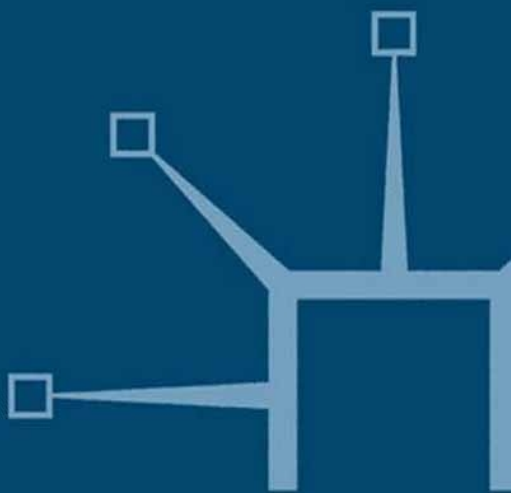


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# Carnap's Ideal of Explication and Naturalism

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Pierre Wagner



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# Carnap's Ideal of Explication and Naturalism

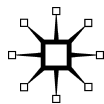
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# Series Editor's Foreword

During the first half of the twentieth century analytic philosophy gradually established itself as the dominant tradition in the English-speaking world, and over the last few decades it has taken firm root in many other parts of the world. There has been increasing debate over just what 'analytic philosophy' means, as the movement has ramified into the complex tradition that we know today, but the influence of the concerns, ideas and methods of early analytic philosophy on contemporary thought is indisputable. All this has led to greater self-consciousness among analytic philosophers about the nature and origins of their tradition, and scholarly interest in its historical development and philosophical foundations has blossomed in recent years. The result is that history of analytic philosophy is now recognized as a major field of philosophy in its own right.

The main aim of the series in which the present book appears – the first series of its kind – is to create a venue for work on the history of analytic philosophy, consolidating the area as a major field of philosophy and promoting further research and debate. The 'history of analytic philosophy' is understood broadly, as covering the period from the last three decades of the nineteenth century to the start of the twenty-first century – beginning with the work of Frege, Russell, Moore and Wittgenstein, who are generally regarded as its main founders, and the influences upon them – and going right up to the most recent developments. In allowing the 'history' to extend to the present, the aim is to encourage engagement with contemporary debates in philosophy – for example, in showing how the concerns of early analytic philosophy relate to current concerns. In focusing on analytic philosophy, the aim is not to exclude comparisons with other – earlier or contemporary – traditions, or consideration of figures or themes that some might regard as marginal to the analytic tradition but which also throw light on analytic philosophy. Indeed, a further aim of the series is to deepen our understanding of the broader context in which analytic philosophy developed, by looking, for example, at the roots of analytic philosophy in neo-Kantianism or British idealism, or the connections between analytic philosophy and phenomenology, or discussing the work of philosophers who were important in the development of analytic philosophy but who are now often forgotten.

Rudolf Carnap (1891–1970) was the leading figure in logical empiricism, which was central to the development of analytic philosophy in the 1930s. Influenced by Frege, Russell and the early Wittgenstein, he played a major role in the work of the Vienna Circle, and in turn influenced Quine and many other analytic philosophers, especially in the United States, to which



Carnap moved in December 1935. At the core of Carnap's philosophical methodology was the idea of *explication*, understood as the process of replacing a familiar but vague concept by a new exact concept. The term 'explication' was not introduced into Carnap's writings until 1945, and the method only received a full discussion in 1950, in the first chapter of *Logical Foundations of Probability*. But the underlying idea was arguably present throughout Carnap's work. Indeed, he himself later described his earlier method of 'rational reconstruction' as essentially explication.

