A Constraint-Shifting Account of Loanword Adaptation: Evidence from the Early Stages of Dissemination

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Loanwords often exhibit phonological behavior different from that of native words. Japanese, for example, prefers epenthesis for illicit sequences in loanwords which would otherwise promote deletion in native words. Smith (2006; 2009) accounts for this with a mechanism of differently ranked loan-specific constraints. Others (e.g. van Oostendorp 1997; Kang 2003) have also employed differently ranked grammars to account for the behavior of loanwords, but not detailing how these divergent grammars were induced. I argue that loanword adaptation (LWA) patterns are best explained as a result of style shifting (in terms of style-sensitive Stochastic OT: Boersma and Hayes 2001, Appendix C) during the early stages of loanword dissemination and establishment. Specifically, I argue that a PRESERVATIONAL STYLE is activated in loanword dissemination. This style captures the intuition that a borrower is less willing to delete or change material from the source-language form than they are to split phonemes or epenthesize new material. This is represented in formal OT terms by all IO faithfulness constraints shifting upward in ranking except those barring epenthesis (DEP) and phoneme splitting (UNIFORMITY). Its effects are then passed on during establishment of the loanword, manifested in its adapted form. It must, however, affect IO faithfulness constraints as its effects are seen on native words in surrounding speech as well. Loan-specific constraints are therefore unnecessary and less predictive.

Empirical evidence comes from the experimental loanword dissemination (designed similar to Davidson 2006; 2007) of a Japanese-to-English nonce loanword by English speakers learning Japanese as a foreign language (n=12). This subject pool choice is under the assumption that a loanword disseminator can usually be expected to have at least some familiarity with the source language. Subjects read a short story in Japanese about choosing between two travel destination options, with the experimental nonce loanword as one of the place names. Subjects were interviewed about the story, eliciting tokens of the nonce loanword, /wak^{j}oːseː/, which includes the palatalized velar stop observed in previous Japanese-to-English LWA ([toː.**k^j**oː] → [toʊ.**ki**.oʊ]). Results' average F2 trajectory resembled the stop-glide [kj] sequence, between native [k^j] and conventionally adapted [ki.]. I interpret this as evidence that the disseminators' IDENT[VOC] faithfulness constraint preserving the [–vocalic] feature (see Padgett 2008) of /^{j}/ is in a higher state than usual in English, in relation to the markedness constraints disfavoring a [kj] onset. Additionally, a striking variation of locative 'to' across pre-nonce-loan and pre-native-word contexts—both plentiful by nature of the story—was observed with significantly more faithful forms (p=.001) in the pre-nonce-loan context, quantified by features lost/changed. This also shows a higher state of other featural IDENT constraints associated with the same context as the nonce loan's heightened IDENT[VOC].

I analyze these observations as resulting from a combination of frequency-based upward shifting of IO faithfulness constraints in the grammar (Coetzee and Kawahara 2013) and the intuition that the source language form is better preserved if features are added or spread than if they are changed or deleted. I propose a PRESERVATIONAL STYLE, which entails the raising of all faithfulness constraints except DEP and UNIFORMITY in the utterance of a new loanword. This is modeled for the locative 'to' data in style-sensitive Stochastic OT (Boersma and Hayes 2001, Appendix C) and, given its observed correlation with native-vs-loan preceding context, concluded to reflect this style's effects on the disseminated loanword, itself. I suggest that this preservational style is employed at the early stages of loanword adaptation, its effects on the output then passing on to a loanword's established form at later stages of adaptation: e.g. /k^j/ → [kj] → [ki.]. This better predicts the cross-linguistic epenthetic inclination in LWA (Paradis and LaCharité 1997) than freely rankable source-borrowing constraints (Smith 2006; 2009), as well as accounting for the novel empirical finding that these effects may extend beyond the loanword and thus cannot be treated as loan-specific.

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