

Social separation and group size in the evolution of sound change

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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).

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