The effect of semantic categorization on object location memory

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Abstract

We often organize objects around both visual and semantic boundaries in space. Across four experiments, we examined how semantically consistent partitions influenced memory for object locations. Participants learned the locations of items in a semantically partitioned display (where each partition contained objects from a single category), as well as a purely visually partitioned display (where each partition contained a random assortment of objects from different categories). While semantic partitions significantly improved location memory over the purely visually partitioned display, this advantage was significantly reduced when participants were cued to the correct partition during recall. Our results suggest that semantic category information benefits memory via strengthening the association between a given category and a spatial region delineated by a partition. Further, there was some indication that this benefit may come with the drawback of reducing memory precision for objects within a partitioned space.