

original locus of the innovated tones, as well as the segmental preconditioning of the tonogenesis.

In the village of Oapan, \**h* has been lost and the tonal system has undergone developments beyond those found in Ahuelicán. First, as in Ahuelicán, when a syllable with a historical \**h* was preceded within a root or stem by another syllable, a high–low patterning was evidenced across these two syllables. We suggest that Oapan went through a stage when \**h* was pronounced as breathy voiced [f̥], which conditioned a slight lowering of the F0 of the tautosyllabic vowel due to the effects of breathy phonation. The preceding syllable, which would most likely not have been affected by the breathy voicing, would have had a relatively higher F0. This relatively higher F0 was then reinterpreted as a high–low F0 target yielding the pattern that we have documented (see, e.g., the first two syllables of the word in (9) and note that the penultimate stress accent has shifted to the final syllable).

- (9)  $\widehat{t\acute{h}aso'ti}$  < \* $\widehat{t\acute{h}a'sohti}$  (cf. Ahuelicán  $\widehat{t\acute{h}asofi'ti}$ )  
 Ø-  $\widehat{t\acute{h}asohti}$  -Ø  
 3SG.S- to.be.dear -PRES.SG  
 'it is dear (or scarce)'

This high–low pattern is also found in both Ahuelicán and Oapan when a root- or stem-initial syllable has \**h* in the coda and there is a prefix. Consider the word in (10) with the initial prefix *no-* 'my'.

- (10)  $nókwe'ton$  < \* $no'kwehton$  (cf. Ahuelicán  $nókwefi'ton$ )  
 no-  $kwehton$  -Ø  
 1SG.POSSR- pillow -ALIEN.POSSD.SG  
 'my pillow'

However, these two subdialects diverge in cases where the root- or stem-initial syllable has coda \**h* but no preceding syllable. In these cases Oapan Nahuatl manifests a further, and what we consider subsequent, development that is absent in Ahuelicán. Specifically, there is a high tone on these initial syllables (11). Note that this prosodic pattern cannot be directly explained by the F0-lowering hypothesis of breathy-voiced [f̥].

- (11)  $kwéto'mat\acute{t}$  < \* $kweh'tomat\acute{t}$  (cf. Ahuelicán  $kwefi'tomat\acute{t}$ )  
 $kwehtoma$  - $\widehat{t\acute{t}}$   
 pillow -ABS  
 'pillow'

This suggests a stage beyond that found synchronically in Ahuelicán, in which tone is tied to the location of coda [f̥]. In Oapan, when coda [f̥] was lost, the high–low tonal pattern may have come to be associated with the root itself. By this analysis, the high–low pattern would be produced

on the root when the first syllable of an unprefix root ended with a coda \**h* (as seen with [kwéto'mat\acute{t}] in (11)). Consider also the forms in (12) and (13). The transitive verbal root \* $\widehat{t\acute{h}ahpa'lowa}$  'to greet' has Oapan forms in which a high tone is found on the first syllable of the root, even when there is a prefix, as in (12). With prefixes having a long vowel, however, the high tone is found on the preceding syllable, as in (13).

- (12)  $ki\widehat{t\acute{h}apa'lowa}$  < \* $ki\widehat{t\acute{h}ahpa'lowa}$   
 Ø-  $ki-$   $\widehat{t\acute{h}ahpalowa}$  -Ø  
 3SG.S- 3SG.O- to.greet -PRES.SG  
 's/he greets him/her'
- (13)  $né:\int\widehat{t\acute{h}apa'lowa}$  < \* $ne:\int\widehat{t\acute{h}ahpa'lowa}$   
 Ø-  $ne:\int-$   $\widehat{t\acute{h}ahpalowa}$  -Ø  
 3SG.S- 1SG.O- to.greet -PRES.SG  
 's/he greets me'

Thus, we hypothesize a second stage unique to Oapan. Once the coda \**h* was lost, the innovated high tone was no longer tied to the syllable preceding the syllable with coda \**h*; it may also be located on a root-initial syllable with coda \**h*. This proposed set of events may be an example of the development of autosegmental tonal patterning in a language, as tones come to be associated with roots rather than the conditioning environment. Oapan has further developed in this regard and now has some morphological uses of tone (e.g., speakers in Oapan use a high tone for some meanings encoded by a reduplicant in other Balsas subdialects).

Now let us consider the second high in the high–low–high patterning found in Ahuelicán and Oapan for words with \**h* in the second syllable. Two likely possibilities present themselves as to the origin of this second high. First is the proposal that the following high is a dissimilatory high, similar to the high preceding the syllable with \**h*, in that it arose in contrast to the low F0 of the syllable with coda \**h*. Another possibility, the one we support here, is that the following high is a reflex of the penultimate stress accent that has been displaced to the final syllable. Words with more than three syllables are needed to disambiguate these two possibilities, as a dissimilatory high would be present, whereas a displaced historical stress accent would not. Amith (unpublished ms.) proposes the second analysis and provides some example data to support this view.

Consider for example, the word in (14). The first two syllables have a high–low pattern. However, there is no other high on the syllable immediately following the second syllable with a low. The next prominence is found on the penultimate syllable and does not seem to be related to the \**h*. Instead, this would seem to be the penultimate stress accent found throughout Nahuatl dialects. Contrast this to the accentual pattern in (15). Here there are two high–low tonal patterns related to the placement of \**h*. We suggest stress accent in (15) is from the historical penultimate