

Unstressed Root Vowels In Spokane¹

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0. A typical Spokane word is based on a CVC(C) root which may occur alone or take prefixes and suffixes. The root itself may be modified by a number of reduplicative patterns. Every full word in Spokane has primary stress on the vowel of either the root or one of the suffixes present and it is a general rule that underlying root and suffix vowels which do not receive this stress are deleted. The following example shows the underlying and surface forms of a word with a root and a number of suffixes. Surface representations are in broad phonetics. Schwas are epenthetic elements.²

//k^wul^l-nu-n-te-x^w// k^wələnúntx^w. 'I got it done.'

A substantial number of roots, however, have full vowels present even when unstressed. The purpose of this paper is to account for the presence of these vowels.

1. Unstressed root shapes. There are two situations in which a root shape may be observed unstressed: (1) when stress is on the suffix of a word; and (2) when a root has

distributive reduplication.

1.1. Stress placement. As stated previously, stress occurs either on a suffix or the root vowel of a word. The kinds of roots and suffixes involved determine stress placement.

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

Roots are similarly divided into two main groups: stress-retentive roots, which take the stress unless an inherently-stressed suffix is present; and stress-shifting roots, which lose stress to variable-stress suffixes as well as to inherently-stressed suffixes. Unstressed, roots usually lose their underlying vowel. Either type of root, of course, appears stressed when no suffixes are present. However, many stress-shifting roots are unattested stressed, with a full vowel, and must be listed in their underlying form as $//C_1C_2//$.

1.11. Stress-retentive roots are noted in underlying forms by underscoring their vowels. When they occur with variable-stress suffixes, the suffixes appear in reduced form.

//pul// 'kill'

//pul-s-te-s// pulsc. 'He kills it.'

//k'ul// 'do, make'

//k'ul-n-te-x^w// k'ul^wəntx^w. 'You did it.'

Inherently-stressed suffixes (listed in underlying forms with stressed vowels) take stress from these roots.

//-sut// 'reflexive'

//pul-s-te-sut// pulscut. 'He killed himself.'

//-nu-// 'successfully'

//k'ul-nu-n-te-n// k'ul^wəlnun. 'I managed to do it.'

1.12. Stress-shifting roots are cited in their underlying forms with their characteristic vowels wherever possible; when a root is cited without a vowel it means that only unstressed forms have been recorded. Variable-stress suffixes take stress when following these roots (unless an inherently-stressed suffix is also present).

//caq// 'put, place' (cf. hi cáq. 'It's placed, set.')

//caq-n-te-n// cqəntén. 'I placed it.'

//šl// 'chop'

//šl-min// šləmín. 'It's an axe.'

1.2. Reduplication of a root to form a distributive stem creates another situation in which a root shape may be observed unstressed. In this type of reduplication the initial CVC of the root is repeated and serves as a prefix. Since the prefix vowel is unstressed, it is lost. When the root itself is unstressed, its vowel is also lost. Some examples are given below with the stems isolated by hyphens.

Root stressed

//k^wul// -k^wəlk^wúl-stən. 'I sent them.'

//tém// s-təmətém- 'They're things.'

//xal// s-xəlxál-t. 'They're days.'

//tix^w// -tx^wtíx^w-cč. 'They're tongues.'

Root unstressed

//taq// -tqtq-əntén. 'I hit them.'

//caq// -cqcq-əntén. 'I placed them.'

//šl// -šəlšəl-əmín. 'They're axes.'

2. Unstressed roots with full vowels.

2.1. Retained vowels in roots with ? and h. As I have pointed out, roots usually lose their underlying vowel when unstressed. However, roots which have ? or h as either C₁ or C₂ retain the vowel when unstressed. This happens because laryngeals in Spokane only occur contiguous to a vowel (as onset or coda). Since vowel deletion would violate this

canon and create unacceptable clusters, vowels are protected. Some forms that show unstressed roots with ? and h are given below. Most of these roots are stress-shifting and are unattested with stress. (A root or distributive stem is isolated by hyphens.)

