The phoneme /h/ in Montana Salish

Sarah G. Thomason
University of Michigan

Pre-publication copy; published 2021 in Lucy Thomason, David J. Costa, and Amy Dahlstrom, eds., *Webs of relationships and words from long ago: A Festschrift presented to Ives Goddard on the occasion of his 80th birthday* (Petoskey, MI: Mundart Press), 381-396.

The phoneme /h/ is rare in almost all Salishan languages, including Montana Salish. But Montana Salish has a productive process of *h*-insertion that is surprising in a language with few instances of /h/ otherwise. This paper first surveys the distribution of /h/ in Salishan languages and its alternation with zero and with other segments. It then describes the productive process of *h*-insertion in Montana Salish.*

1. Introduction

In discussing *h* in Salishan languages, Swadesh remarked that 'The glottal spirant *h* is rare...There is no Salish language, with the exception of Tillamook, in which *h* is a common phoneme' (1952:236). The accuracy of this observation is confirmed by a glance through Salishan dictionaries, including Montana Salish. But there is a surprising systematic exception to the generalization in Montana Salish, in the speech of some elders. In this paper I will first survey the distribution of /h/ in several other Salishan languages (§2) and its distribution and phonotactics in Montana Salish specifically (§3). Section 4 considers alternation of /h/ with zero and with other segments—glottal stop, pharyngeal resonants, and dorsal fricatives. I will then describe a very productive Montana Salish process of /h/-insertion between a lexicalized truncated stem and a possessive suffix, either third person *-s* or (much less often) second person plural *-mp* (§5). The paper concludes with a

brief (and inconclusive) discussion of some possible implications of the /h/-insertion process (§6).

2. The distribution of /h/ elsewhere in the Salishan family

Because Montana Salish (henceforth MSa) is one of three dialects of a (nameless) language, it makes sense to start our survey with its two sister dialects, Kalispel and Spokane, and then the most closely related language, Colville-Okanagan (which, like MSa, belongs to the Southern Interior branch of the family). Except for MSa itself, my check of dictionaries was confined to *h*-initial entries; since /h/ is considerably more common in morpheme-initial position than elsewhere, these suffice to show that /h/ occurs rarely in roots, particles, and affixes. A count of non-initial *h*'s would not change the overall picture.

Vogt describes Kalispel /h/ phonetically as 'an ordinary *h*', and says that it is 'weak initially, and in some words parallel forms with and without *h* coexist'; 'It is strongly articulated after consonants' (1940:13). The glossary that follows his grammar and text collection contains just eight entries with initial /h/: the yes/no question particle *há*, the 'startle' interjection *hayó*, a clearly onomatopoetic word *háhá* 'laugh', and five roots, two nominal (*he'en'əm* 'eight', *hem'ís* 'kind of night-owl') and three verbal (*ham* 'gnaw, eat up (talking of bugs)', *heét* 'tease', and *hói* 'quit doing something'). (Here and throughout this paper I ignore the problem of whether Salishan languages in fact have a lexical distinction between nouns and verbs. For the analysis of MSa /h/ the distinction is useful and perhaps necessary, and it is immaterial whether it is a derived or a fundamental lexical distinction.) Vogt's glossary is not meant to be a full-scale dictionary, but it is nevertheless evident that /h/ is much less common than most other consonants in word-initial position.

For Spokane, Carlson says that '/h/ is rare except in word-initial position'; the glottal stop, by contrast, occurs freely in all positions (1972:10). He also discusses the loss of prefix-initial *h* (e.g. in *hec-* 'actual aspect') under various phonological circumstances (pp. 18-19). Black describes Spokane /h/ as 'relatively rare, generally word-initial' and says that, in consonant clusters, /h/ becomes a voiceless *e* but 'on occasion it may also surface as [ʔ]' (1996:17). The Spokane dictionary (Carlson & Flett 1989) has twenty-one entries with word-initial /h/: the interjection *hayó* 'oh my!', two onomatopoetic 'sound' words

(*ham* 'droning sound', *húhu* 'owl noise'), a particle *hec'ín't* 'what did he say?', and seventeen roots. Eight of the roots are nominal (*h?en'-m* 'eight', *hatt* 'peregrine falcon', *hem(í)* 'fog', *hem'ís* 'mourning dove', *hew(í)* 'rail (a kind of bird)', *hew'-t* 'rat', *hit* 'alumroot', and *hmhúwye?* 'raccoon') and nine are verbal (*ham(í)* or *ʕam(í)* 'melt', *hay(í)* 'growl', *hek*^{w} 'peeled', *hen* 'pink', *hilh* 'other side of the mountain', *ho?* 'cough', *hoy* 'finished', *hoy'* 'laugh', and *huy* 'it's a pile').

Some of the eight nominal roots, in Spokane and in the other languages surveyed here, may ultimately be connected with verbal roots; I am treating a root as nominal only if, in the dictionary, it is entered independently, unconnected to any verbal forms. (The word for 'raccoon' may be problematic here, both as an *h*-initial stem and as a basically nominal root: there is a main entry *hmhúwye?*, as listed above, but there is also a main entry *mhuw'* 'howl', and under this second entry is a word *mhúw-y=e?* 'raccoon', which matches the forms for 'raccoon' in MSa and Colville-Okanagan.) Of the nine Spokane verbal roots in *h*-, three—'growl', 'cough', and 'laugh'—are probably onomatopoetic. Carlson & Flett's dictionary contains no main entries for clitics or grammatical affixes, but Spokane also has one *h*-initial clitic, the yes/no question particle *ha*, and at least four prefixes that are analyzed with initial *h*: *hec-* 'actual' (mentioned above), *heł-/hełuł-* 'back, again', *hin-* 'my', and *han-* 'your (sg.)'.

In Colville-Okanagan, like MSa-Spokane-Kalispel a Southern Interior Salishan language, '*h* is quite rare and, as with *ʔ*, it can often be lost in rapid speech, especially in word-initial position (*h* does not occur word-finally)' (Mattina 1973:8). Watkins, describing an Okanagan dialect (perhaps different from the ones Mattina worked on?), comes to the same conclusion: 'h is morpheme final in *wah* '(dog) barks' and *hah* '(person) laughs'. No examples of utterance final h can be found' (1970:48). Mattina's Colville-Okanagan dictionary (1987) has twenty *h*-initial entries: a lexical prefix *hɬ=* 'family, homogeneous group', two interjections (*hi* 'well...', *húma?* 'please, listen'), the yes/no question particle *ha?*, and sixteen roots. Six of the roots occur in nominal formations: *hup* 'Fort Hope', a borrowing from English, *hápu* 'cottonwood mushroom', *n-hít-hit-wlx* (a mythical bird's name), *hawíʔ=ɬp* 'wild weeping willow', *híw't* 'rat', and *s-háʕyk*^{w}*'* 'nodding onion'. The remaining ten roots are verbal: *hn* in *han* 'pink', *hq*^{w}*'* in *k'ɬ-ahq*^{w}*'=xán* 'foot slips' (in this

root the *h* may or may not be morpheme-initial underlyingly; it is, in any case, the first consonant in the root), *hr'* in e.g. *s-har'á-m* 'soak', *ht* in *haht* 'laugh', *hw* in *haw-híw=iʔst* 'yawn', *hy* in *huy* 'be done, finished', *hy* in *n-hyh=ils-m* 'respect one's feelings', *hʕ'* in *ʕ'a-haʕ'* 'catch cold', *hʔ* in *h-huʔ* 'catch cold' (these two roots for 'catch cold' are likely to be connected), and *haʕʷ'* 'let loose'.

