

On non-optimal laryngeal timing: the case of Trique
General Session : Phonetics/Phonology

The language of San Martín Itunyoso Trique is a laryngeally and tonally complex language which sequences laryngeal features in non-optimal way for tonal perception. The language, which has 5 level tones and 3 contour tones, contains a set of laryngealized vowels which may be post-aspirated, post-glottalized, or rearticulated (with or without post-aspiration or post-glottalization). The tones of the language pattern in interesting ways with the laryngeal segments. In particular, modal vowels have final breathiness which perturbs F0 and ambiguates tonal contrasts between level tones on post-aspirated vowels and contour tones.

Current phonological theory predicts that laryngealized segments or features pattern in such a way to be optimally perceived (Silverman, 1997a, 1997b). The concept of “perceptual optimization” (Steriade, 2002) predicts that speakers actively produce sounds in such a way as to maintain phonological distinctions in perception. Under such a view, laryngealization in tonal languages patterns at syllable onsets so that pitch is optimally perceived on the latter, modal portion of the syllable. Where laryngealization can appear in syllable-final position, it will be timed to not overlap with the modal portion in order to allow the perceptual “recovery” of tones (Silverman, 1997a). The timing of laryngeals with tone in Trique presents an interesting counter-example to this claim of optimal syllable-final timing. While much of the phonological literature discussing laryngealization focuses on its timing with respect to consonants, this talk complements such research by focusing on laryngeal timing on rimes.

The initial part of this talk will present phonetic data on the effect of laryngeals on pitch in the language. Data from 5 speakers of Trique (from the author’s fieldwork) will be presented. In the latter part of the talk, I will present some other counterexamples to this claim of “optimization” with laryngeals, i.e. their patterning in Chamicuro (Parker, 2001).

References:

- Parker, Steve (2001) *Non-optimal onsets in Chamicuro: an inventory maximized in coda position*, *Phonology*, 18, 2001, 361-386
- Silverman, Daniel (1997a) *Phrasing and Recoverability*, Phd Dissertation, Garland Publishing.
- _____ (1997b) *Laryngeal Complexity in Otomanguean Vowels*, *Phonology*, 14, 235-261.
- Steriade, Donca. (2002) *Directional asymmetries in place assimilation: a perceptual account* In E. Hume and K. Johnson (eds.), *The Role of Speech Perception in Phonology*. New York: Academic. (2002)