

Review of  
**PENELOPE MADDY, *NATURALISM IN  
MATHEMATICS***

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*Naturalism in Mathematics* addresses a fundamental question that lies between Mathematics and Philosophy: what is the status of the axioms from which all our mathematical knowledge derives? Penelope Maddy has been working on this topic for several years already and she has published a multitude of papers on her work. This book is based on some of those papers, as is *Realism in Mathematics* (1990) [2], (see Frápolli [1]).

Everything we know, including our scientific theories, must rest on some kind of evidence, either direct or indirect. Having indirect evidence for a particular thesis or theory means that there is a way of reducing this theory into another for which we have independent reasons, and thus the reduced theory or thesis inherits its evidential support from the theory into which it is reduced.

It is commonly accepted that mathematics can be defined in set theoretical terms and that mathematical objects other than sets can be suppressed in favor of these abstract entities. Thus, one of the most basic philosophical questions about set theory is, “What sort of evidence can we offer to support set-theoretical axioms?” Historically, the different answers to this question have implied different epistemological and metaphysical conceptions of the world. In *Realism in Mathematics* and in Part II of *Naturalism in Mathematics*, the object of the present review, Maddy pursues one of the most appealing conceptions: mathematical realism. This view claims that mathematics works by emulating the natural sciences, in that there is an external reality, independent of human beings, which mathematical theories attempt to reflect and explain. Mathematicians discover, but do not create, the mathematical entities with which they work. They define these entities through axioms which attempt to describe the most abstract features