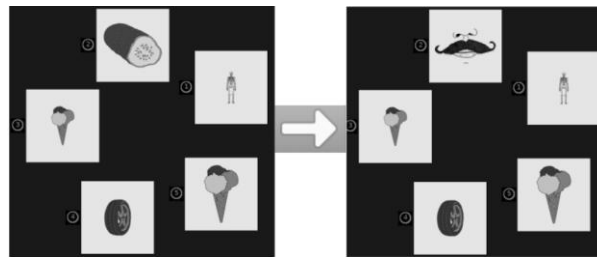# Examining Listeners' Use of Perspective in Online Comprehension of Modified Noun Phrases

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Let's look at the experiment!

- Introduction of our research: This visual-world experiment aims to determine how listeners employ perspective when understanding modified noun phrases. In particular, we are interested in assessing listeners' ability to account for a speaker's varying perspective during the interpretation process. We will provide an overview of the experiment and its significance in this communication piece.

- Methods: The experiment consists of a referential communication game in which a director (lab assistant) describes a target object to a matcher (participant), who must identify it by clicking on it using a computer mouse. During the task, participants' eye movements will be monitored. Five images of commonplace items will be displayed on the computer screen during each round, and a star will be concealed behind one of them (the target image). The director will be aware of the location of the target, but the matcher will not. The director will be responsible for describing the target without revealing its number, while the matcher attempts to identify the target.

- How to make a difference in perspective: To introduce a difference in perspective, a single object's identity will change throughout the trial. Before the change, the director will prepare her description while observing the screen (pre-change display). While she is distracted, the identity of one of the objects on the screen changes. The matcher is present during the transformation, but the director is not. The matcher continues to observe the post-change display while the director describes the target. To accurately and efficiently interpret the speaker's description, the matcher must consider the speaker's unique perspective.

Why this experiment?

- The experiment investigates a long-standing debate in psycholinguistics regarding how individuals integrate information about a communicator's divergent perspective during real-time language processing. It is well-established that language comprehenders maintain knowledge of their interlocutors and their shared ground. The precise mechanism by which and when "common ground" constrains real-time language processing remains controversial (Clark & Marshall, 1981) .

- In addition, the experiment is novel in that it introduces perspective differences using a method other than visual occlusion, which can lead to anticipatory baseline effects. Instead, we introduce perspective differences by changing the identity of a single object throughout the trial. This task requires participants to reason about another individual with out-of-date information about the world. To the extent that listeners consider their common ground with the speaker, they should interpret the speaker's utterances in accordance with the set of objects available to the speaker at the time of formulation.