

Tonal flop in Kikuyu motivates a Shift operation

Recent studies in phonological theory have explored Harmonic Serialism (HS), a serial version of Optimality Theory (OT) where derivations proceed step-by-step based on a set of operations called GEN (McCarthy, 2009). In my own study, I have examined GEN in light of data from Kikuyu, a Bantu language with highly predictable tonal flop (Clements & Ford, 1979; McCarthy et al., 2012). I argue that the GEN should be expanded to include a new function, SHIFT, in order to account for the regularity in the Kikuyu data.

The standard operations of GEN include two ways to alter associations between features and segments. ASSOCIATION creates a new link from a feature and DELETION removes an existing link. In featural flop, a feature appears to change which segment it is associated with; in Kikuyu, for example, this occurs when underlying tones move one syllable right in the surface forms.

Previous treatment of flop relies on two successive harmonically improving steps: deletion and subsequent re-association. I argue that the Kikuyu flop data cannot be captured without using a single-step operation, SHIFT, which combines the other two operations. In particular, HS without SHIFT fails to detect serial improvement because of the interaction of word-medial contour and floating tones, neither of which are attested in Kikuyu surfaces.

With Shift included on the operation set of GEN, attested Kikuyu surfaces can be obtained through HS derivations. In addition, I show how SHIFT can be used to derive flop of other features like vowel height cross-linguistically, in order to demonstrate its usefulness as an operation in GEN.

References

- Clements, G. N., & Ford, K. C. (1979). Kikuyu tone shift and its synchronic consequences. *Linguistic inquiry*, 179-210.
- McCarthy, J. J. (2009). Harmony in harmonic serialism. *Linguistics Department Faculty Publication Series*, 41.
- McCarthy, J. J., Mullin, K., & Smith, B. W. (2012). Implications of Harmonic Serialism for lexical tone association. *Phonological Explorations. Empirical, Theoretical and Diachronic Issues*, 265-297.