Actions travel with their objects: evidence for dynamic event files.

Spapé MM, Hommel B.

Source

Leiden University Institute for Psychological Research and Leiden Institute for Brain and Cognition, Wassenaarseweg 52, 2333 AK, Leiden, The Netherlands. mspape@fsw.leidenuniv.nl

Abstract

Moving a visual object is known to lead to an update of its cognitive representation. Given that object representations have also been shown to include codes describing the actions they were accompanied by, we investigated whether these action codes "move" along with their object. We replicated earlier findings that repeating stimulus and action features enhances performance if other features are repeated, but attenuates performance if they alternate. However, moving the objects in which the stimuli appeared in between two stimulus presentations had a strong impact on the feature bindings that involved location. Taken together, our findings provide evidence that changing the location of an object leaves two memory traces, one referring to its original location (an episodic record) and another referring to the new location (a working-memory trace).

PMID:

19107512 [PubMed - indexed for MEDLINE] PMCID: PMC2795152 Free PMC Article