

An evolutionary account of loanword-induced sound change in Japanese loanwords

Generative accounts of loanword phonology typically focus on the role of an individual speaker's grammar in generating the phonological adaptations seen in loanwords. For example, Ito and Mester (1995) explain the tendency for coronal stops to be affricated before /i/ in Japanese loanwords from English, such as /tʃi:mʊ/ 'team', by proposing that Japanese speakers have a markedness constraint *TI (no coronal stops before /i/) forbidding the unaffricated form */ti:mʊ/ (which would more closely approximate the English source /tim/). This constraint is also active in the native stratum of the lexicon, where it governs the alternations seen in verb roots ending in /t/; for example, the /t/ in /mat-/ 'wait' surfaces as [t] in /mat+anai/ → [matanai] 'wait (neg.)', but as [tʃ] in /mat+imasu/ → [matʃimasu] 'wait (polite)'. While these types of generative models can be successfully used to explain static synchronic patterns in loanword adaptations in terms of existing constraints in the native phonology, it is more difficult to use these models to explain changes in such patterns over time. In Japanese, the restriction on coronal stops before /i/ does not apply in more recent loanwords, such as /direkuta:/ 'director'; the affricated form */dʒirekuta:/ is never attested. It is generally known that, as the level of bilingualism increases over time in a language contact situation, non-native phonological patterns become more and more acceptable in loanwords (Haugen 1950). Yet the causal links between loanword adaptations at the level of the individual speaker, and the larger-scale tendencies towards less nativization of loanwords over time at the level of the speech community, remain unclear.

In this talk I will propose a model of loanword-induced sound change which unifies both the generative and sociolinguistic approaches to borrowing. Following "evolutionary" accounts of sound change, such as Croft (2000), I will argue that it is more fruitful to view loanword borrowing at the level of the speech community as a selection process among competing variants of a given loanword introduced by bilingual speakers. This model predicts that non-native phonotactic patterns, such as /ti/ in Japanese, are more likely to be preserved both during times of increased borrowing, and in environments with a high type frequency in the source language. These predictions are confirmed using data from Arakawa (1977). Loanwords derived from English source words containing relatively frequent lexical neighborhoods, such as word-final /-ti/ (*city, humanity, ...*) are attested with unnativized /ti/ in the late 19th century, long before other instances of /ti/. The introduction of these loanwords created a contrast between /t/ and /tʃ/ before /i/ in the loanword stratum of the Japanese lexicon; this contrast then spread to loanwords with less frequent lexical neighborhoods, such as words with /-tik/ (*mystic, statistic, ...*), which start to be attested with unnativized /ti/ around the turn of the 20th century, and words with /-tiv/ (*active, ...*) which are generally attested with nativized /tʃi/ until the 1930's. I conclude by discussing how the evolutionary model of loanword borrowing can explain the lexical diffusion effects seen in other examples of sound change (Wang 1977, Labov 1994).

References

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