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Representation of object state-changes of semantically similar objects

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Abstract

Many studies show that language comprehenders track multiple object state-changes during event comprehension. In this research, we investigate if comprehenders are sensitive to object state-changes of semantically similar objects. In Experiments 1 to 3, participants were asked to verify whether the object depicted in a picture was mentioned in the previously read sentence. Crucially, the picture either showed the original/modified state of an object that was mentioned in the sentence (Experiment 1) or not (Experiments 2 and 3). In Experiment 1, participants were faster to verify that an object was mentioned in the sentence if its pictured state matched the state implied by the sentence. In Experiments 2 and 3, participants were slower to verify pictured objects (e.g., cake) after reading a sentence that implied multiple states for a semantically similar (e.g., egg) rather than dissimilar (e.g., thermometer) object. Thus, comprehenders are sensitive to object state-changes of semantically similar objects.