beach at Sliammon/peču/[píč^yu]cedar basket/čuʔu+qinem/[číuʔo+qɛnɨm]stealing food/č'umen/[č'íumɨn]a screw (not a nail)

Exceptions to this are rare, such as the word for child

/čuỷ/ [čuỷ?] child /čeyčuỷ/ [čí¹čuy?] children If a sequence such as $[\check{c}^y \epsilon]$, $[\check{c}^y u]$, or $[\check{c}^i u]$ is heard, it is a sequence of a high consonant plus a nonhomorganic vowel. It is not an instance of schwa insertion, any more than the W glide after a rounded velar or rounded postvelar is an instance of schwa insertion. The Y offglide and the W offglide are a unitary phenomenon.

This phenomenon must be taken into account when writing a dictionary of the language, as must the allophony of vowels. Just as each entry in an English dictionary has an indication of pronunciation, so each entry in a Homalco or Klahoose or Sliammon dictionary will need a phonetic transcription following the phonemic transcription. If this is done, the dictionary will be of use to language learners and to those of the newer generation whose language skills are less than those of today's language consultants. Otherwise, the dictionary will be of use to academic Salish specialists only.

4 The inherent height of vowels

My M.A. thesis, written under a deadline, contains no table of vowel phonemes because phone $[\epsilon]\sim[e]$ was still a problem. Not until after the deadline for completion did I realize that this is an allophone of both the front vowel /i/ and the low vowel /a/, but in different contexts. Examples include

/ʔiɬtən/	[ʔɛ́+tɪn]	eat
/miʔin/	[méʔɛn]	carrot
/fin/	[ťɛn]	roast salmon
/č'ax̆/	[č' ^y ɛxǐ]	ripe, cooked
/ča/	[č ^y ε]	where?

Other examples appear throughout this presentation.

The four vowel phonemes and their features are

	i	θ	a	u
high	<u>-</u>	0	-	<u>-</u>
low	-	0	+	-
front	+	0	0	-
back	-	0	0	+

In his Southern Puget Sound Salish: Texts, Place Names, and Dictionary, Warren Snyder wrote the four vowels as $\frac{8}{9} \frac{1}{4} \frac{1}{6}$.

In Comox, when schwa is followed by /y/or/w/ in the same syllable, they

coalesce to form a monophthong with these characteristics

	өу	əw
high	+	+
low		-
front	+	-
back	-	+

Note that the vowels /i/ and /u/ are [-high] while the monophthongal sequences /ey/ and /ew/ are [+high]. Absent a high consonant, the most common values for /i/ and /u/ are [ɛ] and [o]. Examples of this are mushroom /pileq/ [pɛlʌq], bow (of boat) /qa+un/ [qá+on], and the beach at Church House /mušqin/ [mošqɛn]. Conversely, the monophthongs /ey/ [i] and /ew/ [u] are lowered to be mid vowels only in the environment of a [+low] consonant -- a postvelar such as /q/.

Examples of the coalescence of /əy/ and /əw/ appear in one method of making plurals, which consists of the prefix {C¹eC²-} --

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Singi	ılar		Plural	
/čuỷ/	[čuyʔ]	/čəyčuỷ/	[čí¹čuyʔ]	child
/qaymix ^w /	[qáymix ^w]	/qəyqaym ix ^w /	[qé ^e qnymix ^w]	human
/qawum/	[qáwum]	/qəwqawum/	[qóºqawum]	eye
/qigaθ/	[qég∧θ]	/qəwqiga0/	[qóºqeg∧θ]	deer
(here the histo	ric /w/ has be come	e/g/ before a vowel)	

Other examples of the phonemic sequence of /ey/ can be seen in comparative vocabulary items, such as:

Pentlatch	Homalco/Klahoose/Sliammon	
/sťəlmix ^w / [sťálmix ^w]	/fəymix ^w / [fí ⁱ mix ^w]	medicine

The sequences /iy//iw//uy//uw/ do not coalesce into monophthongs, as in seagull /hiyum/ [héyum?], arrow /hiyhiy/ [héy hey], horse /tiqiw/ [téqew], first, very /hihiw/ [héhew], the whole body /gi?iws/ [gi?ews], follow /tuyap/ [tóy?np], and get aboard /?uwe+/ [?ówv+]. Those words which (on the basis of paradigm atic and comparative evidence) can be shown to be exceptions are few in number, such as come/be from /tuwa/ [túwn] rather than *[tówn] -- compare coming from /tutuwa/ [tútuwn], which shows that this is not schwa, as in freezing above.

