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Investigating contextual effects in referential communication

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Abstract

The ability to flexibly interpret signals in context is at the core of human communication, as even the most conventionalized linguistic signals are necessarily ambiguous and subject to inter-individual variability. We introduce a novel communication game (the Pizzini game) requiring pairs of participants to exchange linguistic signals that are successfully interpreted by using contextual information freshly generated by each pair. By allowing this common ground between once-strangers to be developed interactively in the lab, we are able to characterize the pair-specific contextual information available to participants when inferring intended meanings. We present preliminary data testing the predictions that (1) interactants align on an abstracted conceptual representation of a set of stimuli during the context-building portion of the task and (2) that the characteristics of this pair-specific conceptual representation predict the dynamics of how participants later resolve context-specific references to the same stimuli.