

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Origins of cross-domain asymmetries

Permalink

<https://escholarship.org/uc/item/3h75h844>

Journal

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

Authors

Casasanto, Daniel

Ksa, Yamur Deniz

Publication Date

2019

Peer reviewed

Origins of cross-domain asymmetries

Daniel Casasanto

Cornell University, Ithaca, New York, United States

Yamur Deniz Ksa

University of Chicago, Chicago, Illinois, United States

Abstract

Why do people use space to talk about time, and to think about time, more than vice versa? On one proposal, this space-time asymmetry arises from the greater perceptual availability of space. Alternatively, a space-time asymmetry in language could give rise to the space-time asymmetry in thought during early language acquisition. If this language-first view is correct, then parents should use space-time words (e.g., long) more often in their spatial senses than in their temporal senses, imparting to children the primacy of the spatial senses. More generally, childrens space-time word use should reflect the statistics of parental input. Results of a corpus analysis contradict both predictions: English speaking adults used polysemous words more often in their temporal senses than in their spatial senses, whereas young children showed the opposite pattern, in the same conversations. Asymmetries between space and time appear to precede and guide the acquisition of spatio-temporal language.