My new history volumes are aimed mainly at professional philosophers and Ph.D. students with strong interests in contemporary and historical facets of what has come to be known as “the analytic tradition.” Since specialization has, in recent decades, become a pervasive feature of professional philosophizing, it is all too common for the advanced practitioner to combine a sharp focus on a restricted range of issues with increasingly fuzzy awareness of topics at greater and greater remove from his or her specialty. I don’t deplore this tendency – much of it is necessary and desirable – but I believe some efforts can profitably be made to minimize its drawbacks. My volumes, which engage historical figures in critical arguments about both their problems and ours, are the fruits of one such effort.

Those I write about in this volume are among the greatest philosophers ever, while also being our virtual contemporaries, and so highly accessible to us. Because of this, knowledge of their insights and errors can help us deal with issues we face today. The example that interests me most involves propositions – thought of as objects of attitudes, contents of mental states, bearers of truth, and meanings of some sentences. Having studied Frege and Russell early in my career, I have, over the years, found more to be learned from them than I first realized. Writing volume 1 plus the Tractatus chapters for volume 2 deepened my understanding both of how central propositions were to Frege, Moore, Russell, and Wittgenstein and of how some of their ideas on the topic can be recast in ways that advance the subject today. In short, these thinkers can be made participants of current debates.
Studying the tradition can also help us form a picture of philosophy in our era, and hence of who we are and where we may be heading. The picture I am gradually assembling is, of course, merely one construction, limited by my own interests and competencies. Still the attempt to encompass such a vast amount in a single mind will, I hope, be useful to others in attempting their own constructions. To that end, I have focused on those historical ideas that hold the most important lessons for us about which I may have something useful to say.

The Frege chapters attempt to integrate the preeminent philosopher of mathematics with the seminal philosopher of language. I take the key to his logic to be his replacement of the subject/predicate distinction of syllogistic logic with a clarified and expanded function/argument distinction from mathematics, ingeniously applied to quantification. Extending the class of predicates to include incomplete expressions resulting from removing singular terms from sentences, and identifying their referents with 1st-level concepts (understood as incomplete entities mapping n-tuples of objects onto truth values) gave Frege a powerful referential semantics. Taking quantifiers to stand for 2nd-level concepts that map 1st-level concepts to truth values, and then iterating the move for higher-order quantification gave him great expressive power. When senses were added, propositional attitudes and the hierarchy of indirect sense and reference followed, providing a core semantic framework for languages of all sorts.

The result takes the central semantic feature of language to be its use in representing the world. For a sentence S to be meaningful is for S to represent the world as being a certain way – which is to impose conditions the world must satisfy
if it is to be as S represents it. These are S’s truth conditions. In this way, the ideas needed for Frege’s logicist project provided not only semantics for his new logical system, but also foundations of a science of the linguistic coding of information. The philosopher of mathematics constructed a powerful calculus and the semantic ideas needed to understand it that, together, made a general science of language possible.

This background is presented in the first half of chapter 1. The second half of the chapter explains (i) Frege’s criticism of psychologism, naturalism, and formalism in the philosophy of mathematics, including his devastating critique of Mill, (ii) his anti-Kantian treatment of arithmetic as analytic and pro-Kantian treatment of geometry synthetic, (iii) his conception of number and his definitions of arithmetical primitives, (iv) the crucial features of the logic used in The Basic Laws of Arithmetic to prove the Peano axioms, and (v) the key ideas employed in the proofs.

Chapter two examines eight issues in the philosophy of language: (i) the difference between Frege’s insightful treatment ‘∃x’ and his mistaken claim that existence is a property of concepts, (ii) an apparent paradox arising from combining fine-grained Fregean senses with his analysis of quantification, (iii) the concept horse and the unity of propositions, (iv) the insights and errors in his evolving view of truth, (v) why the sense-reference distinction has nothing to do with identity, (vi) Kripkean lessons about the Frege hierarchy drawn from quotation and acquaintance-based senses, (vii) the apparent need for non-transparent thoughts, and (viii) time, tense, and indexicality.

Turning to logicism, I discuss how Frege’s goal of justifying our mathematical knowledge generated pressure to individuate logical/mathematical truths as finely
as objects of attitudes generally, which raised the stakes for evaluating his crucial definitions and constructions. After noting this difficulty, I sketch a limited sense in which his reduction might have shed light on the apriority of mathematics, had it succeeded. This sets the stage for dealing with Russell’s paradox. In addition to rendering Frege’s original system inconsistent, it also led, via a later Quinean argument, to the derivation of an absurdity from Frege’s modification of Axiom V. At this point, a larger worry loomed. Although one may hope for technical fixes, it came to seem that any consistent logico-set-theoretic principles sufficient to derive arithmetic would not have the self-evident status Frege desired, and might stand in even greater need of epistemic justification than arithmetic itself.