//k^we?// 'bite' -k^we?k^we?-ntés. 'They chewed.'

//q^we?// 'squeeze' č^hi-q^we?-cintəm. 'They strangled him.'

//me?// 'bother' -me?-ntén. 'I bother him.'

//?ax^w// '?' -?ax^w-əméčst. 'It's a canoe paddle.'

//č^hi?// 'close' -č^hi?-lélx^w. 'It's tree bark.'

//lu?// 'stab' -lu?-mín. 'It's a fish spear.'

//hem// 'fog' -hem-íp. 'It gets foggy.'

//ču?// '?' s-ču?-šín. 'It's a foot, leg.'

//q^we?// 'get accustomed to' -q^we?-mín. 'I get used to it.' Also occurring in my corpus is -q^wa?q^we?-məncút. 'He practices.' Surface a is due to a general rule which lowers //e// to a (and //u// to o [ɔ]) before a postvelar in the word.

//huk^w// 'go' -huk^w-əpéwəs. 'They split up.'

//te?// 'pound, hammer' -te?-ntén. 'I pounded it.'

//cu?// 'hit' -cu?-ntés. 'He hit him.'

//xe?// '?' s-xa?xé?- 'They're in-laws.'

//holó?// 'marten' -holó?- 'It's a marten.'

- //ham// 'melt' -ham-íp. 'It melted.'
//su?// 'whisper' -su?-ntén. 'I whispered it.'
//hew// 'yawn' -hewəhéw-ənt. 'He yawned.'
//?em// '?' səmə-?emə?ém. 'They're women.'
//ie?// 'lean against' čən č-la?-qín. 'I lean my head.'
//?ep// 'wipe' čəy esčə-?epə?ep-əsəncúti. 'I am wiping
my eyes.'
//hoy// 'stop, finish' -hoyəhóy-sc. 'He stopped them.'
//?ucqe?// 'go out' -?occqe?-cín. 'He vomited.'

2.2. Unstressed roots with derived full vowels. Roots with a semivowel w or ɣ as C₁ or C₂ undergo the normal deletion of their underlying vowel when unstressed. Then w develops to u and ɣ to i. Some examples follow.

w or ɣ as C₂

- //pew// 'breathe' -pupéw-əlš. 'He breathes.'
//q^way// 'black' -q^wi q^wáy- 'It's a buffalo.'
//qey// 'live' -qⁱqéy- 'They were camped.'
//miy// 'know' -mi-pənún. 'I found out.'
//tew// 'buy, sell' sən-tu-místən. 'It's a store.'
//tey// 'fall' -ti-pəməncút. 'It came down.'
//q^wew// 'crazy' -q^wo q^wéw- 'He's crazy.'
//čey// 'shade' -čičéy- 'There is shade.'
//čuw// 'gone, silent' čən -ču-pəmí. 'I am quiet.'

//puy// 'wrinkled' -pípúy-šan. 'It's an automobile.'

//sew// '?' -suséw-ik^w. 'They're lakes.'

As the next two examples show, y develops to i? and w to u?

//šey// 'that, there' -ši?šéy- 'They were there.'

//čew// 'wash' čey es-ču?čéw-əsi. 'I wash my eyes.'

w or y as C₁

//wiš// 'stand' necs-uš-étk^w. 'He stands in the water.'

When the derived vowel is word initial, ? is inserted before it. The following example shows this situation. (The derived u is lowered to o by the following postvelar.)

//wič// 'see' ?-oč-sqélix^w. 'He saw people.'

For a number of roots, an initial //w// or //y// is assumed, but the underlying vowel is unknown. These are listed in their underlying form as //C₁C₂//. Some examples follow.

//yl// '?' ?-ilil-əmíx^wəm. 'They are chiefs.'

