Ixpantepec Nieves Mixtec Word Prosody

This paper presents ongoing investigation into the word prosodic phonology and acoustic correlates of Ixpantepec Nieves Mixtec, based on data collected with two speakers currently living in San Diego, California. Some aspects of the syntax (Caponigro et al 2012) and discourse (Villas-Boas 2010) of Ixpantepec Nieves have been described, but no systematic phonological description is yet available.

Mixtec languages are usually described as having both complex lexical tone systems and word-level stress accent (e.g. Pankratz and Pike 1967; Pike and Oram 1976), and the typological variation and acoustic properties of such languages are only beginning to be explored (Remijsen and van Heuven 2005; Pearce 2006). Studies in other languages, including some languages of Mexico (Chavez Peón 2008; Guion et al 2009; DiCanio 2012), have identified distinct acoustic correlates of stress and tone, but no similar study in a Mixtec language has appeared.

The municipality of Ixpantepec Nieves lies on the northern edge of the Southern Mixteca Baja dialect group, and the word prosody is similar in many ways to the other Mixtec varieties of this region. A bimoraic canonical root features prominently in the morphology and phonology. Only vowels are moraic, and the vowel pairs within canonical roots are tightly associated, generally identical when there is no medial consonant. All voiced segments within a morpheme must share any nasalization, and nasalization is not permitted in canonical roots with medial voiceless consonants. There is at least a three-way height-based tone contrast on vowels in all prosodic positions, while the vowel in monomoraic enclitics can host contour tones. The initial syllable of the rightmost bimoraic root in a phonological word is also the default position of stress, while certain enclitics can cause the stress to shift rightward.

Stress and tone are independent phenomena in Ixpantepec Nieves Mixtec, in that stress is predictable and cued primarily by duration and intensity profile, while tone is lexically determined and cued primarily by pitch. However, the cues do overlap in that intensity profile, as a function of vowel phonation, is a secondary cue of tone, and acoustic falls in pitch are observed in stressed vowels with phonologically simplex tone, though this effect might be a correlate of prominence in a domain larger than the phonological word.

This research is still in an early stage, and so there are many open questions, but these results extend our understanding of variation among Mixtec languages and contribute to our knowledge of the typology of prosodic systems.