

# **Role of Gemination and Degemination in the Adaptation of Loanwords: A Study of English Loanwords in Japanese and Arabic Loanwords in Odia**

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## **ABSTRACT**

This paper investigates the role of gemination and degemination in shaping the well-formedness prosodic features of loanwords, which may vary from one language to other. In the adaptation of loanword, borrowing languages either adapt a single consonant (singleton) as geminated clusters or change the geminated clusters as a single consonant. For this, it aims to answer how and why a borrowing language like Japanese, forms geminated clusters, while adapting some English words, but Odia, an Eastern Indo-Aryan language spoken in the Indian territory of Odisha, simplifies almost all geminated clusters, while adapting some Arabic words. This paper is an empirical and analytical work based on the recorded speech of loanwords collected from native speakers. Analyzing the spoken form of English and Arabic loanwords, and comparing them with their source counterparts within the framework of Optimality Theory, this study looks at the prosodic licensing features of gemination of singleton and degemination of geminated clusters. Most of the contextual prosodic effects of loanwords are presented in the form of spectrograms by analyzing the acoustic features of geminated and degeminated consonants using the phonetic software ‘Praat’.

Data analysis reveals that the native speakers of Japanese prefer geminated clusters to alter the heavy or super heavy monosyllabic English source words as heavy plus light disyllabic loanwords, whereas, Odia speakers simplify the geminated clusters of heavy or super heavy syllables of Arabic words as light plus light disyllabic loanwords. It is observed that, the gemination is achieved through the insertion of a homorganic consonant, which is parsed as a coda of the preceding left side syllable, but the degemination is succeeded by the deletion of coda of the same syllable. By these processes, the trimoraic syllables are largely prohibited in Japanese as well as in Odia. Inserting and deleting of consonants and vowels, the native speakers of Japanese and Odia achieve the disyllabic minimality structure of loanwords. The findings of this study suggest that some of these well-formedness prosodic features of loanwords are also cross-linguistically motivated by the processes of gemination and degemination.

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