

Morphosyntactic Domains of Harmony Processes

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Points of Departure

- **Universal:** Virtually all phonological harmony processes are bound by morphosyntactic junctures
- **Controversial:** Prosodic/parallel vs. cyclic pure morphosyntax models
e.g. Nespor and Vogel (1986) vs. Clark (1990)
- **Understudied:** Well-articulated theoretical models, but rather language-specific empirical evidence
(cf. Schiering et al. 2010)

For example. . . Harmony Processes in Akan

- **H-Tone Spreading (Plateauing):**
 - ~~ all subjects, verbal prefixes, verb roots
- **Vowel Harmony**
 - ~~ verbal prefixes and pronouns, but not lexical subject nominals
- **Nasal Place Assimilation:**
 - ~~ verb roots and prefixes, but not subjects

(Paster 2010)

High-Tone Spreading/Plateauing (Paster 2010)

	H	L	H	H	'H	H		
Negative	Suffix	Verb	Verb					
Habitual	ésí m	bì	sá	→	ésí m	'mí	sá	'E doesn't ask'
Future	Prefix	Verb	Verb					
	ésí bé	bì	sá	→	ésí bé	'bí	sá	'E will ask'
Motional	Noun	Prefix	Verb					
	ésí	kò	tó-ó	→	é sí	'kó	tó-ó	'E goes asking'

[ATR]-Harmony (Paster 2010:81-82)

CV H

é sí b é - t ó p è n	‘Esi will buy a pen.’
w ó b é - t ó p è n	‘You will buy a pen.’
y à w b é - t ó p è n	‘Yaw will buy a pen.’
ò b é - t ó p è n	‘He will buy a pen.’

CVOV LH

é sí b é - ¹ b í s á à s è m	‘Esi will ask something.’
m ó b é - ¹ b í s á à s è m	‘You pl. will ask something.’
y à w b é - ¹ b í s á à s è m	‘Yaw will ask something.’
ò b é - ¹ b í s á à s è m	‘He will ask something.’

Nasal Place Assimilation (Paster 2010:83-84)

é sí n̩-¹tó pèn
wó n̩-¹tó pèn

‘Esi doesn’t buy pens.’
‘You don’t buy pens.’

é sí m̩-¹mísá àsèm
wó m̩-¹mísá àsèm

‘Esi doesn’t ask something.’
‘You don’t ask something.’

é sí ñ̩-¹káé kòfi
wó ñ̩-¹káé kòfi

‘Esi doesn’t remember Kofi.’
‘You don’t remember Kofi.’

Goals

- a typological study on morphosyntactic domains for three central harmony processes (vowel harmony, Tone spreading and consonantal palatalization)
- Theoretical implementation of the data in Stratal Optimality Theory (Kiparsky 2000, Bermúdez-Otero 2011, Trommer 2011, 2013)
- Hybrid modelling of asymmetries in morphosyntactic domains by the formal model and algorithmic approaches to phonological learning (cf. Staubs 2014, Bermúdez-Otero 2003, Goldsmith and Riggle 2012, Finley 2015)

References

- Bermúdez-Otero, R. (2003). The acquisition of phonological opacity. In Spenader, J., Eriksson, A., and Östen Dahl, editors, *Variation within Optimality Theory: Proceedings of the Stockholm Workshop on Variation within Optimality Theory*, Stockholm. Department of Linguistics, Stockholm University.
- Bermúdez-Otero, R. (2011). Cyclicity. In van Oostendorp, M., Ewen, C. J., Hume, E., and Rice, K., editors, *The Blackwell Companion to Phonology*, volume 4: Phonological Interfaces, chapter 85, pages 2019–2048. Wiley-Blackwell, Malden MA.
- Clark, M. M. (1990). *The tonal system of Igbo*. Foris, Dordrecht.
- Finley, S. (2015). Learning non-adjacent dependencies in phonology: Transparent vowels in vowel harmony. *Language*, 91:48–72.
- Goldsmith, J. and Riggle, J. (2012). Information theoretic approaches to phonological structure: the case of Finnish vowel harmony. *NLLT*, 30(3):859–896.
- Kiparsky, P. (2000). Opacity and cyclicity. *The Linguistic Review*, 17:351–67.
- Nespor, M. and Vogel, I. (1986). *Prosodic Phonology*. Foris Publications, Dodrecht.
- Paster, M. (2010). The verbal morphology and phonology of Asante Twi. *Studies in African Linguistics*, 39(1):77–120.
- Schiering, R., Bickel, B., and Hildebrandt, K. (2010). The prosodic word is not universal, but emergent. *Journal of Linguistics*, 46:657–709.
- Staub, R. (2014). *Computational Modeling of Learning Biases in Stress Typology*. PhD thesis, UMass Amherst.
- Trommer, J. (2011). Phonological aspects of Western Nilotic mutation morphology. Habilitation Thesis, University of Leipzig.
- Trommer, J. (2013). Stress uniformity in Albanian: Morphological arguments for cyclicity. *Linguistic Inquiry*, 44(1):109–143.