

## Motivating a Prosodic Stem constituent in Blackfoot nominals

### Overview

This paper motivates the existence of a Prosodic Stem constituent in Blackfoot nouns. I show that morphosyntactic diagnostics distinguish noun stems from both words and roots. A process of consonant deletion targets the right edge of stems before suffixes within the same word, but not the right edge of words or roots. This is evidence that noun stems are parsed to a P(rosodic) Stem constituent which must be distinct from the P(rosodic) Word.

*Noun stems* Regarding morphological criteria, noun stems can occur with nominal possessor morphology, (1), while verb stems cannot, (2) (cf. Wiltschko 2014). Stems are shown in braces.

- |     |                      |  |     |                          |
|-----|----------------------|--|-----|--------------------------|
| (1) | [nitá:ki:koama]      |  | (2) | *[nitó:ojóʔsi:mə]        |
|     | nit–{aakiikoan}–m–wa |  |     | nit–{a–ooyoʔsi}–im–wa    |
|     | 1–{girl}–POSS–AN.SG  |  |     | 1–{IMPF–cook}–POSS–AN.SG |
|     | ‘my girlfriend’      |  |     | Intended: ‘my cook’      |

Regarding phonological criteria, when noun stems are followed by inflectional suffixes, a stem-final [m], [n], or [s] after a short vowel deletes before suffixes within the same word. The final [n] in *atsikín* ‘shoe’ and [aakiíkoan] ‘girl’ deletes before plural suffixes in (3), and the final [n] in ‘girl’ also deletes before the possessive suffix *-m* in (1). When bare noun stems (with no inflectional suffixes) occur, a stem-final [m], [n], or [s] never deletes, even when another word follows, (4).

- |     |    |                |                 |              |
|-----|----|----------------|-----------------|--------------|
| (3) | g. | [atsíkí:st̩si] | atsikin -istsi  | ‘shoe-IN.PL’ |
|     | h. | [a:kí:koə:ksi] | aakiikoan -iksi | ‘girl-AN.PL’ |
| (4) | g. | [atsikín]      | atsikin         | ‘shoe’       |
|     | h. | [a:kí:koan]    | aakiikoan       | ‘girl’       |

*Words* Regarding morphological criteria, a word consists minimally of a stem and maximally of a stem plus any bound affixes. A word instantiates a minimal syntactic constituent ( $X^0$ ). Regarding phonological criteria, a word-final [m], [n], or [s] crucially never deletes.

*Roots* Regarding morphological criteria, roots are monomorphemic bound elements. Roots cannot form stems by themselves, but must first combine with a categorizing suffix. Examples (5) and (6) show the root *ksis* ~ *iksis* ‘sharp’ combining with nominal and verbal categorizing suffixes, respectively. The resulting constituent, marked off in braces, has the same properties as other stems. A root can also occur at the left edge of a stem, as in (7). The resulting constituent again has the properties of a stem; a root at the left edge of a stem creates a recursive stem.

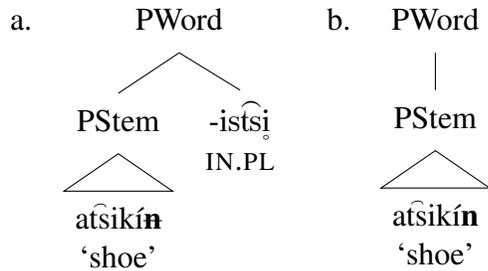
- |     |                 |     |                       |     |                            |
|-----|-----------------|-----|-----------------------|-----|----------------------------|
| (5) | [ksísóji]       | (6) | [iksíse:kim:a]        | (7) | [iksísíst:somoʔka:n̩]      |
|     | {ksis–oyi}      |     | {iksis–aiikimm}–wa    |     | {iksis–{isttsomoʔkaan}}–yi |
|     | {sharp–mouth.n} |     | {sharp–blade.AI}–3    |     | {sharp–{hat}}–IN.SG        |
|     | ‘tea kettle’    |     | ‘it (anim.) is sharp’ |     | ‘pointed hat’              |

Regarding phonological criteria, a root-final [m], [n], or [s] after a short vowel never deletes before other morphemes within the same word, as shown in (5)–(7).

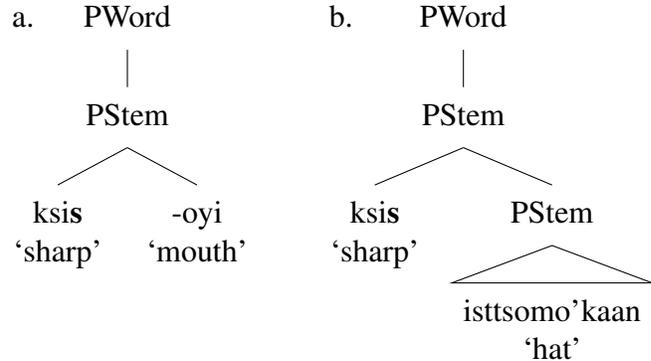
### Proposal for prosodic structure

I propose that deletion targets the right edge of a PStem, but not a PWord. In (8), the noun stem *atsikín* ‘shoe’ is parsed to a PStem. Because the PStem is followed by a suffix and is therefore not word-final, the stem-final [n] deletes. In (8b), the noun stem is parsed to a PStem constituent, and since there are no other affixes in the word, the PStem projects directly to a PWord constituent. The stem-final [n] falls at the right edge of a PWord, and deletion does not occur.

(8) PWORDS WITH(OUT) SUFFIXES



(9) PSTEMS WITH ROOTS



A root is never aligned to the right edge of a PStem because roots always occur to the left of a categorized suffix, (9a), or stem, (9b). Since deletion targets the right edge of a PStem, a root-final [m], [n], or [s] will never delete.

### Implications for prosodic categories

Recent studies propose a prosodic hierarchy without morphoprosodic categories below the PWord, but with a richer projection structure which allows recursive prosodic constituents (Ito & Mester 2009; Selkirk 2011). Thus, a word with phonological sub-domains must contain recursive PWords. The PStem in Blackfoot cannot be a minimal PWord, because the process of deletion targets PStems to the exclusion of PWords. The data from Blackfoot support prosodic hierarchies that include a PStem category (e.g. Downing & Kadenge 2015; Inkelas 1989). Blackfoot lacks phonological evidence for a PRoot category as distinct from the PStem category; there are no phonological processes or constraints which target roots.

### References

- Downing, Laura J & Maxwell Kadenge. 2015. Prosodic stems in Zezuru Shona. *Southern African Linguistics and Applied Language Studies* 33(3): 291–305.
- Inkelas, Sharon. 1989. *Prosodic constituency in the lexicon*. Published 1990, New York: Garland. Stanford University, PhD dissertation.
- Ito, Junko & Armin Mester. 2009. The extended prosodic word. In *Phonological domains: Universals and deviations*, 135–194. (Interface explorations vol. 16). Mouton de Gruyter.
- Selkirk, Elisabeth O. 2011. The syntax-phonology interface. In *The handbook of phonological theory*, Goldsmith, John, Jason Riggie, & Alan C.L. Yu (eds.), 435–484.
- Wiltschko, Martina. 2014. Patterns of nominalization in Blackfoot. In *Cross-linguistic investigations of nominalization patterns*, Paul, Ileana (ed.), pp. 189–214. (Linguistik Aktuell vol. 210). John Benjamins Publishing Company.