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Horsten, Leon (D-KNST-NDM); Ito, Ryo (J-WASES-SHS)

★Russell and Fine on variable objects. (English. English summary)

*Kit Fine on truthmakers, relevance, and non-classical logic*, 691–704, *Outst. Contrib. Log.*, 26, Springer, Cham, [2023],

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In the first half of the 1980s, British philosopher Kit Fine developed a metaphysical theory of arbitrary objects in his book [*Reasoning with arbitrary objects*, B. Blackwell, Oxford, 1985]. In Section 29.2 of the chapter under review, Horsten and Ito provide a concise overview of this theory. The core thesis of Fine’s theory of arbitrary objects, the authors tell us, is that alongside specific objects, there are arbitrary objects. Arbitrary objects differ metaphysically from specific objects. Each arbitrary object is associated with a value range. There is a sense in which an arbitrary object can take specific objects as its value. Fine refers to this principle as the principle of generic attribution.

The primary aim of this chapter is to compare Fine’s theory of arbitrary objects with the theory of variables that Bertrand Russell formulated in [*The principles of mathematics*, Univ. Press, Cambridge, 1903]. The authors argue that Russell’s early theory of variables can be seen as anticipating Fine’s theory of arbitrary objects.

As the authors remind us, Russell developed a logicist position in *The principles of mathematics*: he attempted to define all the relevant notions of pure mathematics in terms of logical notions and to deduce the theorems of mathematics from these definitions using only logical inferences. The book also contains his philosophical account of key notions such as proposition, class, propositional function, and variable. In Section 29.3, the authors describe the background in which Russell developed his account of these concepts.

A succinct yet detailed account of Russell’s theory of variables in *The principles of mathematics* is presented in Section 29.4. Russell endorsed a contextualist account of variables (i.e., any term denotes different entities in different contexts, that is, in different propositional functions), but the authors highlight that there are tensions in Russell’s views, and that he arguably did not arrive at a metaphysical view of variables that fully satisfied him.

In Section 29.5, the authors proceed to compare Russell’s account of variables with Fine’s theory of arbitrary objects. Noting that Russell’s view of variables was not developed in as much detail or articulated as clearly as Fine’s theory of arbitrary objects, Horsten and Ito nevertheless argue that some aspects of Russell’s theory of denoting concepts are comparable to Fine’s approach. For instance, they point out that Russell was explicit that the relation of denoting is not a linguistic one but one holding between a concept and a combination of terms. However, the argument is nuanced. Indeed, the authors emphasize that a point of difference between Russell’s and Fine’s views lies in their respective treatment of dependence relations between variables. Unlike Fine, Russell did not stress the key importance of the notion of dependence in arbitrary object theory.

Even though Russell did not develop this notion in *The principles of mathematics*, he later made various attempts to find a workable formal system, and these efforts culminated in [A. N. Whitehead and B. Russell, *Principia mathematica*, Univ. Press, Cambridge, 1910–1913]. In Section 29.6, Horsten and Ito provide a very rough sketch of the way in which Russell developed the notion of dependence between variable objects in the intermediate period from 1903 to 1910. In doing so, they highlight possible connections between Fine’s theory of arbitrary objects and the theories of functions that Russell developed after *The principles of mathematics*. Furthermore, they claim that it may still be possible to find in *Principia mathematica* another instance where

Russell envisaged an idea similar to Fine's notion of dependence among arbitrary objects. However, the authors are quick to add that this interpretation is disputed.

*Frédéric Morneau-Guérin*