

Negation affects processing of correct and incorrect information: A visual-world paradigm for misinformation

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Abstract: The current study investigated how lexical priming and negation affects encoding and retrieval of information. Studies have shown people encode and retrieve misinformation from memory, but the mechanisms of encoding and retrieval are not well understood. To address this, an eye-tracking paradigm was designed to examine probabilistic activation during retrieval of accurate or inaccurate information. Participants read four different kinds of texts that varied by if they were affirmative or negated and whether they contained accurate or inaccurate information. After participants read all texts, eye fixations were tracked in a visual world paradigm with four plausible answers on screen in each corner to choose from. Suppression was observed in groups that did not produce misinformation. When participants answered correctly, despite reading misinformation, we observed misinformation being inhibited instead of primed. Mechanisms of processing true and false information and the interplay between language and conceptual formation are discussed.