

The representation of tone in Ixpantepec Nieves Tu'un Savi (Mixtec)

This paper provides a phonological description of the tonal system of Ixpantepec Nieves Tu'un Savi (INTS; Otomanguean, Mixteca Baja), a previously undocumented variety of Mixtec. The tone systems of Mixtec languages display considerable variation among them: while Peñoles Mixtec has a system with 9 underlying tone patterns in bimoraic stems (Daly and Hyman 2007), Yoloxóchitl Mixtec has 28 tone patterns in equivalent stems (DiCanio et al 2012). The few phonological analyses also differ considerably. San Miguel el Grande Mixtec has been analyzed as having an underspecified M tone and morpheme-final unassociated (floating) H tones (Tranel 1995), while Peñoles Mixtec has similarly been argued to have underspecified M tone, but all L tones are analyzed as underlyingly unassociated (Daly and Hyman 2007). Finally, for Yucunany Mixtepec Mixtec, Paster (2005) proposes underspecified H tone and no floating tones. Based on field research data, in this paper I document the basic properties of the tonal system of INTS and propose that the tonal processes of this language support an analysis as a tripartite system with underspecified M tone and morpheme-final H or L floating tones.

In INTS as in most Mixtec varieties, the minimal word and the maximal root are both bimoraic, making the canonical bimoraic stem a natural unit for analysis of tone pattern inventories. These stems can be either monosyllabic CVV with a long vowel or disyllabic CVCV with short vowels. All 9 possible pairs of basic tones are attested (1):

1)	HH:	k ^w éé 'slow'	HM:	xíḷ 'different'	HL:	k ^w î 'green'
		xíkó 'tall'		sákō 'opossum'		lékà 'bag'
	MH:	ḡūú 'night'	MM:	ḡūū 'town'	ML:	nḷ 'skin'
		ixá 'overmorrow'		t'uku 'again'		ʃikò 'smell'
	LH:	t'ḷ 'mouse'	LM:	vèē 'heavy'	LL:	ḷ 'nine'
		tʃíkí 'cactus pear'		kikī 'sew'		zùkù 'grass'

as well as 5 patterns with a final floating tone (indicated by “/”) (2):

2)	HH/L:	léé` 'baby'	MH/L:	—	MM/L:	t'ḷḷ` 'grab'
		síká` 'far'		kāsî` 'eat (sweet)'		ⁿ d'íkō` 'grind'
	ML/H:	nūḷ' 'face'	LL/H:	nḷ' 'blood'		
		zūkù' 'mountain'		xìkò' 'neck'		

In isolation or in phrase-final position, the floating tones might delete rather than be realized. However, when an enclitic attaches, or in non-final positions in certain phrase types, the floating tone associates to either the preceding mora, creating a HL or LH contour tone ([nūũ = ⁿd'ì] face = 1P.EXCL 'to us, not you') or the initial mora of the

following morpheme, if the tonal configuration of that morpheme can be displaced by the floating tone. A floating L tone can displace any tone from an enclitic ([kótʃíɲà] /kótʃí = ná/ ‘her pig’; [kótʃínà] /kótʃí = na/ ‘their pig’), but when the target is not an enclitic, a floating L tone can only displace a H tone in a sequence of H tones, forming a bimoraic LH sequence ([kótʃí vâlí] /kótʃí vâlí/ ‘piglets’). On the other hand, a floating H will fully displace any M tone ([ⁿdʒàzì íʔà] /ⁿdʒàzì íʔà/ ‘salty mole’; [nūù véʔē] /nuù veʔe/ ‘on the house’) but can only displace a L tone from LL roots ([nūù kóʔò] /nuù kòʔò/ ‘on the plate’).

The distribution of underlying tone and the sandhi processes show that M is underspecified. Only L or H tones can be a floating tone, not M tone, and as a result of the sandhi processes, surface HL and LH contours are licensed on the stem-final mora, but monomoraic contours involving M are illicit. In other words, L and H can share a mora because they are marked values, whereas M is underspecified, realized in the absence of L or H.

The stem tone inventory in INTS shows 14 patterns, comparable to the 14 patterns of Mixtepec (Paster 2005), where a greater variety of monomoraic contours are licensed and final tones are consistently realized on the final vowel rather than as floating tones. This count is greater than what is found in Peñoles (9; Daly and Hyman 2007) or San Miguel el Grande (13; Tranel 1995), other Mixtec varieties that have been analyzed with underspecified M tone, but still smaller than the inventories of Atatláhuca (17; Alexander 1980) or Yoloxóchitl (28; DiCanio et al 2012), where an analysis based on underspecified M tone is not possible and four tone levels have been proposed. Considering the reconstruction of Proto-Mixtec as a two-level tone system (Durr 1987) and the diversity within the still closely related Mixtec languages, expanding our understanding of the Mixtec tone systems and working out their correspondences promises to improve our perspective on both the typology of tone systems and the diachronic processes of development of tone levels and tone sandhi.

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