

# Possibility, Opportunity, Choice in a Deterministic World

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Assuming fundamental (physical) causal determinism seemingly forbids talk of genuine possibility, alternative, or choice if one does not resort to a compatibilist reversible figure point of view. Prominent recent accounts of deterministic causation separate uncertainty in observation or measurement from a functionally described ontological core, thereby underlining the deterministic character of our world's mechanisms. I will take the interventionist approach (e.g., as elaborated by Judea PEARL in *Causality*, 2009) as a starting point for firstly showing how possibility as a form of thought can be accommodated in nets of deterministic causal relations. Secondly, although it is often noted in the philosophical debate on compatibilism that voluntary action presupposes determinism, I want to explicate – vice versa – how an interventionist, deterministic concept of causation must presuppose the idea of possibility, and how ultimately only partitioning the world in subsystems allows talking about both – possibility and causality.

**Keywords:** causal reasoning, epistemic causation, Bayes nets, interventionist account of causation, causal Markov condition, determinism, possibility and necessity

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