As in Kalispel and Spokane, some of the Colville-Okanagan verbal roots are likely to be onomatopoetic: 'laugh', 'yawn', and the two roots for 'catch cold'. (The similarity without identity in the 'catch cold' forms could be accounted for easily if they are onomatopoetic in origin.)

Inspection of dictionaries of other Salishan languages yields varying results, in part because of varying sizes of particular dictionaries but apparently also in part because of significantly different numbers of *h*-initial words. The remaining two Southern Interior Salishan languages are Moses-Columbia and Coeur d'Alene. Kinkade's brief dictionary of Moses-Columbia has only seven independent words beginning in /h/ (1981); three of these are glossed as nouns in English, three as verbs, and one as an adjective. Barthmaier's 1996 Coeur d'Alene dictionary, which is derived from Gladys Reichard's file slips, has about fifteen independent entries beginning in /h/, about seven roots and eight apparent particles, e.g. *hahaʔ* 'ha ha', and a few prefixes, e.g. *hn-* 'my' (one of several variants for this morpheme). One of the three Northern Interior Salishan languages, Shuswap, has eleven words beginning in /h/, including two loanwords (Kuipers 1974). The very extensive dictionary of Thompson River Salish, another Northern Interior Salishan language, has twenty-three words beginning in /h/, including numerous roots but also including two loanwords and at least one onomatopoetic word (Thompson & Thompson 1996).

The occurrence of /h/ in Central (Coast) Salishan languages generally resembles that of the Interior languages (e.g. Squamish, Kuipers 1967, and Lushootseed, Bates et al. 1994), but /h/ seems to be even more marginal in Upper Chehalis (Kinkade 1991) than it is in the Interior and other Central languages. Finally, Kuipers' *Salish etymological dictionary* (2002) has 5-7 Proto-Salishan roots with word-initial *h* (two of the roots have variants with different initials), plus one additional *h*-initial root in Central Salishan only.

3. The distribution and phonotactics of /h/ in Montana Salish

For Montana Salish itself I'll give a more detailed picture, including morphemes with non-initial /h/ as well as those with initial /h/. First, here is the inventory of Montana Salish consonant phonemes to help to frame the discussion:

Montana Salish consonant phonemes

p	t		c	č	(k)	k^w	q	q^w			ʔ
p’	t’	ƛ’	c’	č’		k^w’	q’	q^w’			
		ł	s	š		x^w	x̣	$x̣^w$			h
m	n	l		y		w			ʕ	$ʕ^w$	
m’	n’	l’		y’		w’			ʕ’	$ʕ^w$’	

My dictionary files contain 28 morphemes with /h/. In sixteen of these the /h/ is morpheme-initial: two particles, the exclamation *háyo!* ‘oh! hey!’ and the yes/no question particle *ha*; one onomatopoetic ‘sound’ word, *hammmm* ‘buzzing sound’ (probably this is derived from a root—compare the Spokane cognate above); three nominal roots, *hem’ís* (in *hem’íshem’* ‘mourning dove’), *héw’t* ‘packrat’, and *he?én’m* ‘eight’; and ten verbal roots, *hál* ‘soaking wet’, *háw* ‘scold’, *haw’* ‘loose(n)’, *hém/hén* ‘pink’, *hemí* ‘foggy’, *hetí* ‘tease’, *héw* ‘yawn’, *hé?* ‘be respected’, *híp* ‘sound of a ruffed grouse drumming’, and *hóy* ‘stop doing something’. The remaining twelve morphemes have non-initial /h/: the demonstrative particle *ihé?/ihi* ‘here’; three nominal roots, *séhč* ‘Douglas’s onion’, *ch* (in *č-ch=é(čst)* ‘right(hand) side’), *mhúye?* ‘raccoon’; and eight verbal roots, *?éh* ‘feel offended’, *čhé* ‘use together with something’, *ihém’* ‘reconcile with somebody’, *pnh(é)* ‘arrive on time for something’, *č’eh(k^w’)* ‘uncover’, *?ohó?* ‘cough’, *ahq^w’* ‘slip’, and *uhé* ‘bark (of dogs)’. Unlike Spokane, MSa does not appear to have any affixes with underlying /h/; the four Spokane prefixes that begin with /h/ have vowel-initial cognates in MSa: *es-* ‘stative aspect’ (cf. Spokane *hec-*), *eł-* ‘back, again’ (cf. Spokane *heł(uł)-*), *in-* ‘my’ (cf. Spokane *hin-*), and *an-* ‘your (sg.)’ (cf. Spokane *han-*).

As in the other languages, several of the MSa morphemes with /h/ look onomatopoetic. We have already seen one instance in MSa *hámmmm*. The roots for ‘yawn’, ‘sound of a ruffed grouse drumming’, ‘cough’, and ‘bark’ also belong in this category, and one or two others may involve sound symbolism too. In all the Southern Interior Salishan languages and dialects, in fact, sound-symbolic morphemes comprise a significant proportion of the morphemes with /h/. There is no evidence, however, to support a proposal that all the

roots with /h/ can be classified as sound-symbolic. Still, if the onomatopoetic roots are eliminated, the non-affective occurrence of /h/ is even more limited than it appears from the lists of roots above.

One MSa root, *pnh(é)* 'arrive on time for something', is unusual in that the /h/ looks like an added suffixal element; the root seems very likely to be connected with *pén* 'time' (as in e.g. *pén-tč* 'forever' and *s-pi-sc'é* 'yesterday', where [pi] is underlyingly /p(é)n/). This pattern is presumably fairly old, because it also occurs in Colville-Okanagan: compare the Colville-Okanagan roots *pn* (as in e.g. *pin=tk* 'always, still') and *pnh* (as in e.g. *pnh-íp-nt* 'be in time for something') (Mattina 1987:135, 136; these two dictionary entries are cross-referenced to each other).

Turning to the phonotactics of /h/ within the MSa word, we find that other authors' comments about the occurrence of /h/ in other Salishan languages are generally valid for MSa as well. It is more common morpheme-initially than elsewhere in the word. It's true that /h/ never occurs word-finally, as Mattina found for Colville-Okanagan (1973:8), but this is almost trivially true in MSa: the only two morphemes that end in /h/ are the roots *ʔéh* 'feel offended' and *ch* 'right(hand) side', and these are always (in my data) followed by a lexical suffix—usually *=éls* 'feeling/thought' after *ʔéh* and *=éčst* 'hand' after *ch*. So I have no evidence that word-final /h/ is ruled out in principle in MSa.

