Positive Causes All the Way Down: The Role of Physical Causes and Mechanisms in Handling Schaffer Disconnection Cases

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Abstract

On physicalist theories (Salmon, Dowe, Glennan), causation involves a physical connection (a process, conserved quantity, or mechanism) linking cause and effect, excluding causation by absence or omission. So-called cases of causation by disconnection (Schaffer), purport to show that absence-causation is possible. Examples include firing a gun and killing by decapitation. I defend physicalist theories from this challenge.

Closer examination reveals no case of events produced by absences; all physical events are caused by prior physical events. The causal structure consists entirely of positive causes. Some cases are handled on the physical level itself, such as interrupting double-preventions (Skow). Others are better explained by zooming out from the level of physical causation to mechanisms (Glennan), where the causal link is the mechanism as a whole, rather than its parts. When pulling the trigger, I act on the world, causing things to happen and removing obstacles to others. This involves acting and manipulating a mechanism, rather than simply allowing a bullet to escape the chamber. No part is moved by an absence. The challenge is to differentiate actual mechanisms from mere configurations of counterfactual dependence.

I delineate causal cases, where mechanisms bridge the gap, from non-causal ones and explore the metaphysical implications of multi-level causation (physical processes and mechanisms). We must distinguish between absence causation on the physical level (which I deny) and the absence of causation on the physical level (a possibility granted when zooming out to the mechanistic level). There is no incompatibility between demanding physical realization of causal processes (ruling out mere counterfactual dependence or omissions) and the need to adjust the level of causal explanation. That some causal relations are not visible at a lower level, doesn’t entail invisible causal relations. This vindicates the physicalist/mechanistic picture of casual connection, with implications for science, metaphysics, ethics, and law.