The Review of Modern Logic
Volume 11 Numbers 1 & 2 (June 2007–December 2008) [Issue 33], pp. 167–180.

José Ferreirós and Jeremy J. Gray (editors)
The Architecture of Modern Mathematics: Essays in History and Philosophy
Oxford: Oxford University Press, 2006
xii + 442 pp. ISBN 0198567936

REVIEW

MICHAEL LISTON

This collection of essays, as its title indicates, aims to increase our understanding of modern mathematics and, more generally, "to advance contemporary work in creating stronger links between the history and philosophy of mathematics" (p. 1). Modestly construed this is a commendable aim - the evolution of modern mathematics post-1850 is a complicated business, and all too often historians operate with tacit philosophical presuppositions and philosophers operate with questionable (or no) histories - and dialogue should have the desirable effect of removing such impediments to understanding. However, not all the essays in the collection equally advance our understanding of either modern mathematics or the history or philosophy of mathematics; some clearly do; others do not. Moreover, the editors seem to have a more ambitious understanding of their aims, though it is not entirely clear either what that understanding amounts to or the extent to which the collection accomplishes what it sets out to do. The book contains twelve essays (divided into three topical groups of four) flanked by an introduction by the editors and a coda by one of them (Gray). In what follows I will briefly describe the essays and present some commentary that will clarify these opening remarks.

Most—all but six pages summarizing the essays—of the forty-five page introductory essay is concerned primarily to situate the collection and motivate the importance of combining historical with philosophical studies of mathematics. Already in the introduction we find signs of tension in aims. On the one hand, when discussing the state of philosophy of mathematics, the editors rightly complain that twentieth century philosophy of mathematics in the Anglo-American tradition (with a few notable exceptions like Lakatos and Kitcher) has been pursued