

Book Review

Francisco A. Rodriguez-Consuegra. *The Mathematical Philosophy of Bertrand Russell: Origins and Development*. Birkhäuser Press, Boston, 1991. 256 pages.

This book is a probing new account of the origins and development of Russell's early philosophy of mathematics. Beginning from Moore and Russell's transition away from neo-Hegelian Idealism, Rodriguez-Consuegra examines the many manuscripts that remain from Russell's early efforts to write a treatise on mathematics. In its first chapter, the book discusses Russell's early encounters with the works of Dedekind, Cantor, and Canturat, as well as Whitehead's "universal algebra". The chapter continues with the hint that Bradley's philosophy benefited Russell and discusses the impact of Moore's view that relations are external, his theory of judgment, and his attack on the subject-predicate pattern of the Idealists. Taking up Russell's stalled foundational work before his fateful meeting with Peano in 1900, chapter two attempts to set out the salient features of Russell's 1899 *Fundamental Ideas and Axioms of Mathematics* and the 1898 *Analysis of Mathematical Reasoning*. Two difficult and involuted works, the author makes his way by giving pre-eminence to Moore. The emphasis on relations is again present together with an appearance of Russell's "Principle of Abstraction". This sets the stage for the remainder of the five-chapter book. Subsequent chapters take up the following two themes: the evolution of Russell's views on relations and his views on the Principle of Abstraction. The two are traced in the context of Russell's enlightenment by Peano and Peano's disciples, through the fruition of his early studies in the 1903 *Principles of Mathematics*, and indeed all the way to the 1910 *Principia Mathematica*. The book challenges scholars to reexamine much of the prevailing understanding of many technical and philosophical aspects of Russell's early Logicism.

1 The author gives a valuable discussion and chronicle of the important influence of Peano's *Formulaire de Mathématique* (1894–1905). The book details Peano's many innovations: the notion of "formal implication", marking the difference between "real" (free) and "apparent" (bound) variables; the distinction

Received September 8, 1992