UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Task Variation in Scalar Implicature Computation

Permalink

https://escholarship.org/uc/item/9pm7b4bj

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 45(45)

Authors

Qiu, Zhuang Felton, Casey D. Houghton, Zachary Nicholas <u>et al.</u>

Publication Date

2023

Peer reviewed

Task Variation in Scalar Implicature Computation

Zhuang Qiu

The Chinese University of Hong Kong, Hong Kong, China

Casey Felton

University of California Davis, Davis, California, United States

Zachary Houghton

University of California, Davis, Davis, California, United States

Masoud Jasbi

UC Davis, Davis, California, United States

Abstract

Experimental research on the processing and acquisition of Scalar Implicatures (SIs) relies on behavioral tasks that purport to measure the rate at which SIs are computed. Two paradigms, the Truth Value Judgment Task (TVJT) and the Picture Selection Task (PST) have dominated the experimental pragmatics literature; however, it is still unclear how the selection of experimental paradigm affects the estimates of implicature rate. We report the results of two studies testing participants in both TVJT and PST using three different linguistic scales in English: "ad-hoc", "or-and", and "some-all". In Experiment 1, the task variation was manipulated within subjects while in Experiment 2, it was manipulated between subjects. We found that the estimated rate of SI computation varied noticeably between these tasks. This suggests that the experimental paradigm itself has a significant impact on our estimates of the implicature rate and consequently psycholinguistic theories of implicature computation.