

## **A Lexical and Contextual Path of Tonogenesis: evidence from Seoul Korean**

The emergence of tone in non-tonal languages (*tonogenesis*) often results from phonologization (Hyman, 1976) of automatic f<sub>0</sub> differences on vowels from coarticulation with neighboring laryngeal consonants. The f<sub>0</sub> difference is exaggerated and the consonantal contrast is lost, transferring contrast from a consonantal cue (e.g. VOT) to f<sub>0</sub> over time (Kingston, 2011; Kirby, 2013). Despite growing interest in how the “seeds of sound change” (Hombert et al., 1979) sprout, relatively little work so far has addressed how they grow in a language and its speech community over time, due to the difficulty of observing tonogenesis in progress in a large-enough dataset.

We investigated how tonogenesis spreads across both (a) a speech community and (b) the language, examining a well-known case in progress in Seoul Korean (SK) (Silva, 2006a; Kang, 2014) using data from an apparent-time corpus. We analyzed VOT and f<sub>0</sub> in a large dataset (5888 stops) using linear mixed-effect models, testing (a) by considering speakers’ year of birth and gender, and (b) by probing word frequency, the lexicon, phonetic contexts and prosodic domains. The results suggest that tonogenesis in SK may have been driven by reduction in VOT contrast, initiated in words with high frequency, alveolar stops and non-high vowel contexts and by female speakers before spreading through the rest of the language and the community. We argue that tonogenesis in SK shows adaptive behavior by which the loss of one cue is replaced by the exaggeration of another in order to satisfy informational needs for the listener (Lindblom, 1995).