

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

On the purpose of ambiguous utterances

Permalink

<https://escholarship.org/uc/item/14097746>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 41(0)

Authors

Scontras, Gregory

Achimova, Asya

Stegemann, Christian

et al.

Publication Date

2019

Peer reviewed

On the purpose of ambiguous utterances

Gregory Scontras

UC Irvine, Irvine, California, United States

Asya Achimova

University of Tbingen, Tbingen, Germany

Christian Stegemann

University of Tbingen, Tbingen, Germany

Martin Butz

University of Tuebingen, Tuebingen, Germany

Abstract

Traditionally, linguists have treated ambiguity as a bug in the communication system, something to be avoided or explained away. More recent research has taken notice of the efficiency ambiguity affords us. The current work identifies an additional benefit of using ambiguous language: the extra information we gain from observing how our listeners resolve ambiguity. We propose that language users learn about each others private knowledge by observing how they resolve ambiguity. If language does not do the job of specifying the information necessary for full interpretation, then listeners are left to draw on their private knowledgeopinions, beliefs, and preferencesto fill in the gaps; by observing how listeners fill those gaps in, speakers learn about the private knowledge of their listeners. We implement this hypothesis as a computational model within the Rational Speech Act framework. We then test our hypothesis by using the model to predict behavioral data from naive participants.