A tone system with a low functional load: The case of Karbi (Tibeto-Burman)

Karbi, a Tibeto-Burman language from Northeast India, has three tones: low, mid, and high. A satisfactory account of the tone system has been challenging in several ways, mostly due to its overall low functional load and the resulting difficulty for native speakers to compare and determine tones.

Among the three tones, the mid tone is peculiar for several reasons, including word-final glottalization. After discussing the basic phonological properties of the tone system, I will present data from an acoustic study of F0 measurements of monosyllabic stems that are low, mid, or high, from collaborative work with Amos Teo. Three stem forms: 1) the bare stem, and the stem with either 2) the -pò 'irrealis1' suffix, or 3) the -jí 'irrealis2' suffix, were recorded from both a female and a male speaker. Previous observations had suggested that mid and high stem tones are not distinguished by F0 in these three contexts.

Surprisingly, the F0 measurements of the mid and the high tone are significantly different in the male but not the female speaker.

However, a follow-up perception study shows that the consistent F0 difference between the M and the H tone that the male speaker produced is not phonological: listeners were not able to use it as a cue to distinguish between the mid and the high tone. This then appears to be an interesting case of incomplete neutralization.

Returning to the phonology of the tone system, I will finish with a discussion of methods my language consultants and I used to determine tones.