The section on Moore begins with a new chapter chronicling his early career from (i) his initial Idealist-friendly critiques of Kant and Bradley (in 1898 and 1899), through (ii) his “Realist” phase, in which mind-independent concepts and propositions become objects of analysis, (iii) his biting, analytically meticulous 1901 attack on McTaggart’s conception of Reality as a community of immortal persons united in reciprocal love, and (iv) his 1903 masterpiece “The Refutation of Idealism.” Through it all, we see Moore emerge as the philosopher he was to become – the relentless critic zeroing in on an argument’s weakest point, the deflator of philosophical pretensions, and the practitioner of dialectical jujitsu, who transfers the burden of proof onto his opponent and demonstrates the impossibility of discharging it without violating what we prima facie take ourselves to know.

The heart of Moore’s “Refutation” is his diagnosis of the Idealist’s claim that to exist is to be perceived. Confused by the duality of sensation talk -- sometimes
speaking of the sensation of blue as the blue one sees and sometimes speaking of it as one’s seeing it – Moore’s Idealist becomes convinced that what we perceive are (like our experiences) things whose existence depend on us. Rejecting this, Moore sketches a realist, relational theory according to which perceptual and cognitive states have representational content, and so involve relations to propositions involving mind-independent objects and properties. The result is taken to be a vindication of common sense, an unanswerable challenge to Idealism, and an assault on skepticism about the external world. Though not established, Moore’s theory is plausible. It is a pity that his later work on perception retreated from it.

The remaining chapters on Moore examine his ethical and metaethical views, his defense of common sense, and his proof of an external world. They are reworked versions of material in my 2003 volume, expanded to cover the influence of Sidgwick and Russell on Principia Ethica, Moore’s 1910-11 lectures on the aims of philosophy, a new requirement on his proof of an external world, and an expanded objection to taking ‘good’ to express a property.

The Russell-section of the book is the longest and most ambitious. After introductory sessions on early influences, including the interaction with Cantor’s work that led to Russell’s paradox, and a discussion of its significance, I turn in chapter 7 to a close examination of his 1903 theory of propositions and denoting concepts. The chapter ends with his discovery of what became the Gray’s Elegy argument of “On Denoting,” which led directly to his new theory of definite descriptions and indirectly to his new account of quantification. Chapter 8 is an exhaustive discussion of all aspects of “On Denoting,” with special emphasis on the
Elegy argument, the reason for its failure, the fatal contribution to it of Russell’s conception of meaning and propositions, and the special escape-hatch from it employed by Fregeans. Because this obscure argument was so central for Russell, the more evident virtues of the theory that led so many to adopt it were essentially bonuses for Russell, and his discussion of them was not always what it should have been. Hence, my chapter has something of the flavor “On Denoting” purged of every fault.

Chapter 9 begins with a section in which the new theory of denoting figures in criticisms of Absolute Idealism and American Pragmatism by Russell and Moore. This accomplished, I turn to the main task -- identifying both the brilliant insight behind Russell’s multiple relation theory of judgment, adopted after he rejected propositions, and the disastrous consequences to which it led. I argue that the insight could have been used to construct a new theory of propositions fulfilling his desiderata for truth bearers, while avoiding his objections to propositions as previously conceived. Alas, the needed theory wasn’t constructed, which left him without both propositions and genuine functions to propositions. This led in Principia Mathematica to a deflated conception of “propositional functions” as mere formulas -- which, had it been taken seriously, would have short-circuited the attempted reduction of mathematics to logic and undermined the philosophical significance of his theory of denoting. Fortunately, the deflated conception wasn’t systematically observed, but only because Russell failed to clearly distinguish substitutional from objectual quantification. Briefly put, I argue that the reduction required higher-order objectual quantification over either classes or robust
propositional functions, while his ramified theory of types and his ontologically audacious (I think disastrous) “no-class theory” was influenced substitutional thoughts. Thus, the reader is invited to another round of saving Russelian achievement by purging him of significant error.

The final two chapters discuss *Our Knowledge of the External World* and *Lectures on Logical Atomism*. Here, Russell uses the methods of logical analysis and theoretical reduction (including the “no-class theory”) to construct a systematic conception of Reality capable of being known by us. Assuming all necessary and conceptual connections to be ultimately logical, he attempts simultaneously to reveal the logical forms of thought and the ultimate (simple) constituents of Reality. Although his methods are logical and linguistic, his theory is highly revisionary and classically metaphysical. It is also plagued by severe difficulties. Although not without later influence, on, e.g., Carnap, it was soon eclipsed by a system of logical atomism that minimized metaphysics while elevating the logical and linguistic from mere means of achieving traditional ends, to the essence of philosophy itself.