
Testing perceptions of multimodal cues in overlapping speech

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Overlapping speech is a common occurrence in spoken conversation, serving several communicative functions for speakers including the signalling of turn-competitiveness, collaborative completion, and requests for more information (Tannen, 1983). Recent experimental work by Hilton (2016) suggests that the social perception of overlapping speech depends on a range of factors, including the duration and prosodic intensity of the overlap, and the pragmatic relations between speaking turns. Such factors affect how speakers are perceived with respect to competitiveness, cooperativeness, and overall likeability; this is further modulated by the listener's own conversational style.

Building on this work, we look to analyse the role of multimodal cues in the perception of overlapping speech. We examine the role of timing and synchronisation of overlapping speech with two multimodal cues, namely eye-gaze (Kendrick & Holler, 2017) and co-speech gestures held across turn units (Sikveland & Ogden, 2012). It is predicted that both averted eye-gaze and the holding of a representational gesture across turns will give a speaker greater license to overlap with their interlocutor due to the additional pragmatic information conveyed.

To test this prediction, participants will see a series of video clips depicting a short 12-second dialogue. For each cue type, there are 8 different conditions varied by the presence of overlap in the speech, the use of a multimodal cue (eye gaze vs no eye gaze; gesture held vs gesture dropped), and the stance taken during the overlap (agreeing vs disagreeing). Using a between-subjects design, each participant will watch exactly one dialogue before answering a series of questions about the speakers and their relationship. Additionally, background information on participations pertaining to their conversational style and tendency towards traits associated with autism spectrum disorder will be taken, in addition to basic demographic information. This will allow us to measure how the effects of overlapping speech on perception of speakers is modulated by multimodal cues and varies across different populations of listeners.

References: • Hilton, K. (2016). The Perception of Overlapping Speech: Effects of Speaker Prosody and Listener Attitudes. *Proc INTERSPEECH*. San Francisco, CA, 1260-1264. • Kendrick, K.H. & J. Holler (2017). Gaze direction signals response preference in conversation. *Research on Lang & Social Interaction* 50(1), 12-32. • Sikveland, R.O. & R. Ogden (2012). Holding gestures across turns: Moments to generate shared understanding. *Gesture* 12(2), 166-199. • Tannen, D. (1983). When is an overlap not an interruption? One component of conversational style. In R.D. Di Pietro, W. Frawley & A. Wedel (eds.), *Selected Papers of the First Delaware Symp on Lang Studies*. Newark: UD Press, 119-129.