Medially, MSa /h/ occurs intervocalically or next to one consonant or, more rarely, between two consonants. The /h/ is intervocalic in several of the morphemes listed above—*ihéʔ/ihi* 'here', *ihém'* 'reconcile with someone', and *ʔohóʔ* 'cough'. It occurs more frequently after than before a consonant. This is not accidental: most /h/'s are root-initial and most roots have the form CVC, and many prefixes either consist of or end in a consonant. Moreover, although most unstressed vowels delete in MSa as in its close relatives, unstressed /e/ often remains, and /a/ sometimes remains too (notably when it is protected by a back consonant), so morpheme-initial /h/ is almost always followed either by a stressed vowel, as in *i-sc-héʔ* 'my secret' and *q-s-híp-i* 'it (a ruffed grouse) is going to drum', or by an undeleted unstressed vowel, as in *shemíp* 'fog' and the second syllable of *es-hew-héw-lš-i* 'she's yawning' or *y-es-heʔé-m* 'I'm saving it'. There are a few occurrences of underlying /h/ before a consonant, for instance *séhč* 'Douglas's onion', $k^w u$

es-n-ʔéh-ls-m-s ‘he’s insulting me’, and *čn čɬ-ahqʷ’-p=šíʔ* ‘I slipped’.

The rarest occurrences of /h/ are between consonants and in geminates. I’ve found only two words with interconsonantal /h/: *kʷ cnpnhcíʔ* ‘you came in time to eat’ (underlyingly /c-n-pnh(é)=cín/, lit. ‘hither-in-arrive.in.time=food’) and *čn nč’hkʷ’qín* ‘I got my scalp taken off’ (/n-č’eh(kʷ’)=qín/, lit. ‘in-uncover=head’).

Three words in my files have a geminated /h/, all of them due to a regular morphological inchoative formation with C_2 reduplication: *čn es-n-ʔéh-h=els-i* ‘I got even more perturbed and stayed that way’ (the root is *ʔéh* ‘feel offended’); *čn čchhe(ʔ)tíl’š* ‘I ended up doing better than others, I got to the front of the line’ (the root is *ch*); and *esuhhemíʔ* ‘a dog is barking’ (the root is *whé*).

A final topic for this section is the more general behavior of MSa /h/ under reduplication conditions. If, as has been suggested, /h/ is phonotactically weak, we might expect it to be unstable when reduplicated. As we’ve just seen, however, a root-final /h/ undergoes C_2 reduplication to form a geminate. It is therefore not surprising that root-initial /h/ reduplicates in the normal way. Here are most of the examples from my files: *hehetmúɬ* ‘a teaser, someone who’s always teasing’, *čn eshewhéwlši* ‘I’m yawning’, *čn ɬhewhéwlš* ‘I yawn a little’ (cf. Spokane *hew(í): hewhéw-n-t* ‘he yawned’, Colville-Okanagan *hw*: *haw-híw=iʔst* ‘yawn’), *ɬhéhew’t* ‘a little packrat’, *hew’héw’t* ‘several packrats’, *uhéwhéw* ‘it’s howling’, *hehe?é* (truncated from *hehe?én’m*) ‘an eight (playing card)’, and *oho?ohóʕʷ’lš* ‘he keeps coughing continuously’. Note that this last word shows total rather than partial reduplication, a common feature of onomatopoetic formations in MSa. Besides these clear examples, there is one rather puzzling form, the first word in *héʔmhemt l ululím* ‘He likes giving money (*ululím*) away’. It looks at first glance as if it might be connected with the root *héʔ* ‘be respected’, but the reduplicated *m* must surely be part of the root, because (parts of) affixes do not participate in reduplication processes; but I have no simplex forms for a root *hé(ʔ)m*, and I can find no potential cognates for such a root. Still, it is at least clear that this is a reduplicated /h/-initial root, so it’s worth including here.

It should be noted that there is very little material in my files on reduplication and other forms for roots and stems containing /h/. In part this is no doubt due to the inevitable incompleteness of the files, but in part it is certainly due to the paucity of occurrences of

/h/ in general.

4. /h/ in alternation with other segments

The problem of limited data is more acute when we turn our attention to alternations between /h/ and other segments. There are at most a few examples of any given connection, which makes the posited links more tantalizing than conclusive. Further research into the behavior of /h/ and these other segments in other Salishan languages, especially other Southern Interior languages, should help to clarify the picture.

First, I've found no appreciable tendency for /h/ to alternate with zero in MSa. This finding surprised me, both because (as mentioned above) /h/ has the reputation of being a 'weak' consonant in Salishan languages and because it regularly alternates with zero in several morphemes in Spokane. But in Spokane the regular alternations involving *h* loss affect only the handful of *h*-initial prefixes; MSa, by contrast, has no *h*-initial prefixes at all—either because it never developed an /h/ at the beginning of the cognate prefixes or because it lost the initial /h/ completely some time ago—so MSa lacks that target for /h/ loss, and /h/ seems in general to be quite stable in MSa.

The second surprise was that I've found only one example of a possible correspondence between /h/ and /ʔ/. The root *héʔ* 'be respected' (in e.g. *n-heʔ=éls-n* 'I (want to) respect people') is cognate with Colville-Okanagan *hy(hʔ)* in e.g. /s-n-hyh=ils-m/, which surfaces as *s-n-hiʔ-íls-m* 'respect'. Mattina (1987:23) comments that the 'analysis [is] uncertain', so perhaps this isn't an example of a correspondence between /h/ and /ʔ/ at all; perhaps the second root consonant is actually *ʔ* in Colville-Okanagan, as it seems to be in MSa. The lack of alternations between /h/ and /ʔ/ is moderately surprising in view of Black's comment, quoted above, that Spokane /h/ may also on occasion surface as glottal stop (1996:17).

What /h/ does alternate with, within MSa and/or between MSa and other Southern Interior languages, is the entire range of non-glottalized dorsal continuants: the velar fricatives x^w and (in Colville-Okanagan and Moses-Columbia) x, the uvular fricatives $\dot{x}$ and $\dot{x}^w$, the non-glottalized pharyngeal resonant consonants ʕ and ʕ^w, and (in Moses-Columbia) a voiceless pharyngeal fricative $\dot{h}$. Some of the examples below may be due to faulty

transcription; in particular, all three of the dorsal fricatives (x^w, $\underset{\cdot}{x}$, $\underset{\cdot}{x}^w$) are so lax in MSa that distinguishing x^w from $\underset{\cdot}{x}^w$ can be extremely difficult, and even $\underset{\cdot}{x}$ may pose occasional perceptual problems when compared with *h*. Acoustic analysis of all these segments would be needed to achieve full confidence in the transcriptions. Moreover, some of my MSa data is drawn from sources that are not always phonetically reliable, even when the transcriber was a linguist. Nevertheless, in word-initial position at least, /h/ is generally easy to distinguish from any other continuant segment in the language; and in favorable instances some speakers are conscious of relevant differences and willing to comment on them. So the transcriptions are far from random, and I am reasonably confident that they are correct as they stand.

