

Okanagan sandhi & morphophonemics

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In this informal survey of some of the prosodic and morphophonological phenomena of Okanagan I discuss truncated and elided forms, multi-word lemmas, rhetorical length of vowels and consonants, various simplifications of consonant sequences, ?-V metathesis, laryngealization of y, some cases of i → a lowering, and a-insertions.

1 Introduction

This is an informal survey of some of the prosodic and phonological phenomena that take place in Okanagan at sentence-level, phrase-level, and word-level. Scantiest is the survey of sentence-level prosody, more elaborate the accounts of phrase- and word-level phenomena.

2 Sentence level phenomena

Here I do not provide a full account of the intonation patterns of Okanagan sentences, but only some coarse examples of normal speech truncation, elision, and rhetorical vowel and consonant length.

2.1 Truncated and elided forms

Many high-frequency lexical items have truncated or elided variants in normal speech:

t/e form	full form	gloss
níkna	níkxna	Goodness!
n'u	n'ín'w'i?(s)	if and when, in a while
ya ^ʔ t	ya ^ʔ yá ^ʔ t	all

All pairs of deictic stems decapitate their stem-initial vowel:

xi?	ixí?	that
xa?	axá?	this
ti?	ití?	not near oblique deictic (used in place of t + nominal)

taʔ	atáʔ	near oblique deictic (used in place of t + nominal)
kʔliʔ	ikʔlíʔ	(to) there
kʔlaʔ	akʔlaʔ	(to) here
tliʔ	itlíʔ	from there
tlaʔ	atláʔ	from here

Here I should also mention such variants as *ntils* and *ntils think*, used interchangeably by many speakers, and by such pairs as *taʔxʷ-* and *taw-* *get, obtain* (in compounds). Speakers regularly use one or the other variant, but understand the other often without realizing its phonological difference:

tawspíkst (RA) ~ taʔxʷspíkst he got gloves
 tawʔqʷaʔxán (RA) ~ taʔxʷʔqʷaʔxán he got shoes

2.2 Multi-word lemmas

Some Okanagan forms consist of more than one free morph, yet function as single lexical items, perhaps on their way to becoming single words. Not unlike such English cases as *nevertheless, can not, of course, because, etc.*, with varying gradients of compositeness, they probably represent the common linguistic phenomenon of closed-class lexicalizations, that is the creation of discourse functors (sentence conjunctions, complex prepositions) based on members of closed classes. This seems to me a phenomenon congruous with what linguists call *grammatic(al)ization* (but could be called *grammation*), the creation of a *gram* (hence *grammation*), or grammatical morph, from a lexical morph in certain syntactic environments. Homologously, as if to counter such common phenomena as truncation and elision, speakers add redundant material not only to lexical items, to produce such forms as *irregardless, unthaw, orientate, and continue on*, but also to functors, and produce complex prepositions, conjunctions and other multi-word functors, or *lemmas*, single entries in dictionaries. The process could be called *lemmation*, and deserves to be studied cross-linguistically. Here I give two examples with elided and full forms. A list of the several dozen such multi-word lemmas is not for this paper, but it would include all such items as *lut swit, nobody, lut pənʔkínʔ nowhere, laʔkínʔ where, how, t sʔiwt behind*, etc. Speakers and analysts are not always in agreement on how to write such forms (as one or separate words), and the Okanagan speakers and students of the language are no exception.

tʔíʔp	t nyʔíʔp	for ever, for good
cʔəʔt	cʔxiʔt	like

2.3 Rhetorical lengthening of vowels and consonants

The rhetorical lengthening of vowels is well known. A pair in context is the following:

məʔ kən k'iwlx Until I am old
məʔ kən k'i·wlx Until I am very old

Such rhetorical lengthening may be considered to border on the grammatical, because *ilf*[?] means *there* and *ilf*^{·?} means *they/things were there a while*, and the two forms are not interchangeable, but be that as it may, rhetorical lengthening is a useful diagnostic for stress placement.

