

Notes

¹Kinkade, M. Dale and Clarence Sloat. "Proto-Eastern Interior Salish Vowels." IJAL 38; 26-48, 1972. My paper is meant to be read with this article at hand.

²'Back' consonants are r, uvulars and pharyngeals.

³For a discussion of this phenomenon see my paper "Pharyngeal movement in Colville and related phenomena in the Interior languages." 11th ICSL, Seattle (UW preprint, pp. 148-66).

⁴Strong suffixes are stressed. See the immediately following paragraph in the text for further discussion of stress and morpheme weight.

⁵Spokan forms are taken from Barry F. Carlson's unpublished Spokan Dictionary.

Spokane -e- ¹

Barry F. Carlson

University of Victoria

0. Introduction

1. The Spokane Word

2. Repetitive Infixation -- Suffix Stressed Forms

3. Repetitive Infixation -- Root Stressed Forms

4. Conclusion

Appendix A -- Suffix Stressed Repetitive Forms

Appendix B -- Root Stressed Repetitive Forms

O. While basic grammatical descriptions for Interior Salishan Spokane and nearly identical Kalispel have been available for some time (Barry F. Carlson, *A Grammar of Spokane*, 1972; Hans Vogt, *The Kalispel Language*, 1940), until recently a very interesting morpheme, the -e- 'repetitive' aspect, has gone unnoticed. This has been a particularly glaring omission since it seems that nearly any word, simple or complex, has the potential to occur in the repetitive aspect. In this way -e- is like the three very productive reduplication patterns that occur in the language: C_1VC_2 - 'plural', C_1V - 'diminutive', and $-VC_2$ 'inceptive'.

The following paper discusses the rules which allow correct placement of -e- within a word. As well, it shows how previously unexplained occurrences of unstressed surface vowels, root reduplications and glottalized resonants are due to this morpheme. Since the insertion of -e- must be discussed within the broader framework of Spokane word building and phonological rules, I will first provide a brief sketch of Spokane words.

1. At the heart of the Spokane system of word building are typical CVC(C) roots. Roots may take prefixes or suffixes or stand alone to form words.

When a root occurs alone to form a word, it takes primary stress. When prefixes are added, primary stress is still placed

on the root. When the suffixes are added, primary stress may occur on the root or on one of the suffixes. Roots and suffixes involved will determine stress placement.

Suffixes fall into three groups: Those that are strong (suffixes which always take the stress from a root); unstressed suffixes, which do not have an underlying vowel; and variable suffixes, which have both stressed and unstressed variants. The last take stress when it is not automatically placed on the root or on a strong suffix in the same form. When unstressed their underlying vowels are usually lost.

Roots are divided into three main groups: strong roots, which take the stress unless a strong suffix is present; weak roots, which lose stress to variable suffixes as well as to strong suffixes. Unstressed, these roots usually lose their underlying vowels. If no variable or strong suffixes are present, weak roots occur stressed. There are also a number of variable roots, which sometimes act like strong roots, at other times as weak roots. Various combinations are illustrated below. Underlying and surface forms are given.

There are some conventions for citing underlying forms. Strong roots and strong suffixes are listed in underlying forms with a stressed vowel; vowels of weak roots and variable suffixes are not marked. Variable roots are marked with a \checkmark over the vowel.

Strong root/variable suffix

//púl-s-t-es// púlsc *He killed it.*

(root //púl// *kill*, variable suffix //-es// *he*)

Strong root/strong suffix

//púl-s-t-sút// pəlsút *He killed himself.*

(root //púl// *kill*, strong suffix //-sút// *reflexive*)

Weak root/variable suffix

//šil-n-t-es// šələntés *He chopped it.*

(root //šil// *chop*, variable suffix //-es// *he*)

Weak root/strong suffix/variable suffix

//šil-nú-n-t-es// šələnúys *He managed to get it chopped.*

(root //šil// *chop*, strong suffix //-nú-// *success*,
variable suffix //-es// *he*)

Variable root/variable suffix

Acting strong

//ʔúpñ/-ečst/-qin// ʔópəñčstqən *one hundred* ²

Acting weak

//ʔúpñ/-ečst/-eiče?// ʔupəñčstéiče? *ten animals*

(variable root //ʔúpñ// *ten*, variable suffixes

//-ečst// *hand, work* // -qin// *head, top* // -eiče?//

animal)

The suffixes in the last two examples are lexical suffixes.

