

Montana Salish epenthesis and consonant class division

ISO 639-2: sal; 47°30' 0.7" N 114°20' 3.5" W

This paper argues for a three-way division between **obstruents** (O), **sonorants** (S), and **pharyngeals** (Ph) in Montana Salish (MaS), which is in contrast to the more common two-way division between O and S (which includes Ph), cross-linguistically and in MaS literature (Flemming, Ladefoged, Thomason 2008). I provide evidence from schwa epenthesis within consonant clusters (based on Flemming et al 2008 and Thomason 2017 ms.), the patterning for which differs between pharyngeals and other sonorants. This patterning can be accounted for under the Syllable Contact Law (SCL) (Vennemann 1988): syllables in contact are preferred when there is not rising sonority between the coda of one syllable and the onset of the next syllable.

Salish languages are known for their rich consonant inventories and clusters, which makes them a point of interest for this discussion. Montana Salish, an interior Salish language, allows very complex and long obstruent clusters (*sx^wčšt'sqá* 'herdsman/shepherd'), but requires an epenthetic schwa in other cluster environments, most commonly between an obstruent and a following sonorant (Flemming et al 2008): $0 \rightarrow \text{ə} / O _ S$; /ʔeslíwti/ \rightarrow [ʔesəlíwti] 'chapped'; /t'áq'n/ \rightarrow [t'áq'ən] 'six'.

I present a systematic survey of consonant clusters in MaS. For OS (setting aside Ph) clusters in all positions of the syllable (#CC, C.C, CC.C, CC#), the data show that schwa epenthesis occurs word-internally between an obstruent and sonorant (1-4) (as predicted by Flemming et al 2008). Interestingly, word-initial OS clusters do not epenthesize— see (5).

- (1) x^wíc'š.tx^w 'You gave me (it)' (OO no epenthesis) (2) ʔe.sə.líw.ti 'chapped' (OəS)
 (3) q'áw^ʔ.xəʔ 'yellow bell' (SO no epenthesis) (4) q'ej^ʔ.mín 'paper' (SS no epenthesis)
 (5) smén^ʔx^w 'tobacco' (#OS no epenthesis)

The data support an analysis driven by the SCL as sonority, not complexity, determines whether epenthesis applies. I then show that OPh clusters behave differently: schwa epenthesis occurs between obstruents and pharyngeals both word-internally and word-initially (6-7) (differing from the initial finding). Schwa epenthesis also occurs between pharyngeals and sonorants, just as systematically as pharyngeals do with obstruents— see (8).

- (6) ʔe.sə.ʔáts 'it's tied/staked' (OəPh) (7) ʔe.sə.ja.ʔ.sqé 'shy/reserved' (PhO no epenthesis)
 (8) ja.ʔ^ʔə.mim 'gathering (as, rocks)' (PhəS)

Crucially, word-internal pharyngeals pattern with obstruents and word-edge pharyngeals pattern with sonorants, leading to the conclusion that there is a three way sonority division between obstruents, pharyngeals, and sonorants. In MaS, if a coda consonant is more sonorous (based on the three-way division) than the following onset consonant, this violates the SCL, as summarized below. Thus, a schwa is epenthesized to break up the illicit cluster across a syllable boundary. This is why epenthesis occurs between pharyngeals and sonorants, because pharyngeals are categorically less sonorous. Notably, the SCL also accounts for the behavior of word-initial #OS and word-final OPh/S# clusters (which do not show epenthesis), because the SCL only holds of syllables that are in contact.

O.O (no violation)	O.Ph (Ph has greater sonority = ə)	O.S (S has greater sonority = ə)
Ph.O (no violation)	Ph.Ph (no violation)	Ph.S (S has greater sonority = ə)
S.O (no violation)	S.Ph (no violation)	S.S (no violation)

This analysis offers a careful view of the phonotactics of MaS, a less well studied Salish language. The highly regular pattern of schwa suggests that schwa need not be written in the practical orthography of the language. Schwa epenthesis, driven here by the SCL, highlights language specific patterning of the sonority hierarchy, which could exist in other languages (Salish or not).

References

- Bagemihl, Bruce. 1991. Syllable Structure in Bella Coola. in *Linguistic Inquiry* Vol 22, No 4: 589-646.
- Bates, Dawn and Barry F. Carlson. 1992. Simple Syllables in Spokane. In *Linguistic Inquiry*, Vol 23 No 4:653-659.
- Flemming, Edward, Peter Ladefoged, Sarah Thomason. 2008. Phonetic Structure of Montana Salish. In *Journal of Phonetics* 36 pp 465-491
- Hall, Nancy. 2011. Vowel epenthesis. In van Oostendorp, M., Ewen, C. J., Hume, E., Rice, K. (Eds.), *The Blackwell companion to phonology* (pp. 15761596). Oxford: WileyBlackwell
- Hall, Nancy. 2006. Cross-linguistic patterns of vowel intrusion. *Phonology* 23, 387429.
- McCarthy, John J. 1988. Feature Geometry and Dependency: A Review. *Phonetica* 43: 45;84-108.
- Parker, Aliana. 2011. It's that schwa again! towards a typology of Salish schwa. Victoria: University of Victoria, Department of Linguistics.
- Thomason, Sarah G., compiler. 2017. *Šeliš-Ql'ispe Dictionary*. University of Michigan, ms.
- Uffmann, Christian. 2011. The Organization of Features. in *The Blackwell Companion to Phonology*. Marc Van Oostendorp, Colin Ewen, Elizabeth Hume, and Heren Rice (eds.)
- Vennemann, Theo. 1988. *Preference Laws for Syllable Structure*. Berlin: Mouton de Gruyter.