The most frequent alternation links /h/ with a velar fricative, either x^w or (in the languages that have it) *x*. In two cases there is a morphophonemic alternation within MSa between /h/ and /x^w/, with the fricative occurring before a rounded vowel. First, the root *č'eh(k^w')* 'uncover', in its continuant-final variant, occurs once with x^w before a suffix beginning with a rounded vowel: compare *k^w es-n-č'ex^w=úps* 'your bottom (=*úps*) is uncovered' with *k^w'ɬ-n-č'h=ép-is* 'he opened it (a car door)'. (I have no explanation for the fact that the root-vowel /e/ remains in the first form and disappears in the second; the same speaker provided both forms, though not in the same session.) In other examples, however, this root seems to have /h/ even before a rounded-vowel suffix, e.g. *es-č'eh=ús* 'his face is uncovered'. I also have a form *k^w'ɬ-n-č'x^{w}k^w'=é* 'key' (truncated from *k^w'ɬnč'x^{w}k^w'ép*), with the long form of the root and apparently with /h/ assimilated to a labialized fricative before the labialized root-final stop; but this form needs to be rechecked.

The second alternation within MSa is in reduplicated forms of the root *hóy* 'stop doing something', where *čn hoy-hó* (truncated from *hoy-hóy*) 'I quit (playing cards)' varies with *x^{w}i-hó*. The first variant has vowel retention in the prefixed CVC- reduplication syllable; the second variant has undergone the regular vowel deletion process in the unstressed reduplication syllable—or, rather, the vowel itself is gone, but its feature [+round] remains on the consonant, yielding [x^w]. The vowel deletion leaves the underlying root-final consonant /y/ between two consonants, so as expected it vocalizes to [i]. When this word came up in an elicitation session in 1999, two elders preferred the variant with *x^{w}i-* and one

(the oldest of the three by about twenty years) preferred the variant with *hoy-*; all three of the elders who entered into the discussion were Ql'ispé (Pend d'Oreilles), so it's unlikely that a dialect difference could account for their differing views on the best pronunciation.

The other two examples in which *h* alternates with *x*^{w} are cross-linguistic. MSa has a particle *x*^{w}*u* meaning (roughly) 'O.K.'; this is likely to be cognate with the Colville-Okanagan particle *huy* in the reduplicated form *hu-húy* 'O.K.' The second example is shakier, because I have been unable to find or elicit any data on the MSa root other than the one form: the MSa root *x*^{w}*m'n* 'forbid' (which may be morphologically complex, since it has three consonants) seems likely to be cognate with Columbian *hám'ən* 'I forbade him'.

Finally, two examples appear to show an *h*/*x* alternation. MSa and Spokane have a root *séhč* 'Douglas's onion' that corresponds to the Colville-Okanagan root *sáxk*. And the MSa demonstrative particle *ihé?* 'here' looks as if it is cognate with Colville-Okanagan *axá?* 'this, here'. These correspondences are irregular: MSa and Spokane /h/ corresponds regularly to Colville-Okanagan /h/, as in the question particle *ha(?)* or the root for 'yawn' (MSa *héw*, Spokane *hew(í)*, Colville-Okanagan *híw*), and Colville-Okanagan /x/ is a reflex of the Proto-Salishan fricative that palatalized regularly to /š/ in MSa and Spokane. So, for instance, the regular correspondences would predict either MSa and Spokane *séhč* and Colville-Okanagan *sáhk* or MSa and Spokane *séšč* and Colville-Okanagan *sáxk* for 'Douglas's onion'.

Three examples seem to point to an alternation between /h/ and a uvular fricative. In one of them Spokane has an /h/ where MSa and Colville-Okanagan have /χ^{w}/. The MSa form *č-x̣*^{w}*óy=qn* 'it's piled' (from the root *x̣*^{w}*óy*) corresponds to Colville-Okanagan *t-x̣*^{w}*áy=qn* 'pile something' and also to Spokane *č-hóy=qn* 'it's all in a pile'. The second example features variant forms from different speakers for the root *ahq*^{w}*'/ax̣*^{w}*q*^{w}*'* 'slip': *čł-ahq*^{w}*'-p=šíʔ* and *čł-ax̣*^{w}*q*^{w}*'-p=šíʔ* 'his foot/feet slipped'; compare Spokane *č'ł-łaq*^{w}*'-p=šín* and Colville-Okanagan *k'ł-ahq*^{w}*'=xán*. The lack of a medial consonant in the Spokane root makes it likely that the original consonant was /h/, which is a better candidate for total loss than /χ^{w}/ is. The variant MSa form with *x̣*^{w} would then be due to assimilation to the following labialized uvular stop—parallel to the probable assimilation of /h/ to [x^{w}] before a labialized velar stop in *k*^{w}*'ł-n-č'x*^{w}*k*^{w}*'-é* 'key' (discussed above). The third set of forms in

which /h/ appears to correspond to a uvular fricative is rather puzzling—the analysis of the forms is not clear, at least for MSa, and neither are the semantic connections—but it's hard to believe that the forms are completely unconnected. In this case MSa has /x̣/ where Spokane has /h/: compare MSa *x̣awítx̣o* 'American bittern' and *x̣awítx̣aw* 'shooting star' with Spokane *n-hew=étk^{w}=eʔ* 'rail (a kind of bird)' and *hwíthut* 'shooting star'.

In four examples, two of them probably onomatopoetic, /h/ alternates with a pharyngeal consonant. Spokane has a root varying between *ham(í)* and *ʕam(í)* in e.g. *hamí-p* 'it melted'; in MSa this root always begins with a plain pharyngeal consonant, e.g. in *ʕamí-p* 'it melted'. Spokane also has an initial /h/ in the root *hóy'* 'smile' (e.g. *hoy'-n'-cút* 'he smiled') where both MSa and Colville-Okanagan have a labialized pharyngeal: MSa *ʕ^{w}oy'* in *ʕ^{w}oy'-n-cú(t)* 'he laughed'; Southern Colville-Okanagan *ʕ^{w}'y* in *ʕ^{w}'y-n-cút,* *ʕ^{w}'y-ʕ^{w}'y-n-cút* 'he laughed'. (Northern Colville-Okanagan has instead a plain pharyngeal here: the root is *ʕaʔ*, in *ʕaʔ-n-cút* 'he smiled', *ʕa-ʕa-n-cút* 'he laughed'.)

In two other words Columbian has a voiceless pharyngeal fricative /ḥ/ or /ḥ^{w}/ where MSa and its closest relatives have /h/. Compare MSa *ohóʔ* 'cough' (in e.g. *ohoʔ-ohóʕ^{w}-lš* 'he keeps coughing continuously') and Spokane *hóʔ* (in e.g. *hec-hóʔi* 'a cough (from a cold)') with Columbian *ʔəḥ^{w}aʔ* 'cough'. This word may also be cognate with Upper Chehalis *x̣^{w}ó:x̣^{w}uʔ* 'cough', which would add another example—though not a very impressive one, given the onomatopoetic nature of the word—in which /h/ corresponds to /x̣^{w}/. In the root for 'loose(n), let loose', MSa and Colville-Okanagan have /h/ where Columbian has /ḥ/: MSa and Colville-Okanagan *háʕ^{w}'* vs. Columbian *ḥámp*. The cognacy of the Columbian root with the others is in some doubt, however, given the non-correspondence in the coda consonant(s).

