

Generalisation of recent word meaning experience across modalities: How we avoid barking up the wrong tree

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Research suggests that adults' lexical-semantic representations are dynamically updated in response to recent experience. For instance, encounters with ambiguous words (e.g. bark) in a particular meaning context (dog vs. tree) will bias their interpretation towards the same meaning after 20+ minutes (Rodd et al., 2013, 2016). Different loci for this priming effect within models of lexical-semantic processing lead to different predictions about whether priming is modality-specific or transfers between modalities. In two web-based experiments, we examined whether exposure to words in spoken sentences affects the later interpretation of written words, and vice versa. Ambiguous words were presented in a written or spoken sentence, or were unprimed. We tested interpretations of written or spoken words roughly 20 minutes later using word association (Experiment 1, N=78) and speeded semantic relatedness decisions (Experiment 2, N=181). We found that sentence-consistent meanings were retrieved more frequently and quickly after priming. This priming effect was significant and similar in magnitude for both unimodal and cross-modal conditions. These results indicate that recent experience with word meanings biases the later interpretation of these words in a modality-general way. This is consistent with a central semantic locus of word-meaning priming. Implications for models of word recognition will be discussed.

Key words: semantic ambiguity; lexical ambiguity; language; long-term priming

References

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