//wp// 'hair' sč-up-ús. 'It's an eyelash.'

sč-upup-ús. 'They're eyelashes.'

?-upup-cín. 'It's a bullhead; beard.'

//wl// 'metal' ?-ulul-əmíňč. 'It's a gun.'

//wh// 'bark' yec-uh-ém. 'I bark.'

//wq// '?' s-oq-ém. 'It's the moon.'

//wx^w// '?' s-ox^w-ép. 'It's a root.'

If both C₁ and C₂ are semivowels, C₂ is the source of the surface vowel.

//wy// 'finish' -wi-stén. 'I finish it.'
sənə-wi-télx^wtən. 'It's a hospital.'

Examples are limited, but it seems that a root with a glottalized semivowel as C₁ does not develop a vowel.

//y̥i̥// 'dull' -y̥ələy̥i̥l-t. 'They're dull.'

2.3. Full vowels in roots with pharyngeals. A small number of roots have an unrounded pharyngeal consonant (ʕ or ʕ̣) as C₁ or C₂. Since a pharyngeal consonant, like ʔ or h, occurs only next to a full vowel, these roots retain their underlying vowel when unstressed. Deletion would create an unacceptable cluster; the pharyngeal then protects the vowel.

//q̣^waʕ// 'move by dragging' -q̣^waʕ-mstén. 'I dragged it.'

//ʕac// 'tie' -ʕac-əntén. 'I tied it.'
sč-ʕac-éwəs. 'It's Sunday.'

//ʕak^w// '?' sən-ʕak^wk^w-áne?. 'It's a toad.'

//ʕam// 'gnaw' -ʕam-əntán. 'I gnaw it.'

//yaʕ// 'all' -yaʕ-mstén. 'I gather them.'

2.4. Some unexplained full vowels. For reasons that are not entirely clear at this time, some other roots also have a full vowel when unstressed. A few surface forms are

given below with each root or distributive stem isolated by hyphens. These roots are unattested with stress.

-t̥a-pəntén. 'I shot him.' also; -t̥ata-pəntén. 'I shot them.'

-yo-stén. 'I learned it.' also; -yoyo-scút. 'He exerts himself.'

-co-šín. 'It's a toe.' also; -coco-šín. 'They're toes.'

-so-pəmí. 'He drank it all.'

?ecə-la-pəmí. 'He travels by boat; paddles.'

čən č-ɣaxa-púsən. 'I stared.'

s-ʔoč-óle?xʷ. 'It's mud.'

-čoš-ím. 'He shouts.'

It is interesting that the root vowels in these examples are of a lower quality than historical development and morphophonemic alternation would predict; a occurs instead of i or e and o instead of u. In the development of Spokane from Proto-Eastern Interior Salish (PEIS), *a became e and *ə became i unless followed by a uvular (postvelar) or pharyngeal consonant. If conditioned by these back consonants, *a remained a and *ə became a.³ Surface o in the language is mostly predictable; uvulars and pharyngeals lower //u// to o. Thus the presence of a and o here, where conditioning is not evident, suggests that back consonants,

probably pharyngeals, were once present in these roots. The roots which appear above with the surface form C_1a may once have had the shape $*C_1\left\{\begin{matrix} a \\ e \end{matrix}\right\}\text{ʕ}$. For example, the root 'to stare' may have been $*\text{ʕaʕ}$ or $*\text{ʕeʕ}$. The pharyngeal would also have protected the vowel from deletion.

Comparative evidence suggests that roots given above with surface C_1o developed from roots with rounded pharyngeals as C_2 . I have no examples of these particular roots stressed, but in Columbian, Colville and Coeur d'Alene one root-stressed cognate can be found: the unstressed Spokane root co 'fringe' (which occurs above in the word for 'toes') corresponds to Cm cáʕ^w, Cv céʕ^w and Cr cáʕ^w. It seems reasonable to suppose that in an unstressed root ʕ^w would become o (parallel to w becoming u), but since root stressed examples are lacking in Spokane, I cannot determine if this is still an active process in the language.⁴ In any case, o seems to have developed from a rounded pharyngeal, at least historically.

