

Accessing the meanings of ambiguous word roots in context: Evidence from crossmodal priming

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Abstract

How are morphemes recognized and interpreted during incremental sentence comprehension? We investigated this question in a crossmodal primed lexical decision task employing words that contain semantically ambiguous roots (e.g., 'bark'; with meanings related to both "dog" and "tree") but which are disambiguated when affixed by "-ing" (e.g., 'barking'; related to "dog" only). We aimed to understand whether access to the meaning of the root 'bark' would be constrained by lower-level morphological affixation. In our experiment, participants listened to sentences containing an affixed ambiguous root while concurrently performing lexical decisions to a visual target related to the root-only meaning, the affixed meaning, or matched controls. Targets were presented for 80 ms at the recognition point of bark or 500 ms post-recognition. We found that both meanings of the root were activated, despite affixation. Results suggest that a parsing system blind to semantics decomposes morphologically complex words into morphemes before recognition.