All other suffixes are called grammatical suffixes. Lexical suffixes follow a root and precede grammatical suffixes, although a small number of primary grammatical suffixes may intervene between a root and lexical suffixes. The term lexical is used because they often have very concrete meanings. They are cited in underlying forms with a preceding slash (/) and a hyphen (-).

When two variable grammatical suffixes occur with a weak root or a weak acting variable root, the first is stressed.

//šil-n-t-si-es// šələncís *He chopped you (up).*

(root //šil// *chop*, variable suffixes //-si-// *you*,
//-es// *he*)

Variable lexical suffixes are stressed rather than accompanying variable grammatical suffixes.

//ʔayx^w/-ečst-m-s-t-en// ʔayx^wečstəmstən *I tired him out.*

(root //ʔayx^w// *tired*, variable suffixes //-ečst// *hand, work*,
//-en// *I*)

It is not (yet) possible to predict which lexical suffix will be stressed when more than one lexical suffix forms a long base.

The above discussion has assumed two rules thus far:

(1) stress assignment; (2) deletion of unstressed vowels.

Unstressed vowels of roots or affixes can be retained if they are adjacent to a laryngeal or unrounded pharyngeal consonant. For example, the vowel of the weak root //ʔamxʷ// *shave* is retained in ʔamxʷəntén *He shaved it*.

Other unstressed surface vowels are due to syllabification of semivowel resonants //y// and //w// (in either roots or affixes), and uvular pharyngeal resonant ʕʷ (only in roots) which become i, u and o respectively when they are not adjacent to vowels. The root //téw// *buy, sell* shows this development when it occurs unstressed in tumíst *He sells or buys things*, from //téw-míst//, strong suffix //míst// *middle [voice] reflexive*. (Compare stéwçən *groceries*, from //s-téw/-cin//, variable suffix //cin// *mouth, food*.) This rule of syllabification must follow stress assignment and vowel deletion.

2. If the component morphemes of a word require stress to be placed on a suffix, marking for repetitive aspect is achieved by inserting -e- within the root, in place of a deleted underlying vowel. In addition, if there are unglottalized resonants (m, n, l, r, y, w, ʕ, ʕʷ) within the word, in the repetitive form they become glottalized.³ For example, the repetitive form leçəntén *I haywired it back together*; *I tied it over and over* is based on a weak root //liç// followed by suffixes of the transitive system: //n// *control*, //t// *transitive*, and //en// *I*.

The corresponding non-repetitive form would be lçəntén *I tied it*.

In the same way, the repetitive form ʔaqʷəntén *I put bands on over and over*, is based on the weak root //ʔoqʷ// *banded*. The -a- allomorph of the repetitive is due to the vowel lowering rule (cf. fn. 2). The corresponding non-repetitive would be ʔqʷəntén *I put a band around it*. Derivations showing the development of these two repetitives follow.

//liç ³ -n-t-en//	//ʔoqʷ ^u -n-t-en//	Rules
liç ³ -n-t-én	ʔoqʷ ^u -n-t-én	Stress
l ç ³ -n-t-én	ʔ qʷ ^u -n-t-én	Vowel deletion
leç ³ -n-t-én	ʔeqʷ ^u -n-t-én	Infixation
leç ³ -h-t-én	ʔeqʷ ^u -h-t-én	Glottalization
-----	ʔaqʷ ^u -h-t-én	Vowel lowering
leçəntén	ʔaqʷəntén	Schwa insertion before a resonant

Roots containing the semivowel resonants y or w syllabify these segments to i or u respectively when their underlying root vowel is deleted under lack of stress (cf. 1.). For example, a root like //yil// *poke* becomes il in a form like ʔiləntén⁴ *I poked it* (//yil-n-t-en// *poke-control-transitive-I*). However, when it occurs in a repetitive form the -e- infix is present and the semivowel does not syllabify: yeleəntén *I kept poking*. As well, the root //çw// *say, tell* becomes çw in a repetitive like ncewçinçtx^u *You repeated what somebody said* (//çw/-cin-n-t-ex^u//

say-mouth-control-transitive-you). The root //qey// to live becomes qi when it loses stress to a suffix as in qimútyə? *tipi* (//qey-m/-útyə?// to live-derivational suffix-on ground). However, when it occurs unstressed in a repetitive form it appears as qey, as in qeylx'éye? *play house* (//qey/-elx'-éye?// live-house-seems to be but is not).⁵

The rule of resonant syllabification is ordered after -e- insertion, as shown by the following derivations of yeləntén *I kept poking* and ?iləntén *I poked it*.

