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Negation as a tool for conveying mental models

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Abstract

Negations (e.g. "the ball isn't red") are thought to contain less information than their positive counterparts (e.g. "the ball is green"), which poses a pragmatic puzzle: why ever use them? We contend that negations convey additional information about a speaker's mental model of the world, revealing preferences and expectations. For example, "the ball isn't red" implies the speaker's expectation that the ball could or should have been red — that it being red was worth considering. Here, we demonstrate that speakers take advantage of the dual world and world-model information conveyed by negation when faced with the need to efficiently share information about their beliefs across many contexts. Across four experiments, we demonstrate that speakers use significantly more negations when differentiating between possible causal models of a situation, explaining their political beliefs to a member of the opposite party, discussing racial differences, and sharing genre-specific sources of narrative conflict.

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