Dialectal variation in Korean vowel harmony and the emergent locality effect

BACKGROUND: In Korean, there is a group of verbal suffixes whose initial vowel alternates between [α] and [Λ] depending on the last vowel of the root. The so-called "light vowels" (/ α / and / α /) take [α] suffix forms and the so-called "dark vowels" (all other vowels) take [Λ] suffix forms (*mak-a* 'to block', *nop^h-a* 'high', *muk-\Lambdala* 'stay-IMP.', *cAp-\Lambdass-ta* 'fold-past.tense'). In "standard" Korean, harmony is eroding and [Λ] forms are encroaching upon / α /-final roots while / α /-final roots stably take [α] forms (Sohn 1999, H. Kang 2010). The number of consonants that intervene between the last root vowel (trigger) and the suffix vowel (target) has been mentioned as a factor in the variation, which we dub a locality effect, but no systematic study is available. This study examines this emergent locality effect in the synchronic variation in Korean vowel harmony.

DATA: The data for the study come from *The Dialect Survey Speech Corpus* collected by the *National Institute of the Korean Language* (2004-2010). The corpus contains sociolinguistic interviews and elicited lexical and sentential productions from one speaker from over 60 towns in Korea and abroad. Included in the elicited data are conjugations of around 350 verb/adjectives. In this study, we report on the intervening consonant effect found in the mainland Korean (excluding Jeju and overseas dialects) and a total of over 18,000 verb forms that contain a suffix that exhibit vowel harmony are analyzed.

RESULTS: In this abstract, we report on the two major central dialects (Kyounggi and Kangwon) but the actual presentation will include all results. The number of consonants between the last root vowel (trigger) and the suffix vowel (target) had a significant effect on whether the suffix is harmonic or not (Figure below). With no intervening consonant, harmony is near categorical but disharmony is common when consonants intervene. Moreover, the disharmony was also frequently attested with /o/-final roots as well as the /a/-final roots. (*k'o-ato* 'to twist', *k'oc-ato* ~ *k'oc-Ato* 'to shelve', *olm-Ato* ~ *olm-ato* 'to contract a disease') Also, even dark vowel roots showed variation and exhibited an intervening consonant effect; disharmonic [a] suffix forms are more likely when more consonants intervene. Separate mixed-effects models are built for dark and light vowels (dependent variable: SUFFIX HARMONY (harmonic or disharmonic), fixed effect variable: INTERVENING CONSONANTS (null, one, two), random effects: TOWN (intercept and slope)). Statistically significant difference (*null > one > two*) was found for both dark and light vowels.



DISCUSSION: We discuss the possibility that this emergent locality effect is a manifestation of a UG-bias.