As noted at the beginning of this section, and in discussions of some of the examples, not all the alternations exemplified above are solidly established. All, or almost all, are irregular. Two conclusions can, however, be drawn with some confidence about the status of /h/ in MSa and other Salishan languages. First, although rare, /h/ is an old phoneme; it must be reconstructed for at least a few Proto-Salishan roots (e.g. '(pack)rat'). Second, in Southern Interior languages, /h/ alternates sporadically with various dorsal continuants.

5. A rule of /h/-insertion in Montana Salish

Because /h/-insertion is so closely connected with truncation, a brief account of this process is needed to set the stage for the discussion of /h/-insertion. It is well known that some Southern Interior Salishan languages have undergone an optional truncation process in which everything after the stressed vowel in a word is deleted (as discussed in Doak 1990 for Coeur d'Alene and in Thomason & Thomason 2004 for MSa). According to Carlson, '[t]he primary distinguishing feature of Flathead [Montana Salish] is the shortening of many forms by deletion of material beyond the accented vowel, a tendency observable in Kalispel, but not as widespread. The Spokans refer to Flathead speakers as "those people that cut off their words" ' (1972:v). Vogt's description of truncation in Kalispel is worth quoting in full (1940:17):

> 'A great number of words have two forms, one full form and one abbreviated form where everything following the stressed vowel is dropped. Most, perhaps all, the words with stressed final vowel have this origin. This fact undoubtedly has grammatical consequences. Final -*á* may represent -*áqs* 'nose, road' or -*ásq't* 'day, sky', -*é* may represent -*élx*^{w} 'skin', -*ép* 'door, hair', -*éčst* 'hand', etc. When the feeling of the abbreviated forms as secondary forms of the full word is lost, the abbreviated form becomes an independent word whose relation to the stem is not always clear. This was the case with my informant who often was incapable of giving the longer forms.'

Montana Salish is similar to Kalispel in this respect, but (as Carlson noted) more so: there are many lexicalized stems ending in stressed vowels, with no apparent knowledge of longer forms among modern speakers. As we will see below, all such stems seem to be nouns. The truncation process raises an obvious question: what happens when semantically important grammatical suffixes (as opposed to the lexical suffixes in Vogt's examples) follow the stressed vowel, as is very often the case? In Thomason & Thomason 2004 we phrased the truncation rule in a somewhat frivolous way: 'Delete everything after the stressed vowel of any word if you want to—but you won't want to if there are crucial grammatical suffixes after the stressed vowel.' The only non-crucial grammatical suffixes in

my files are the unstressed intransitive continuative allomorph *-i* (when it co-occurs with a stative prefix) and the antipassive *-m* (when it co-occurs with an agent prefix); in both of these cases, the prefix forces the correct reading of the word, so the suffix isn't needed for semantic interpretation. It turns out, perhaps surprisingly given the relative weakness of the lexical distinction between nouns and verbs in MSa and other Salishan languages, that nouns and verbs behave differently under truncation.

In verbs, even when (as often happens) speakers are unable to think of 'the long form' when asked for it, the long forms pop up when important grammatical suffixes are added to the stem. Some verbs do have fairly freely alternating short and long forms, even when the morpheme containing the stressed vowel is word-final. An example is the root *ʔác'x̣* 'watch (something)', in which the truncated intransitive continuative form *es-c-ʔá* 'she was/is watching them' alternates with the full form *es-c-ʔác'x̣-i* 'she is/was watching them'. Forms with important grammatical suffixes, such as the plural transitive imperative, are never truncated, e.g. in *ʔác'x̣-nt-i!* 'look at him, you guys!' Other verbs are routinely truncated when possible, for instance the verb stem /x̣ʷeɬ=éčst/ 'hurry' (the lexical suffix means 'hand' and is semantically opaque here). Elders always give a truncated form when asked for a translation of a simplex construction with this stem, e.g. *čn x̣ʷeɬé* 'I hurry/hurried', and they can't all provide the long form on request. But the full form surfaces in a suffixed construction like the singular intransitive imperative: *x̣ʷeɬéčst-š!* 'hurry!'. Occasionally a verb appears in truncated form mainly in nominalized and (apparently) stylistically marked verbal constructions. The root *ʔócqeʔ* 'go outside' usually occurs untruncated, as in *čn ʔócqeʔ* 'I went outside'; and of course the full form always appears when there are crucial suffixes, as in the causative construction *ʔóccqe-st-s* 'he let them out' (with inchoative C_2 reduplication). But the root is truncated in the nominalized form *s-čɬ-ʔó* 'measles', in the fixed adverbial expression *č'-č'-ó* 'outside', and in the baby-talk expression *xey' n'é tn ʔó* 'I might have to go outside [to the potty]'. (In this last sentence the 1sg intransitive subject pronoun *tn* is baby-talk for *čn*.)

Grammatical suffixes with weak stress are never truncated even when they're stressed, but three grammatical suffixes with strong stress that can occur in word-final position are often truncated. These are the reflexive suffix *-cút*, the reciprocal suffix *-wéxʷ*, and the

'intransitive reflexive' suffix *-míst*. With all these, as with other truncated verbal stems, the full form surfaces when further suffixes are added: compare *čn x̣c-m-n-cú* 'I got ready' with *x̣c-m-n-cút-š!* 'get ready!'; *ihem'-t-wé* 'they made peace (with each other)' with *ihem'-t-wéx*^{w}*-st-n* 'I made them make peace (with each other)'; and *čn č-te(ʔ)-mí* 'I bumped against something' with *č-te(ʔ)-mist-m-n-wé* 'they collided (with each other)'. Examples like these make it clear that for verbs, at least, the underlying forms are the full forms: speakers have the knowledge to produce the long forms when they're needed, and they're needed whenever grammatically and semantically crucial suffixes are added to the stem.

The situation is strikingly different with nouns. Many truncated nominal forms are clearly lexicalized, so that they are in fact the underlying forms; the etymological full forms are no longer internalized for current speakers. There is of course some variation: some elders know long forms that others don't, and long forms sometimes surface in alternation with truncated forms. But for many nouns there appear to be no long forms at all in modern MSa. Some of these truncated forms end in stressed root-vowels, but most end in stressed lexical suffixes, so that what is truncated is the lexical suffix.

An example of a consistently truncated root is the word for knife, *ɬ-n'í* (a diminutive formation from the root *níč'* 'cut', with a diminutive prefix and glottalization of the resonant consonant). The root is never truncated (in my data) in verbal contexts; even in the rare cases when a verbal form of 'cut' is word-final, the root appears in the full form, e.g. *es-níč'* 'it's cut'. A more typical example of a truncated noun stem is formed from the root *t'íš* 'sugar, sweet', which always appears with its final consonant, as in *i t'íš* 'it's sweet'. The derived noun *s-t'š=á* 'huckleberry' (literally 'sweet berry'), with an etymological suffix *=áɬq* 'root, berry, fruit', is invariably truncated. Compare the nouns meaning 'huckleberry' in Spokane (*s-t'š=áɬq*), in Kalispel (optionally-truncated *s-t'š-a(ɬq)*), and in Coeur d'Alene (*s-t'š=ástq*, with a different lexical suffix than in Spokane and Kalispel).

