The Effect of the Speaker’s Motivation on the Interpretation of Logical Connectives
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Abstract
Logical connectives like ‘or’ and ‘if-then’ have been at the center of research on conversational implicature since Grice (1975). It is widely assumed that successful communication depends partly on the alternative expressions the speaker could have used but didn’t, and mutual beliefs about the goals and rationality of the interlocutors. However, most studies on implicature fail to consider the role of contextual factors such as the hearer’s beliefs about the speaker’s interests. For example, participants are likely to interpret utterances differently if they believe that the speaker has reason to be deceptive. The studies we report here demonstrates that these factors play a significant role in the process of utterance interpretation.

Background

How do the perceived intentions of the speaker affect the hearer’s interpretation of an utterance?

A game-theoretic analysis

Based on game theory it is possible to predict the likely interpretation in contexts that involve varying levels of cooperation and mutual beliefs.

Ps were more likely to make the choices predicted by the default interpretation (e.g., choose a target that is next to a pineapple and a mushroom if the utterance was of the form ‘P if Q’) when they stood to win by making a correct choice. \( (p < .01) \)

Discussion

The results described here demonstrate that the utterance interpretation process is sensitive to the hearer’s beliefs as to what they perceive to be the likely motivation of the speaker.

Experiment 1: Vested interest
Speaker and Participant have opposing goals
In this experiment whenever the speaker wins the participant loses and vice versa (based on Ps choice)

Prediction (based on a game-theoretic analysis)
Participants will be more likely to follow the default interpretation of the utterances if they win by making the correct choice

Results

Ps were more likely to make the choices predicted by the default interpretation when the speaker stood to win than lose. \( (p < .05) \)

Experiment 2: No vested interest
Participant is given instructions by one of two speakers with opposing goals
In this experiment there are 2 possible speakers. One wins when the P makes a correct choice, the other loses when the P makes a correct choice.

Prediction (based on a game-theoretic analysis)
Participants will be more likely to follow the default interpretation of the utterance if the speaker wins on a correct choice.

Results

Ps were more likely to make the choices predicted by the default interpretation when the speaker stood to win than lose. \( (p < .05) \)

References
