RUSSELL'S *PRINCIPLES OF MATHEMATICS*

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Of the philosophical books published in the United Kingdom in 1903, the most important is Mr. Russell's *Principles of Mathematics*.[1] In this book, Mr. Russell tells us, he has two main objects. His first object is to establish the two very important propositions (1) "that all pure mathematics deals exclusively with concepts definable in terms of a very small number of fundamental logical concepts" and (2) "that all its propositions are deducible from a very small number of fundamental logical principles." The examination of the principal branches of pure mathematics, which is necessary to establish these two propositions, occupies the last six Parts of the book, which are entitled respectively "Number", "Quantity", "Order", "Infinity and Continuity", "Space", and "Matter and Motion". In these parts there is much which cannot be easily understood without a special knowledge of Mathematics, and much which has little bearing on philosophy, except so far as it helps to establish Mr. Russell's two main propositions; but there is much also which is of considerable importance for philosophy, quite apart from its bearing on these two propositions: in particular, Mr. Russell examines very carefully the conceptions of Infinity and Continuity, and attempts to shew that they involve no antinomies. Part 1, on the other hand, is devoted to Mr. Russell's second object—"the explanation of the fundamental concepts which mathematics accepts as indefinable", and is almost entirely philosophical in its nature. I shall endeavour to give some account (1) of the meaning and consequences of Mr. Russell's two propositions concerning the relation of Logic and Mathematics (2) of some of the more important points dealt with in Part 1 and (3) of the theory of Infinity and Continuity. Mr. Russell is eminently qualified for his task by a thorough knowledge of Mathematics and by great philosophical acumen; and it is certain that no philosopher ought in future to handle any of the subjects discussed in this book, without taking account of the arguments advanced in it.[2]

[1] *The Principles of Mathematics*.

[2] [The remainder of Moore's very long, unpublished review may be read in the Russell Archives, Rec. Acq. 116.—Ed.]

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