

Tonal adaptation of Japanese phonemic loanwords in Mandarin Chinese

Jueyu Hou (j.hou@hum.leidenuniv.nl)

Leiden University

The present study accounts for the tonal adaptation of Japanese phonemic loanwords in Mandarin Chinese. Crucially, instead of being dictionary-based, the present study investigated experimentally how 28 selected Japanese loanwords were produced by 12 native Mandarin Chinese speakers (aged 18–35, 5F), none having any (systematic) Japanese L2 learning experience prior to the study. The participants were randomly divided into two groups, each of which was assigned 14 read-aloud tasks (i.e., covering half of the loanwords under study). They were instructed to read aloud the loanwords situated in contextualized declarative carrier sentences. In order to categorize and identify the tonal adaptation strategies, a clustering analysis with *Contour Clustering GUI* was adopted, triangulated with perceptual judgements from two native speakers of Mandarin Chinese. F0 trajectories of the loanwords were extracted with *ProsodyPro* (Xu, 2013) measuring 10 equidistant points per Chinese character to visualize their tones.

The study observed four major tonal adaptation patterns. First, speakers scarcely assign tones to the loanwords following those of the Chinese characters comprising these words. Second, the high-level tone is most commonly assigned, sometimes regardless of the original pitches in Japanese. Third, the assignment of some tones, for instance, the neutral tone, does not always follow the phonological rules of Mandarin Chinese. Finally, between-speaker variations were observed. These findings suggest that despite their readily developed graphic shapes in Mandarin Chinese characters, and despite the fact that the participants have no access to the Japanese lexicon, they tried to “foreignize” the loanwords, pronouncing them in the “Japanese” way as what they imagined to be. These findings made it possible to further discuss the intertwining cognitive and sociolinguistic mechanisms in the process of lexical borrowing.

Reference

Xu, Y. (2013). ProsodyPro—A tool for large-scale systematic prosody analysis. In B. Bigi & D. Hirst (Eds.), *Proceedings of Tools and Resources for the Analysis of Speech Prosody* (pp. 7–10). Laboratoire Parole et Langage.