How do spontaneous imitation capacities relate to the spread of sound change?

Labov and many other (socio)linguists have often shown that even in small local communities sound change is not equally advanced in all speakers. Consequently, many studies have aimed at identifying the 'leaders of change' or the 'early/late adopters' of a new variant. In order to explain these individual differences in the spread of a sound change, previous studies focussed on language external factors (like social and personality factors, see f.i. Yu (2013)). However, it is also important to explore language internal factors. The goal of this study is to explore the possibility that the spread of a change within communities is related to individual differences in imitation capacities, as it has often been assumed that phonetic imitation is a key mechanism in the process of sound change. (e.g., Delvaux & Soquet, 2007; Garrett & Johnson, 2013; Trudgill, 2008).

The sound change in progress considered in this study is the devoicing of fricatives in Standard Dutch. Standard Dutch is traditionally described as having a phonological distinction between voiced and voiceless fricatives. During the last decades, it has been frequently observed that word-initial voiced fricatives are increasingly produced as voiceless (Kissine et al., 2005; Van de Velde et al., 1996; Pinget, 2015). This change is spreading across the Dutch language area and might result in merger of /v/-/f/.

Five regions in the Dutch language area were selected to represent different stages of change. In each region, twenty highly educated young adults participated in a series of production experiments and in a spontaneous phonetic imitation task (sometimes called *deliberate imitation*). The design of the spontaneous phonetic imitation task was inspired by the study of Delvaux & Soquet (2007): it took the form of a game played by three players: the participant and the two model talkers who have devoiced initial fricatives. The expectation based on previous imitation studies (e.g., Babel, 2012; Delvaux & Soquet, 2007; Dufour & Nguyen, 2013) is that participants might (gradually) converge in their productions to the devoiced fricatives in the course of the experiment. Simple exposure to model speakers induces spontaneous imitation.

The production tasks confirmed previous work on the devoicing of Dutch labiodental fricatives: it is an advanced change showing regional stratification. Also within regions, there were clear individual differences in the degree of devoicing of /v/, with some early and late adopters of the change. The spontaneous imitation experiment triggered in all regions on average more devoicing compared to the baseline production results. On the individual level, most speakers gradually converged to the model talkers in the course of the experiment, while a few speakers showed phonetic divergence during the experiment. Furthermore, it was examined whether the degree of individual spontaneous imitation could predict the position of speakers in their own region. Individual imitation patterns turned out to significantly predict the production results, which did account for 10.38% of the variance: the more advanced the speakers in their own region, the more inclined they were to imitate the model talkers.

These preliminary results point out at the fact that leaders of change within a community – whenever exposed to the sound change – are producing the new variant even more than what they usually do, while more 'conservative' speakers are less inclined to spontaneously imitate model speakers with the new variant.

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