Many speakers have a difficult time deciding where primary stress falls on words with more than one vowel. The problem is nearly solved by adding rhetorical length to one of the vowels. Speakers will add it with regularity to the vowel that in normal speech is stressed. I say "nearly solved" because there is a slight complication: the unstressed word final vowels of some words may also be lengthened, producing competing pairs of forms, for example,

ní·kna or níkna·

I think long unstressed final vowels parallel the onomatopoeic lengthening of word-final consonants as in:¹

t'i? liw· It makes a ringing sound
ʔix^w· full of holes
k^wa? t'i? ʔa^s· ʔa? cx^wuy, cənt'ix^wlcən. It [a jet plane] goes ʔa^s· when it goes, it sounds different (SL)

3 Phrase-level phenomena

3.1 Simplification of lut t' to lut

Factual negatives are formed periphrastically with *lut* and the proclitic *t'* immediately before the predicate verbal, nominal, or adjectival.

lut kən t' ʔast I am not well.
//lut t' ʔast// lut t' ʔast [lut' ʔast] He is not well.

¹I cannot identify Okanagan ideophones, but I find that different speakers have their ways of imitating various sounds such as the sound of a jet plane, the crying of a baby, the hollering of Gopher in pain, not to mention the speech of mythological characters such as Meadowlark, Raven, and Coyote.

//lut t' alá?// lut t' alá? [lut' alá?] She's not here.
 lut t'a ʔx^wuy k'al citx^ws.² He hadn't gone to his house.
 lut t'a c'ístəm //c-ʔiʔn-st-m//³ iʔ sənt'áluyaʔqən We don't eat the --.
 lut t'a cq^wəlq^wflstx^w. You haven't talked to him/don't talk to him.

The orthography adopted by the Okanagan and the Colville preserves the underlying form and writes **lut t'** when the two words are contiguous.

3.2 Coalescence of n + n at word boundary

The **n** of **kən** coalesces with a following word-initial **n**:

//kn nʔuʔx^w// kn nʔuʔx^w [kənʔúʔx^w] I went in.
 //kn nstils// kn nstils [kənstils] I think.

3.3 a-insertion after proclitics before words that begin with resonants

Words that begin with **n**, **l**, **y**, **w** cause the insertion of **a** after preceding proclitics. The insertion of **a** before certain grammatical elements is discussed in the next subsection.

//k'ln+ʔiʔtk// k'la nʔiʔtk to the north
 //tl' n+yx^wut// tlaʔ nix^wút⁴ from inside
 //lútiʔ ʔ nʔuʔx^w// lútiʔ ʔa nʔuʔx^w. Before he went in.
 //cuntm iʔ t ʔiws// cúntəm i ʔa ʔiws⁵ His dad told him.
 //iʔ t ylmix^wm// i ʔa ʔilmix^wm by the boss
 //iʔ ylmix^wm// (y) a ʔilmix^wəm the boss⁶

²a-insertion here and in the next two examples correlates with the presence of the initial morph of the word that follows. See 3.4.

³See 4.4.2.

⁴See 3.4.6. for discussion of the movement of glottalization.

⁵See 3.5. for discussion of the loss of ʔ.

⁶The proclitic article **iʔ** functions as described, and with the added complications that the **ʔ** is lost, and the **i** desyllabifies. Subsequently the **y** is optionally lost. See also 3.4.1.

3.4 a-insertion between proclitics and certain grammatical elements

Besides the phonologically motivated a-insertion just discussed, proclitics that find themselves before certain grammatical elements add **a**. These elements are: {c-} *customary*; {c-} *habitual*; {t-} *back, again*; {kt-} *have*.

3.4.1 iʔ → a *art*

ixiʔ λ'əm' a cwísiʔstm //iʔ c-wis+m-st-m//⁷ That's the one we used to praise.

(Cf. taʔlíʔ cwísiʔstm. We praise him very much.)

cnitc a cqʷəlqʷflsts //cnitc iʔ cqʷlqʷilsts// He's talking to him.⁸

a tɛxʷuystxʷ //iʔ t+c+xʷuy-st-xʷ//⁹ what you brought back

isnəqsílxʷ a ktɛcítxʷəlɛ //iʔ kt-citxʷ-lx//¹⁰ My people that live there

3.4.2 kiʔ → kaʔ *comp*

... //kiʔ c-tr'qam-lx// ... kaʔ ctər'qáməlɛ. That's when they winter-dance.

