UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Distinguishing first-line defaults and second-line conceptualization in reasoning about humans, robots, and computers

Permalink

https://escholarship.org/uc/item/89b2d4b2

Journal

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

ISSN

1069-7977

Authors

Levin, Daniel
Saylor, Megan
Lynn, Simon

Publication Date

2010

Peer reviewed

Distinguishing first-line defaults and second-line conceptualization in reasoning about humans, robots, and computers

Daniel Levin
Vanderbilt University

Megan Saylor
Vanderbilt University

Simon Lynn
Vanderbilt University

Abstract: We previously demonstrated that people distinguish between human and nonhuman intelligence by assuming that humans are more likely to engage in intentional goal-directed behaviors than computers or robots. In the present study, we tested whether participants who respond relatively quickly when making predictions about an entity are distinguish more or less between human and nonhuman agents. Participants responded to a series of five scenarios in which they chose between intentional and nonintentional actions for a human, a computer, and a robot. Those who chose quickly were more likely to distinguish human and nonhuman agents than participants who deliberated more over their responses. We suggest that the short-response time participants were employing a first-line default to distinguish between human intentionality and more mechanical nonhuman behavior, and that the slower, more deliberative participants engaged in deeper second-line reasoning that changed their predictions for the behavior of a human agent.