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# Poisoned Babies, Shot Fathers, and Ruined Experiments: Experimental Evidence in Favor of the Compositionality Constraint of Actual Causation

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## Abstract

Livengood and Sytsma (2020) challenge the *compositionality constraint of actual causation* (CCAC), according to which each intermediary of a causal chain is an effect of its predecessor and a cause of its successor link. In several studies, they find support for their hypothesis that the CCAC is not in accordance with the ordinary causal attributions of laypeople. We argue that there are three interrelated problems in their studies' design that we call the *causality-responsibility confusion* (CRC), the *intermediary-ontology confusion* (IOC), and the *cause-end questioning* (CEQ). Avoiding the CRC, the IOC, and the CEQ leads to strong empirical support for the CCAC.

## 1 Introduction

Livengood and Sytsma (2020) (hereafter L&S 2020) challenge the *compositionality constraint of actual causation* (CCAC) that is implicitly entailed by many philosophical accounts of actual causation (e.g., Reichenbach 1956; Salmon 1994; Dowe 1995; Ehring 1997; Lewis 1973, 1986; for a brief summary, see L&S 2020, 43–47). They illustrate the CCAC by a chain of dominoes. There are two ways a person could cause the last domino in a chain to fall: First, they could cause it directly by flicking the last domino of the chain. Second, they could cause it indirectly by flicking, for example, the first domino of the chain. It then falls against the second domino, which falls against the third domino, and so on, until the last domino of the chain finally falls, too. According to the CCAC, the person causes the last domino to fall in both cases. However, if they do it indirectly, then there must be a number of *intermediaries*—the falling of one domino against the next one—such that