Repetitive	Non-repetitive	Rules
//yil-n-t-en//	//yil-n-t-en//	
yil-n-t-én	yil-n-t-én	Stress
y l-n-t-én	y l-n-t-én	Vowel deletion
yel-n-t-én	-----	Infixation
yel-ń-t-én	-----	Glottalization
-----	i l-n-t-én	Syllabification
-----	?i l-n-t-én	Glottal insertion
yeləntén	?iləntén	Schwa insertion

When a root containing a rounded pharyngeal resonant ɣ^w as C₂ occurs unstressed, the underlying vowel is deleted and ɣ^w syllabifies to o [ɔ]. Thus the resonant syllabification rule applies to w, ɣ and ɣ^w.⁶ In this way //cáɣ^w// *bathe* becomes co as in colšémən *He likes to bathe* (//cáɣ^w-lš-émn// bathe-get in a state,

position-one who), and //coɣ^w// *fringed* also becomes co as in contén *I fringed it* (//coɣ^w-n-t-én// fringed-control-transitive-I). However, in repetitives like caɣ^wəlšéye? *He seems to be bathing* (//cáɣ^w-lš-éye?// bathe-get in a state, position-STB) and caɣ^wəntén *I kept fringing it* (//coɣ^w-n-t-en// fringed-control-transitive-I), -e- is present (lowered to -a- by the vowel lowering rule) and there is no resonant syllabification. In the same way //laɣ^wč// *muddy* appears with a vowel in a repetitive like laɣ^wčəntés *He kept smearing here and there* (//laɣ^wč-n-t-es// muddy-control-transitive-he), but syllabifies its resonant in a non-repetitive like ločəntán *I smeared it* (//laɣ^wč-n-t-en// muddy-control-transitive-I).⁷ Derivations of non-repetitive contén *I fringed it* and repetitive caɣ^wəntén *I kept fringing it* follow.

Repetitive	Non-repetitive	Rules
//coɣ ^w -n-t-en//	//coɣ ^w -n-t-en//	
coɣ ^w -n-t-én	coɣ ^w -n-t-én	Stress
c ɣ ^w -n-t-én	c ɣ ^w -n-t-én	Vowel deletion
ceɣ ^w -n-t-én	-----	Infixation
ceɣ ^w -ń-t-én	-----	Glottalization
-----	contén	Syllabification
caɣ ^w -ń-t-én	-----	Vowel Lowering
caɣ ^w əntén	-----	Schwa insertion

As outlined in section 1, roots with protective laryngeal or unrounded pharyngeal consonants can retain their vowels under lack of stress. However, in suffix stressed forms, roots with the shape $//?iC_2(C_3)//$ appear with the vowel e replacing the underlying vowel in repetitive formations. The root $//?itš//$ *sleep* shows this development in ?etšéye? *He feigns sleep* ($//itš-éye?//$ sleep-STB) and the root $//?iɬn//$ *eat* shows it in ?eləhéye? *He just snacks* ($//?iɬn-éye?//$ eat-STB).

Roots with the shape $//?eC_2(C_3)//$ (where neither C_2 or C_3 can be a uvular) appear with the vowel e in both repetitive and non-repetitive formations.⁸ The root $//?emk^w//$ *to skin, peel* as in ?emk^wəntén *I skinned it* ($//?emk^w-n-t-en//$ skin-control-transitive-I) appears with only glottalized resonants marking it as a repetitive in ?emk^wəntén *I kept skinning it*.

