Experimentally testing loanword adaptation as socially mediated phonetic imitation

This multi-method study extends the sociolinguistic research on loanword variation in American English, triangulating it with the phonetics and phonology of loanword adaptation using a phonetic imitation paradigm. Hall-Lew et al. (2010) found the pronunciation of *Iraq* to differ amongst U.S. politicians: liberals preferring unnativized [ə] and conservatives preferring nativized [æ]. In this study, I examine the variation of established loanwords along political identity, as well as factors more directly related to language contact: source-directed attitude (Weinreich 1968), ideology regarding language contact (Thomason 2001, Poplack et al. 1988), and one’s expression of a ‘global persona’. I also hypothesize that such effects hold at the initial adaptation and dissemination of a loanword, considering adaptation a form of sound replication in tandem with findings that social factors like attitudes can influence such replication (e.g., Yu et al. 2013). I test this in a simulated loanword adaptation experiment.

Subjects (N=30) are exposed to nonce words within short stories, manipulated between [ɛ] and [æ] variants: e.g., [ðɛni]–[ðæni]. Within, the words are framed as Samoan- or Iran-sourced loans, or as unfamiliar English words by manipulating factors like story setting and orthography. Subjects then read a sequel out loud, to examine how strongly the exposure form influenced subsequent pronunciation. Samoan and Iran framings are used to examine different degrees of negative source-directed attitude (considering Samoa a more neutral control), and the US framing allows for comparison between ‘loan’ vs. ‘non-loan’ status to test for potentially broader, non-source-specific factors. Subjects then read a randomized word list including potentially variable established loanwords. Followup tasks test for the social factors of interest. An Implicit Association Test (Greenwald et al. 1998) between Iran and Samoa measures implicit biases regarding the Middle East, relative to Polynesia. Finally, subjects answer an extensive Likert agreement questionnaire, eliciting stances regarding political alignment, the Middle East and Polynesia, language contact ideology, and global vs. nationalist persona using multiple distinct items per factor.

Logistic regression models compare predictors of [ɑ]–[æ] pronunciation of *Iran* and *Iraq* from the word list task. Political leaning is not a strong predictor; rather, explicit (but not implicit) relative attitudes between the Middle East and Polynesia, language contact ideology, and ‘global persona’ indexation are—all significant in expected directions. This also holds across additional established loans besides just the two Arabic-sourced ones, except (as expected) region-specific attitude is no longer significant. Parallel effects surface in simulated loanword adaptation, examined with Euclidean distance measurements of phonetic imitation between [ɛ] and [æ] categories (Figure). Individuals more strongly disfavoring the Middle East relative to Polynesia imitate the exposure form of Iran-framed nonce loans less, relative to Samoa-framed ones. Individuals identifying as less ‘global’ imitate the form of loan-framed nonce words less, relative to unfamiliar English words. These findings demonstrate that factors besides political identity may more strongly and directly predict loanword variation, such that political identity falls out from and reflects factors of political ideology: e.g., source-directed attitudes and globalism. They also demonstrate that loanword variation may result from the same social effects on adaptation.

### References


Yu, A. et al., 2013. Phonetic imitation from an individual-difference perspective: Subjective attitude, personality and “autistic” traits. PLoS ONE 8, e74746.