

EPR, Robustness and the Causal Markov Condition

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Abstract

It is still a matter of controversy whether the Principle of the Common Cause (PCC) can be used as a basis for sound causal inference. It is thus to be expected that its application to quantum mechanics should be a correspondingly controversial issue. Indeed the early 90's saw a flurry of papers addressing just this issue in connection with the EPR correlations. Yet, that debate does not seem to have caught up with the most recent literature on causal inference generally, which has moved on to consider the virtues of a generalized PCC-inspired condition, the so-called Causal Markov Condition (CMC). In this paper we argue that the CMC is an appropriate benchmark for debating possible causal explanations of the EPR correlations. But we go on to take issue with some pronouncements on EPR by defenders of the CMC.

Keywords: Quantum Mechanics, causal inference, robustness, Principle of the Common Cause.

Subjects: [General Issues: Causation](#)
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