In like fashion, roots with the shape $//?aC_2(C_3)//$ (where either C_2 or C_3 must be uvular) appear with the vowel a in repetitive formations, as shown by hecə?ayx^w-téye?ey *He's always making believe he's tired* ($//hec-?ayx^w-t-éye?-i//$ progressive-tired-stative-STB-continuative). Again, only the glottalized resonants mark the form as repetitive. To date, there are no examples showing repetitive formations with the root shapes $//?uC_2(C_3)//$ or $//?oC_2(C_3)//$ (Spokane has the underlying vowels i, e, a, u, and o.) Examples are also lacking for roots beginning with the laryngeal h.

Roots with protecting ʔ or ħ as C_1 or C_2 all have an underlying vowel a.⁹ This vowel remains a in surface forms regardless of whether the word form is repetitive or non-repetitive. For example, ʔacəntén *I tied it* ($//ʔac-n-t-en//$ tie-control-transitive-I) is non-repetitive and ʔacəntén *I kept tying it* is repetitive. As well, yaʔəmstén *I gathered it* ($//yaʔ-m-s-t-en//$ gathered, all-derivational suffix-causative-transitive-I) is non-repetitive and yaʔəmstéye? *He was supposed to gather but didn't* ($//yaʔ-m-s-t-éye?//$ gathered, all-derivational suffix-causative-transitive-STB) is repetitive.

There is no evidence to date to show that roots with the shape $//C_1V^?//$ can enter into -e- repetitive formations. Instead, distributive plural reduplication is used to indicate that an activity repeats or continues. The Spokane distributive plural is C_1VC_2- , although with $//C_1V^?//$ roots the reduplicated glottal stop is regularly lost, so that the pattern looks like C_1V- . Thus $//ʔu^?//$ *poke, spear* as in ʔu^?əntén *I stabbed him* in the distributive plural would be ʔuʔu^? as in ʔuʔu^?əntén *I kept stabbing him*.

Therefore, except in the case of $C_1V^?$ roots, -e- replaces unlike underlying vowels that are protected from deletion. However, to date there is only evidence to show $//i//$ replaced by -e-. Since $//e//$ and $//a//$ of roots are in complementary distribution (a occurring only before a uvular obstruent or uvular pharyngeal or after

a uvular pharyngeal), this analysis assumes that they are both like vowels and no replacement occurs. If -e- did replace //a// it would become -a- by vowel lowering in any case.¹⁰ Appendix A contains more examples of suffix stressed repetitives.

3. When stress must occur on the root of a Spokane word, marking for repetitive aspect is achieved by reduplicating C₁ of the root and inserting -e- after this reduplicated element. As before, glottalization of resonants accompanies the infix. For example, note the repetitive heñiç³əntx^w *You kept cutting* (//niç³-n-t-ex^w// cut-control-transitive-you), based on the strong root //niç³// *cut*. The corresponding non-repetitive would be niç³əntx^w *You cut it..*

Even weak roots form the repetitive in this way when they occur without suffixes. For example, heñleliç³ *It's tied all up, haywired together* (//hec-n-liç³// progressive-in, at-tied) is based on the weak root //liç³// (Compare suffix stressed ieçəntəñ *I haywired it back together* cf. 2.) Derivations of these two repetitives follow.

//niç ³ -n-t-ex ^w //	//hec-n-liç ³ //	Rules
niç ³ -n-t-ex ^w	hec-n-liç ³	Stress
niç ³ -n-t- x ^w	-----	Vowel deletion
n niç ³ -n-t- x ^w	hec-n-l liç ³	Reduplication
neñiç ³ -n-t- x ^w	hec-n-leliç ³	Infixation

heñiç ³ -ñ-t- x ^w	hec-n-leliç ³	Glottalization
-----	he- n-leliç ³	deletion of <u>c</u> ¹¹
heñiç ³ əntx ^w	heñleliç ³	Schwa insertion

Appendix B contains more examples of root stressed repetitives.

4. For some time now, my Spokane corpus has contained seemingly aberrant forms with unexplained occurrences of unstressed surface vowels, root reduplications and glottalized resonants. These are now analyzable as repetitives. For example wewick^wəle? *meadowlark* can now be seen as a repetitive based on a root //wick^w// '?!'. The suffix is probably //-ule?x^w// *ground*. Similarly, words like čəñə'axçe? *cantaloupe* (//č-ñax/-içe?// after,toward-striped-skin) and čəñə'la'qəmi'təñ *buttons on the front of a man's pants* (//č'i-lo'w/-qmi-təñ// on-fit together-pelvic area-instrument) can now be explained. Spokane -e- has proved to be a very important morpheme.

