

Call for Papers
***Synthese* Special Issue**
What to Make of Highly Unrealistic Models?

What to make of highly unrealistic models? This is one of the big questions in contemporary philosophy of science, especially in philosophy of economics and biology.

We consider two set of issues particularly relevant here. The first has to do with the ways in which highly unrealistic models should be characterized and the numerous ways in which models can be unrealistic. The key concepts here include those of representation and target, truth and falsity, abstraction and isolation, idealization and simplification. Recent literature on models exhibits conceptual and terminological diversity and disagreement in characterizing unrealistic models. Different authors use different names to refer to highly unrealistic models, including ‘toy model’, ‘fictional model’, ‘minimal model’, ‘non-representative model’, ‘model without a target’, ‘substitute model’. Moreover, they sometimes use the same name to refer to different types of models. Neither the precise meanings nor the relations between these notions are clear in the literature.

The second set of issues has to do with the functions and uses of such unrealistic models. What purposes can they serve, and what purposes are actually pursued when using them? The main body of literature points to representational quality as grounding explanatory capacity despite abstraction, isolation, simplification and idealization. Others dispute this idea. Moreover, highly unrealistic models can serve other possible functions, next to their explanatory uses. Obviously, debates concerning the appropriate uses of highly unrealistic models need some tidying up.

The Special Issue What to Make of Highly Unrealistic Models aims to sort out some of the ambiguities and confusions in the literature and to contribute to a better understanding of the interpretations and uses of highly abstract and idealizing models. We are particularly interested in contributions that (i) clarify the meaning of commonly used terms such as toy model, minimal model, fictional model, substitute model, etc, and that (ii) clarify the arguments for and against such models having explanatory import or some other epistemic or non-epistemic function. Papers that focus on the uses (and misuses) specific (set of) models in scientific practice are particularly welcome.

Please submit your paper using the editorial manager at <https://www.editorialmanager.com/synt/> by 31 January 2019. When the system asks you to “Choose Article Type”, select “S.I. Unrealistic Models” in the pulldown menu.

Before submitting your paper, please, read carefully the Synthese “Instructions for Authors” at: <https://www.springer.com/philosophy/epistemology+and+philosophy+of+science/journal/11229>

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