

## 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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