Cross-situational Word Learning Results in Explicit Memory Representations

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Abstract: Word learning is a fundamental part of language acquisition. Learning words from cross-situational statistics (Yu & Smith 2007) has been argued to be critical for lexical acquisition, but the resulting representations are not well understood. Here, we examine the claim from Hamrick & Rebuschat (2014) that cross-situational learning results in implicit representations. Three experiments provide evidence to the contrary. First, we establish that confidence ratings positively correlate with accuracy. By using a cover story where participants were not told to infer word meaning, only highly confident answers were above chance, contrary to what accounts of implicit memory would predict. In addition, using a deadline procedure (Voss, Bayem & Paller 2008), we found that participants performed no differently than without a deadline, contrary to predictions from implicit memory representations. In sum, we conclude that representations from cross-situational word learning are explicit.