

# Optimal L2 Speech Perception: Native Speakers of English and Japanese Consonant Length Contrasts

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## Abstract

This paper examines the perception of Japanese singleton-geminate consonant contrasts by native speakers of English with varying degrees of experience with Japanese. In an identification experiment, it was found that while native speakers of Japanese exhibit consistent identification of consonants varying in duration as either singleton or geminate, native speakers of English do not. However, this effect was mediated by Japanese language experience-native speakers of English who have studied Japanese for up to one year exhibited more Japanese-like identification of Japanese consonants. A formal Optimality Theoretic model of second language speech perception development is proposed, building on the Boersma (1999) perception grammar and the Gradual Learning Algorithm (Boersma & Hayes 2000). The application of the model to the experimental results is demonstrated.

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## About the Author

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