Glides Harmonize, Too: Evidence from Akan Dialects

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The language Akan (Niger-Congo; Kwa) is well known for having vowel harmony according to the feature Advanced Tongue Root (\pm ATR) (Stewart 1967; Stewart 1971; Dolphyne 1988:14; O'Keefe 2003). In this talk I present evidence that glides are also sensitive to ATR specifications in some Akan dialects. The argument for glide sensitivity to ATR harmony comes from an analysis of dialect-specific glide formation strategies for CVV sequences. Akan forms both *labial* and *labio-palatal* glides on plain consonants, resulting in a secondary glide articulation either with labial rounding, /w/, or with simultaneous labial rounding and palatal constriction, /**q**/ (Westermann & Ward 1933/1957:106; Eshun 1993:180; de Jong & Obeng 2000; Abakah 2004a).

Together, labialization and labio-palatalization are often referred to jointly as the 'CUe/CUa' process (see Abakah 2004a), since both occur when, for any underlying CVV sequence:

- i. consonant (C) is any unspecified consonant,
- ii. first vowel (V₁) is always either /u/ or /u/, and
- iii. the second vowel (V₂) is always either /e/ or /a/.

The distribution of *labialization* and *labio-palatalization* varies between two major dialects: Akuapem Twi and Asante Twi, and the conditioning factors on the distribution of the glide articulation are not the same. For a given CVV sequence the factors that determine the place of the glide articulation may include the consonant's place of articulation, both vowel's places of articulation, and/or the initial vowel's specification for harmony according to Advanced Tongue Root (ATR). Examples are given in (1), where the labio-palatal forms are highlighted in grey.

(1)	UR	Akuapem & Fante	ASANTE	ENGLISH GLOSS
	dua	d ^q ia	d ^ų ia	'tree'
	tue	t ^w ue	t ^ų ie	'to puncture'
	tua	t ^q ia	t ^w ua	'to join'
	bua	b ^w ua	b ^w ua	'to help'

In Asante, the labio-palatal glide, [\mathbf{u}], occurs in CVV sequences where the underlying initial vowel (V₁) is [+ATR], *i.e.* / \mathbf{u} /, whereas the labial glide, [\mathbf{w}], occurs when the underlying V₁ is [-ATR], *i.e.* / \mathbf{U} /. But in Akuapem, the labio-palatal glide targets *coronal consonants*, regardless of the ATR specification of V₁, and *only* when the *second* vowel (V₂) is equivalent to /a/ (the labial glide therefore occurs as the elsewhere glide).

The data indicates that Asante assigns a glide's place feature just according to the ATR specification of the initial vowel, whereas Akuapem makes that assignment based on the place of the initial consonant *and* the place specification of the second vowel in the CVV sequence. In Asante, glides appear to harmonize with vowels in terms of ATR agreement, while in Akuapem, glides appear to be subject to place constraints. The analysis shows that the occurrence and dialect-specific distribution of labial and labio-palatal glides in Akan dialects can be accounted for with alternate rankings of OCP and AGREE constraints, including a new constraint for segment-internal place agreement. The results indicate that glide consonants can be sensitive to vowel harmony conditions.

Sources

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