The phonetics and phonology of stop lenition in Korean.
Meaning and Linguistic Variation

By Penelope Eckert

"Meaning and Linguistic Variation" examines the development of the study of sociolinguistic variation, from early demographic studies to a focus on the construction of social meaning in stylistic practice."
Title: The Phonetics and Phonology of Stop Lenition in Korean

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Abstract: This study, an investigation into the phonetics and phonology of stop lenition in Korean, presents a detailed analysis of the phenomena of word-initial and word-final lenition. The research is based on extensive fieldwork conducted in South Korea and utilizes a variety of acoustic and spectrographic methods to explore the nature of lenition in context. The findings contribute to our understanding of the phonological and phonetic systems of Korean and have implications for theories of phonological change and minimal pairs. The study also includes a comparative analysis with other East Asian languages, highlighting the unique characteristics of Korean phonology.
stop consonants, addresses the following issues: (1) the underlying representations for the Korean stops; (2) the allophonic variation they exhibit in three different prosodic positions: at the edge of a phonological phrase, at the edge of a phonological word, and within a phonological word; and (3) a formal characterization of those processes commonly referred to as lenition.

Speech data collected from five male speakers of the standard language served as the basis for two acoustic studies, one on the lax stops /p/, /t/, and /k/ and another on the bilabial stops lax /p/, reinforced /p'/ and aspirated /ph/. For each token, several acoustic characteristics were measured, including the duration of stop closure, the duration of voicing in the closure, and vowel lag (‘aspiration’). The data were then subjected to statistical analysis to discern the relative effects of several factors, including place of articulation, phonation type, and prosodic position.

The results of the investigation of the lax stops indicated that place of articulation plays only a minor role in the analysis while prosodic position is a more important factor. The investigation of the bilabial stops showed that phonation type, prosodic position, and their interaction all play a significant role in accounting for the observed acoustic behavior. Specifically, when it comes to the effects of prosody, it was found that segments occurring within a word are weaker (i.e., more sonorous and shorter) than those occurring at either the edge of a phonological phrase (where they are strongest) or the edge of a phonological word within a phrase.

Based on the results of the quantitative study, a new analysis of lenition--one that recognizes a distinction between phonological and phonetic processes--is presented. Under this account, phonological lenition is characterized by a loss of phonological structure and a subsequent non-directional reassociation of neighboring features, thereby yielding categorical changes. Phonetic lenition is characterized by a loss of duration, which gives rise to gradient values in the phonetic properties of the stops.