3.4.3 t → ta *when*

kʷu taʔ ck'ám when we prayed

3.4.5 t → ta *article* before kt- *have*

k'im caʔkʷ kʷ taʔ ktɛxaʔxʔít, anxaʔxʔít, siwnt Whatever older relative you have, ask your older relative.

⁷The examples in this section show two types of what can be analyzed as relative clauses.

⁸The following contrasting construction has been offered, where *c-* is *cislocative* (and not *customary*): //cnitc iʔ c-qʷl+qʷil-st-s// cnitc iʔ cqʷəlqʷflsts. He's the one that called him from there. This may or may not be another example of contrived laboratory data. Note, incidentally, the surface phonetics [cqʷəlqʷflsc]. The orthography cqʷəlqʷflsts is adopted because it preserves the inflectional morphology.

⁹Note that the segmentation //iʔ t+c+xʷuy-st-xʷ// implies that *-st* is an inflectional suffix. This is probably not so. In practice I use a hyphen to mark not only the causative, but, sometimes, also the highly productive directional prefixes *t-* and *c-*.

¹⁰*kt-* derives verbs, and so the 3rd plural of an intransitive verb is marked with *-lx*. The plural of the noun *citxʷ* is *cətcítxʷ*.

The next three examples show what I call the alternate possessive construction:

kiʔlawna ʔaʔkscwílʔcən Andrew's book of jokes
sənkʔlíp ʔaʔksysyús Coyote's power
istəmtímaʔ ʔaʔksqəltmíxʷ my grandmother's husband

3.4.6 l, tɬ, kʰl → la, tlaʔ, kʰla

These proclitics also participate in this a-insertion. In addition the laryngealization of the l of tɬ may move (as a glottal stop) past the word-initial vowel of the i- set of person markers:

//tɬʰascxʷúy// [tɬaʔscxʷúy, tɬascxʷúy,] tɬʰascxʷúy since you came.

3.5 Loss of clitic-final ʔ

In allegro speech the word-final glottal stop of iʔ *art* and kiʔ *comp*, and also, less commonly, of tʰiʔ *emph* and taʔlʰʔ *much* (not a clitic), is often lost.

4 Word-internal morphophonemic processes

Here I discuss only phenomena that I have not treated in any detail elsewhere.

4.1 Insertion of a after ʔ

When stems that contain the sequence ʔV lose the stressed vowel to a strong suffix, they replace it with a (unstressed) as in the examples that follow. This obviously parallels the a-insertion discussed in 3.4. and 3.3.

ksʔastkínaʔ //ks-ʔistk+ínaʔ// stay for the winter (sʔistk *winter*)
kʷu nʔacxənlwísəs //kʷu n+ʔuc+xn+lwís-nt-s// he followed me around (nʔucxn
follow)
nʔacknítʰkʷ //n+ʔickn+itkʷ// he played in the water (etc.)
ʔakʷʔakʷtɬʰlʰx //ʔukʷ+ʔukʷt+lʰ+ilx// they're crawling around
nʔaskʷlítʰkʷəntp //n+ʔiskʷl+itkʷ-nt-p// you throw them in the water
sʔatxɬlxəlx //s-ʔitx+ilx-s-lx// They slept
nʔaʔxʷítʰkʷ //n+ʔuʔxʷ+itkʷ// go under water

a is also inserted after ʔ in reduplicated stems with stem-final stress:

k^wu sʔaʔífnəx //s-ʔit+ʔitn-x// Let's eat
spuʔús, spaʔpʔús heart, hearts
sənʔímaʔt sənʔamʔímaʔt grandchild, grand-children

