

The Invisible Hand as an Explanation Type in Intuitive Sociology

Izabelė Jonušaitė^{1, 2}, Tomer D. Ullman³

¹Department of Brain & Cognitive Sciences, Massachusetts Institute of Technology, Cambridge, USA, ²Amsterdam Brain and Cognition Center, University of Amsterdam, Amsterdam, Netherlands, ³Department of Psychology, Harvard University, Cambridge, USA



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Introduction

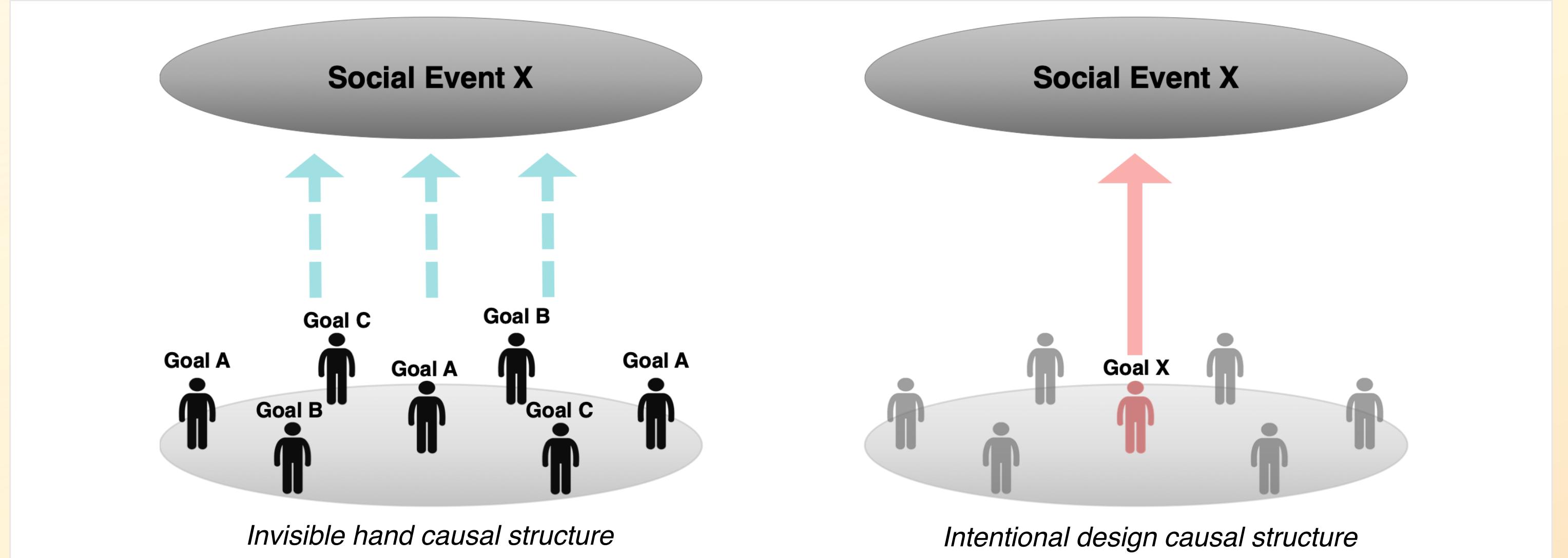
Why don't clouds fall down? Why did the girl refuse to do her homework? Why did the protest break out?

Previous research shows even without knowing specific details, people have a sense of what **type of explanation** different questions garner.

