Francisco A. Rodriguez-Consuegra, *The Mathematical Philosophy of Bertrand Russell: Origins and Development.* Boston/Basel/Berlin, Birkhäuser Verlag, 1991. 236 pp.

Reviewed by

JOHN SHOSKY

Department of Philosophy and Religion
American University
Washington, D.C. 20016

This book is a landmark publication, both in terms of its scholarship and the historical value of its appearance. Any serious student of Russell should possess a copy of this brilliant, cogent, and thorough book. Rodriguez-Consuegra is to be congratulated on a fine presentation, and for having the courage and persistence to devote himself to unearthing the sources, influences, and stimulants for Russell's mathematical philosophy. *The Mathematical Philosophy of Bertrand Russell* is highly recommended, both as a careful description of Russell's efforts and achievements, and as an important history of the development of mathematical philosophy in the first quarter of the twentieth century. I agree with Ivor Grattan-Guinness in his preface: Rodriguez-Consuegra has "launched a veritable one-man Armada upon the history of Russell's logical thought" (p. xiv).

The book offers five lengthy chapters. The first concerns "Methodological and Logicist Background." Russell was a determined, eager, and encyclopedic student of his predecessors. The rise of quantificational logic, engineered by Boole, Frege, Schröder, and Peano, provided the genealogy for Russell's achievements. The groundbreaking discoveries of Cantor and Dedekind were inspirational to Russell. This chapter shows how vital these influences are in understanding Russell's goals, methodology, and direction. Logicism, the attempt to deduce mathematics (and covertly knowledge of the external world), from logic was a direct result of the discoveries of Russell's

predecessors. This chapter should be required reading for graduate comprehensive examinations that test the evolution of mathematical logic from 1847 to 1901. There is also a rare discussion of Russell's *Foundations of Geometry*, submitted for a fellowship dissertation in 1895 and later published by Cambridge in 1897.

The second chapter deals with Russell's "Unpublished Mathematical Philosophy: 1898-1900." The central event in Russell's mathematical/logical development was the Paris Congress of 1900, where he met Peano. However, prior to July, 1900, Russell had examined many of the issues that would figure in his later work. Drawing upon these unpublished manuscripts (now found in the *Collected Papers of Bertrand Russell*, Volumes 2 and 3), Rodriguez-Consuegra shows Whitehead and Cantor's influence on Russell, and how logic came to have a "philosophical priority" over mathematics in the logicist program. One of the great strengths of this book is that Russell's reliance on logic to address problems in ontology is repeatedly highlighted and examined. The logicist program offered a chance to uncover knowledge about the external world, and Russell recognized the mutual advantage of linking logic and epistemology. Russell's logical realism can be traced to this period, revealing an epistemological agenda well before Russell's more obvious steps in the *Problems of Philosophy*, the 1912 "shilling shocker", and *Theory of Knowledge*, the unpublished manuscript of 1913. Incidently, Wittgenstein hated both of these efforts, in part because he clearly understood Russell's intention to use logic as covert epistemology.

The third chapter concerns "The Contribution of Peano and his School." Russell came to the Paris Congress looking for a mathematical logic that could satisfy the needs of the logicist program and his own demands for philosophical progress. He left armed with Peano's logic of relations, elegant new symbolism, and a cogent view of material implication. Russell said that he spent one month digesting everything that Peano wrote, and then in the Fall of 1900 began writing the monumental *Principles of Mathematics*. Popper, Quine, and many others have paid much tribute to this book, which was a precursor to *Principia Mathematica*. But few scholars have actually examined the writings of Peano and explored the links them to Russell. This chapter fills that void admirably.

A fourth chapter looks at the *Principles of Mathematics*, and its use of symbolism, class concepts, indefinables, relations, propositional functions, material implication, and an early atomistic structure. The definitions for cardinal numbers, ordinal numbers, and real numbers are explicated and analyzed. This chapter is actually a continuation of the previous one, because it ends with a long list of lessons Russell learned from Peano.

Finally, in the last chapter, Rodriguez-Consuegra re-examines the "Philosophical and Methodological Problems" confronting Russell. Like Frege before him, Russell's methodology is best understood by examining the use of definitions, which are the linchpins of his entire enterprise. We also see a clear emergence of Russell's use of abstraction, logical analysis, and relational logic.

