ACOUSTICS2008/1868 Increasing speech alignment through crossmodal speaker familiarity

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In speech alignment phenomena, individuals inadvertently imitate aspects of another talker's utterances. Recent research has shown that when asked to shadow words, subjects not only align to the speech they hear, they also align to the speech they see when shadowing words by lipreading [Miller, et al., J. Acoust. Soc. Am., 120, 5, Pt. 2 (2006)]. This research also showed that some of the dimensions to which subjects align are the same whether based on shadowing of auditory or visual speech stimuli. This might mean that subjects can align to a speaker's idiolectic dimensions available in both modalities. To examine this possibility, an experiment was conducted to see if alignment increased with exposure to the same or a different speaker, across two blocks of presentations that were: a) both auditory; b) both visual; or c) one auditory and one visual. If subjects align to amodal, idiolectic speaker style, then alignment increased when the speaker was the same over the course of the two blocks regardless of presentation type. These results suggest that alignment can be based on amodal, idiolectic dimensions which are available across modalities.