Faithfulness Conflict in Korean Blends

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In conventional theories of morphology (Dressler 2000, Bauer 2006 among others), blending has been treated as a marginal operation rather than a linguistically governed word-formation process. However, some recent investigations into blending in a variety of languages (Hebrew (Bat-el 1996), English (Gries 2004a/b, Hong 2004/2005), Spanish (Piñeros 2000/2004), and Japanese (Kubozono 1990)) suggest that many of phonological characteristics of blending in fact show grammatical regularities. For instance, in English, the segmental composition of a blend (e.g. brunch) is always based on both of its source words (e.g. *br(eakfast)* and *(l)unch*) whereas its prosodic properties such as word-length and stress pattern are usually identical, or at least similar, to one of the two source words which is often called 'head' of the blend (Gries 2004b, Bat-el 2006). A similar phonological characterization holds for blends of other languages including Korean.

Segmental and prosodic characteristics of blending have been explained within a constraint-based framework such as Optimality Theory (OT). As shown in example (1), Korean blends usually preserve the prosody (i.e. syllable count) of the semantic head, while the initial part of the segmental sequence of the blend is from the non-head source word. This general pattern can be explained by adopting (i) prosodic faithfulness constraints for the head (Max-σ(HD)/Dep-σ(HD)) and (ii) segmental faithfulness constraints for both source words (Max-seg(HD/Non-HD)). Generally, prosodic faithfulness overrides segmental faithfulness.

Example: Overlap segments are underlined, and truncated segments are parenthesized.

(1) sʌl.len.t^{h}a.in = sʌl + (pa)l.len.t^{h}a.in (head)
'(Chinese) new year's day and Valentine's day are on the same day' 'new year's day' 'Valentine'

Several interesting exceptional patterns, where segmental faithfulness is preferred to prosodic faithfulness, have been observed, as shown in (2).

(2) to.ne.t^{h}i.cɨn = to.ne.(i.sjʌn) + ne.t^{h}i.cɨn (head)
'a netizen who donates' 'donation' 'netizen'

The example in (2) indicates that drastic violation of segmental faithfulness is avoided although it is generally less important than prosodic faithfulness. The patterns found in Korean blends are amenable to an analysis using Harmonic Grammar (Legendre, Miyata, and Smolensky 1990, Smolensky and Legendre 2006), where constraints are assigned weights. In (2) where the length of the blend, i.e. four syllables, is longer than that of the head, i.e. three syllables, many input segments may survive in the blend due to the presence of the overlap segments '*ne*' (the segments from both source words). This case cannot be explained via a strict domination between constraints. In the previous analyses, the output form that is faithful to the length of the blend always wins over the form faithful to the segmental maximization. In other words, regardless of how much segmental faithfulness is preserved, if prosodic faithfulness is violated, the relevant candidate cannot be optimal, as in tableau 1. However, a different analysis is possible in HG. In tableau 2, even though *tot^{h}icɨn* does not violate the prosodic structure constraint, it violates Max-seg too much – four more violations than *tonet^{h}icɨn*. Therefore, *tonet^{h}icɨn* is the optimal output, although it exceeds the syllable number of the head.

Tableau 1. Analysis of *tonet^{h}ic ɨn* within OT

to.ne.i.sjʌn + ne.t^{h}i.cɨn	Max-σ(HD)/ Dep-σ(HD)	Max-seg	
☹a. to.ne.t^{h}i.cɨn	σ	i,s,j,ʌ, n	
☞b. to.t^{h}i.cɨn		n,e,i,s,j,ʌ, n	n,e

Tableau 2. Analysis of *tonet^{h}ic ɨn* within HG

	5	2		
to.ne.i.sjʌn + ne.t^{h}i.cɨn	Max-σ(HD) / Dep- σ(HD)	Max-seg		
☞a. to.ne.t^{h}i.cɨn	σ	i,s,j,ʌ, n		-15
b. to.t^{h}i.cɨn		n,e,i,s,j,ʌ, n	n,e	-18

A similar analysis can be provided for the cases like the one in (3).

(3) t^{h}ɛ. k^{h}o.li.ʌn = t^{h}ɛ. k(wʌn.to) + k^{h}o.li.ʌn (head)
'a mixture of Taekwondo and Korean' 'Taewkondo, a Korean martial art' 'Korean language'

What is interesting about this case is that the corresponding segments, /k/ and /k^h/ are not completely identical to each other, but they are considered overlapping segments. Even though the correspondence relation of /k/ and /k^h/ violates the ID-feature constraint, it is optimal because it better satisfies Max-seg than the other candidates. Segments that are totally different from each other would not be in a correspondence relation because this relation would incur a serious violation of Identity constraints. Tableau 3 shows the analysis of *t^{h}ɛ. k^{h}o.li.ʌn*.

Tableau 3. Analysis of *t^{h}ɛ. k^{h}o.li.ʌn* within HG

	5	2		1	
t^{h}ɛ. kwʌn.to + k^{h}o.li.ʌn	Max-σ(HD)/Dep-σ (HD)	Max-seg		ID-SW-BL (Feature)	
☞a. t^{h}ɛ. k^{h}o.li.ʌn	σ	w,ʌ,n,t,o		*	-11
b. t^{h}ɛ. k^{h}o.li.ʌn	σ	k,w,ʌ,n,t,o			-17
c. t^{h}ɛ. li.ʌn		k,w,ʌ,n,t,o	k^h,o		-16

In conclusion, this study addresses the question of what basic principles and constraints govern blending while focusing on the description and analysis of phonological properties of Korean blends. Korean blending is a systematic grammatical word-formation process as it illustrated with the observed patterns of my corpus. General and exceptional patterns of Korean blends can be explained by the interaction of prosodic faithfulness and segmental faithfulness constraints within the framework of HG.

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