I now move from a review of the book itself to a wider discussion of Russellian scholarship. This review appears six years after the publication of *The Mathematical Philosophy of Bertrand Russell*, allowing for a short-term perspective on new trends in Russellian scholarship. Since 1990, there has been a renaissance in Russellian scholarship, primarily motivated by new explorations of Russell's work from the misguided idealism of the late 1890s to the publication of his lectures on "The Philosophy of Logical Atomism" in 1917-1918. In this twenty year period, Russell churned out an enormously rich, deep, and lasting legacy. Consider just a few of his publications: "The Logic of Relations" in 1901, the discovery of Russell's Paradox in 1901 (if not earlier) and communicated to Frege in 1902, the *Principles of Mathematics* in 1903, "On Denoting" and "The Existential Import of Propositions" in 1905, "Mathematical Philosophy Based on a Theory of Types" in 1908, *Principia Mathematica* (with Whitehead) in 1910, his unpublished manuscript *Theory of Knowledge* in 1913, "On Scientific Method in Philosophy" in 1914, *Our Knowledge of the External World* in 1914, and the profound "Philosophy of Logical Atomism" in 1917-1918. During these two decades, Russell found the most important paradox of the century, explicated his theory of descriptions and theory of types, constructed his logical atomism, re-invigorated empiricism, and developed new logical techniques. He played a leading role in the rise of logicism. Russell also had formative interactions with Peano, Frege, Couturat, Whitehead, Moore, James, Hardy, Wittgenstein, and Dewey. In addition, the Russell of this period directly inspired Wittgenstein's work, and later stimulated the work of American logicians (Lewis, Sheffer, and Quine), the Vienna Circle (especially Carnap and Ayer), and the anti-Circle Popper and Gödel. Arguably, Russell is also the key counterpoint of linguistic philosophy, where he is both a godfather and favorite target.

Yet, surprisingly, at the end of the 1980s, Russell was the scholastic equivalent of yesterday's papers. From Russell's death in 1970 until 1989, Russellian scholarship seemed sparse, mostly mopping up old encounters, and leaving the impression that work on Russell had been exhausted. Russell never wanted disciples, and he didn't have many. Ayer, Quine, and many others associated with Russell were too independent, talented, and honest to become Russell's mouthpiece. Also, Russell's clear, straight-

forward prose left little room for re-interpretation. Russell's errors were well known, and his virtues forgotten. One of my own professors once asked me, "How can you like Russell, when he was so wrong about everything he ever wrote?" There were many in academic philosophy who shared a disdain for Russell.

There was also an important, powerful crossing current — the almost mythic figure of Wittgenstein, who seemed to become all things to some people. Elizabeth Anscombe once wrote that it was a tragedy that Wittgenstein had become a "cult figure" [Anscombe *1991*]. It was a double tragedy because Wittgenstein's popularity was at Russell's expense. For example, the Derek Jarman film on Wittgenstein pictures Russell as a doddering and perplexed oaf, whereas Wittgenstein is heroically tortured and relentlessly driven to uncover the truth in the world. In my view, many philosophers are now emerging from the shadow of Wittgenstein, and welcome a reassessment of Russell.

Russell was, after all, his own worst critic, and, after his death, other critics finally had the field to themselves. Michael Dummett pushed Frege, often at Russell's expense [Dummett *1981*]. Richard Rorty pushed pragmatism, Derrida, or both, finding Russell mistaken, old-fashioned, and philosophically quaint [Rorty *1979*; *1982*]. It was hard to find a good word about Russell anywhere. He seemed destined for quick relegation to obscurity, not escalating significance.

All of that began to change in 1990, when Hylton published his magnificent *Russell, Idealism and the Emergence of Analytical Philosophy* [Hylton *1990*]. Hylton demonstrated that Russell's early work had been insufficiently examined. For too long, Russell's own analysis and that of his critics was taken to be the final word. But Hylton showed that fresh insights could be found, and that there was a voluminous amount of unpublished material that needed scrutiny. Such an enterprise showed a depth and force in Russell's work that recalled the relevance of Frege's *Foundations of Arithmetic* and the fruitfulness of Wittgenstein's *Tractatus*. In my view, the great achievement of Hylton's book was its productive unpacking of Russell's elegant prose, revealing an underlying and little-realized appreciation of the difficulties involved in tackling philosophical problems. There was more to Russell than we thought. Concurrently, in 1991, Rodriguez-Consuegra released this book and Griffin published *Russell's Idealistic Apprenticeship* [Griffin *1991*], which instantly riveted attention to Russell's least known, often embarrassing, yet extremely formative short acceptance of McTaggert and Bradley's idealism. Griffin also published the first volume of *The Selected Letters of Bertrand Russell* in [*1992*]. In 1994, Hager attacked the view that Russell's work lacked a

foundational core in *Continuity and Change in the Development of Russell's Philosophy* [Hager *1994*]. Hager painstakingly showed that Russell's approach to philosophy (logical analysis, open-ended universal propositions, use of empirical evidence, a correspondence theory of truth, and a scientific methodology) was steadfast, but that this approach was progressive, designed to produce more accurate results over time. The rapid change of Russell's views was a product for an unwavering use of logic and a scientific approach to philosophical problems. In that same year Slater produced a fine summary of Russell's views and methodology in *Russell* [Slater *1994*].

So, the publication of Rodriguez-Consuegra's book is an exciting event in Russellian scholarship, part of the new wave of Russellian studies. It adds an important and scholarly voice to the growing number of excellent commentators on Russell's early, most prolific work. The renaissance continues. In this year (1996) there are three new books on Russell: *Russell*, a philosophical analysis by Grayling [Grayling *1996*]; *Bertrand Russell: Spirit of Solitude* [Monk *1996*], the first volume in a two-volume biography by Monk; and *Bertrand Russell and the Origins of Analytical Philosophy* [Monk & Palmer *1996*], a collection of essays from the Southampton Conference in July, 1995, edited by Monk and Palmer.

