## Syllabicity of [X] in Blackfoot: An Empirical Investigation

## Mizuki Miyashita University of Montana

This study examines the syllabicity of a dorsal fricative /x/ in Blackfoot. Blackfoot has two fricatives, /s/ and /x/, and it has been claimed that Blackfoot /s/ is syllabic (Derrick 2007; Denzer-King 2009; Goad and Shimada 2014). The syllabicity of /x/, however, has never been investigated, though Elfner (2006) states that /x/'s phonetic variants are possibly moraic. The sound /x/ always surfaces as [x], [c], or  $[x^w]$ , and these surface forms are collectively represented as [x] in this paper, omitting place features. This study examines the native speaker intuition of two Blackfoot speakers and suggests that [x] may be conditionally syllabic.

Although obstruents' syllabicity is typically determined by native-speaker researchers (e.g., Tashlhiyt Berber: Dell and Elmedlaoui 1985, 1988; Ridouane 2008), native intuition has not been extensively relied on in Blackfoot prosodic research. This study addresses this issue by conducting a tapping method with two Blackfoot native speakers. The results showed that the speakers did tap on [X] when it was bounded by consonants and the preceding consonant followed another [X] (e.g., [mi:.sta.kso:mX.kX.ki.na:] miistáksoomahkihkinaa 'bighorn sheep'). However, they did not tap on [X] when it followed a vowel (e.g., [in.noX.ksi.sii] innóóhksisii 'elephant') or when [X] followed a consonant and was followed by a consonant then a vowel (e.g., [omX.ko.ka.ta] 'gopher'). The results suggest that [X]'s syllabicity is not inherent and is controlled by the environment.

This study contributes to several areas in linguistics: typology, the sonority sequencing principle, mora theory, and syllabification. It also provides important information to language teachers and learners, as it demonstrates that one must learn that [X] is a possible syllable head and learn the environments where it is treated as syllabic.

## References

- Dell, François, and Mohamed Elmedlaoui. 1985. Syllabic consonants and syllabification in Imdlawn Tashlhiyt Berber. *Journal of African Languages and Linguistics* 7. 105–130.
- Dell, François, and Mohamed Elmedlaoui. 1988. Syllabic consonants in Berber: some new evidence. *Journal of African Languages and Linguistics* 10. 1–17.
- Denzer-King, Ryan. 2009. The Distribution of /s/ in Blackfoot: An Optimality Theory Account. MA Thesis. University of Montana.
- Derrick, Donald. 2007. "Syllabification and Blackfoot's." *Proceedings of NWLC 22*. SFU Working Papers in Linguistics. Burnaby: Simon Fraser University. 62–76.
- Elfner, Emily. 2006. Contrastive syllabification in Blackfoot. *Proceedings of WCCFL 25*, ed. by Donald Baumer, David Montero, and Michael Scanlon. Somerville, MA: Cascadilla Press. 141–149.
- Goad, Heather, and Akiko Shimada. 2014. In some languages, /s/ is a vowel. *Proceedings of the Annual Meetings on Phonology 2013*, ed. by John Kingston, Claire Moore-Cantwell, Joe Pater and Robert Staubs. Washington, DC: Linguistic Society of America. 1–12.
- Ridouane, Rachid. 2008. Syllables without vowels: phonetic and phonological evidence from Tashlhiyt Berber. *Phonology* 25. 321–359.