

Accent in Uspanteko

Uspanteko (Guatemala; ~2000 speakers) is an endangered Quichean-branch Mayan language. It is unique among Quichean-branch languages in that, along with obligatory right-edge stress (1), Uspanteko has innovated a system of contrastive pitch accent. In this paper we provide a novel analysis of word-level accent in Uspanteko, using data drawn from Can Pixabaj (2006) as well as our own recent fieldwork.

We propose that the location of pitch accent and stress in Uspanteko can be straightforwardly captured under three assumptions: (i) Uspanteko words contain a single right-aligned iamb; (ii) pitch accent must dock to a foot head (e.g. de Lacy 2002); and (iii) pitch accent cannot dock to a word-final mora. These assumptions account for default word-final stress (1), as well as penultimate stress in [CVCV] words bearing pitch accent (2).

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| (1) | a. | xin.lo.wi.'saaj | ‘I sheperded it’ |
| | b. | i.xpa.'qar | ‘toad’ |
| (2) | a. | 'teem | ‘chair’ |
| | b. | 'ín-tem | ‘my chair’ |
| | c. | 'chee' | ‘tree’ |
| | d. | 'ín-chi' | ‘my tree’ |

We further analyze this pitch-driven stress retraction as an iambic-trochaic reversal: footing remains perfectly right-aligned, but becomes trochaic to accomodate pitch placement. An advantage of this account of stress retraction is that it explains why pitch accent and stress are confined to the rightmost two syllables of the word: tone association and stress shift are effectively foot-bounded. This account also explains why phonemic long vowels are only found word-finally in Uspanteko: all long vowels must be stressed, but deviations from default word-final stress can only be driven by constraints on pitch accent placement (2).

Along with the moraic non-finality requirement on tone placement, there is an additional pressure to realize tone on a non-final syllable. However, there is lexical variation as to how this constraint is met. In some cases final long vowels shorten in order to realize tone on the penult (2a-2b). In other cases, tone deletes rather than appear on a final syllable, as in (3a-3b), even when tone is required for morphological reasons, e.g. to mark possession. Finally, there are some forms that do allow tone on a final syllable (3c-3d).

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| (3) | a. | 'keem | ‘weaving’ |
| | b. | 'in-keem | ‘my weaving’ |
| | c. | 'ooj | ‘avocado’ |
| | d. | aw-'óoj | ‘your avocado’ |

We model this lexical variation using cophonologies with partially-ordered prosodic constraints (Antilla 2002). The successive imposition of simple pairwise rankings at different lexical strata correctly derives the three patterns described above.

Further evidence for accentual cophonologies comes from words ending in [V?C#] sequences. Tone cannot appear on words that end in [V?C#]; this condition is met either by tonal deletion or by final consonant deletion. We analyze this condition on tone as the result of a clash between constraints on tone and stress placement. The core idea is that [V?C] syllables are bimoraic and thus stress attracting, but only contain one TBU (as the vocalic mora), and are therefore incapable of bearing tone when word-final. The resolution of this clash — as tonal or segmental deletion — varies arbitrarily by lexical class.

References: [1] Antilla, A. (2002) Morphologically conditioned phonological alternations. *NLLT* 20:1-42. [2] Can Pixabaj, T. (2006) *Gramática descriptiva Uspanteka*. [3] de Lacy, P. (2002) The interaction of tone and stress in OT. *Phonology* 19.