The Mathematical Philosophy of Bertrand Russell is also an important event in the European study of Russell, which has previously been less interesting and less prevalent than in Anglo-Austrian-American circles. Many German scholars find Russell important, but simply view him as a foil for Wittgenstein, ignoring the apparent similarities between Russell and Husserl, particularly the Russell found in the 1913 *Theory of Knowledge* manuscript. Rodriguez-Consuegra is one of the most visible and capable leaders of a vanguard of Russellian students on the rest of the continent, principally found to date in France, Spain, and Italy.

Much of Rodriguez-Consuegra's research is based on two invaluable sources that should be mined for further logical and philosophical insight: the *Collected Papers of Bertrand Russell* , published now by Routledge, and the Russell Archives at McMaster University. The *Collected Papers* series is a key source for early work on Russell, containing early drafts and comments on the theory of descriptions, theory of types, the nature of propositions, the correspondence theory of truth, and many other topics associated with Russell's work in mathematical logic and analytical philosophy. The Archives, operating under the wise guidance of Kenneth Blackwell, have proven a valuable source for Rodriguez-Consuegra, Hylton, Griffin, Hager, and Monk. For many, the Archives is the mecca of Rus-

sellian Studies, and rightly so, since it contains all of Russell's manuscripts, letters, and even his personal library.

Among Russell scholars, the kick against *The Mathematical Philosophy of Bertrand Russell* is that Rodriguez-Consuegra is a bit too rapid in drawing his conclusions and that many of his interpretations are questionable. Granted, there is much to debate here, which is good news. The early Russell provides much grist for philosophical thought, both in what he covers and in what he leaves out. The wisdom of Russell's premises, methodology, theories, corrections, deletions, and historical scholarship is questionable. There are many alternative interpretations within and outside of the theory of descriptions, the nature of propositions, and other aspects of Russell's thought that are now again open to discussion. In philosophy, nothing is settled, and Russell himself welcomed criticism as the road to progress. But Rodriguez-Consuegra has given us a formative, well-reasoned, tough, and comprehensive discussion of Russell's mathematical philosophy. He has also led the renaissance of Russell studies in Anglo-Austrian-American circles, and provided a powerful voice for Russellian scholarship in the rest of Europe. *The Mathematical Philosophy of Bertrand Russell* is not the final word on this subject, but it is a book that cannot be ignored.

For those who are looking for other works by Rodriguez-Consuegra, may I recommend his many contributions to *Russell: The Journal of the Bertrand Russell Archives* [Rodriguez-Consuegra *1989-90*; *1992-93*]. There is also a contribution by Rodriguez-Consuegra, "Russell's Perilous Journey from Atomism to Holism 1919-1951," in the Monk and Palmer volume [Rodriguez-Consuegra *1996*].

Bibliography

ANSCOMBE, G. E. M. 1991. *Wittgenstein: Whose philosophy?*, A. Phillips Griffiths (ed.), *Wittgenstein centenary essays* (Cambridge, Cambridge University Press, 1–10.

DUMMETT, Michael. 1981. Frege: Philosophy of language, Cambridge, MA, Harvard University Press, 2nd ed.

GRAYLING, A. C. 1996. *Russell*, Oxford, Oxford University Press.

GRIFFIN, Nicholas. 1991. *Russell's idealistic apprenticeship*, Oxford, Clarendon Press, 1991.

—. 1992. *The selected letters of Bertrand Russell, Volume 1: The private years (1884–1914)*, New York, Houghton Mifflin

HAGER, Paul. 1994. *Continuity and change in the development of Russell's philosophy*, Dordrecht/Boston/London. Kluwer Academic Publisghers.

HYLTON, Peter. 1990. *Russell, idealism and the emergence of analytical philosophy*, Oxford, Clarendon Press.

MONK, Ray. 1996. *Bertrand Russell: The spirit of solitude*, London, Jonathan Cape, 1996.

MONK, Ray, and **PALMER**, Tony (editors). 1996. *Bertrand Russell and the origins of analytical philosophy*, Bristol, Thoemmes Press.

RODRIGUEZ-CONSUEGRA, Francisco. 1989-90. *The origins of Russell's theory of descriptions*, Russell: The Journal of the Bertrand Russell Archives (n.s.) **9** (no. 2, Winter), 99–132.

—. 1992-93. *A new angle on Russell's 'inextricable tangle' over meaning and denotation*, Russell: The Journal of the Bertrand Russell Archives (n.s.) **1 2** (no. 2, Winter), 197–196.

—. 1996. Russell's perilous journey from atomism to holism 1919-1951, in [Monk & Palmer *1996*], 217–243.

RORTY, Richard. 1979. *Philosophy and the mirror of nature*, Princeton, Princeton University Press.

—. 1982. *Consequences of pragmatism*, Minneapolis, University of Minnesota Press.

SLATER, John. 1994. *Bertrand Russell*, Bristol, Thoemmes Press.