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Processing of Homonymous, Polysemous, and Mono-Sense Words

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Abstract

Since most of the words in our language are ambiguous, how we resolve the conflicts between multiple meanings of the same word form becomes an important issue. Among the ambiguous words, linguists have differentiated homonymous words (e.g., bank) from polysemous ones (e.g., paper). However, empirical evidence for such distinction is scant. In the current study, we compared the processing of polysemous words with that of mono-sense and homonymous words at both the lexical and semantic levels in a double priming paradigm. Specifically, reaction times on the target word after related or unrelated primes were contrasted to examine whether polysemous words are represented more similar to homonymous or mono-sense words. Moreover, neurophysiological measurements were taken with the amplitude of the N400 component as an index of semantic incongruency. We observed different priming patterns between homonymous and mono-sense words only in a semantic relatedness judgment task. The results would shed light on our understanding of the mental representations of polysemy and the processing of ambiguous words as such.