4.2 Coalescence of like alveolars at word-internal morpheme boundaries

t + t = t
//s+n+k^wl'+cn+cut+tn-s// i ʔ sən^wəl'cncútəns in her kitchen
//iʔ s+x^wl+x^wilt-tt// iʔ s^wəl^wíltət our debts
//an-s+n+ʔq'+ut+tn// asnʔq^wútn your bed
//s+n+tiw+mist+tn// səntumístən store

n + n = n
//k^wu n+ʔaw+cin-nt// k^wu nʔawcín^t follow the sound of me
//naʔk'+nun-nt-m// naʔk^wnúntəm we sensed it (cf. lut a-ks-naʔk'+nun-m you won't sense it)

s + s = s
ixíʔ misqəl'tmíx^w //mys+s+ql't+mix^w// He is a better man (cf. //mys+yílmíx^wm// misílmíx^wəm better boss).
sməspíntk //s+mus+s+pin+tk// four years old;
//c-n+lq^w+lq^w+iw's-st-s// cənləq^wləq^wíw'sts He broke it in two.
//c-k^wis+k^ws-st-s// əck^wísk^wəsts He kept holding him.¹¹

4.3 Assimilation

4.3.1 -x *imptvs* → -x^w after x^w

nʔuʔx^w one goes in nʔuʔx^w-x^w go in!
c-nʔuʔx^w one comes in c-nʔuʔx^w-x^w come in!
pux^w blow pux^wx^w blow!
manx^w smoke manx^wx^w smoke!

This assimilation does not apply to the post-velar ʃ^w:

ptiʃ^w spit ptiʃ^wx spit!

¹¹The phonetic realization of this form is [əck^wísk^wəsc]. Again, we prefer this orthography because it preserves the integrity of the inflectional morphology.

4.3.2 s → ʃ before ʃ back, again

ixiʔ ʃəʃʔáçqaʔs //s-ʃ-ʔáçqaʔ-s// //dur-again-go_out-dur// he went back out
ʃəʃnísc //s-ʃ-nis-c// he left again

In the last example we also see the (known) dissimilation of -s to -c after s, ʃ.

4.3.3 s of s-...-x perfect, s-...-s durative → ʃ before ʃ- back, again

wayʔ ilíʔ ʃəʃxʷúyx //s-ʃ-xʷúy-x// Let him go back.
ixiʔ ʃəʃtkʷíwləxs //s-ʃ-t+kʷiw+lx-s// ikʷlíʔ She started to climb back.

Note that the s of ks- future is lost before ʃ-back, again:

kʷjəkəʃcúnəm //kʷj-ks-ʃ-cun-m// I'll tell you again. (Cf. kʷjksçúnəm I'll tell you).
çəmʔ ʃ laʔkín kʷjəkəʃmʷayʷxítəm //kʷj-ks-ʃ-mʷayʷ-xit-m// Some other time I'll tell you again (Cf. kʷjksmʷayʷxítəm I'll tell you).
kʷjəkəʃwpləʔtəm //i-ks-ʃ-siw+pləʔ-t-m// I'm going to ask you again. (Cf. kʷjksíwpləʔtəm I'm going to ask you).
kʷjəkəʃwəm //kʷj-ks-ʃ-siw-m// I'll ask you again. (Cf. kʷjksíwm. I'll ask you).
lut nixʷ akʃəʃqʷíwʷm //a-ks-ʃ-qʷíwʷ-m// Don't pick berries any more.

4.3.4 Lenition of c- cust, c- hab and c- cisl to s- before t, t', c, c'

stʷíxəl //c-tʷíxl// they have landed on the shore
stʷíxʷləm //c-tʷíxʷl+m// it's different
scústəlx //c-cus-st-s-lx// ʃsalistá. They referred to him as salistá.

4.3.5 Non-phonemic u after consonant and before rounded segments¹²

This occurs when another C follows the rounded consonant:

tukʷtán //tkʷtan// tules (cf. lkʷut, *lukʷút far, ...-itkʷ, *...ítukʷ)
çənluqʷlqʷíwʷsts //c-n+lqʷ+lqʷ+íwʷs-st-s// he broke it in two
tukʷtukʷʔút //tkʷ+tkʷʔ+ut// they walk

Some speakers write u, others omit it, others write ə, thus təkʷtán, çənləqʷləqʷíwʷsts, təkʷtəkʷʔút, etc.