Footnotes

1. The inventory of consonants and vowels in Spokane is as follows: p t c č q kʷ qʷ ? p̥ t̥ č̥ q̥ k̥ʷ q̥ʷ s š ʔ x xʷ ɣʷ h m n r l y w ɣ ɣʷ m̥ n̥ t̥ ʔ̥ l̥ w̥ ʔ̥ i e a u o. Unstressed ə is a predictable, epenthetic vowel.
2. It is a general rule that //e// becomes a and //u// becomes o ([ɔ]) before a following uvular within a word; a [-low] vowel becomes a [+low] vowel before [+low] consonants. This is the vowel lowering rule.
3. Apparently, resonants in prefixes are not affected.
4. It is a general rule that glottal stop is inserted before word initial vowels. This is the glottal insertion rule.
5. The suffix // -éye?// *seems to be but is not* is often accompanied by the repetitive morpheme. The semantic contribution of the repetitive is sometimes difficult to determine in these forms. Numerous examples occur in the paper. Henceforth this suffix will be glossed STB.
6. There are no examples showing ɣʷ as C₁ syllabifying.
7. Note that // -en// I has a lowered suffix vowel in the non-repetitive (but not in the repetitive). Sometimes a root with a

pharyngeal will cause a suffix to have a lower vowel. For a thorough discussion of this topic see Anthony Mattina, "Pharyngeal movement in Colville and related phenomena in the Interior languages," XI ICSL Working Papers, 1976.

8. Historically, Spokane e developed from *a which fronted and raised unless a following uvular or a preceding uvular pharyngeal was present, in which case it remained a. There are some exceptional roots with a where this conditioning is not apparent, for example //ham// *melt*. For a full discussion see M. Dale Kinkade and Clarence D. Sloat, "Proto-Eastern Interior Salish Vowels," IJAL 38 (1972):26-48.

9. cf. fn. 8.

10. Cf. fn. 2. The environment of the vowel lowering rule would have to be expanded to include preceding uvular pharyngeals; [+low], [+voice] consonants.

11. A very limited rule deletes c of //hec-// *actual* before //n// *in, at*.

Appendix A

Suffix Stressed Repetitive Forms

- ččeňépele?eň I led it around (//č-čVň/-eple?-n-t-en// after-toward-hold-knobbed, handle-control-transitive-I). Where the underlying root vowel is not known a V is written.
- čeix^wəntés He kept touching (//čVňx^w-n-t-es// hold-control-transitive-he)
- čefəntés He kept cutting (//čer-n-t-es// cut-control-transitive-he)
- řepəntéň I marked all over it in different places (//řVp³-n-t-en// mark-control-transitive-I)
- řek^wpəniň piteň fork (//řik^w-p-min// pierced-lack of control-instrument)
- qecənstéň He had a number of spasms (//qVC-m-s-t-em// shrunken-derivational suffix-causative-transitive-passive)
- ma^wəntés He kept making it flow (//mVř^w-n-t-es// flow-control transitive-he)
- peňtəň I folded it (//piň-n-t-en// bent-control-transitive-I)
- čapqəntéň I stuck it in more than one place (//čapq³-n-t-en// stuck-control-transitive-I)
- nčelúle?x^wtəň fence posts (//n-čil/-ule?x^w-tn// in, at-stand (pl)-ground, earth-instrument, thing)

