

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Mutual Observability Determines When Precedent is Moralized in Multi-Agent Coordination Games

Permalink

<https://escholarship.org/uc/item/61g2d7kt>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 48(0)

Authors

Calcott, Rachel

Braga, Anita

Cushman, Fiery

et al.

Publication Date

2026

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

Mutual Observability Determines When Precedent is Moralized in Multi-Agent Coordination Games

Rachel Calcott

Harvard University, Cambridge, Massachusetts, United States

Anita Braga

University of Warwick, Coventry, United Kingdom

Fiery Cushman

Harvard University, Cambridge, Massachusetts, United States

Arthur Le Pargneux

Harvard University, Cambridge, Massachusetts, United States

Abstract

Moral cognition evolved, in part, to facilitate cooperation. Since coordination problems constitute a large subclass of cooperation problems, we should expect coordination behavior to be subject to moralization. But which of several coordination strategies is preferable depends on their respective probability of success. This, in turn, often depends on whether other people's actions are mutually observable. Past research has focused on the moralization of coordination behavior in dyadic contexts. In two preregistered experiments ($n = 472$) based on incentivized real-time coordination games, we extend investigations of the moralization of coordination behavior to small groups, and study how it depends on the mutual observability of others' actions. In Experiment 1, we show that moving away from the current coordination solution (thus inducing miscoordination) is viewed as morally worse than sticking to it. In Experiment 2, we show that this is not the case when actions are mutually observable, making switching to a more mutually beneficial alternative achievable. In such contexts, abandoning precedent to coordinate on a more efficient equilibrium is viewed as morally superior than sticking to it. Crucially, the same coordination rule is viewed as morally superior in one informational context, and morally inferior in the other. Understanding the cognitive processes involved in successful coordination can shed light on which conventions, norms, and rules are morally appropriate and which aren't, when this is so, and why.