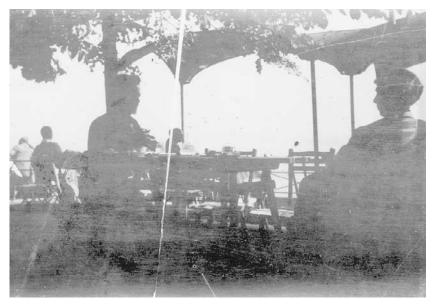


## Wittgenstein's Apprenticeship with Russell

Wittgenstein's *Tractatus* has generated many interpretations since its publication in 1921, but over the years a consensus has developed concerning its criticisms of Russell's philosophy. In *Wittgenstein's Apprenticeship with Russell*, Gregory Landini draws extensively from his work on Russell's unpublished manuscripts to show that the consensus characterizes Russell with positions he did not hold. Using a careful analysis of Wittgenstein's writings he traces the *Doctrine of Showing* and the "fundamental idea" of the *Tractatus* to Russell's logical atomist research program which dissolves philosophical problems by employing variables with structure. He argues that Russell and Wittgenstein were allies in a research program that makes logical analysis and reconstruction the essence of philosophy. His sharp and controversial study will be essential reading for all who are interested in this rich period of the history of analytic philosophy.

GREGORY LANDINI is Professor of Philosophy at the University of Iowa.





Bertrand Russell and Ludwig Wittgenstein in conversation in 1922. From the archives of Dora Russell at McMaster University Library. Reproduced by permission of McMaster University Library.



# Wittgenstein's Apprenticeship with Russell

Gregory Landini

University of Iowa





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For Frann to whom I am a grateful apprentice



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## **Preface**

Wittgenstein's Tractatus Logico-Philosophicus has generated many interpretations since its publication in 1921. Time has produced something of a consensus, however, concerning the nature of the Tractarian criticisms of Russell's early philosophy. Challenging this consensus is the subject of the present book. Russell's unpublished manuscripts have brought about a revolution in the understanding of his philosophy. The manuscripts reveal that the consensus about the Tractarian criticisms characterizes Russell with positions he did not hold. Rereading Russell requires rereading Wittgenstein. Russell's logical atomism is not an empiricism couched in a logic of ramified and type-stratified entities (propositional functions) and based on a principle of acquaintance with sense-data. Logical atomism is a research program for dissolving philosophical conundrums by employing variables with structure – an ontologically austere structural realism. Wittgenstein transformed Russell's method of structured variables into his Doctrine of Showing. The book identifies the Tractarian Grundgedanke ("fundamental idea") with Showing and argues that Russell and his apprentice Wittgenstein were allies in a research program that makes logical analysis and reconstruction the essence of philosophy.

In the *Tractatus*, Wittgenstein wrote, "The riddle does not exist. If a question can be framed at all, it is also possible to answer it" (*TLP* 6.5). Of course, paradoxes are all too easy to fall into. When my son Ansel was young, our bedtime ritual was for me to ask him ten questions. After a short time of repeating the questions every other night, he had memorized the answers. Finally, he demanded, "I want new hard questions." I thought I'd be clever and give him a riddle. I fondly recalled walking with the logician Raymond Smullyan when I was a teaching assistant in graduate school. On one occasion we were off to his logic class and he turned to me and said, "Is the answer to this question, no?" I wanted something similar. I said to Ansel, "OK, here you go with the new hard questions: What is the first question?" Not surprisingly, he complained, saying that it doesn't count as a question. I replied that it does count and is in fact easy to answer. The answer is, "What is the first question?" It seems that Ansel got

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the better of me in this exchange. He replied, "Well, if it is easy, then it is not among the new hard questions." Now we have a puzzle. It would seem that my performative act of utterance assured that whatever question I asked is the first of the new questions if and only if it is hard. But is the question hard to answer? If it is hard, then it is the first question and so it is easy. If it is easy, then it is not the first question and that makes it a hard question to answer. What, after all, would then be the first question?

Philosophical problems are, to my mind, puzzles whose solutions are very difficult because they require in some cases an almost complete understanding of logic, mathematics, physics, and metaphysics. Wittgenstein held that the task of the philosopher is to dissolve riddles (philosophical problems) by elucidating the misconceptions that are involved in their characterization. Russell clearly had a similar view. It was with just this attitude concerning the paradoxes plaguing logicism that he boldly entitled one of his papers "On 'Insolubilia' and Their Solution by Symbolic Logic." From a historical perspective, this is perhaps the most important among Russell's published papers for understanding the historical development of Principia Mathematica. It was originally published only in French with the title "Les paradoxes de la logique." In the paper, Russell embraces a substitutional theory of propositional structure. He separates logical from semantic paradoxes, and shows how the structure of a type-theory of attributes (propositional functions) adequate to mathematics is to be emulated in a formal reconstruction of the first principles of logic that is type-free and makes no assumption that every formula comprehends a class (or an attribute). Based on Russell's unpublished manuscripts on this theory, my book Russell's Hidden Substitutional Theory set forth an entirely new account of the historical origins and nature of Principia. Russell's substitutional theory, hidden among the voluminous collection of his manuscripts and work notes until the 1970s, shatters interpretations of Russell's philosophy that have persisted for decades. Perhaps most startling among the discoveries I made is that *Principia* does not embrace a ramified type-hierarchy of *entities*. *Principia* offers a type-free ontology of universals, particulars, and facts. Its "type-theory" is a scaffolding built into its use of structured variables - a scaffolding which emulates the fundamental laws of a type- and order-regimented theory of attributes and thereby emulates a type-theory of classes and relations-in-extension. Principia does not embrace a hierarchy of orders of entities. It offers a recursive definition of "truth" which assumes that the facts that are truth-makers, and the universals (relating relations and properties) inhering in them, are logically independent of each other. It offers a "no-propositions theory" according to which logical connectives are not relation signs standing for entities. These discoveries, and more like them,



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require a new interpretation of Wittgenstein's *Tractatus*. They demand a new account of logical atomism and the relationship between Russell and Wittgenstein. Earlier accounts are constructed with foundations in clay and washed away by Russell's manuscripts.

Early drafts of chapters of this work have greatly benefited from the comments of Pasquale Frascolla, Nicholas Griffin, Francesco Orilia, Russell Wahl, and Kenneth Williford. Each has made a mark on some chapter of the book. The manuscript was improved by being read in its entirety by Tuomas Manninen, who helped in translating parts of Müller's *Abriss* of Schröder's *Algebra of Logik*. Many thanks to the Bertrand Russell Research Center, McMaster University, Hamilton, Ontario, Canada, for permission to use scanned images.