

# Can simulations be explanatory an why do they seem not to be?

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## Abstract

Computer simulations are usually considered to be non-explanatory because, when a simulation reveals that a property is instantiated in a system, it does not enable the exact identification of what it is that brings this property out (relevance requirement). Conversely, analytical deductions are widely considered to yield explanations and understanding. In this paper, I emphasize that explanations should satisfy the relevance requirement and argue that the more they do so, the more they have explanatory value. Finally, I show that this emphasis on relevance has the unexpected consequence that simulations can sometimes be explanatory.

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