

The Role of Prosodic Structure in the Word Tonology of Lhasa Tibetan

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The prosodic structure of Lhasa Tibetan brings evidence for four main constituents: the intonational phrase (ι), the large prosodic word (Ω), the small prosodic word (ω), and the syllable (σ). In this presentation, I will focus on tonal processes taking place in the small and large prosodic words. Lexical tonal processes are bound by the small prosodic word, and the syllable is the tone-bearing unit (TBU). Intonational tone rules, on the other hand, mostly govern the interaction between prosodic words within a large prosodic word.

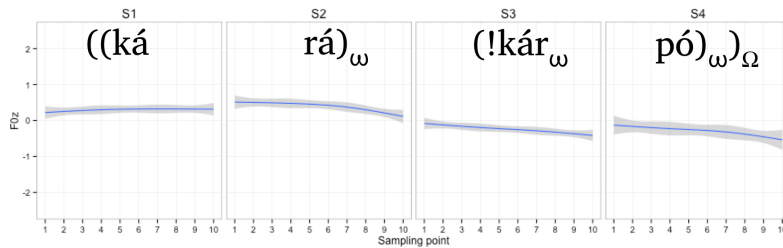
Lhasa Tibetan has three lexical tones: L, LH, and H. In recent research, its word tonology has been analyzed by means of two main components: prosodic phrasing defines tonal domains (akin to small prosodic words), and a set of tone rules operates in those domains (Qu and Tan:1983; Monich:2011; Gong:2014). That said, previous studies have not been able to provide a satisfactory account of prosodic phrasing and pitch realization in polysyllabic words. For example, they predict that /H.H.H/ should have the tone pattern [H.H.H] or [H.H.L], while it actually has either the structure [H.!H.H] or [H.H.!H] depending on the prosodic phrasing. This paper proposes a new analysis of prosodic structure and of intonational and lexical tone rules. This proposal concurrently provides a more accurate characterization of prosodic phrasing and its role in the word tonology of Lhasa Tibetan.

The lexical tone rules I propose are a reinterpretation of the Lhasa tone rules proposed by Duanmu (1992): (a) form a small prosodic word of a maximum length of two syllables based on morphemic boundaries and semantic symmetry; (b) delete all non-initial tones within a small prosodic word; and (c) associate the tones with syllables on a one-to-one and left-to-right basis within a small prosodic word, where LH can associate with a monosyllable. For example, Duanmu's rules predict that /H.LH.H/ should have the tone pattern of [H.H.H]; however, based on current lexical tone rules, it actually either has the structure [H.H.!H] or [H.L.H] depending on the prosodic phrasing.

A polysyllabic word is treated as a large prosodic word that consists of multiple small prosodic words. The large prosodic word is parsed from particular types of morphemic boundaries and semantic groupings. The main evidence to support the status of large prosodic words is as follows: (a) Lhasa Tibetan's small prosodic words are not recursive, as seen in the fact that the tone of the non-initial small prosodic word is preserved as in [kárpó] in Figure 1; (b) the large prosodic word is the domain of downstep as seen at the boundary between the two small prosodic words in Figure 1; and (c) the large prosodic word naturally aligns with the polysyllabic word's morphological boundaries as in [kárá!kárpó] 'white sugar'.

Based on these results, I argue that the Lhasa Tibetan small prosodic word is not recursive, contrary to the Japanese one (Ito and Mester: 2012), and that its prosodic domains do not match those of the proposed Universal Prosodic Hierarchy (Selkirk: 2002, Nespor: 2007).

(a) Surface realization of /ka^Hra^Hkar^Hpo^H/ ‘white sugar’



(b) Phonological derivation

Underlying /ka^Hra^H-kar^H-po^H/
Representation sugar-white-ADJ

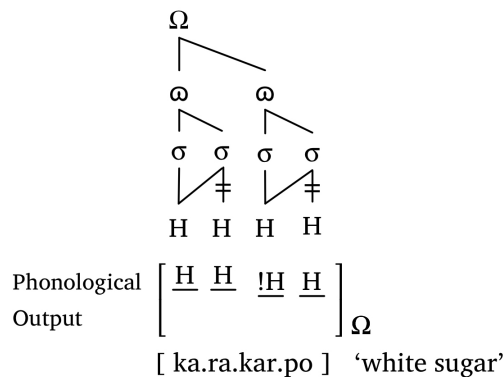


Figure 1. The surface realization and phonological derivation of /ka^Hra^Hkar^Hpo^H/ ‘white sugar’.

References

- Duanmu, San. (1992). *An autosegmental analysis of tone in four Tibetan Languages*. *Linguistics of the Tibeto-Burman Area*, 15(1).
- Gong, X. (2014). Structure of the prosodic word and stress in Old Tibetan. In SEALS24, Yangon University.
- Ito, J. and Mester, A. (2012). Prosody Matters: Essays in Honor of Elisabeth Selkirk, chapter 9: Recursive prosodic phrasing in Japanese, pages 280–303. Equinox Pub.
- Monich, I. (2011). *Interaction of tone and intonation in Lhasa Tibetan: A working hypothesis*. In *Generative Linguistics in the Old World 34*, Wien. Department of Linguistics, Universität Wien.
- Nespor, M. and Vogel, I. (2007). *Prosodic Phonology*, Volume 28 of *Studies in Generative Grammar*. Mouton de Gruyter, Berlin New York.
- Qu, A. and Tan, K. (1983). *Ali Zangyu [Ali Tibetan]*. Chinese Academy of Social Sciences Press, Beijing.
- Selkirk, E. (2002). *International Encyclopedia of the Social and Behavioral Sciences*, chapter 3.9/23 The Syntax-Phonology Interface. Elsevier.