¹²Not included here are cases of [u] //w// such as çuxwíx //c-wx+wix// they live there (cf. unreduplicated çwix).

4.4 Simplification of phonological sequences¹³

4.4.1 ...ʔn-ʔt-s → ...-ʔt-s

//k^wu ʔiʔn-ʔt-s i-st'ik'l// k^wu ʔiʔts ist'ik'al [k^wu ʔiʔc ...] He ate up my food.
//c-ʔaʔ+ʔiʔn-ʔt-m// c'aʔʔiʔtəm They are eating his ...

4.4.2 ...ʔn-st → ...-st

c'istəm //c-ʔiʔn-st-m// we eat it

4.4.3 ...s(t) + st → ...-st

æcx^wists //c-x^wist-st-s. He always makes him walk.
æcxásts //c-ʔas+t-st-s// He always does him good.
scústəlx //c-cus-st-s-lx// they call it ...

4.4.4 Other simplifications

In addition to the known loss of -nt *trans* in 1sg, 3sg, 3pl of all strong verbs (wik-n 1sg, wik-nt-x^w 2sg, wik-s 3sg, wik-nt-m 1pl, wik-nt-p 2pl, wik-s-lx 3pl), the following are found:

4.4.4.1 ...n-nt-is → ...-is

k^wu ncaw'cís //n+caw'+cin-nt-s// He mimicked me (Cf ncaw'cíntx^w you mimicked him).

4.4.4.2 nt → t after √ʔam in all persons

ixiʔ ʔamtís //ʔam-nt-is// he fed them
ʔamtín //ʔam-nt-in// I fed them

4.4.4.3 ...n-m-s → ...iʔs

This occurs in what I call future transitive forms conjugated with the i- set:

ksənʔúcxíʔs //ks-n+ʔuc+xn-m-s// he was going to follow (Cf. iksənʔúcxnəm I'm going to follow him).

¹³See Reichard 1935, sections 359-363 for similar phonological processes in Coeur d'Alene.

kʰtər'qíkiʔs //ks-t-tr'q+ikn-m-s// he was going to kick the ice again
məʔ ksp'áp'qiʔs //k-sp'+ap'+qn-m-s// he was going to whack her on the head

4.4.4.4 n → Ø / -s 3erg

//sp'+ap'+qn-nt-s// sp'áp'qəs she hit him on the head
//km'+km'+aʃn-nt-s-lx// kəm'km'áʃsəlx they grabbed him by the arms
məʔ k'wʔápqəs //k'wʔ+apqn-nt-s// she bites them on the head
kʰaʔaʔqís //k+aʔaʔ+qin-nt-s// he leaned them there
ixíʔ nʔúcxəsəlx //n+ʔuc+xn-nt-s-lx// They tracked them.
k'əʔwíkwxsəlx //k'əʔ+wík+xn-nt-s-lx// They found their tracks.

This also obtains in customary forms before -st:

əccústs //c-cun-st-s// he always says it

Note that n does not delete indiscriminately before s:

sʔaʔʔíʔəns //s-ʔaʔ+ʔíʔn-s// they started eating
//iʔ c'q'+iln-s// iʔ c'q'íʔəns his arrows

4.4.4.5 s → Ø before -ʔt possessor applicative

ʔúluʔʔtxʷ //ʔúl+iw's-ʔt-xʷ// she gathered its ...
kʷu nʔp'íw'ʔtəm //n+ʔp'iw's-ʔt-m// They divided our [land]. (Cf.
kʷu nʔp'íw'səntəm //n+ʔp'+iw's-nt-m They divided us).
kʷu siwʔts //siws-ʔt-s// they drank my ...

4.4.4.6 ks future + s → ks

kʷ jksíwm //kʷ j-ks-siw+m// I'm going to ask you
ksp'áp'qiʔs //ks-sp'+ap'+qn-m-s// he was going to whack her on the head

4.4.4.7 k of ks-...-(míx)aʔx inceptive → Ø in 2sg

kʷ sxʷúyaʔx you are about to go (Cf. kən ksxʷúyaʔx 1sg)
kʷ sʔaʔaʔmíxaʔx you are about to look for it (Cf. kən ksʔaʔaʔmíxaʔx 1sg)

4.4.4.8 xkin + st → xki-st

xkistxʷ //xkin-st-xʷ// What will you do to it.

