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:

<table>
<thead>
<tr>
<th>t/e form</th>
<th>full form</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>nlfka</td>
<td>nlfkxna</td>
<td>Goodness!</td>
</tr>
<tr>
<td>n’u</td>
<td>n’in’w’i?(s)</td>
<td>if and when, in a while</td>
</tr>
<tr>
<td>yaťt</td>
<td>yaťyăťt</td>
<td>all</td>
</tr>
</tbody>
</table>

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

| xiʔ | ixʔ   | that |
| xaʔ | axăʔ  | this |
| tiʔ | itʔ   | not near oblique deictic (used in place of t + nominal) |
ta?  atá? near oblique deictic (used in place of t + nominal)
k’li?  ik’lfi? (to) there
k’la?  ak’la? (to) here
tli?  itlfi? from there
tla?  atlá? from here

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

\[
tawspíkst (RA) \sim ta?xʷ^{\text{spíkst}} \text{ he got gloves}
\]
\[
tawq’a?xán (RA) \sim ta?xʷ^{\text{q’a?xán}} \text{ he got shoes}
\]

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 pon’kín’ nowhere, la?kín’ where, how, t s?iwt 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.

\[
t’íp  \quad t \ ny’íp \quad \text{for ever, for good}
\]
\[
c’óht  \quad c’óht \quad \text{like}
\]
2.3 Rhetorical lengthening of vowels and consonants

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

\[
\begin{align*}
mət \text{ kən}_\text{ k'i} & \text{iw}l\text{x Until I am old} \\
mət \text{ kən}_\text{ k'i} & \text{i} \cdot \text{w}l\text{x Until I am very old}
\end{align*}
\]

Such rhetorical lengthening may be considered to border on the grammatical, because illd means there and illd \text{?} 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 that 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,

\[
nf \cdot k\text{na or } nfk\text{na}:
\]

I think long unstressed final vowels parallel the onomatopoeic lengthening of word-final consonants as in:\footnote{I 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.}

\[
\begin{align*}
t'i & \text{ liw} \cdot \text{ It makes a ringing sound} \\
\text{ ti}x\text{?} & \text{ full of holes} \\
k'a? \ t'i? \ xa'c\text{?} & \text{ ta? cxuy, cən't'i}x\text{?}l\text{cən. It [a jet plane] goes } xa'c\text{?} \text{ when it goes, it sounds different (SL)}
\end{align*}
\]

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.

\[
\begin{align*}
lut \text{ kən}_\text{ t'} & \text{ xast I am not well.} \\
/\text{lut t'} & \text{ xast/ lut t'} \text{ xast [lut' xast] He is not well.}
\end{align*}
\]
She's not here.

He hadn't gone to his house.

We don't eat the --.

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*:

*I went in.
*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.

*I went in.
*I think.*

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

3 See 4.4.2.

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

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

6 The proclitic article *ʔ* functions as described, and with the added complications that the ? 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 i?—a a art

\textit{ixi\'? k'om\'a cw\'is\'i?stm} //i?_c-wis+m-st-ml? That's the one we used to praise.
(Cf. ta?l? cw\'isi\?stm. We praise him very much.)
\textit{cni\'tc a_cq"olq"flsts} //cni\'tc i?_cq"lq"flsts// He's talking to him.\(^8\)
\textit{a_\textit{tcx}"uy\textit{st}x″} //i?_t+c+x"uy-st-x″//\(^9\) what you brought back
\textit{insi\'q\'i\'x" a_\textit{kt\textit{c}t\textit{x}x}′"e\textit{i}x} //i?_\textit{kt-ct\textit{x}x}′"-\textit{lx}//\(^{10}\) My people that live there

3.4.2 ki?—ka? comp

... //ki? c-tr’qam-\textit{lx}// ... ka? ct\'or’q\'am\textit{lx}. That's when they winter-dance.

3.4.3 t—\textit{ta} when

\textit{k"u_\textit{ta}′_ck’t\'am} when we prayed

3.4.5 t—\textit{ta} article before \textit{kt}- have

\textit{k’im ca?k"x\'} k"_\textit{ta}′_k\textit{t}x\textit{a}x\textit{t}’\textit{x}\'\textit{lt}, anxa?x\'\textit{lt}, siwnt Whatever older relative you have, ask your older relative.