don't
use
asterisk
from context

- šeləntéň I chopped just to do it (//šil-n-t-en// chop-control-transitive-I)
- taq^wəňéyə?ey He's just sewing for nothing (//toq^w-m-éye?-i// sew-derivational suffix-STB-continuative)
- heck^weləňéyə?ey He's just passing the time (//hec-k^wul³-m-éye?-i// progressive-make, do-derivational suffix-STB-continuative)
- henk^wəňəňéyə?ey He's just singing for nothing (//hec-n-k^wVn³-m-éye?-i// progressive-in, at-sing-derivational suffix-STB-continuative)
- šeiléye? He's pretending to be dead (//šil [inceptive reduplication]-STB)
- čaq^wq^wéye? He's pretending to be crying (//čaq^w-éye?// cry [inceptive reduplication]-STB)
- čewəlšéye? He's trying to be old (//čew-lš-éye?// old-get to a position, state-STB)
- ?eňšéye? He's moving for nothing (//?iňš-éye?// move-STB)
- řacəňéye? He's making believe that he's tying something (//řac-m-éye?// tie-derivational suffix-STB)
- la^wəntéň I put it together and took it apart again until it fit (//loř^w-n-t-en// fit together-control-transitive-I)
- čai^wšéye? He shouted for nothing (//čVř^wš-éye?// shout-STB)
- čai^wšəntéň I shouted over and over to get their attention (//čVř^wš-n-t-en// shout-control-transitive-I)
- naq^wəňəň thief, robber (//naq^w-émn// steal-one who)

Appendix B

Root Stressed Repetitive Forms

- k^wek^wuli[?]s He kept making things to see if they worked [like a puzzle] (//k^wul¹-n-t-es// make, do-control-transitive-he)
- nehici[?]s He kept cutting (//nič²-n-t-es// cut-control-transitive-he)
- sənnehicəməh saw mill (//s-n-hič³-min// nominal-in, at-cut-instrument)
- heck^wek^wuriəhi He kept borrowing (//hec-k^wurin-i// progressive-borrow-continuative)
- k^wek^wupəh I kept pushing (//k^wup-n-t-en// push-control-transitive-I)
- laləqəh I just covered things as I went along (//ləq⁴-n-t-en// bury-control-transitive-I)
- la[?]la[?]qi[?]s He heated it over and over (aimlessly) (//la[?]q⁴-n-t-es// hot-control-transitive-he)
- wəkičəntx^w find (//wič⁵-n-t-ex^w// see-control-transitive-we)
- wəwək^wi[?]s He keeps hiding things (//wək^w-n-t-es// hide-control-transitive-he)
- x^wex^wist He paced back and forth just to exercise (//x^wist// walk)
- čeci[?]s He kept going there (//čic⁶-n-t-es// arrive at-control-transitive-he)

- x^wx^wax^weləm garbage collectors (//sx^w-x^wel-m// one who-abandon-middle)
- əlek^wstəh I kept taking them away (//lək^w-š-t-en// remove-substitutive-transitive-I)
- əmələh I kept dealing (//məl⁷-n-t-en// mix-control-transitive-I)
- əmi[?]ləh I put a dab here and there (//mi[?]l⁸-n-t-en// cover with a liquid-control-transitive-I)
- əməyə[?]əh I taught him (//məyə[?]-n-t-en// tell-control-transitive-I)
- epi[?]ntx^w You folded it over and over (//pi[?]n-n-t-ex^w// bent-control-transitive-you)
- əlaqq He kept sitting (//ləq⁹// [inceptive reduplication])
- etəsəlš He kept standing up (//təs¹⁰-lš// stand-get in a position, state)
- e[?]əntəh I kept feeding (//[?]ənt-n-t-en// feed-stative-control-transitive-I)
- e[?]epəh I kept feeding (//[?]ep¹¹-n-t-en// wipe-control-transitive-I)
- əyəcə[?]e[?]i[?]š I keep moving from one place to another (//čn-hec-[?]i[?]š-i// I-progressive-move-continuative)
- a[?]wosəh I keep losing (//[?]wos¹²-n-t-en// lose-control-transitive-I)

Additions:

1. ʔewəntéñ 'I stabbed in different places' //ʔVw-n-t-en// stab,spear-control-
transitive-I
2. weʔúkəwəñ 'I keep taking it back' //ʔúkw-n-t-en// bring-control-transitive-I
3. ʔúkəwən 'I took it back'
4. nəweʔútx^w 'He kept going in' //n-ʔútx^w// at,in-go,enter
5. nəʔútx^w 'He went in'
6. ʔeʔisk^wələñ 'I scattered here and there' //ʔísk^wl-n-t-en// scatter-control-
transitive-I