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Impact of nameability, presentation configuration, and placement structure on object location memory

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Abstract

We investigated the impact of nameability, presentation configuration, and placement structure on object location memory. In Experiment 1, participants memorized photos of nameable and unnameable objects presented at one of four screen locations, either one or four objects at a time. After a filled retention interval, they were presented again centrally, and participants indicated the position where they were previously located. Results revealed a substantial memory advantage for nameable objects. Presentation configuration had no effect. In Experiment 2, we replicated these findings and additionally investigated the role of placement structure by presenting objects either in the corners or on the left/right/top/bottom position of the screen. Memory was better for horizontal/vertical placement, but only for nameable objects. Thus, nameable objects profit from semantic encoding, which can be further improved by simple orientation cues. Notably, with an average accuracy of 50%, location memory was not as "massive" as suggested in previous studies.