4.1 Summation

When a phonetic [u] occurs without a high consonant, we must first assume that it is a realization of /ew/. One example of this is the word for freeze /tew/, pronounced [tu?]. The phonemic vowel appears in the reduplicative freezing /tetew/ [tátu?]. and the ablaut form appears in the stative frozen /ta?git/ [ta*agit]. Those words which (on the basis of paradigmatic and comparative evidence) can be shown to be exceptions are few in number, such as man, hunter /tumiš/ [túmiš].

When a phonetic [i] occurs without a high consonant, we must first assume that it is a realization of $/\Theta y/$. One example of this is the word for good $/?\Theta y/$, pronounced [?i?]~[?i¹]. The underlying schwa reveals itself when it changes in the negative

The exceptions to this are few, such as big /tih/ [tih].

The evidence in this section four shows that, at the phonetic level, the high vowels [i] and [u] almost never occur without being caused by a neighboring high consonant.

Appendix: Comments on some of my previous papers

1970. Some Phonological Rules in Mainland Comox. M.A. thesis, University of Victoria.

My thesis committee asked me to describe the phonology of Sliammon, which I intended to do within a theory I took to the field. However, the data did not fit the theory I originally intended to use. Luckily, James Hoard taught a phonology course during 1969-70 and presented a theory more compatible with the data. When we are striving to document endangered languages accurately, we must be ready to abandon our preconceived theories.

Although I discussed the phone mic inventory of consonants, my discussion of vowels was ham pered by the fact that I did not recognize the overlapping nature of the phonemes /i/ and /a/ until after the deadline for completion (I presented the four phonemic vowels in my paper for the Fifth Intemational Conference on Salish Languages). In addition, I did not state the existence of the glottalized resonants /ŷ ŵ n n 1'/, although I wrote them in subsequent papers. It was not necessary to state their existence before writing those subsequent papers.

After completing the thesis, I gathered data on the diminutive, which (as in many other languages) is formed in ways that challenge otherwise neatly stated rules; as well as data on that reduplicative form which, as Mary Haas (during a 1974 seminar) said about Norwest Coast

languages, refers to paired body parts, for example a name grandchildren of the aforementioned Bill Gallegos sometimes called each other -- big eyes [títhawus] from big /tih/ plus eye /-awus/.

1978. Pronominal paradigms in Sliammon. XIII International Conference on Salishan Languages.

The appendix of this paper presents evidence that the so-called "control" transitive shows intent (regardless of success, which calls into question the extent of control) and the so-called "noncontrol" transitive shows success or lack of success (in other words, result) regardless of intent. In narratives, these two are paired in a way analogous to the once common English expression "have a look-see." In his 2003 book, Honoré Watanabe presents an extended discussion of intent transitive versus result transitive.

Because my typewriter did not have curly brackets to write morphophonemes such as {-nW-} and {s} in standard morphophonemic notation, I used the standard heuristic substitution of double virgules (slash marks) during 1978.

1980. The Passive in Sliammon. Proceedings of the Annual Meeting of the Berkeley Linguistics Society 6. pp. 278-286.

During the fall of 1979, I had an idea for a paper on the passive voice and constructed a series of sentences. When I presented them to language consultant Mary George, she rejected them. But the next morning, she said that she had been thinking about the sentences during the night and "they could be like this." She then presented a series of sentences which illustrated what I had been attempting to achieve.

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