

N. Hall (p.c.) additionally observes that, rather than the MINDIST constraint above, some undominated constraint(s) proscribing the degree of gestural overlap allowed in nasals could account for at least some of the observed variation. For example, if there is a markedness constraint  $\mathbb{M}$  barring *minimal* overlap of  $n$  and  $i$ , and  $\mathbb{M}$  dominates IDENT[timing], a candidate with  $[n|i]$  could be ruled out on the simple phonetic grounds that sonorants are more susceptible to overlap than are obstruents.

The relational faithfulness account is subject to none of these criticisms, relying on more traditional notions of what constitutes an input representation and relying on the rankings of normal constraint on the I-O mapping to determine the contrastive inventories of Korean.

#### 2.4. Summary

The current account of Korean palatalization has hinged upon a number of crucial ranking arguments. As we saw in §2.2, Non-Derived Environment Blocking in Korean Palatal Affrication results from a TETU ranking of relational faithfulness constraints; homomorphic CONSISTENCY preserves morpheme-internal Association relations from the assimilatory pressures of SPREAD-L(COR), which in turn dominates general CONSISTENCY and other faithfulness constraints militating against autosegmental spread less stringently. The Palatal Affrication mapping we have argued for is further mediated by constraints on the surface realization of  $[-ant]$  segments in Korean, as well as the across-the-board effects of 2<sup>ary</sup>-Palatalization, itself resultant from the high ranking of an additional constraint of the SPREAD family which forces secondary articulation in *ti* sequences. Lastly, we have argued the lexical space of Korean to be effectively free of

input underspecification for the feature  $[\pm\text{ant}]$ , by the ranking  $\{\text{DEP}[\text{ant}] \gg \text{MPARSE}\}$ .

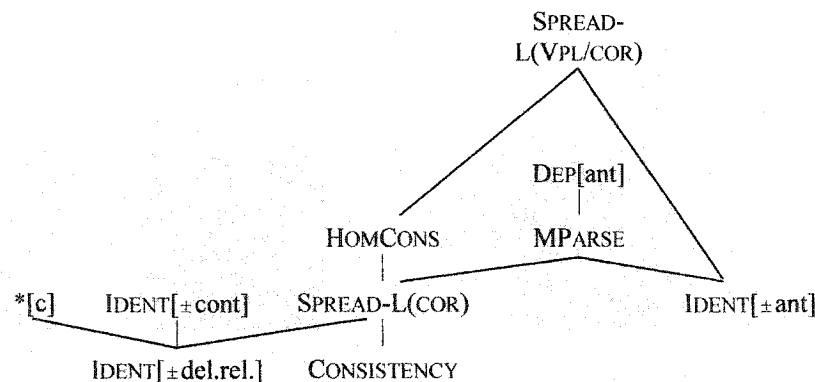
We summarize these various arguments below.

(96) Account summary

- a. NDEB TETU: Palatalization  
 $\text{IDENT}(\text{PLACE}), \text{HOMCONS} \gg \text{SPREAD-L}(\text{COR}) \gg \text{CONSISTENCY}$
- b. Realization of palatalization as affrication:  $/t_i/ \rightarrow [tʃ_i], *[ci], *[ʃi]$   
 $\text{IDENT}[\pm\text{cont}], *[c] \gg \text{IDENT}[\pm\text{del.rel.}]$
- c. 2ary-Palatalization occurs across the board  
 $\text{SPREAD-L}(\text{VPL}/\text{COR}) \gg \text{HOMCONS}, \text{IDENT}[\pm\text{ant}]$
- d. Underspecified vowels may never surface  
 $\text{DEP}[\text{ANT}] \gg \text{MPARSE} \gg \text{SPREAD-L}(\text{VPL}/\text{COR}), \text{IDENT}[\pm\text{ant}]$

Together, these constraints fall into the following set of dominance relations.

(97) Final rankings



Factorial typology of the above constraints yields a variety of results—some surprising, some not. Re-ranking of CONSISTENCY, HOMCONS and any appropriate markedness constraint will lead to a typology of assimilatory processes wherein assimilation occurs either a) across morpheme boundaries (NDEB), or b) both within and across morpheme boundaries (across-the-board), as we have seen. We predict a fairly natural range of variation in  $/t_i/ \rightarrow X$  mappings, resultant from the generic nature of the markedness constraints we have adopted here. Because SPREAD-L[COR] could be satisfied by a variety of repairs on the input sequence  $/t_i/$ , we predict that NDEB effects could arise for assibilation ( $/t_i/ \rightarrow [ti]$ , but  $/t+i/ \rightarrow [ʃi]$ ) and simple palatalization ( $/t_i/ \rightarrow [ti]$ , but  $/t+i/ \rightarrow [ci]$ )

in addition to the affrication we have seen in Korean. Assibilation of *ti* is widely attested in natural languages, for example as in the famous Finnish NDEB case of Kiparsky (1993). I am unaware of a parallel case of simple palatalization under NDEB, however, this seems hardly surprising given the crosslinguistic rarity of the segment [c], and whether this an accidental gap or not remains to be seen. Combining the NDEB prediction with the range of repairs gives us certain implicational relations between Ci sequences in homo- and heteromorphemic environments. If a language allows [ti] sequences homomorphemically, it may allow [ti], [ci], [ʃi], or [tʃi] heteromorphemically. Similarly, if a language allows singly-articulated [Ci] homomorphemically, it may show [Ci] or [Cʲi] heteromorphemically. These implicational relations combine to produce the range of potential variation found in the chart below.

(98) Implicational relations between homo- and hetero-morphemic environments

<i>if Ci is:</i>	<i>then C+i may be:</i>
ti	ti, ci, ʃi, tʃi, tʲi, cʲi, ʃʲi, tʃʲi
ci	ci, cʲi
ʃi	ʃi, ʃʲi
tʃi	tʃi, tʃʲi
tʲi	tʲi, cʲi, ʃʲi, tʃʲi
cʲi	cʲi
ʃʲi	ʃʲi
tʃʲi	tʃʲi

These considerations made, let us briefly summarize the current framework's advantages.

The current analysis has argued Korean palatalization to fall out from a simple and widely generizable constraint schema, repeated again below.

(99) Non-Derived Environment TETU schema

$$\text{HOMF}_{\text{rel}} \gg \text{M} \gg \text{F}_{\text{rel}}$$

The account demonstrated that simple relational faithfulness constraints HOMCONS and CONSISTENCY, when ranked with appropriate markedness constraints, can produce

assimilatory NDEB, crucially without any of the following theoretical liabilities. First, the account requires none of the level-based machinery necessary in LPM-OT (Kiparsky *forthcoming*), and so does not subject the framework to Duke-of-York effects of various kinds. And second, account derives NDEB while staying fully consistent with the Richness of the Base principle (Prince and Smolensky 1993), requiring neither a) input specification of specific features in specific morphological contexts, nor b) surface indeterminacy of featural structure, nor yet c) stipulation of gestural variance in the lexicon. We take these formal advantages as significant motivation for adopting the current approach over its predecessors.

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