## A Stratal OT Approach to a Noun-Verb Asymmetry with respect to Opacity in Korean Jiwon Yun (jy249@cornell.edu) Cornell University

In Korean, underlying consonant clusters in coda position are reduced to singleton consonants before another consonant or word-boundary (e.g. /kaps/  $\rightarrow$  [kap] 'price'), while lax obstruents become tense after another obstruent (e.g. /mak-ko/  $\rightarrow$  [mak.k'o] 'to block' + conjunctive suffix). When these two processes interact, opacity results because tensification takes place even though its context for application disappears at the surface (e.g. /ilk-ko/  $\rightarrow$  [il.k'o], \*[il.go] 'to read', cf. /sal-ko/  $\rightarrow$  [sal.go], \*[sal.k'o] 'to live')

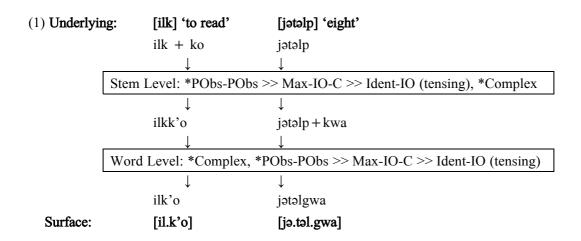
To explain this opacity problem within the framework of Optimality Theory, Tak (2001) suggests an analysis based on Sympathy Theory (McCarthy 1998). According to Tak, [il.k'o] is more optimal than [il.go] because it is more faithful to the sympathetic candidate [ilk-k'o] with respect to tense. On the other hand, S. Lee (2002) argues that tense consonants are actually geminates and then [il.k'o] is more optimal than [il.go] because it preserves more consonants in the input /ilk-ko/.

However, these approaches fail to notice that nouns do not show opacity effects in the same phonological environment (e.g. /jətəlp-kwa/ → [jə.təl.gwa], \*[jə.təl.k'wa] 'eight' + conjunctive particle) and cannot explain this asymmetry because they predict the wrong opaque output for nouns. This kind of noun-verb asymmetry puzzle also cannot be solved with other approaches to explain nounverb asymmetries in Korean phonology (e.g. Y. Lee 2001, Kang 2004, Ko 2006) that depend on the assumption that nouns have a phonologically privileged status compared to verbs, because they can only explain the cases where nouns make opaque outputs contrary to verbs, which are the opposite cases of the current problem.

A solution to this complicated puzzle must appeal both to phonological derivation and to morphological category. I propose that a Stratal OT (Kiparsky 2001) approach provides the best solution. Specifically, the different morphological status of verbal suffixes and post-nominal particles in Korean should be captured by assuming that suffixes are stem-level endings whereas particles are word-level endings. The ordering assumption is supported by the morpho-syntactic fact that post-nominal particles can also follow verbs but the verb should be attached by a verbal suffix first: [[verb+suffix]+particle] (e.g. mək + ə + nɨn 'to eat' + infinitive suffix + topic particle, cf. \*mək + nɨn + ə, \*mək + nɨn). The application of processes at each level is illustrated in (1). \*Complex is ranked low at the stem level so that cluster simplification does not occur at that level. Therefore, in case of verbs, tensification can transparently take place at the stem level because of the highly ranked \*PObs-PObs constraint (no plain obstruent sequence). When it comes to nouns, on the other hand, there is no place for tensification to occur because particles are attached to nouns at the word level where the stem-final obstruent does not surface in the output.

These Korean data suggest that the Stratal OT approach provides a better solution to the opacity problem than even rule-based derivational phonology does. Though the initial problem with opacity

between cluster simplification and tensification has been considered an example that shows the superiority of rule-based phonology to OT, a rule-based analysis cannot deal with the whole puzzle above without some additional theoretical device to explain the morphological contrasts. In sum, the Stratal OT approach overcomes both empirical and theoretical shortcomings with other competing approaches.



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