

Concretization, Explanation, and Mechanisms

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Abstract

Traditional accounts of explanation fail to illuminate the explanatory relevance of “models that are descriptively false” in the sense that the regularities they entail fail to obtain. In this paper, I propose an account of explanation, which I call ‘explanation by concretization’, that serves to explicate the explanatory relevance of such models. Starting from a highly abstract and idealized model, causal explanations of the absence of regularities are sought by adding complexity to the model or by concretizing it. Whether this process is successful depends on whether the abstractions and idealizations in the basic model succeed in isolating a mechanism, i.e. in representing how it operates when interfering factors are absent. This account is developed in the context of economics and contrasted to those of Daniel Hausman and Nancy Cartwright. I go on to provide an account of how unrealistic models can be used for providing understanding of the way mechanisms work.

Keywords: abstraction, idealization, concretization, explanation, understanding, mechanism, tendency, nomological machine, Nancy Cartwright, Daniel Hausman

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