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Getting Chances from Powers

Abstract

A realist about powers ought to follow a propensity theory of chance rather than a frequentist one. Causal dispositionalism offers such a theory based on mutual manifestation partnerships of powers, where at least one such power is probabilistic in nature. This theory allows us to explore the conceptual terrain between chance, necessitation, determinism and causation. The dispositional theory of causation, for instance, tells us that causes involve the dispositional modality, in which causes produce without necessitating. This contrasts with claims made by Popper and Armstrong in which a cause produces only when its effect reaches a probability of 1. We also wish to clear-up the discussion between Popper and Mellor over whether chances are intrinsic to particulars or are attributed to the entire set-up, including environmental factors. The vector model of causal dispositionalism allows us to discern individual contributions to chance from the propensities of things while also acknowledging the holistic nature of their production. This has implications for the debate concerning determinism and free will.