Social separation and group size in the evolution of sound change

Keith Johnson
University of California, Berkeley

The role of the synchronic pool of phonetic variation (Ohala, 1989) in sound change is well-established. Phonetic biases introduce variants in the speech stream, and sometimes these variants are adopted as new, changed phonetic exponents of linguistic units (Ohala, 1993; Lindblom et al., 1995). A key unresolved problem has to do with the "sometimes" in this formulation - the "actuation problem" (Weinreich, Labov, Herzog, 1968). We seek to determine when a phonetic bias will lead to sound change and when it will not. The present paper offers a partial answer to this question. This paper builds on earlier research in our group which classified phonetic biases and simulated sound change on the basis of social group dynamics (Garrett & Johnson, 2012), and which suggested that the speaker's sense of social "power" help predict sound change actuation (Dimov, Katseff, & Johnson, 2012). I will extend this earlier work by exploring model simulations that predict the relative strength of two social factors - (1) the degree of social separation between groups of speakers, and (2) the relative size of the speech communities. The simulations suggest that a sound change is more possible when a subgroup of a language has a strong sense of separate social identity relative to other speakers of the language (Labov, 1963), and that this effect is modulated only a little by the relative sizes of the groups (Atkinson, 2011).


