## On the Convergence of Positional Markedness and Morphemic Presence

**Problem:** In this paper, I will argue that the regressive vowel harmonies of Assamese (Goswami 1982) and Bangla (Das 2002), two genetically related languages, are best analyzed with positional markedness constraints operating within Span Theory (McCarthy 2004). *Positional faithfulness* has been deemed to be of crucial importance in vowel harmony, relegating the function of harmonizing elements to their relative markedness in the harmonic scale (Beckman 1998). The contra position is that of Zoll(1996, 1998) and Walker(2001) arguing that *positional markedness* is also active in vowel harmony languages. However, Krämer(2003), Bakovic(2000) etc shows that these families of licensing constraints alone cannot account for vowel harmony patterns.

**Data:** In terms of triggers and targets of harmony, Assamese and Bangla are quite similar (e.g. 1a &b). In both languages, [+high +ATR] vowels on the right hand side trigger harmony. In Assamese the entire vowel inventory i.e. /i,u, $\Theta$ , $\Theta$ , $\Theta$ , $\Theta$ , $\Theta$ ,A/ is possible in stems (and prefixes), whereas in suffixes only /i,u, $\Theta$ , $\Theta$ , $\Theta$ ,A/ are possible. In Bangla, /i,u, $\Theta$ , $\Theta$ , $\Theta$ ,A/ are present in the stem inventory and /E/ and /A/ are absent from the suffixal inventory. I show that these subset restrictions manifest in these two languages as a result of a historical requirement where only /i/ and /u/ were the surface suffixal vowels. As a result, /i/ and /u/ have a unique harmony triggering role in both the languages - indicating morphemic presence.

However, Assamese vowel harmony is a word based phenomenon, whereas Bangla is not. In Assamese, all vowels in a word agree with the [+high +ATR] value of a final /suffixal vowel. Notably, Assamese have both suffixes and prefixes but harmony is spread only by final/suffixal vowels creating a domain that encompasses the whole word, including the stem and the prefix (2 a& b). Significant difference also arises from the nature of their underlying inventories. The restructuring of the Assamese vowel inventory versus the Bangla one shows that Assamese has veered away to retracted mid vowels in its underlying inventory. Assamese UI: /i,u, $\epsilon$ , $\sigma$ , $\sigma$ ,a/ vis-à-vis Bangla UI: /e, $\sigma$ , $\epsilon$ , $\sigma$ ,a/. Consequently in Bangla, both word final and word initial /o/'s and /e/'s are possible. On the other hand, [e] and [o] have been reduced to allophones in Assamese. Word final [o] is totally banned, word initial [o] is possible only when the harmony rule applies. Unlike Shona (Beckman 1998) therefore, in Assamese, all positional neutralisations are in the word-initial syllable. Attributing this pattern to the strengthening of word-initial syllable gives as the right results, as Assamese also shows harmony blocking in the presence of a consonant cluster - via WSP (e.g. 3).

**Solution:** As Assamese and Bangla are both weight-sensitive trochaic systems, strengthening of the initial position is a plausible solution to the regressive nature of their vowel harmony patterns. But in both the cases positional faithfulness plays no role, whatsoever. Neutralization of the root vowel's specification is costly because of the positional privilege of the root, expressed through the universal constraint ranking: FAITH ROOT >> FAITH AFFIX (McCarthy and Prince 1995). However, the adoption of Head Constraints and the constraint COINCIDE (/e/&/o/,Head Pwd) in Assamese circumvents this problem. Restricting the headship of /e/ and /o/ as a result of the violable constraints \* VOWEL HD /e/ and \*VOWEL HD /o/ is a desirable outcome too, as /e/ and /o/ are marked vowels with a similar behaviour in a range of languages. The family of Coincide constraints along with \*A-SPAN (ATR) also takes care of harmony blocking by consonant clusters in Assamese. The less complicated Bangla facts can be elegantly handled by building on the same constraints.

Data			
1) a. A	ssamese		
Verb Root	Gloss	Suffix	Derivation Gloss
(a) kor	'do'	i	kori 'do' (inf)
(b) dɛk <sup>h</sup>	'see'	i	dek <sup>h</sup> i 'see'(inf)
1) b. Ba	ngla		
Verb Root	Gloss	Suffix	Derivation Gloss
(a) kor	'do'	i	kori 'do' (inf)
(b) dɛk <sup>h</sup>	'see'	i	dek <sup>h</sup> i 'see'(inf)
2) a. As	samese		
Root	Gloss	Suffix	Derivation Gloss
(a) box	'settle'	oti	boxoti 'act of dwelling'
(b) pod	'position'	obi	podobi 'position-holder'
2) b. Bar	ıgla		
Root	Gloss	Suffix	Derivation Gloss
(a) boS	'settle'	oti	bɔ∫oti 'act of dwelling'
(b) pod	'position'	obi	podobi 'position-holder'
3)			
Root	Gloss	Suffix	Derivation Gloss(Derivation)
(a) sokro	'circle'	ika	sokrika 'platelet'
(b) kərmə	'work'	i	kərmi 'active person'
(c) kəl.pə	'wish'	i	kolpi 'one who imagines'(fem)

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