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### **Proceedings of the Annual Meeting of the Cognitive Science Society**

#### **Title**

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#### **Permalink**

<https://escholarship.org/uc/item/9zg588qr>

#### **Journal**

Proceedings of the Annual Meeting of the Cognitive Science Society, 45(45)

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#### **Publication Date**

2023

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Peer reviewed

# An Experimental and Computational Analysis of Agreement-based Moral Cognition

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## Abstract

Contractualist moral theories hold that morality is primarily about acting according to what would be agreed by rational agents. The contractualist tradition has received little attention in empirical work compared to competing normative ethical theories that are primarily concerned with rules (deontology) and consequences (consequentialism). Recent theoretical developments and empirical results suggest that agreement-based considerations and forms of reasoning could play a central role in moral judgment and decision making. However, the computational foundations of moral contractualism have scarcely been explored. In this paper, we present a flexible experimental paradigm to study contractualist moral behavior in an incentivized setting. We then develop a simple computational model of agreement-based moral decision making that captures participants' behavior in the task. Results suggest that agreement-based cognitive processes are required to explain the nuances of observed behavioral patterns. Contractualism could offer a fruitful framework to understand how humans coordinate their behavior in morally ambiguous contexts.