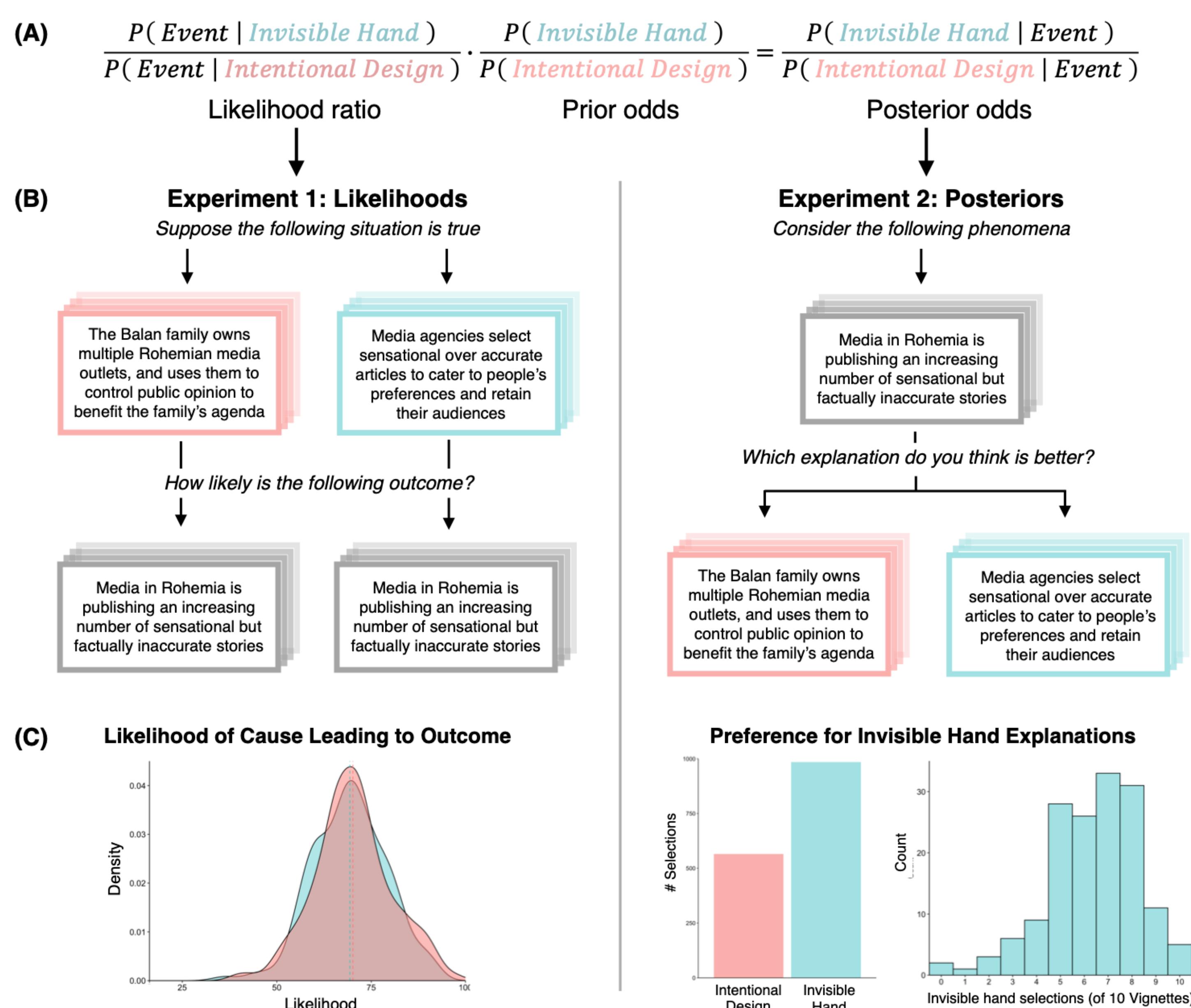
Past work shows different meta-expectations in the domains of intuitive physics, biology, psychology, mechanism.

We examine the domain **intuitive sociology**, and propose the type of explanation people expect there is an **invisible-hand explanation**.

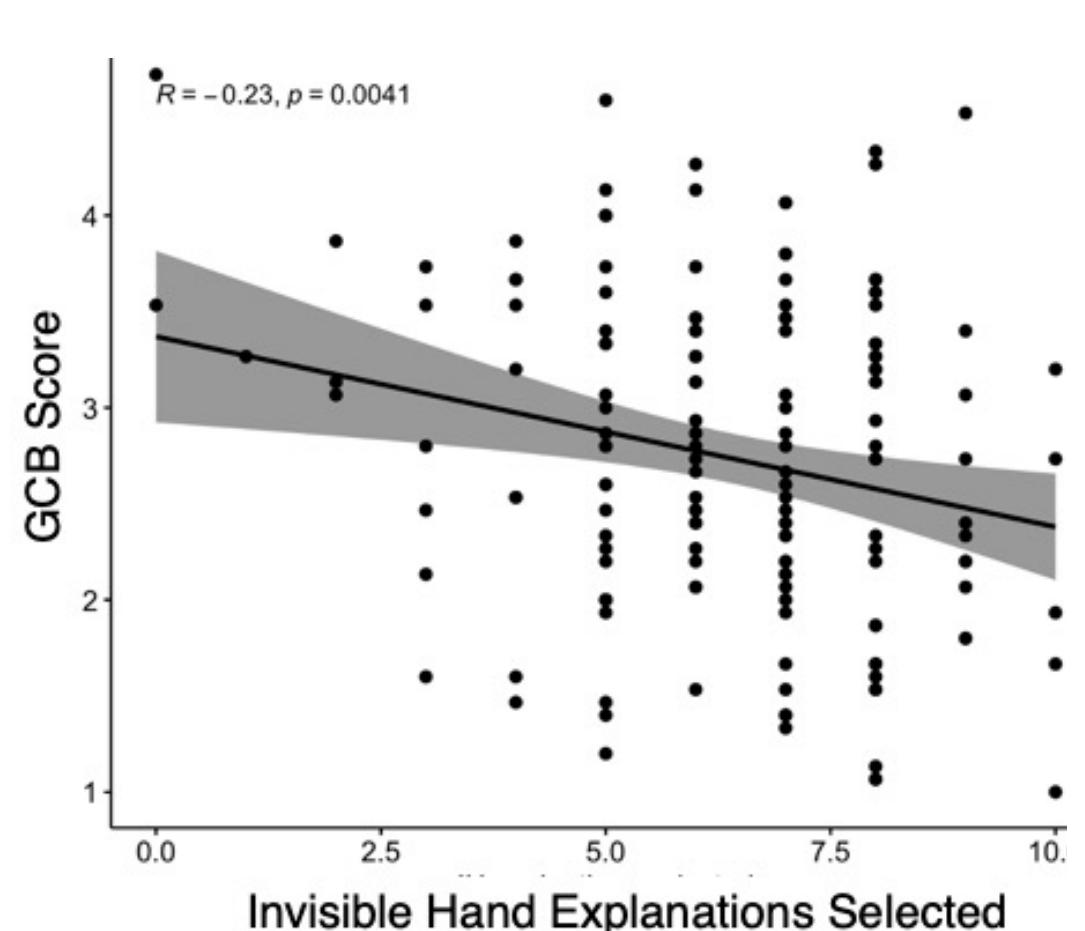
The Invisible Hand: Well-known type of explanation in economics and social sciences. A global state X emerges from people taking local individual actions in pursuit of local goals, without intending X. Contrasted with intentional design, in which an agent or group of agents intend X.