\(^{7}\)The examples in this section show two types of what can be analyzed as relative clauses.

\(^{8}\)The following contrasting construction has been offered, where c- is cislocative (and not customary): //cni\'tc i?_c-q"t+c+q"il-st-\textit{a}l\textit{lx} cni\'tc i?_cq"olq"flsts. 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 [cq"olq"flsts]. The orthography cq"olq"flsts is adopted because it preserves the inflectional morphology.

\(^{9}\)Note that the segmentation //i?_t+c+x"uy-st-x″// 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 -\textit{lx}. The plural of the noun cit\textit{x}″ is catcit\textit{x}″.
The next three examples show what I call the alternate possessive construction:

s?nk’l?p 4a?_ksysy?ws Coyote’s power
ist?mt?ma? 4a?_ksq?tlm?w my grandmother’s husband

3.4.6 l, tl’, k’l Behavior of the word-final glottal stop in this a-insertion

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

/tl’_ascx”uy/ [tl_a?scx”uy, tl_ascx”uy,] tl’_ascx”uy since you came.

3.5 Loss of clitic-final ?

In allegro speech the word-final glottal stop of i? art and ki? comp, and also, less commonly, of t’i? emph and ta?If 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 ?

When stems that contain the sequence ?v 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.

ks?astkfn? //ks-?istik+ina?/ stay for the winter (s?istik winter)
k’u n?acxnw?sas //k”u n+?uc+xn+lwfs-nt-s/ he followed me around (n?ucxn follow)

n?acknftk“ /n+?ickn+itk“/ he played in the water (etc.)

?ak“ak”tl’flx //?uk“+?uk“t+1+ilx/ they’re crawling around

n?ask“lkftk“ontp //n+?istik“l+itk“-nt-p// you throw them in the water

s?atxflxs?lx //s-?itx+ilx-s-lx/ They slept

n?aftk“itk“ //n+?ufx“+itk“/ go under water
a is also inserted after ? in reduplicated stems with stem-final stress:

\[ k"u_s\alpha t?i\tilde{n}ox \equiv s-\tilde{\eta}t+?\tilde{\imath}n-x// \text{Let's eat} \]
\[ spu?\tilde{t}s, spa?p\tilde{t}s \text{ heart, hearts} \]
\[ s\tilde{\eta}n\tilde{m}a?t s\tilde{\eta}n\tilde{a}m?\tilde{m}a?t \text{ grandchild, grand-children} \]

4.2 Coalescence of like alveolars at word-internal morpheme boundaries

\[ t + t = t \]
\[ \text{//} s+n+k"w?l'c+n+cut+tn-s/ i\_s\tilde{\eta}n\tilde{k}"w\tilde{c}\text{cuit?}s \text{ in her kitchen} \]
\[ //i\tilde{n} s+x"l+x\tilde{l}t-tl// i\tilde{n} s\tilde{\alpha}l\tilde{x}\text{flt}at \text{ our debts} \]
\[ //a-n-s+n+?q'+ut+tn// a\tilde{n}t\tilde{q}'\text{utn your bed} \]
\[ //s+n+tiw+mist+tn// \text{s\til{o}ntum\tilde{m}st\tilde{\eta}n store} \]

\[ n + n = n \]
\[ //k"u n+?aw+cin-tl// k"u n?'awc\tilde{m}nt \text{ follow the sound of me} \]
\[ //na?k'\text{+nun-nt-m}// na?k'n\tilde{u}nt\tilde{e}m \text{ we sensed it (cf. lut a-ks-na?k'+nun-m you won't sense it)} \]

\[ s + s = s \]
\[ i\tilde{n}f? \text{misqal}\text{tmfx} //\text{mys+s+ql?t+mix} // \text{He is a better man (cf. //mys+y\text{lmfx}m} \]
\[ \text{misilmfx}m\text{b}etter \text{ boss).} \]
\[ \text{sm\tilde{a}sp\tilde{m}ntlk} //s+\text{mus+s+pin+tk// four years old;} \]
\[ //c-n+?q'\text{+?q'+iw's-st-s// conlq'?\text{w'st}sts \text{He broke it in two.} \]
\[ //c-k"i\text{s+k"s-st-s// a\tilde{k}\text{fsk}\text{est}sts \text{He kept holding him}.^{11} \]

