UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

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

Permalink

Journal

Authors

Le Bouar, Cedric
de Almeida, Roberto G.

Publication Date

2024

Peer reviewed

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

Cedric Le Bouar
Concordia University, Montreal, Quebec, Canada

Roberto de Almeida
Concordia University, Montreal, Quebec, Canada

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.