In 2007 André Carus published *Carnap and Twentieth-Century Thought: Explication as Enlightenment*, in which he argued that the ideal of explication lay at the heart of Carnap's philosophical thinking. Developing Carnap's idea of 'conceptual engineering', Carus sought to show that, far from being moribund, this idea is more relevant today than ever before as philosophers debate issues of scientific naturalism and philosophical methodology. The publication and reception of Carus' book was the occasion for a conference on 'Carnap's Ideal of Explication' organized by Pierre Wagner in Paris in May 2009. This brought together many of the leading Carnap scholars, including Carus himself, and most of the participants in this conference have contributed their papers to the present volume, which is supplemented by two further papers by Michael Friedman and Mark Wilson. The collection provides a rich and fruitful discussion, from a number of different perspectives, of the whole range of issues concerning Carnap's ideal of explication and its relevance to current debates.

Wagner is also the editor of *Carnap's Logical Syntax of Language*, which was the second volume published in this series on the history of analytic philosophy. So I am delighted to see the present collection appear in the series too, as its sequel. Taken together, the two volumes testify to the growing interest that there is in Carnap's philosophy, not just in order to understand the history of analytic philosophy in greater detail but also to encourage us to think more deeply about a host of fundamental issues that remain at the heart of analytic philosophy today.

Michael Beaney  
January 2012

# Contributors

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**Jacques Bouveresse** is Professor at the Collège de France and a member of the IHPST (Institut d'histoire et de philosophie des sciences et des techniques), France. His areas of research include Wittgenstein, philosophy of language, philosophy of logic, the Austrian philosophic tradition, and a general evaluation of contemporary philosophy.

**A. W. Carus** is the author of numerous papers on Carnap, of a series of papers with Steve Awodey about Carnap and Gödel, as well as of the book *Carnap in Twentieth-Century Thought: Explication as Enlightenment*. He is one of the editors of the *Collected Works of Rudolf Carnap*. He has collaborated with social and economic historians on various papers, some recently published, on the philosophy and method of social science.

**Richard Creath** is President's Professor of Life Sciences and of Philosophy and Director of the Program in the History and Philosophy of Science at Arizona State University. He is the author of numerous articles on Carnap and Quine and the editor of *Dear Carnap, Dear Van*, the co-editor (with Michael Friedman) of *The Cambridge Companion to Carnap*, as well as the general editor of the *Collected Works of Rudolf Carnap*.

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**Michael Friedman** is Frederick P. Rehmus Family Professor of Humanities and Professor of Philosophy at Stanford University, USA. His books include volumes on space-time physics, Kant, logical positivism, and what he calls the dynamics of reason. He is the co-editor of *Kant's Legacy in the Nineteenth Century*, *The Cambridge Companion to Carnap*, and the *Collected Works of Rudolf Carnap*.

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**Wolfgang Kienzler** teaches philosophy at the University of Jena, Germany. His research interests include the history of early analytic philosophy, in particular Frege, Wittgenstein and Carnap, and furthermore philosophy of language, of logic and of mathematics. He is co-editor of the *Collected Works of Rudolf Carnap*, (vol. 1).

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**Erich Reck** is Professor of Philosophy at the University of California, Riverside. His main research areas are the history of analytic philosophy and the philosophy of logic, mathematics, and science. Among other works, he is co-editor (with S. Awodey) of *Frege's Lectures on Logic: Carnap's Students Notes, 1910–1914*, and editor of *The Historical Turn in Analytic Philosophy* (forthcoming).

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# Notes on References

Citations are given by author, date, and page or paragraph numbers. In some cases, two dates are given, separated by a slash. The first date, sometimes followed by a letter, determines a unique entry in the combined bibliography. The second number either refers to a translation or to a later edition given within that same bibliography entry. When two dates are followed by only one page number (or by a set of page numbers), the page number (or the set of page numbers) refers to the translation or to the later edition mentioned in the bibliography entry determined by the first date. Sometimes, when the context makes it clear who the author is, his or her name is omitted.

