

Opacity in Yowlumne — An Enriched Input Analysis

Orhan Orgun

ocorgun@ucdavis.edu

Sharon Inkelas

inkelas@socrates.berkeley.edu

Ronald Sprouse

ronald@uclink.berkeley.edu

How to model phonological opacity has been an important theme in generative phonological theory and has been an important issue in the abstractness debate over the last 30 years. The adoption of Optimality Theory (OT; Prince & Smolensky 1993) by many phonologists in recent years has muddied the waters. Where broad agreement once existed that phonological opacity reflects the existence of some non-surfacing stage(s) of representation, OT, by denying the existence of intermediate representations, forces the phonologist to look elsewhere for analyses of opacity. Often OT's two-level model yields fresh clarity. Rule ordering requires intermediate stages by its very nature, regardless of whether any evidence of the intermediate representations exists, and OT covers most of the same empirical ground through the simultaneous application of constraints. This clarity comes at a cost, however. True cases of phonological opacity are not easily expressed through the simultaneous application of constraints on outputs and require more involved mechanisms, such as 'two-level' constraints (e.g. Archangeli & Suzuki 1997, McCarthy 1996, Orgun 1998) or by richer representations that allow simultaneous representation of input and output structures (e.g. Optimal Domains Theory; Cole & Kisseberth 1995). Yet even these mechanisms are insufficient for cases where the optimal output reflects the presence of a representation which is neither in UR nor in the surface representation.

In this paper we present opacity effects in Yowlumne that escape proper description in the Standard OT model (S-OT); any enlightening account of these cases requires reference to a representation which is not present in its full form in either UR or surface representation. We introduce a new model, the Enriched Input Model (EIM), that handles these types of opacity while formally maintaining OT as a two-level theory. The central insight of this new approach is that the concept of lexical representation and Input need not be identical. If lexical representation is viewed instead as the definition of an Input set, then many remaining problematic cases of opacity receive a satisfying analysis.

While it is probable that the model presented in this paper could also handle some types of opacity frequently attributed to 'cyclic' effects, the goal of this model is not to supplant completely alternative accounts of these effects. The Yowlumne data discussed in this paper include cases of opacity that appear to occur independently of cyclicity, and the model presented is compatible with strategies designed to capture cyclic effects, such as traditionally cyclic models (Lexical Phonology: Kiparsky 1999, Sign-Based Morphology: Orgun 1996) or the similar Output-Output Correspondence approaches (Benua et al.).

EIM is an alternative to Sympathy theory (McCarthy 1999), another approach to opacity effects within Optimality Theory. As we argue in this paper, EIM is more restrictive in its predictions than Sympathy Theory, which overgenerates possible types of opaque interactions. EIM is also more attractive than Sympathy Theory in requiring no new mechanisms to be added to Optimality Theory; rather, it makes use of existing tools independently useful to handle some cases of phonologically conditioned suppletive allomorphy in morphology.