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Authors

Naftalovich, Hadar

Shepard, Jason

Wolff, Phillip

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Causal illusions and occult forces

Hadar Naftalovich

Emory University

Jason Shepard

Emory University

Phillip Wolff

Emory University

Abstract: Causal illusions are situations in which a causal relationship is inferred even though a physical mechanism is not possible. We offer an explanation of such illusions in terms of a two-process account of causal understanding. According to this view, judgments of causation involve two processes: an initial fast process involving the sensation of force that gives rise to the impression of causation, and a second, more strategic process that determines whether there exists a mechanism for the transmission of force. This account was tested in two lines of research in which participants were shown near-photorealistic animations of possible and impossible causal events. Experiment 1 showed that people attribute causation in the absence of legitimate mechanisms. Experiment 2 showed that impressions of causation, even those without possible mechanisms, are associated with the sensation of force, as measured by people's sensitivity to physical forces imparted on their hand.