4.3 Assimilation

4.3.1 -x impetus \rightarrow -x\text{ after x}\text{ }

\[ n?utx\text{ one goes in n?utx}-x\text{ go in!} \]
\[ c-n?utx\text{ one comes in c-n?utx}-x\text{ come in!} \]
\[ pux\text{ blow pux}\text{-x} \text{ blow!} \]
\[ \text{manx}\text{ smoke manx}\text{x smoke!} \]

This assimilation does not apply to the post-velar \( x\):

\[ pti\text{ spit pti\text{x} x spit!} \]

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^{11}The phonetic realization of this form is [a\text{ck}f\text{sk}asc]. Again, we prefer this orthography because it preserves the integrity of the inflectional morphology.
4.3.2 s → t before t back, again

ix? tət?áccqá?z s //s-t-áccqá?-s// //dur-again-go_out-dur// he went back out
tətnfsc //s-t-nis-c// he left again

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

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

way' ilf? tətx'úyx //s-t-x'úyx-x// Let him go back.
ix? tətx'fwlèxs //s-t-t+k'iw+lx-s// ik'li? She started to climb back.

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

kʷ ʃkəcúñəm //kʷ ʃ-j-ks-t-cun-m// I’ll tell you again. (Cf. kʷ ʃksúñəm I’ll tell you).
cəm' t laʔkfn kʷ ʃkəm'ay'xəm //kʷ ʃ-j-ks-t-m'ay'-x-m// Some other time I’ll tell you again (Cf. kʷ ʃkəm'ay'xəm I’ll tell you).
kʷ ʃkəsfwaʔtəm //kʷ ʃ-j-ks-t-siw+plaʔ-ət-m// I’m going to ask you again. (Cf. kʷ ʃksfaʔtəm I’m going to ask you).
kʷ ʃkəsfwaʔm //kʷ ʃ-j-ks-t-siw-m// I’ll ask you again. (Cf. kʷ ʃksfwm. I’ll ask you).
lut nixʔ aktəq "l'iw'm //a-ks-t-q"l'iw'-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'

st'fxl //c-t'ixl// they have landed on the shore
st'fx'əm //c-t'ix'ə+m// it’s different
scústsf /c-cus-st-s-lx/ t salistá. They referred to him as salistá.

4.3.5 Non-phonemic u after consonant and before rounded segments

This occurs when another C follows the rounded consonant:

tukʷtán //tkʷtan// tules (cf. lkʷut, *lukʷút far, ..., itkʷ, *...itukʷ)
cənlq"lq"fw'sts //c-n+lq"+lq"+fw's-st-s// he broke it in two
tuk"tuk"út //tk"+tk"+ut// they walk

Some speakers write u, others omit it, others write a, thus tək"tán,
cənλq"λq"fw'sts, tək"tək"út, etc.

12Not included here are cases of [u] //w// such as cuxwix //c-wx+wix// they live there (cf. unreduplicated cwix).
4.4 Simplification of phonological sequences

4.4.1 ...tn-It-s → ...tt-s

//kwu ʔin-It-s i-st'ik'l/ kʷuʔitts ist'ik'əl [kʷuʔHc ...] He ate up my food.
//c-ʔat+ʔin-tt-m/ c'atʔitəm They are eating his ...

4.4.2 ...tn-st → ...st

c'ıstəm //c-ʔin-st-m// we eat it

4.4.3 ...s(t) + st → ...-st

əcweed //c-xʔist-st-s. He always makes him walk.
əcweed //c-xas+t-st-s// He always does him good.
scüstəlx //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 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

kʷu ʔncaw'cís //n+caw'+cin-nt-s// He mimicked me (Cf ncaw'cîntX you mimicked him).

