Syllable-internal template: Evidence from Korean consonant insertion

Behavioral experiments have shown that Korean speakers tend to group C₁ and V, rather than V and C₂, as a unit in a syllable of C₁VC₂, contrary to prediction that V and C₂ will form a sub-syllabic unit on the basis of the traditional syllable structure, onset + rime which sub-hierarchically consists of nucleus V and coda C (Lee 2006; Chen et al. 2004). I argue that this seemingly language-specific property of Korean cannot be simply attributed to an abstract representation of a syllable, which is usually dubbed as “body (= onset + nucleus) + coda.” Rather, I suggest that there is a sub-syllabic template that requires interdependency between C and V, not V and C, to which speakers of the language make reference in their behavior.

Based on the data of total reduplication with a consonant inserted (CI) as in oson-toson ‘on good terms,’ oŋki-ŋonki ‘densely,’ asak-pasak ‘with a crunch,’ aŋki-jaŋki ‘sparsely spaced; shaggy’ (reduplicants underlined), I propose that Korean speakers are implicitly aware that onset and nucleus are more tightly connected than nucleus and coda at the sub-syllabic level. The experimental results in which the native speakers of Korean were asked to create words with reduplicative forms of V C₁VC₂-CVC₁VC₂ (C = CI) showed a tendency that identical pairs of CI and C₁ are likely to be followed by identical Vs (Zuraw 2002). The participants preferred to insert a C that is identical to C₁ when the resulting output forms came to have two identical substrings of CV. The number of identical pairs of CI and C₁ was even greater when the two nucleus Vs are identical than when Vs are non-identical. It was more likely there to be identical Vs in the cases in which CI and C₁ are identical (78.31%), than in the control cases (41.13%).

This finding that existing Vs affect the choice of CIs indicates an intimate relation between onset C and nucleus V, which is also shown in the CV combination patterns in the lexicon and experiment. The CV combination pattern in the experiment approximately replicates that of the corpus (Figure 1), whereas any other combinations of segments do not show such replication.

Figure 1. CV combinations in the reduplication data (VCVC-bases, C= /t/, p, /ʃ/, V= /a, o, u, ʌ/)
which actually is confirmed by the fact that the most frequent single reduplicated forms with pV, tV, fV are ult\textsuperscript{b}ung-pult\textsuperscript{b}ung, oson-o\textsuperscript{son}, oŋki-\textsuperscript{f}onki (closely after umul-tf\textsuperscript{u}m\textsuperscript{u}l and aki-tf\textsuperscript{f}aki) in the corpus. This implies that the most frequent CV combinations, not the entire CV combinations, have more impact on phonotactics.

The research of this paper shows that lexical statistics may provide the basis for the phonotactics of language, which cannot be absolutely determined but rather, probabilistically determined. In addition, the fact that speakers’ behavior is influenced by the sub-syllabic CV template in such a language as Korean typologically predicts that the template of CCC in a language like Arabic or Hebrew will also affect its speakers’ behavior. Indeed, it was confirmed that Arabic native speakers, given nonce verb forms, rated a form containing identical Cs the worst and a form containing no homorganic Cs the best in a wordlikeness rating experiment, which shows that Arabic speakers are implicitly aware of the restriction imposed on the CCC template (Frisch and Zawaydeh 2001). This paper not only identifies a source for preferring specific consonants as CIs in the consonant insertion of reduplication, but it also incorporates and supports the idea for the sub-syllabic CV constituency for the Korean language, whose argument has not been utilized to explicate any other linguistic behaviors, despite its solid intuition.

**Selected References**


