

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Roles guide rapid inferences about agent knowledge and behavior

Permalink

<https://escholarship.org/uc/item/1ph8n2kk>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 46(0)

Authors

Baker, Aaron

Dunham, Yarrow

Jara-Ettinger, Julian

Publication Date

2024

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

Roles guide rapid inferences about agent knowledge and behavior

Aaron Baker

Yale University, New Haven, Connecticut, United States

Yarrow Dunham

Yale University, New Haven, Connecticut, United States

Julian Jara-Ettinger

Yale University, New Haven, Connecticut, United States

Abstract

The ability to predict and understand other people's actions is critical for real-world social behavior. Here we hypothesized that representations of social roles (e.g., cashier, mechanic, doctor) enable people to build rapid expectations about what others know and how they might act. Using a self-paced reading paradigm and a variety of everyday roles, we show that the mere mention of a role (e.g., "mechanic") supports real time expectations about what the person will do (e.g., in the mechanic case, take your car keys but not your cellphone) and the knowledge they might possess (e.g., in the mechanic case, having private information about your car). Moreover, people reported more surprisal when the events deviated from role expectations, and they were more likely to misremember what happened. Our results suggest that roles are a powerful route for social understanding that has been previously understudied in social cognition.