

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

The Learning of Subordinate Word Meanings

Permalink

<https://escholarship.org/uc/item/3931253t>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 39(0)

Authors

Wang, Hao

Gleitman, Lila

Trueswell, John

Publication Date

2017

Peer reviewed

The Learning of Subordinate Word Meanings

Hao Wang

University of Pennsylvania

Lila Gleitman

University of Pennsylvania

John Trueswell

University of Pennsylvania

Abstract: In three experiments, adults attempted to learn words with subordinate-level meanings (dalmatian) by sampling the referent world cross-situationally. Xu & Tenenbaum, 2007 predicted that encountering three uses of a word, each referring to a dalmatian would evoke “suspicious coincidence” inferencing, leading to the subordinate meaning (dalmatian). Exp. 1 found little evidence for this; cross-situational exposure led to a basic-level bias. This bias was unchanged even when the sample was increased to five subordinate exemplars (Exp. 2). Exp. 3 encouraged semantic contrast by simultaneously teaching each subject a word for the subordinate-level and the basic-level category within the same semantic domain (dap=dalmatian; blit=dog). Participants now showed non-basic level learning, but more in line with mutual exclusivity: they may think “dap” means dalmatian but “blit” means all-dogs-except-dalmatians. We conclude that the basic-level interpretation is powerful and cannot be removed by the mere observation of exemplar items over multiple word instances.