

Lexical Priming without Similarity or Association

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Abstract: Integrative relations, which combine two independent concepts (e.g., "lake" and "bird") into a compound representation ("lake bird"), induce lexical priming. For example, "lake" speeds lexical decisions to "bird" even though they are semantically dissimilar, lexically unassociated, and unfamiliar as a phrase. We report three experiments that investigate whether this integrative priming occurs prospectively (i.e., the prime pre-activates the target) or retrospectively (i.e., prime and target are integrated post-presentation). Integrative (e.g., "lake" -> "bird"), associative (e.g., "canary" -> "bird"), and unrelated word pairs (e.g., "trial" -> "bird") were presented in the perceptual identification, reading aloud, and Stroop color naming tasks, which are thought to measure prospective processing. Integrative pairs and associative pairs both elicited robust priming. That is, prime words (e.g., "lake") facilitated recognition of dissimilar, unassociated target words (e.g., "bird"). Although similarity and association may explain other lexical and sentential priming effects, our results suggest instead a prospective integration process.