Triggers and Blockers as Domain Edges

Phonological processes are commonly described in terms of triggers, targets, and blockers. The trigger spreads its feature to targets; if a blocker intervenes, spreading terminates. The categories remain discrete and the division of labor is clear.

More recently documented patterns, however, do not fit so neatly. Sour Grapes (Padgett 1995; Wilson 2003), Use It or Lose It (Mullin & Pater 2015), and Icy Targets (Jurgec 2011) place contradictory demands on the traditional categories. In Sour Grapes, the presence of a blocker causes spreading to fail entirely, even to licit targets that could otherwise undergo the process. In Use It or Lose It, a segment spreads a feature value yet surfaces as the recessive value when spreading fails. In Icy Targets, a segment receives the spreading feature yet halts further propagation, simultaneously acting as a target and blocker.

I propose that triggers and blockers are better understood as domain edges, segments that mark the boundaries of a subdomain within which phonological changes occur.

The typological variation then reduces to a single parameter: whether a given edge segment falls inside or outside its own domain. When inside, the segment participates in harmony; when outside, it does not. Full harmony, partial harmony, Use It or Lose It, Icy Targets, and Sour Grapes all reduce to different configurations of edge placement. I illustrate this analysis through a Substance-Free Logical Phonology (*e.g.,* Bale et al. 2014; Dabbous et al. 2024; Gorman and Reiss 2025a,b) implementation across diverse ATR harmony systems.

References

Bale, Alan, Charles Reiss, and David Ta-Chun Shen. 2020. Sets, rules and natural classes: vs. [ ]. *Loquens* 6:e06.

Dabbous, Rim, Marjorie Leduc, Charles Reiss, and David Ta-Chun Shen. 2024. Locality is epiphenomenal: Adjacency is opaqueness. In *Proceedings of the 2024 annual conference of the Canadian Linguistic Association.*

Gorman, Kyle, and Charles Reiss. 2025a. How not to acquire exchange processes in Logical Phonology. In *Proceedings of the 2025 annual conference of the Canadian Linguistic Association*, in press.

Gorman, Kyle, and Charles Reiss. 2025b. Metaphony in Substance Free Logical Phonology. *Phonology.* in press.

Jurgec, Peter. 2011. *Feature Spreading 2.0 A Unified Theory of Assimilation.* PhD Thesis. University of Tromsø.

Mullin, Kevin & Joe Pater. 2015. Harmony as Iterative Domain Parsing. *Proceedings of the Manchester Phonology Meeting.*

Padgett, Jaye. 1995. Partial class behavior and nasal place assimilation. In *Proceedings of Southwest Optimality Workshop I: Features in Optimality Theory. Ed. by Suzuki, K. & Elzinga, D. Coyote Working P*apers. ROA-113. Tucson: University of Arizona.

Wilson, Colin. 2003. Analyzing unbounded spreading with constraints: marks, targets, and derivations. Unpublished manuscript, UCLA.