# Introduction

Pierre Wagner

What Carnap calls an ‘explication’ is a procedure by which an inexact, pre-scientific concept – the ‘explicandum’ – is replaced by a precisely defined one – the ‘explicatum’. This meaning of the term was introduced in the context of Carnap’s work on confirmation theory, for which a concept of probability more exact than the vague ordinary one was needed (Carnap 1945b). The general problem of explicating a concept was taken up again and explained in a more precise way in *Meaning and Necessity* (1947, §2), in which Carnap proposed his own explication of a whole series of semantic concepts such as logical truth, logical necessity, proposition, extension, intension, and synonymy. A few years later, the general procedure of explication was recognized as having such a methodological importance that the first chapter of *Logical Foundations of Probability* (1950b) was entirely devoted to its detailed exposition. Later, Carnap often described his own work in terms of explication (explication of analyticity, of belief sentences, of empirical meaning, etc.) and in the preface he wrote for the second edition of the *Aufbau* in 1961, he even reinterpreted his earlier work on the rational reconstruction of concepts in terms of explication (Carnap 1928a/1961, p. v).

For a long time, however, the centrality of explication in Carnap’s philosophy has been neglected or ignored, and the procedure of constructing formally defined explicata was commonly regarded as fundamentally wrongheaded, especially in view of Quinean, Kuhnian, or Wittgensteinian objections to it. But in his 1992 paper on Carnap and Quine ‘Was Carnap Entirely Wrong After All?’, Howard Stein, who had been Carnap’s student in Chicago, proposed a reassessment and a partial rehabilitation of explications, indicating at the same time how he thought the views of the late Carnap could and should be modified. He thus suggested that Quine’s naturalist arguments were not as compelling as had usually been thought, and that further work in the spirit of Carnap’s original programme might not be entirely without value after all.

In his book *Carnap and Twentieth-Century Thought: Explication as Enlightenment* (Cambridge, 2007), André Carus, who was Stein’s student in

Chicago, follows this thread in several ways: on the one hand, he offers a reassessment of Carnap's programme based on a detailed examination of numerous unpublished papers and of parts of his biography; on the other hand, far from being a purely scholarly study, his deeply informed work provides an interpretation which gives to Carnap's method a cardinal place in the contemporary debate on naturalism and conceptual engineering. Carus first argues that an ideal of explication is at the centre of gravity of Carnap's philosophy. It is what holds the pieces together over the entire trajectory of his philosophical development, a development which he interprets as falling squarely in the tradition of the Enlightenment: Carnap, like the French *Encyclopédistes*, aimed at replacing the knowledge inherited from tradition or imposed by authority with the knowledge gained from science, and he, like them, thought that conceptual clarification is most valuable, and desirable for practical – including social and political – reasons. But Carus's rehabilitation of explication also goes beyond Carnap's explicit formulations, especially when he attempts to re-state Carnap's ideal of explication in a way that bridges the gap between conceptual engineering and naturalism. In this way Carus seeks to make explicit the reasons why he thinks explication should not be regarded as an outdated method but as a philosophical programme of lasting value, which should be pursued today.

Carus's views on Carnap, explication, and Enlightenment, have been discussed, challenged, and criticized in different ways. They have also contributed to the ongoing debate between naturalism and rival approaches to issues concerning concept formation, language, knowledge, and the structure and the dynamics of science. For this reason, in several of the following chapters, the reader will find assessments of Carus's book as well as critical or approving comments about his interpretation of Carnap's philosophy. But the main focus of the whole volume is on Carnap's ideal of explication itself, and on the contemporary debate between conceptual engineering and naturalism.

An examination of Carnap's method of explication may proceed in a number of different ways. From an historical viewpoint, several contributors discuss the following questions: when did the method emerge and how is it situated within the whole development of Carnap's philosophical programme (Creath, [chapter 11](#))? What is its place in the history of analytic philosophy and in the history of the philosophy of science? (Richardson, [chapter 1](#)) How is it related to the contrasting views defended and discussed in the Vienna Circle (Uebel, [chapter 8](#))? But the historical perspective also raises issues of origins, influences, and interpretation. The old and simplistic picture of Carnap's philosophy as trying to solve the problems of traditional empiricism with the tools of modern logic has now been completely dispelled by informed studies. A number of other possible influences such as neo-Kantianism, phenomenology, pragmatism, and *Lebenswelt* have been investigated (Gabriel, [chapter 2](#) and Bouveresse, [chapter 4](#)), although