4.4.4.9 Loss of n of //in-, an-// before s, and before ʃ of kin terms

ist'ík'əl //in-s+t'ík'l// my food
iʃsíncaʔ //in-ʃ+síncaʔ// my younger brother

but

inʃʃáx^w my dress

The loss of n of //in-, -an// before ks- *future intrans*, and ks-...-m *future trans*, kʃ- *to be* has been reported.

4.5 V-ʔ metathesis

A posttonic unstressed vowel followed by ʔC(C) → ʔVC(C):

cq'sáp'iłx //c-q'sápiʔ-łx// it takes them a long time (deliberate speech cq'sápiʔiłx).

k^wínmʔam //k^wín+maʔ-m// try (deliberate speech k^wínmaʔam).

k^wu cəcúnmaʔantp //c-cun+maʔ-nt-p// You've shown me things (deliberate speech cəcúnmaʔantp).

cúnmaʔan //cun+maʔ-nt-n// show how (deliberate speech cúnmaʔan). Cf.

k'ʃcnəmaʔxtwíx^włx (with simple loss of unstressed vowel). They're trying to talk sign language.

Note that if no vowel follows the ʔ then the sequence VʔCC remains intact, while a stressed vowel immediately after the ʔ causes the loss of the preceding vowel:

sámaʔ white person, ta nsámaʔcən //n+sámaʔ+cn// in English

səmʔús //sámaʔ+us// white face

smaʔscút //sámaʔ+scut// he acts like a white

səmʔíʃx^w //sámaʔ+iʃx^w// stick house

síl^waʔ sg big ta nsəl^wx^wʔitk^w //n+síl^waʔ+itk^w// by the big river

k^wsəl^waʔscút^w //síl^waʔ+scút-x// you're acting important

k^wsəl^wʔíʃx^w //síl^waʔ+iʃx^w// you have a big house

4.6 Laryngealization of $-C_2$ of x^wuy

Okanagan forms the plural of stems of certain shapes with $-C_2$ reduplication.¹⁴ Thus we have ʔáçqəʔ *go out sg*, and ʔáçəçqəʔlx *pl go out*; ʔíçkən *sg play*; ʔíçəçkən *pl play*, etc. If $-C_2$ is a resonant, then this is lengthened, as in $x^wəl \cdot x^wált$ *pl alive*, ʔúl \cdot uʔsəs *pl gathered*, etc. However, the stem x^wuy *sg go* has a plural $x^wúy \cdot ilx$ *//x^wuy'-y-lx// pl go* where the *y* is copied, and the first laryngealized.

4.7 Ambivalent stress

There are many cases of different stress valences that signify different lexical import; but there are also cases of dialectal and idiolectal variation. Here I provide only four examples:

$nt'ítps \sim nt'ítúps$. Dirty bottom
 $kən tk'wí'k'pxən \sim kən tk'w'k'pxən$ My shoe came off
 $m'áy'a'ʔtsən \sim m'áy'ʔtsín$ I told you
 $ta nsíłxcən \sim ta nsəlxcín$ in Indian

5 Summary

I have given an informal survey of some heretofore unreported or insufficiently reported morphophonemic phenomena of Okanagan. The purpose of the survey is to provide data that will be of use in typological and comparative studies. More reporting is needed for Okanagan and the other languages of the (southern) Interior, of all such phenomena, and others, such as ablaut, vowel lowering, and pharyngeal movement.

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¹⁴See Coeur d'Alene for possible clues as to the source of this process. Gladys Reichard writes $i' ts' áttstcEn$ in line 155 of *Coyote Steals Son's Wife* (Gibbons 1999, p. 26). See also çay'ác'əçqəʔ *they are going to go out* (Barthmaier 1996, p. 135). The glottalization of C_2 points to CVC- reduplication in Coeur d'Alene.