4.4.4.2 nt → t after ʔam in all persons

ixf? ʔamtíts //ʔam-nt-is// he fed them
ʔamtíns //ʔam-nt-in// I fed them

4.4.4.3 ...n-m-s → ...l?s

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

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

13See Reichard 1935, sections 359-363 for similar phonological processes in Coeur d'Alene.
kθtθr'qθki?s //ks-θ-tr'q +ikn-m-s/ he was going to kick the ice again
mθt ksp'ápq'q's //k-sp'+ap'+qn-m-s// he was going to whack her on the head

4.4.4.4 n → 0 / -s 3erg

//sp'+ap'+qn-nt-s// sp'ápq's she hit him on the head
//km'+km'+aθn-nt-s-lx// km'km'áξšálx they grabbed him by the arms
mθt k"aqpq's //k"a+qn-nt-s// she hit him on the head
kta?ta?q's //k+ta'+ta'+qn-nt-s// he leaned them there
k'iwθkξxlx //k'4+wik+xn-nt-s-lx// They found their tracks.

This also obtains in customary forms before -st:

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

Note that n does not delete indiscriminately before s:

s?at?fθns //s-θat+θiθn-s// they started eating
//i? c'q'+iθn-s// i? c'q'fθns his arrows

4.4.4.5 s → 0 before -it possessor applicative

?úlu?txw" //?úl+iw's-it-x// she gathered its ...
k"u_ntiθfθt'm //n+iθfθt'm-it-m// They divided our [land]. (Cf.
k"u_ntfθt'm+iθn't'am //n+iθn't'am-it-m They divided us).
k"u_siwθts //siws-it-s// they drank my ...

4.4.4.6 ks future + s → ks

k" jkθfθm //k" j-ks-siw+m// I'm going to ask you
ksp'ápq's //ks-sp'+ap'+qn-m-s// he was going to whack her on the head

4.4.4.7 k of ks-...-(mθ)xa'n'x inceptive → 0 in 2sg

k" sx"uya?x you are about to go (Cf. kθn_ksx"uya?x 1sg)
k" sk'a?k'a?mθxa?x you are about to look for it (Cf. kθn_ksk'a?k'a?mθxa?x 1sg)

4.4.4.8 xkin + st → xki-st

xkθstx" //xkin-st-x"// What will you do to it.
4.4.4.9 Loss of n of //in-, an// before s, and before t of kin terms

ist’ik’al //in-s+t’ik’l// my food
itsínca? //in-t+ánca?// my younger brother

but

intíáx” my dress

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

4.5 V-? metathesis

A posttonic unstressed vowel followed by ?C(C) → ?VC(C):

cq’sápi?ilx //c-q’sápi?ilx// it takes them a long time (deliberate speech cq’sápi?ilx).
k’“ínma?am //k’“in+ma?-m// try (deliberate speech k’“ínma?am).
k”u“cun+ma?-nt-p// You’ve shown me things (deliberate speech cúnma?antp).
k’fcn+ma?antp (with simple loss of unstressed vowel). They’re trying to talk sign language.

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

sáma? white person, ta_nsáma?cón //n+sáma?+cn// in English
sóm?ús //sáma?+us// white face
sma?scút //sáma?+scut// he acts like a white
sóm?itx “/sáma?+itx” stick house
sfilx”a? sg big ta_nsálx”itk” //n+sfilx”a?+itk” by the big river
k”sélx”a?scút “//sfilx”a?+scút-x// you’re acting important
k”sélx”fíx “//sfilx”a?+fíx” you have a big house
4.6 Laryngealization of -C₂ of x uy

Okanagan forms the plural of stems of certain shapes with -C₂ reduplication.¹⁴ Thus we have ?acqa? go out sg, and ?áqcwacqa?llx pl go out; ?íckán sg play; ?ícákkan pl play, etc. If -C₂ is a resonant, then this is lengthened, as in x"ol-x"ált pl alive, ?uí-u?sos pl gathered, etc. However, the stem xuy sg go has a plural x"úy'ilx //x"uy'y-ilx 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'iİps ~ nt'üps. Dirty bottom
kön tk"ýk'pxan ~ kön tk"ýk'pxan My shoe came off
m'ay'á?Htsen ~ m'ay'ítsín I told you
ta nslixcən ~ ta nsəlxcən 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.

REFERENCES


¹⁴See Coeur d'Alene for possible clues as to the source of this process. Gladys Reichard writes i 'ts'ätstcEn in line 155 of Coyote Steals Son's Wife (Gibbons 1999, p. 26). See also cay'átlecqs? they are going to go out (Barthmeier 1996, p. 135). The glottalization of C₂ points to CVC- reduplication in Coeur d'Alene.