

Diachronic change in loanword adaptation is due to differences in the adaptors' perception grammars

Silke Hamann (University of Amsterdam)

For more than 20 years, the literature on loanwords has been revolving around the question whether loan adaptations happen in perception, in phonology, or in both (for an overview, see Kang 2011). Boersma and Hamann (2009) argue that speech perception itself *is* phonological, since it is influenced by language-specific phonotactic restrictions (as evidenced by psycholinguistic experiments, e.g. Dupoux et al. 1999). Perceptual adaptations are therefore always phonological. Boersma and Hamann explicitly formalize this with an Optimality-theoretic perception grammar (BiPhon model, Boersma 2007).

In the present study I argue that diachronic changes in the perceptual adaptation of loanwords can be accounted for by differences in the perception grammars of the borrowers, which are due to the different input the borrowers receive: younger generations of speakers often have greater exposure to English, and therefore acquire different perception grammars than their parent generations. I provide examples for this change in auditory input and consequently in perception grammars from three languages.

In **Hong Kong Cantonese**, new loans violate the formerly strict requirement for minimally bisyllabic prosodic words (MINWORD; Silverman 1992), see the loan doublet from English in (1) (Bauer & Wong 2008):

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|---------------------|-----------------------|--------------------------|----------------------|
| (1) a) <i>cream</i> | [kejli:m] | 'bakery cream' | borrowed before 1945 |
| b) <i>cream</i> | [k ^{wh} i:m] | 'facial/drinkable cream' | borrowed after 1985 |

While MINWORD was ranked high in the grammar of older HK Cantonese speakers, as can be seen in traditional HK Cantonese words and older borrowings like (1a), younger speakers seem to have a lower-ranked MINWORD constraint, cf. recent borrowings like (1b) (Hamann & Li 2016), because they receive more auditory input from English, a language that allows monosyllabic words.

Japanese used to have a restriction on monomorphemic /ti/ sequences, as can be seen in older loans like (2a). For younger loans this restriction does not seem to hold, cf. (2b) (Itô & Mester 1995).

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|----------------------|---------|-----------------|
| (2) a) <i>team</i> | [t̚imɯ] | old loanword |
| b) <i>teen(ager)</i> | [ti:N] | recent loanword |

Again, I argue that the perception grammar of younger borrowers is different from that of older borrowers (* /ti/ is ranked lower for younger speakers) because the younger borrowers had more contact with English.

In **Dutch**, older generations adapted loanwords from French with nasalized vowels, while younger Dutch speakers replace these loan phonemes by native vowel-nasal sequences, cf. the example in (3).

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|-------------------------|------------|------------------|
| (3) a) <i>entrecôte</i> | [ãtrəkot] | older speakers |
| b) <i>entrecôte</i> | [antrəkot] | younger speakers |

The Dutch case is not an example of a change in borrowing strategy across time but illustrates younger speakers' nativization of French loan phonemes because they received less input in the source language French (see Nagy 2008).

The present proposal shows that sociolinguistic factors such as language contact can have direct implications for the perception grammars of the borrowers and hence for the adaptation of loanwords.

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