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Book Review

Michael Potter. *Reason's Nearest Kin. Philosophies of Arithmetic from Kant to Carnap.* Oxford University Press, Oxford, 2000. x + 305 pages

1 Potter's Project

Potter's book *Reason's Nearest Kin* tells a very important and interesting story in a novel and insightful way. It is the story of how some of the greatest philosophers and mathematicians of the late 19th and early 20th century have attempted to give philosophical accounts of arithmetic. The figures whose work Potter discusses are Frege, Dedekind, Whitehead and Russell, Wittgenstein, Ramsey, Hilbert, Gödel, and Carnap. Of course, they all were directly or indirectly influenced by Kant, and so Kant's philosophy of arithmetic also receives extensive treatment. Potter frames his discussion by two questions, which he takes all of these writers to be seeking to answer:

Can we give an account of arithmetic that does not make it depend for its truth on the way the world is? And if so, what constrains the world to conform to arithmetic? (p. 1)

Potter, and certainly also most of the figures he considers, takes it as given that arithmetic is necessary and that the main difficulties a philosophical account of arithmetic faces are those of (a) explaining why that is and (b) how this necessity can be reconciled with the applicability of arithmetic to the world.

Potter's choice of topics is certainly novel, both in what it includes and in what it excludes. Standard treatments of the philosophy of mathematics around 1900 commonly give significant attention to Brouwer and Weyl's intuitionism, and few pay as much attention to Wittgenstein, Ramsey, and Carnap as Potter does. But it is clear from the questions framing the book why that is: Brouwer's intuitionism is decidedly subjectivist; the emphasis in intuitionism on the mathematical constructing subject arises from a desire to answer not the question of why mathematics is necessary and objective, but why (and to what extent) it is certain. One might of course think of other positions in the philosophy of mathematics worthy of treatment, such as Mill's

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