

Social Factors Influencing Phonetic Convergence During Conversational Interaction

Vincent Aubanel & Noël Nguyen

Laboratoire Parole et Langage, CNRS & Université de Provence, Aix - en - Provence
France

{Vincent.Aubanel;Noel.Nguyen}@lpl-aix.fr

In the course of a conversation, imitation between speakers tends to occur at multiple levels, which include posture, head movements, facial expression and speech (see Pardo, 2006, for a recent survey). One of the functions of this imitative behavior is thought to be the facilitation of mutual comprehension. Concerning speech, convergence effects have been observed in mean vocal intensity, speech rate, utterance duration, and pitch contour. However, despite the apparently systematic character of imitation and its multiple levels of occurrence, there is a great deal of inter - speaker variability in the observed patterns of phonetic convergence, which remains to be explained.

The objective of this work is twofold. First, we seek to characterize the way in which two speakers engaged in a face - to - face conversation may influence each other at the phonetic and phonological levels. Second, we ask whether convergence effects can be related to measures of the speakers' social competence. Our experiment focuses on conversational interaction between native speakers of two different varieties of French, namely standard French and southern French, which show well - established differences at both the phonological and phonetic levels. We examine to what extent each speaker's speech patterns tends to converge towards that of the other speaker in the course of the interaction (see Delvaux & Soquet, 2007, for a similar approach applied to Belgium French). The magnitude of convergence is related to the speaker's score on the Social Desirability scale (Crowne & Marlowe, 1960), a tool that has proven useful in predicting adaptation to others (e.g. Natale, 1975).

We will present a new interactive task, inspired from the Map Task (Anderson *et al.*, 1991), and designed to elicit extensive production of target words in a natural conversation setting. The task is an interactive game where the two interactants have to organize characters into groups, based on the characters' written declarations, referring to the characters by their names. The names are generated using a purpose - built algorithm, in accordance with the phonotactics of French, and they include five phonological dimensions that are known to differ in the two varieties considered.

Our first results show that phonetic convergence, albeit not systematic, appears to be consistently related to both the speaker's Social Desirability score, and the social status potentially associated with the speaker's accent. Implications for language change, language acquisition and the production - perception link will be discussed.

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