

An exemplar-based hybrid model of phonetic adaptation

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Phonetic adaptation to a conversational partner in dialog reflects an increase in similarity of segmental and suprasegmental properties to the partner's speech. A vast body of research into phonetic adaptation has confirmed the existence of these effects, though they usually remain very subtle and are characterized by a large inter-speaker and inter-pair variability.

Socially-motivated explanations of adaptation phenomena (e.g. Communication Accommodation Theory) see the variability of adaptation as to some degree controllable by the speaker. The Interactive Alignment Model (Pickering & Garrod, 2004), on the other hand, attributes all adaptation to automatic mechanisms and does not foresee any further (socially motivated) influencing factors or (active) control. Hybrid accounts, finally, assume both an automatic and a variable component to adaptation. However, no study as of yet has discussed possible individual differences (IDs) in the *ability* to adapt to a partner's speech characteristics or certain personality features which might favor convergent behavior.

We present evidence for a hybrid model of phonetic convergence, where the detailed situational context, as well as the speakers' personality and their phonetic and cognitive abilities merge to give rise to a unique shape of phonetic adaptation in every new encounter. Our data stems from two studies on (acoustically measured) phonetic convergence in a second and first language (e.g. L2 segmental phonetic convergence in relation to subjects' phonetic talent, mental flexibility and personality features). We propose an exemplar-based model of phonetic adaptation, with IDs in talent and attention tapping into the core component of the convergence mechanism, involved in the memorization and subsequent re-usage of richly indexed exemplars. Additional variability in the strength of adaptation is suggested to be influenced both by personality features and the evaluation of the dialog partner and context.

References

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