

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Did you say “gross snails” or “gross nails?” The problem of segmenting co-occurrences of the same segment

Permalink

<https://escholarship.org/uc/item/7849x0r2>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 32(32)

ISSN

1069-7977

Authors

Kim, Dahee
Widmer, Colin
Szostak, Christine
et al.

Publication Date

2010

Peer reviewed

Did you say "gross snails" or "gross nails?" The problem of segmenting co-occurrences of the same segment

Dahee Kim
OSU, Linguistics

Colin Widmer
OSU, Psychology

Christine Szostak
OSU, Psychology

Mark Pitt
OSU, Psychology

Abstract: To comprehend spoken language, listeners have to segment words from a continuous stream of speech. This task may be difficult when [s] repeats at a word boundary (e.g., gas station) because the two s's could blend together and form one long s-sound. Do talkers produce cues that signal the word boundary? If not, how do listeners segment the words correctly? We addressed these questions by having talkers produce two-word sequences that could be interpreted in three ways, depending on how the middle s-sound was heard (e.g. grow snails, gross snails and gross nails). Acoustic analyses of their productions examined whether there are cues indicating the presence of a word boundary. Listening experiments using the talkers' productions as stimuli were carried out to determine the extent to which signal-based and knowledge-based cues are used to resolve ambiguities. Implications of the results for models of spoken word recognition will be presented.