

## Acoustic Analysis of /s/ Palatalization in English Loanwords in Korean

Loanword phonology has been extensively researched cross-linguistically since the late 1980s, as it relates to phonetics and perception in phonology. When a language adopts words from another language, it tries to adopt them as close to their original forms as possible while trying to bring the words into conformity with its phonology at the same time (Silverman 1992). Research on English loanword phonology in Korean has reported on various types of phonological modification, including featural changes, vowel epenthesis (Kim & Kochetov 2011; Davis & Cho 2006) and phonemic substitution of word-final /t/ to /s/ (Davis & Kang 2006), to name a few. However, there have been very few studies that closely examined the adaptation of the palatal /ʃ/ in English words borrowed into Korean. The primary goal of this study is to examine the process of /s/ palatalization in word-initial position in English loanwords adopted into Korean using experimental data.

The research questions investigated are: (1) How does Korean adopt English loanwords with the palatal /ʃ/ in word-initial position when it is not followed by a high front vowel? (2) After the modification, how similar is the modified /s/ to the English palatal /ʃ/?

The participants were native speakers of Korean who are proficient in English. In a sound-proof booth, they were asked to produce English loanwords adopted into Korean while their production was being recorded. The stimuli consisted of English-based loanwords with /s/ followed by a high front vowel, English-based loanwords with /s/ followed by a glide, and Korean words with /s/ followed by a high front vowel. The recordings were analyzed acoustically using the software Praat, focusing on spectral center of gravity (CoG) to examine the varying degrees of palatalization.

The results reveal some interesting characteristics of /s/ palatalization in English loanwords adopted into Korean. The presentation will discuss the differences in acoustic features of /s/ in various environments. The impact of the study and possible future directions will also be discussed.

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