Japanese loanword devoicing revisited: a rating study

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Abstract In Japanese loanword phonology, geminates optionally devoice when there is another voiced obstruent within the same stem, i.e., geminates may optionally devoice when they violate OCP(voice). This devoicing of OCP-violating geminates has received much attention in the recent phonological literature. However, the debates centering around this phenomenon have relied primarily on intuition-based data, and no systematic judgment experiments have been performed. This paper fills that gap. The experiment reported in this paper shows that Japanese speakers do find devoicing of geminates natural when there is another voiced stop within the same word, i.e., when the geminates violate OCP(voice). The experiment moreover finds other interesting aspects of devoicing: (i) the naturalness of devoicing of OCP-violating geminates correlates positively with the lexical frequencies of the words in question, (ii) the naturalness of devoicing of OCP-violating geminates is not significantly affected by place of articulation, (iii) speakers find (context-free) devoicing of geminates more natural than devoicing of OCP-violating singletons, and (iv) speakers find the devoicing of OCP-violating singletons more natural in word-medial position than in word-initial position.

Keywords Laboratory phonology · Phonological judgments · Devoicing · Geminates · OCP(voice) · Lyman's law · Japanese

1 Introduction

1.1 The phenomena

This paper reports a judgment experiment on the devoicing of voiced geminates in Japanese loanword phonology, a topic that has received much attention in the recent

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