Revisiting H tone spreading and depressor consonants in Xitsonga

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Introduction This poster reexamines effects of consonants that are known to block the spreading of a high (H) tone in Xitsonga. There are three major classes of these consonants (so-called depressors) in Xitsonga: voiced obstruents, breathy voice consonants and aspirated consonants (Baumbach 1987). Previous studies, however, have two gaps with respect to the relationship between depressors and H tone spreading in Xitsonga. First, while voiced obstruents and breathy voice consonants commonly behave as depressors, aspirated consonants do not cross-linguistically. Second, in Baumbach (1987), depressor effects have been shown in H tone spreading into LH tone words, but there are no known studies that show the blocking effect of depressors in L tone words. This study aims to fill these two gaps.

Goals The goals of this poster are two-fold. First, the blocking of H tone spreading by various types of depressor consonants is examined using acoustic data. The prediction is that aspirated consonants will not behave as depressors. Second, findings of depressor effects regarding the role of depressors in L tone words are reported. It is predicted that depressor consonants will block H tone spreading.

Data collection Data of Xitsonga, a southern Bantu language, is collected from Mhinga village, Limpopo, South Africa. The data consists of reported forms from Baumbach (1987) and forms that have initial depressors in L tone words. The recordings were made into a Marantz PMD-661 field recorder using a WH-30 Shure headworn microphone in a quiet room. The sampling rate was 22.5 KHz.

Results (1) H tone spreads to the following word and creates a falling tone (/í + **mu**fána/ → [í **mû**fána] 'it is a boy'). When a depressor is present, however, the H tone does not spread into the following LH word (/í + **ɦo**sí/ → [í **ɦo**sí] 'it is a chief'). (2) Aspirated consonants do not behave as depressors (/í + **t^{h}o**nsí/ → [í **t^{h}ô**nsí] 'it is a drop'). (3) Depressors that begin an L tone noun do not block H tone spreading (/í + **du**lu/ → [í **dú**lu] 'it is a grain elevator').

Discussion (1') Pitch track data of Xitsonga shows that depressor consonants do block H tone spreading as reported in Baumbach (1987). The collected data will also show how H tone spreading through non-depressors is realized. (2') As predicted at the onset of this study, aspirated consonants do not block H tone spreading. This result is different from Baumbach's (1987) original report, but it follows findings in other studies on the interaction of tone and consonants (Lee 2008, Tang 2008). (3') Unexpectedly, depressor consonants that begin L tone nouns do not block H tone spreading. This transparency of depressors calls for a revision of previous theories on consonant-tone interaction, in particular with theories that hypothesize that the association of an L tone to depressor consonants blocks H tone spreading (cf. Bradshaw 1999).

References

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