What happens when important suffixes are added to a truncated noun stem? One possibility is that the long form of the noun stem will surface, as happens when (additional) verbal suffixes are added to a truncated verbal stem. In such a case the underlying form of the noun must be the long form. A second possibility is that the suffix(es) will be added

directly to the truncated stem. And the third possibility is that a consonant will be inserted between the truncated stem and the suffix. In the vast majority of cases, this inserted consonant is /h/; in a few instances it is /s/. Only two suffixes are readily available to test speakers' suffixing strategies for truncated noun stems: the 2pl possessive suffix *-mp* and the third-person possessive suffix *-s*. (It's possible that additional tests could be made with verbal suffixes added to noun stems to form words with meanings like 'you turned into coffee', but speakers are understandably reluctant to come up with such weird forms in elicitation sessions, and any translations they do provide are periphrastic constructions.)

An example in which the long form always surfaces under possessive suffixation is the word for 'dog'. The unsuffixed form is always *n-q^{w}-q^{w}'s-m'=í* or, in the plural, *n-q^{w}'i-q^{w}'s-m'=í* ; but in the possessed form the possessive suffix is always added to the etymologically expected long stem, as in *n-q^{w}'-i-q^{w}'s-m'=íčn=ši-s* 'his dogs' (where prefixal *-i-* marks the plural and the final consonant *n* of the last suffix *=š(í)n* 'foot' changes to *i* by a regular morphophonemic rule). A similar example is the word for a brown horse, which is normally truncated as *čɬ-č'é*, but the suffixed form is long: *čɬ-č'éƛ'=ix^{w}-s* 'his brown horse' (cf. Spokane *čɬ-č'éƛ'=x^{w}* 'brown horse' and Colville *kƛ'-k'aƛ'=lx^{w}* 'brown horse').

The second possible strategy, the addition of the possessive suffix directly to the truncated stem, is used (in my data) mainly by just one elder, MD. The word *sx^{w}-n-m'i-m'i-p=á(lq)* 'always telling on someone', has a nominal derivative (without an overt suffix in modern MSa) to which MD gave the possessed form *sx^{w}-n-m'i-m'i-p=á-s* 'his snitch'. The word for 'woodpecker or flicker with red on it' is *k^{w}l-k^{w}l=é*, from the root *k^{w}íl* 'red' (cf. Spokane *k^{w}lk^{w}l=éčeʔ* 'flicker'); its possessed form is given by MD as *k^{w}l-k^{w}l=é-s* and by JPP as *k^{w}l-k^{w}l=é-h-s*. And the loanword *lití* 'tea' (from French, maybe via Chinook Jargon) also has variant possessed forms, *lití-s* (from MD and JMcD) and *lití-h-s* (from JPP).

In some possessive forms there is variation with and without the etymological root-final consonant. One example is *mɬí(č)* 'salmon'. This root almost always appears in truncated form (when it appears at all: the elders say that it is no longer used on the reservation, but they all know the word still), and the longer form is certainly etymologically correct. Mengarini (1861), describing mid-19th-century MSa, has *smlich* for 'salmon', and Kalispel and Spokane both have *s-mɬ=íč*. The unsuffixed form in modern MSa is always *smɬí*. But

'his salmon' is given by the elders variously as *s-mɬíč-s*, with the etymological root-final *č* restored; *s-mɬí-h-s*, with an inserted *-h-*; and *s-mɬí-s-ts*, with an inserted *-s-* followed by the regular dissimilated form of the possessive suffix (which is sometimes pronounced [ts] and sometimes pronounced [c]). Another example involves the loanword *ɬ-l'pó* 'cup' (with diminutive prefix and diminutive glottalization of the resonant root consonant), borrowed from French, perhaps via Chinook Jargon. The original long form is/was *ɬ-l'pót*; cf. Spokane *lpót*. One speaker (JPP) gave two possessed forms for this root, first *ɬ-l'pó-h-s* and then, a few minutes later, *ɬ-l'pót-s*; another elder offered *ɬ-l'pó-s-ts*. (This word for 'cup' occurs only in the Ql'ispé (Pend d'Oreille) dialect of MSa; the Bitterroot Salish dialect has a completely different word for 'cup'.)

Besides the variants *s-mɬí-s-ts* and *ɬ-l'pó-s-ts*, I have just six definite examples with inserted *-s-*. Four of these are in native words that have etymological word-final consonants: *č'np'=qí-s-ts* 'his ring' (from *č'np'qí* 'ring'; cf. Spokane *č'np'=qín=čst* and Colville-Okanagan *k'np'=qin=ks-tn*); *s-t'm'=á-s-ts* 'her cow' (from *s-t'm'=á* 'cow'; cf. Spokane *s-t'm'=áʔ*, which indicates that the untruncated MSa possessive would be either *s-t'm'=áʔ-s* or *s-t'm'=á-s*); *s-ɬ-qʷá-s-ts* 'his rabbit' (from *s-ɬ-qʷá(qʷc'eʔ)* 'rabbit'; cf. Spokane *s-qʷáqqʷc=iʔ*); and *s-xʷp-xʷá-s-ts* 'her wing-dress' (one elder had instead *s-xʷp-xʷá-h-s*; cf. Spokane *s-xʷp-xʷáp=x̣n* 'Indian dress'). The remaining two examples with *-s-* are in vowel-final loanwords from French (either directly or via Chinook Jargon): *lkepú-s-ts* 'his coat' (from *lkepú* 'coat') and *kapí-s-ts* 'her coffee' (from *kapí* 'coffee'); the possessive of 'coffee' alternates with *kapí-h-s*. A total of six examples with *-s-* is not trivial; but it is the inserted *-h-* that is clearly productive, so I will not discuss *-s-* further, except to note that any theoretical account of consonant insertion before possessives must explain the variation in choice of consonant.

Otherwise, and quite productively, the consonant that is inserted between a truncated stem and a possessive suffix is /h/. I have just one example in my files of a 2pl possessive suffix *-mp* added to a truncated stem; this example arose in a 'What happened next?' elicitation context, so the relevant sentence was constructed by the consultant, not translated from English. The word is *s-čɬ-qʷ'á-h-mp* 'your bark bags/rawhide buckets' (from *s-čɬ-qʷ'á* 'bark bag/home-made rawhide bucket'; cf. Spokane *s-c-č-ɬqʷ'=álqʷ* 'bark basket'). An

interesting formation that may be relevant here is the independent Spokane pronoun *nplέhmp* 'you (pl)', which looks as if it too has an inserted *-h-* between a stem *nplé* and a 2pl possessive suffix *-mp*. This would make sense, in spite of the fact that Spokane doesn't seem to have much (if any) truncation otherwise, if the Spokane stem is precisely cognate with MSa *nplé* 'you (pl)'; compare Mengarini's *mpilépstemp* (1861) and 2pl independent pronouns in certain other Salishan languages, e.g. Coeur d'Alene *kuplípst* (where the initial *ku-* (or $k^w u$-) is presumably an analogic innovation based on the 2sg intransitive subject particle).

