Pros and Cons of Stratal OT

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A familiar argument for Stratal OT is that it provides a unified solution for two types of "derivational residue" that resist OT's central principle of parallel constraint evaluation: OPACITY, the unexpected non-interaction of phonological processes, and CYCLICITY, the inheritance of phonological properties from bases to derivatives.

Here I review a less familiar but even weightier argument for Stratal OT: that it contributes to the explanatory goals of phonological theory by narrowing the typological space of constraint systems. Specifically, it restricts the interface between morphology and phonology, reveals previously unnoticed interactions between them, and characterizes levels of representation whose linguistic significance is attested by convergent synchronic and diachronic evidence. These results tell both against classic OT and against enriched versions of OT that incorporate TRANSDERIVATIONAL CONSTRAINTS, which refer not just to the input and output representation of the form under evaluation, but to some property of its derivation, or to some other output form. I show how transderivational constraints, and OT-CC's PREC constraints in particular, are too powerful in some ways and too weak in others, and that they lead to a major loss of generalizations. I argue that OT-CC shares much of classical rule ordering theory's excessive richness, and that the gradualness requirement it imposes on derivations gives up some of the more attractive results of OT phonology.

The final portion of my talk defends Stratal OT against some common objections: that it introduces redundant theoretical machinery or non-uniform treatments of related phenomena, that it overgenerates by allowing constraints to be ranked differently in different strata of a language, that it predicts non-occurring constraint interactions, and that it fails to account for certain cases of intra-stratal opacity.