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The Significance of Memory Retrieval in Perceptual Interference

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Abstract: Verbal overshadowing is a phenomenon where verbalizing a nonverbal experience produces an inaccurate memory of the experience. Drawing from perceptual symbol systems, we postulate that verbal overshadowing belongs to the larger phenomenon of perceptual interference. Verbalizing or mentally imaging nonverbal experiences produces inaccurate memories of those experiences. This is because people initially form prototypical representations of nonverbal experiences. These prototypical representations are not always identical to later exemplars of the experience. On perceiving an exemplar and later having to remember it, people may retrieve inaccurate prototypical representations instead. To test this, we developed a visual interference paradigm that uses fictional spy devices. Previous experiments have shown that people's prototypical representations interfere with their memories for the veridical exemplars, and that it occurs with verbalization or with mental imagery. The current experiment investigates whether perceptual interference occurs during memory encoding, retrieval, or both. Results indicate that it may occur during retrieval.