People prefer invisible-hand explanations over intentional design explanations



Preference for invisible-hand explanations and conspiratorial beliefs are negatively correlated



Methods

Participants. 309 adult US residents (N=154 in Experiment 1, N=155 in Experiment 2) were recruited on Prolific.

Materials. 10 Vignettes describing different fictional social phenomena (Spread of Misinformation in Rohemia; Segregation in Folon; Protesters Clash with the Police in Valtany; Social Movements Grow Influence in Gredland; Creativity in the Education System of Collenland Province; Sunflower Life Trend in Torland; Vocabulary Change for Loeria's Ocean Waste Problem; Fashion trends accelerate in Jirev; Banchi beans gain international popularity; AI assistants in West Gebei).

Procedure. The experiments were presented to the participants online, on the Qualtrics platform. In both experiments, participants first completed a vignette task, and then filled the Generic Conspiratorial Belief scale (GCB). Experiment 1 and 2 vignette structure and contents are illustrated in the (B) panel of the Results figure. Vignettes were presented one at a time, in a randomized order.

Discussion and Future Directions

(i) Preference for invisible-hand explanations

The cause-effect scenarios were fictional and novel to the participants. Nevertheless, people showed a bias towards the invisible-hand explanation. This suggests that people have abstract expectations on what types of causation applies in the sociological domain.

The bias we found in this study supports the conclusion that the invisible-hand causal structure might capture those abstract beliefs.

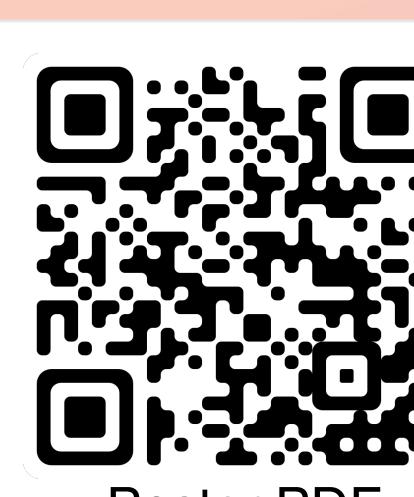
Further work is needed to test the generalizability of the invisible-hand causal structure to 1) other domains of knowledge (e.g., emergence in physics) 2) a more diverse sample, and 3) different ages.

(ii) Negative correlation between intentional-design preferences and the individual degree of conspiratorial beliefs

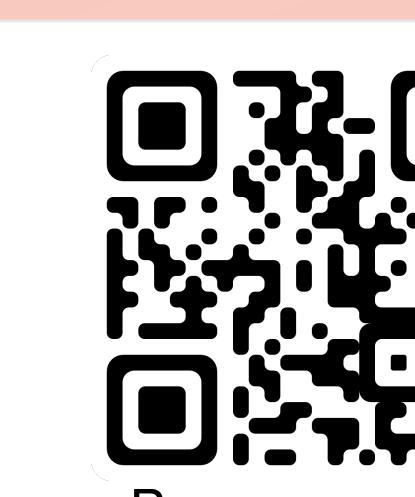
The weak but significant negative correlation suggests a link between the two, but further research is needed to establish the causal direction of this link (does intentional-design drive GCB, does GCB drive intentional design, or does a third factor drive both?).

Take-Aways

- The invisible hand metaphor illustrates spontaneous order—as if there was an invisible hand organizing things without human design.
- We propose and show that people intuitively prefer invisible-hand explanations over intentional-design explanations in social domains.
- We postulate that this preference works as abstract knowledge (a hyper-prior belief) that constrains reasoning.
- Individual variability in preferences for invisible-hand explanation type revealed that people with higher degree of conspiratorial beliefs have a higher preference for the intentional-design explanation type.



Poster PDF



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For any questions or comments on this study, please reach out to Izabelė!

izabelej@mit.edu
Izabele_J