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## **Book Review**

John P. Burgess and Gideon Rosen. *A Subject with No Object: Strategies for Nominalistic Interpretation of Mathematics*. Oxford University Press, Oxford, 1997. x + 259 pages.

*1 Introduction* A *nominalist* is a philosopher who holds that abstract objects do not exist. The *realist* opponent retorts "Oh yes they do," and the debate is off and running. In recent decades, a number of these controversies concentrated on *mathematical* objects, typically numbers and sets, assuming that those are abstract objects par excellence. If nominalists are correct, then mathematics has no (existent) subject matter. The main title of this lively, engaging, and insightful book thus describes what mathematics would be if nominalism were correct, although the authors have virtually no sympathy for nominalism. The subtitle accurately describes the contents of this study.

The book has three parts. The 92 pages of Part I provide an introduction to contemporary nominalism and lay out a "common framework" for presenting various nominalistic strategies. Part II, at 72 pages, provides some detail of three such projects: a "geometric strategy" based on (and improving) Field's Science Without Numbers [8], a "purely modal strategy" modeled after Chihara's Constructibility and Mathematical Existence [7], and a "mixed modal strategy" that follows Hellman's Mathematics Without Numbers [11]. The first chapter of Part III gives very brief sketches of some other "miscellaneous" nominalistic approaches, and the second chapter provides an even briefer account of how the various strategies relate to the work of nominalists in the philosophical literature. For the most part, the discussion is limited to book length (or equivalent) nominalistic projects. The book closes with a 40-page "Conclusion" although the authors remark that it should be entitled "In Lieu of Conclusion." Despite this modesty, the main sections of the chapter contain sharp and penetrating criticisms of the nominalistic projects and of the whole point of nominalism. It is about as "conclusive" as polite, professional philosophy gets nowadays. For the most part, however, the criticisms are broadly aimed at the very idea of nominalistic reconstrual and do not directly address the detailed work of the nominalist