

## Directionality in distance effects

Eric Bakovic & Sharon Rose, UCSD

The theory of surface correspondence is a powerful tool for modelling long-distance segmental interactions. Hansson (2001a) notes that directionality of interaction in consonant harmony follows two main patterns: 1) stem control and 2) regressive or right-to-left directionality. These are the same patterns that are also observed in vowel harmony (Bakovic 2000), but not necessarily in vowel-consonant harmony such as nasal harmony (Walker 2011). While stem control is generally handled through stem-specific faithfulness constraints, a formal incorporation of regressive or progressive directionality into the surface correspondence model has been varied. Hansson (2001, 2010) relates the regressive pattern to speech planning and points out parallels in speech errors. He uses asymmetric correspondence constraints, coupled with the notion of dominant features and targeted constraints to formally model directionality. Rose & Walker (2004) implement directionality by referencing linear sequencing in Ident-CC constraints, allowing for both directions. Yet, as the model has been extended to other areas such as tone (Shih 2013) and dissimilation (Bennett 2013), the issue of directionality is murkier. To produce dissimilation, Walker (2000) uses non-identity constraints such as Bijectivity, while Bennett (2013) employs a lack of correspondence; neither directly addresses how to model directionality. This is not an issue unique to surface correspondence models of distance effects. In Jurgec's (2011) model of consonant harmony and dissimilation, directionality is encoded through f-precedence alignment constraints as well as faithfulness constraints to the rightmost segment with a particular feature. This paper will explore different theoretical approaches to dealing with directionality and attempt to reconcile competing proposals.

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