All my other examples have /h/ inserted before the third-person possessive suffix *-s*. The native words invariably have etymological word-final consonants. Here are a few typical examples, some with variant formations. The stem *qq'm=é(y'eʔ)* 'to fish, fish-hook' has a derived form *č-qq'm=é(y'eʔ)* 'fishing pole' (cf. Spokane *č-q'q'm'=éy'eʔ-tn*); the possessed form varies between a suffixed full form *č-qq'm'=éy'e-s* (with deleted glottal stop—and assuming that the full form in MSa lacks the final suffix that occurs in the Spokane word) and a suffixed truncated form *č-qq'm'=é-h-s* 'his fishing pole'. These two possessed forms were offered by the same speaker in translating the same story sentence-by-sentence from English, but in consecutive years (the form with direct suffixation in 1996 and the form with inserted /h/ in 1997).

The word *nt'é* 'gooseberry' is clearly a lexicalized noun in MSa; it never occurs with the presumed etymological suffixes (cf. Spokane *n-t'ét'm'=l'ps* 'gooseberry' and Colville-Okanagan *n-t'í-t'm=lps* 'wild gooseberry'). The possessed form has inserted /h/: *Malí nt'éhs* 'Mary's gooseberries'. Similarly, *č'eʔmú* 'pet' has only this form; compare Spokane *č'-em'út-n'* 'caged up pet (e.g. a canary or hamster)', which suggests that the etymological MSa form was *č-ʔemút(-n'ʔ)*, literally 'perched on', from the root for 'sit'). The possessed MSa form is *č'eʔmú-h-s* 'his pet'. The only MSa form of the word for 'flea' is k^w*'t-*k^w*'í*, and the possessed form is k^w*'t-*k^w*'í-h-s* 'his fleas'; compare Spokane k^w*'t'-*k^w*'ít'=ps* 'a flea' and Colville k^w*'t'-*k^w*'it'=ps* 'flea'. The possessed form for the word for serviceberry bush is *s-łłq=é-h-s* 'her serviceberry bush' (with C_1 reduplication; compare Spokane *s-łłq=élp*), and *č'ł-*k^w*l'-*k^w*l'=é-h-s* 'his calf' is formed from *č'ł-*k^w*l'-*k^w*l'=é* (cf. Spokane k^w*l'*k^w*l'=él'*x^w 'cow calf'). Many examples could be added to these: the phenomenon is

quite common.

There are also several examples with vowel-final loanwords, all of them borrowed from French (directly or via Chinook Jargon): *laswé-h-s* ‘her silk’, *lmotó-h-s* ‘his sheep’, *lkʷošó-h-s* ‘his pig’, *leputé-h-s* ‘his bottle’, and *sqʷóʔɬ lamná-h-s* ‘honey’, literally ‘bee’s syrup’ (this may be Ql’ispé only; the Bitterroot Salish dialect has a different word for ‘syrup, molasses’).

In some cases a noun must be considered to have severed its link to an etymologically connected root. We’ve already seen a few examples; another is *np’ú* ‘yellow clay (used for painting on the forehead)’, which is originally from the root *p’úm* ‘brown, orange (color)’. The possessed form *np’ú-h-s* indicates that the truncated form has been lexicalized, so that treating it as a derivative of *p’úm* is an etymologically-based decision, quite possibly not justified synchronically. Compare the possibly related formations in Spokane and Colville-Okanagan, respectively *s-n-p’úm=łc’eʔ-tn* ‘smokehouse’ and *s-n-p’úm=łc’aʔ-tn* ‘smoking shed’.

It may well be that the small number of semantically crucial nominal suffixes—only the 2pl and 3rd possessive suffixes, as noted above—is responsible for the striking difference in the behavior of truncated nouns as opposed to truncated verbs. Several grammatical verbal suffixes are vital to the meaning of the word, and the suffixed formations are sufficiently frequent that they can reasonably be supposed to have prevented lexicalization of truncated verb stems. Even nouns that are felicitously possessed probably don’t occur often enough in natural discourse to keep the long form of a truncated simplex noun in speakers’ minds, or to permit child learners to acquire it (in the days when MSa was still learned by children as a first language). And the fact that many or most nouns are not naturally possessed (it’s hard to elicit forms like ‘his cow elk’, even with a hunting context provided) contributes to the low frequency of crucially suffixed nominal forms.

This concludes the description of the /h/-insertion process and the other (less common) strategies for adding suffixes to lexicalized truncated noun stems. It must be emphasized that I don’t know how general this is in the MSa language community; I’ve heard it consistently from just one consultant, JPP, although I do have examples from other speakers as well. There is some variation among speakers, as we’ve seen; significant

individual variation is to be expected of a language that has only a handful of remaining fluent native speakers. I also don't know how old the phenomenon is, but I'd guess not very old as a productive process: it obviously arose after the long slow (and still incomplete) process of lexicalization of truncated stems.

6. Why /h/-insertion?

Two interesting questions remain. First, why is any consonant inserted by some speakers between a lexicalized truncated stem and a possessive suffix? This question arises because it is certainly not the case that word-final sequences of *-és*, *-ás*, and so forth are phonologically prohibited—they are actually quite common, especially *-és*. And second, why is /h/ the most productive hiatus-filler? The choice of /h/ is surprising in view of its infrequent occurrence elsewhere in MSa, its limited distribution, and also its reported weakness, both phonetically and morphophonemically (although, as we have seen, it is not particularly weak morphophonemically in MSa). I have no solid answers to offer here to either question, but I do have a few comments.

One possible answer to both questions is that truncated stems, as well as vowel-final loanwords, have been reanalyzed with a stem-final /h/, to fit the language's canonical C(R)VC / CV(R)C root structure. This isn't an appealing notion, however, because a new and otherwise unmotivated rule would be needed to delete the stem-final /h/ always and only in word-final position. (And of course this hypothesis would still leave /h/ as an arbitrary dummy stem-final consonant.)

A more interesting answer to the first question is that the inserted *-h-* might be acting as a kind of 'morphological trace' signaling the (prior) existence of the truncated material (I owe this suggestion to Dan Everett, p.c. 2002). More generally, it might be a signal that the suffix is being added to a phonologically 'defective' stem, one that ends in a vowel; this would account both for the native truncated stems with etymological final consonants and for the vowel-final loanwords. Elsewhere in the language, both vowel-initial and consonant-initial suffixes are almost always added to consonant-final stems: there are a few vowel-final suffixes that occur in absolute word-final position, but hardly any that precede other suffixes, and the only native vowel-final roots are a few that have lost an original

consonant (usually a pharyngeal). The insertion of /h/ (or of /s/ in the less common case) would then function as a parsing aid (Dan Everett, p.c. 2002).

But then why /h/? At first glance, at least, it seems odd that such a rare and arguably marginal consonant would be chosen as a hiatus-filler. There seem to be two mutually exclusive possibilities here. The choice of /h/ might have been dictated by its marked status in the MSa phonological system, making it a prominent and therefore easily detectable parsing aid (Dan Everett, p.c. 2002). Its phonetic prominence—the inserted *-h-* in the possessed forms is quite long and therefore very noticeable—would support this suggestion.