2.5. Full vowels before *r. Three dialects known collectively as Kalispel (Chewelah, Kalispel and Flathead) are nearly identical with Spokane and thus it is not surprising that they also display unstressed full vowels in the situations outlined above for Spokane. However, Spokane and Kalispel differ in their treatment of roots with reflexes of *r as C_2 . PEIS *r has developed to l in Kalispel

(merged with *l) but it remained r in Spokane (the glottalized counterpart *ɺ developed in parallel fashion). Also, *r, at some stage before merger with *l, functioned as a back consonant in Kalispel, but not Spokane. Thus in Kalispel *r affected preceding vowels: u became o; *a remained a instead of shifting to e; and *e became a, not i.⁵ This development has created dialect contrasts like the following:

*u	Sp	čúr.	Ka	čól.	'It's salty.'
*a	Sp	čért.	Ka	čált.	'It hurts.'
*e	Sp	yír.	Ka	yál.	'It's round.'

The above are root stressed examples. Unstressed roots show another difference. No vowel is present in the reduced grade in Spokane (in accord with the general deletion of unstressed, unprotected vowels), but a vowel is sometimes retained and sometimes deleted in Kalispel. Some examples follow. The roots involved are not attested with stress.

Vowel retained in Ka, but deleted in Sp:

Sp	-mər-ínɺp.	Ka	-mal-ínɺp.	'It's a balsam.'
Sp	-k ^w ər-í.	Ka	-k ^w al-í.	'It's yellow.'
Sp	s-k ^w ər-šín.	Ka	s-k ^w al-šín.	'It's a crane.' (Lit. 'yellow feet')
Sp	-čər-íp.	Ka	-čal-íp.	'He swam.'

FOOTNOTES

¹The topic discussed here is an expansion of points touched upon in my doctoral dissertation, A Grammar of Spokane, which is to appear in a forthcoming issue of University of Hawaii Working Papers in Linguistics. All my work with Spokane has been supported by the National Science Foundation through the Linguistic Relationships Project directed by Laurence C. Thompson. I am grateful to Dr. Thompson and to M. Dale Kinkade for suggestions on a draft of this paper.

²The inventory of Spokane consonants and vowels is as follows: p t c č q k^w q^w ʔ p̣ ṭ č̣ č̣̣ ʔ̣ ḍ ḳ^w ḍ^w s š i x x^w x̣^w h m n r y l w ʕ ʕ^w ṃ ṇ f̣ ỵ ḷ ẉ ʕ̣ ʕ̣^w i e a u o.

³This follows Kinkade and Sloat 1972.

⁴It should be noted that rounded pharyngeals are very poorly attested in Spokane.

⁵M. Dale Kinkade and Laurence C. Thompson have worked out this development.

BIBLIOGRAPHY

Kinkade, M. Dale, and Clarence D. Sloat. 1972. Proto-Eastern Interior Salish Vowels. IJAL 38.26-48.

Vowel deleted in both Ka and Sp:

Sp -təʔ-əqént. Ka -təl-əqént. 'He kicked.'

Sp s-p̚ərqʷ-áqs. Ka s-p̚əlqʷ-áqs. 'It's a turtle.'

In Kalispel, it seems, *r (which occurs only in roots as C₂) was a protective back consonant that could only serve as coda. After merger of *r with *l the unstressed full vowels associated with *r became exceptions to the principle of deletion. Eventually some of these exceptional vowels were also eliminated. (It should also be noted that in one case a vowel is present before the reflex of *r in both Spokane and Kalispel: Sp sx^w-mar-əyém, Ka sx^w-mal-əyém 'He's a doctor.')