The OCP and Variation in Phonology

Korean has a type of reduplication used for adjectival or adverbial ideophones. Normally, the reduplicant (underlined in the data) consists of a full copy of the base. When the base begins in a vowel, a consonant can be inserted in the reduplicant (typed in bold face):

(1)  
   a. alok-talok  \textit{‘pied’}  \hspace{1cm} \textit{(alveolar stop)}  
   b. ulak-pulak  \textit{‘wild’}  \hspace{1cm} \textit{(bilabial stop)}  
   c. umuk-tufumuk  \textit{‘unevenly hollowed’}  \hspace{1cm} \textit{(palatal affricate)}  
   d. upul-k’upul  \textit{‘windingly’}  \hspace{1cm} \textit{(velar stop)}  

I argue that while the choice of an inserted consonant is not completely predictable, it is also not arbitrary. The basic generalization is that the inserted segment is never identical in both place and manner to the neighboring consonants. However, the segment to be inserted is not completely determined. For example, /t/ is epenthesized in (1a) but /p/ in (1b), although the bases contain the same set of consonants, /l/ and /k/. Therefore, I argue that any segment out of a set of consonants is acceptable, subject to identity avoidance (OCP effects).

I present evidence supporting this claim from a dictionary-based analysis of V-initial reduplicative forms where the reduplicant has an inserted consonant, and from experiments I conducted in which Korean native speakers were asked to form reduplicated versions of nonce words. The examination of VCVC-bases, in particular, both in the dictionary and word creation experiment shows that there is a general tendency toward identity avoidance between the inserted C and its base consonants in terms of place and manner. On the other hand, different speakers chose different preferred segments according to the word creation experiments. However, the preferred segments were less likely when the context contains that segment. Therefore, different speakers may have different preferred segments for the insertion in the Korean reduplication, and identity avoidance is one of several factors that determine the choice of epenthesized consonants.

The Korean data is not an isolated case where reduplication is based on the gradient identity avoidance. Similar patterns of reduplication have been found in Turkish, English, Javanese, etc. (Wedel 1999; Yip 1996), and the gradient OCP effects are evidenced in various unrelated languages including Arabic, Maltese, Muna, Ngbaka, Russian, Thai, and so forth (Frisch, Pierrehumbert, and Broe 2004; Coetzee and Pater 2005). The Korean data is even more interesting in that it showcases the variation in speakers’ choice, not only the gradience in the OCP. It casts light on how the variation among speakers is reflected in the grammar.
Selected References

Albright, Adam. 2006. A grammatical account of gradient phonotactics. Presentation handout in the colloquia series of Stony Brook University, Spring 2006.


Coetze, Andries. 2006. Grammar is both categorical and gradient. ROA # 864 at www.roa.rutgers.edu.