But on the other hand, perhaps /h/ was chosen as a default consonant (I'm grateful to Bill Poser, p.c. 2002, for this suggestion and the following analysis.) From the time when autosegmental analyses began making use of default feature insertion rules, epenthetic segments have been assumed to be the defaults for the particular language (or else unspecified). This might work for the rarer instances of *-s-* insertion—I don't have specific evidence to support a claim of default status for any MSa consonant, but /s/ is probably a more promising candidate than /h/. But it may be that the very fact that '/h/ is a consonant with not much feature content' could make /h/ 'the result of the insertion of the minimal [number] of consonant features that MSa requires....in theory there is no reason that the default in this sense...should be a segment that is otherwise common in the language.'

There is some support in the literature for such a proposal: other languages do occasionally have epenthetic [h], in various positions in a word. In some dialects of the Athabaskan language Slave, for instance, [h] is epenthesized before a stem-initial vowel to yield a CV syllable structure (Rice 1989:133-134); in Huariapano, a Panoan language of Peru, [h] is epenthesized in syllable-final position in odd-numbered syllables before a voiceless consonant (but never on a stressed initial syllable) (Parker 1994:117 et passim); and Bessell notes that '/ʔ, h, w, j/ often serve as hiatus breakers in VV sequences' (1993:14; for further examples of epenthetic consonants, including [h], see de Lacy 2006:80).

Both of these suggestions for motivating the choice of /h/ for insertion seem plausible, and I have no evidence at present that would help in deciding between them. Nor am I

altogether certain that they are in fact mutually exclusive: it may be that the phonetic markedness and marginal status of /h/ in the MSa system combine with the minimal feature content of /h/ to make it an excellent choice for hiatus-filler.

Footnote

* I am grateful to the Seliš-Ql'ispé Culture Committee and its Council of Elders for permission to publish this paper. I am most grateful to the Seliš and Ql'ispé elders who, during almost forty summers, have worked with me to document their language. Montana Salish is just one name by which the Salishan tribes of Montana's Flathead Reservation are, or have been, known. The Flathead Reservation, where they live, embodies the name Flathead, by which the Seliš tribe – also known as the Bitterroot Salish – has been known at least since William and Clark's expedition passed through their territory in 1805. More recently, they have been called Bitterroot Salish, to prevent confusion with other Salishan tribes (since the language family got its name from this tribe); most recently, they have become known by their self-name, Seliš. The Ql'ispé were traditionally known to whites as the Pend d'Oreilles, and before that as the Upper Pend d'Oreilles (or Upper Kalispels, who lived upriver from the Lower Pend d'Oreilles or Lower Kalispels of eastern Washington State).

Thanks are also due to Ives Goddard for being such an excellent scholarly role model. I have admired Ives' work since long before we met, in 1986, at the First Spring Workshop on Theory and Method in Linguistic Reconstruction in Pittsburgh. This paper is the closest approximation I can manage (which isn't very close) to the kind of meticulous and insightful analyses for which Ives has long been famous among Americanists and historical linguists.

References

Barthmaier, Paul T. 1996. *A dictionary of Coeur d'Alene Salish from Gladys Reichard's file slips*. Missoula: University of Montana M.A. thesis.

Bates, Dawn, Thom Hess, and Vi Hilbert, compilers. 1994. *Lushootseed dictionary*, ed. by Dawn Bates. Seattle: University of Washington Press.

Bessell, Nicola J. 1993. Phonological wildcards: /ʔ, h/. Philadelphia: University of Pennsylvania, ms.

Black, Deirdre Jean. 1996. *The morphological and phonological structures of Spokane lexemes.* Victoria: University of Victoria dissertation.

Carlson, Barry F. 1972. *A grammar of Spokan: a Salish language of eastern Washington.* Honolulu: University of Hawaii dissertation.

Carlson, Barry F., and Pauline Flett, compilers. 1989. *Spokane dictionary.* (University of Montana Occasional Papers in Linguistics 6.) Missoula: UMOPL-Linguistics Laboratory, University of Montana.

de Lacy, Paul. 2006. *Markedness: reduction and preservation in phonology.* Cambridge: Cambridge University Press.

Doak, Ivy. 1990. Truncation, i-Suffixation, and extended vowel length in Coeur d'Alene. *Papers for the 25th International Conference on Salish and Neighbouring Languages,* University of British Columbia, pp. 97-109.

Doak, Ivy Grace. 1997. *Coeur d'Alene grammatical relations.* Austin: University of Texas dissertation.

Kinkade, M. Dale, compiler. 1981. *Dictionary of the Moses-Columbia language (nxaʔamxcín).* Nespelem, WA: Colville Confederated Tribes.

Kinkade, M. Dale, compiler. 1991. *Upper Chehalis dictionary.* (University of Montana Occasional Papers in Linguistics 7.) Missoula: UMOPL-Linguistics Laboratory, University of Montana.

Kuipers, Aert H. 1967. *The Squamish language: grammar, texts, dictionary.* The Hague: Mouton.

Kuipers, Aert H. 1974. *The Shuswap language: grammar, texts, dictionary.* The Hague: Mouton.

Kuipers, Aert H. 2002. *Salish etymological dictionary.* (University of Montana Occasional Papers in Linguistics 16.) Missoula: UMOPL-Linguistics Laboratory, University of Montana.

Mattina, Anthony. 1973. *Colville grammatical structure.* Honolulu: University of Hawaii dissertation.

Mattina, Anthony, compiler. 1987. *Colville-Okanagan dictionary.* (University of Montana Occasional Papers in Linguistics 5.) Missoula: UMOPL-Linguistics Laboratory, University of Montana.

Mengarini, Gregory, S.J. 1861. *Grammatica linguae Selicae.* New York: Cramoisey Press.

Mengarini, Gregory; Joseph Giorda; Leopold van Gorp; Joseph Bandini; and Joseph Guidi. 1877-79. *A dictionary of the Kalispel or Flat-head Indian language.* St. Ignatius, MT: St. Ignatius Print.

Parker, Stephen. 1994. Coda epenthesis in Huariapano. *International Journal of American Linguistics* 60:95-119.

Reichard, Gladys. 1958. A comparison of five Salish languages, Part I. *International Journal of American Linguistics* 24:293-300.

Rice, Keren. 1989. *A grammar of Slave.* Berlin: Mouton de Gruyter.

Swadesh, Morris. 1952. Salish phonological geography. *Language* 28:232-248.

Thomason, Lucy, and Sarah G. Thomason. 2004. Truncation in Montana Salish. In Donna B. Gerdts and Lisa Matthewson, eds., *Studies in Salish linguistics in honor of M. Dale Kinkade*, 354-376. Missoula: UMOPL-Linguistics Laboratory, University of Montana.

Thompson, Laurence C., and M. Terry Thompson, compilers. 1996. *Thompson River Salish dictionary: nɬkepmxcín.* (University of Montana Occasional Papers in Linguistics 12.) Missoula: UMOPL-Linguistics Laboratory, University of Montana.

Vogt, Hans. 1940. *The Kalispel language: An outline of the grammar with texts, translations, and dictionary.* Oslo: Det Norske Videnskaps-Akademi i Oslo.

Watkins, Donald. 1970. *A description of the phonemes and position classes in the morphology of Head of the Lake Okanagan (Salish).* Edmonton: University of Alberta dissertation.