

Syllabic obstruents in Ahtna Athabaskan

Syllabic sonorants are expected in most Athabaskan languages, and are capable of bearing high tone in some: Jicarilla Apache *nyol* 'It's windy,' Galice (Pacific Coast) *nkei* 'Your foot,' Ahtna *nlaen*, 'He/she is.'¹ However, syllabic obstruents are usually restricted to very particular morphological environments and occur only in a subset of the languages. (Galice *shkaa* 'for me,' Ahtna *ltsii*, 'It's windy.')

In an even smaller subset, stops and affricates may occur in comparable environments. The Southern Alaskan Athabaskan languages, Ahtna and Dena'ina, seem to go farther than any others in their tolerance for syllabic obstruents. In Ahtna prefix sequences, fricatives and aspirated stops may occur word-initially before consonants, or sandwiched between other consonants, as in the following examples from Kari (1990):

(1) Ahtna consonant clusters

	Underlying form	Surface form	Gloss
a	c'+t+d+n+z+gh+e+h+ghuu'+e	i'.tn.zgheł.ghuu'e	'I won't snore'
b	d#ko+i+laak	t.ku.laak	'He fixed it (areal)'

Ahtna prefix phonology employs several strategies to reduce potential consonant sequences. (1a) shows lenition (in the derived *i'*- form of *c'*-) and cluster reduction (the deletion of *d*-, again in 1a). This suggests that Ahtna syllabification is not unconstrained, but that various strategies other than epenthesis are preferred in prefix sequences. One of these strategies, apparently, is to allow aspirated stops to stand alone as syllables (1b).

In the examples above, the letter *d* stands for an unaspirated voiceless stop, and the letter *t* for a strongly aspirated stop. Most curiously, unaspirated stops become more like their aspirated counterparts when stranded in such situations as shown in (1b) (Kari 1990). Supporting Kari's observation, acoustic measurement (Tuttle 2005) shows that prefixes with the underlying phonological shape *d* take on extra voice onset time preceding many consonants. These alternations are recognized in the writing system.

In effect, unaspirated *d* and aspirated *t* are neutralized in Ahtna prefix sequences. It is the direction of neutralization that is interesting here. It appears that there are three Ahtna strategies for reducing consonant sequences: lenition (1a), deletion (1a), and, for particular consonant types, fortition (1b). I propose that the additional aspiration in preconsonantal alveolar stops does two things: it carries place information for the single-consonant prefix, and it provides continuancy to make the alveolar stop more like a voiceless fricative, which is an unmarked syllable peak for Ahtna.

Typological questions remain for Athabaskan syllabification, since the prosodic systems of these geographically dispersed languages can differ so greatly. The Ahtna and Dena'ina territories border on areas where Eyak, Tlingit and Alutiiq have been spoken. Future discussions of comparative Athabaskan prosody must take into account the prosodic structures of both Athabaskan and neighboring languages.

¹ Examples are given in practical orthographies.