

How frequent is frequent, and why does it matter? Lexical frequency effects on a regular sound change

MATTHIAS HOFMANN
Chemnitz University of Technology

SUSANNE WAGNER
University of Oxford

Regular sound changes are sensitive to (lexical) frequency effects to varying degrees and in seemingly contradictory ways, with linear effects often only recognizable after changes have been completed (Bybee, 2001, 2002; Labov 2006). A particular challenge is the demarcation of discrete frequency categories, which can be defined in various ways (e.g. corpus in- or external, continuous vs. binary).

We investigate the effect of frequency on the realization of KIT in St. Johns English. While such acoustic phonetic analyses are rare, some researchers suggest that younger standard St. Johns speakers participate in mainland Canadian English innovations to different degrees than mainlanders (e.g. Hollett, 2006). Some of these are referred to as the Canadian Shift, which has not been uniformly defined: Clarke et al. (1995), unlike Labov et al. (2006), assert that KIT is part of the shift; a view shared by Roeder & Gardner (2013). Boberg (2005, 2010), however, emphasizes retraction of KIT (and DRESS) rather than lowering. The role of frequency has largely been ignored as an explanatory factor for these shifts. We review effects of frequency in different constellations as proposed by Arnon & Snider (2010) vs. Clark (2008) vs. Erker & Guy (2012) vs. Onosson (2011) vs. Walker (2012) and test them against our data set (34 interviewees, 2,300 KITs).

Results from logistic regression suggest a complex pattern of interaction between (different models of) frequency and other factors known to affect vowel realizations: (1) frequency has a non-linear effect, with both high- and low-frequency items behaving conservatively, while mid-frequency items exhibit a strong lowering effect on KIT; (2) modelling frequency in different ways yields dramatically different or even diametrically opposed results; (3) binary modelling of frequency leads to an oversimplified picture of the complex interactions of frequency with other variables. Overall, our results confirm previous findings (e.g. Erker & Guy 2012, Walker 2012), which suggests that research on language change is dependent on carefully considering frequency effects.