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Which alternatives are relevant in scalar implicature processing? A priming study with antonyms and negation

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Abstract

Scalar words such as 'warm' often give rise to inferences such as 'warm but not hot'. Research has shown that weak scalars ('warm') prime stronger ones ('hot'), suggesting that the latter are used in implicature processing Ronai and Xiang (2023). We examine whether priming holds when no implicature is expected to arise. Under standard accounts, scalar implicatures are derived by negating stronger alternatives. We first tested sentences with negation and asked whether 'hot' is primed when comprehenders are exposed to 'not warm'. Then we tested antonyms, such as 'cold', which are assumed to be on a separate scale. In line with theoretical accounts (Horn, 1972), negated weak scalars did not prime strong ones. Contrary to these accounts, antonyms primed the target words. We explain these findings within the Alternative Activation Account (Gotzner, 2017) that assumes initial activation of alternatives and their subsequent contextual narrowing.