

THE CAMBRIDGE COMPANION TO CARNAP

Rudolf Carnap (1891–1970) is increasingly regarded as one of the most important philosophers of the twentieth century. He was one of the leading figures of the logical empiricist movement associated with the Vienna Circle and a central figure in the analytic tradition more generally. He made major contributions to philosophy of science and philosophy of logic, and, perhaps most importantly, to our understanding of the nature of philosophy as a discipline. In this volume a team of contributors explores the major themes of his philosophy and discusses his relationship with the Vienna Circle and with philosophers such as Frege, Husserl, Russell, and Quine. New readers will find this the most convenient and accessible guide to Carnap currently available. Advanced students and specialists will find a conspectus of recent developments in the interpretation of Carnap.

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The Cambridge Companion to

CARNAP

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Logical Positivism from Within and (with N. Cartwright et al.) Otto Neurath: Philosophy Between Science and Politics.

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EDITORS' NOTE

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NOTE ON REFERENCES

In the text we have given citations by author, date, and page (and/or section) numbers. Sometimes two dates are given, separated by slashes. The first date, including a letter if any, identifies a unique entry in the combined bibliography. The second date would then refer to a later edition given within that same bibliographic entry. Where one set of page numbers is given but two dates, the page numbers refer to the later edition in the citation. In a few cases page numbers for both editions are given, and those are also separated by slashes and refer to the corresponding editions. Section numbers, of course, are assumed not to change among editions. Thus, for example, "(Carnap, 1934c/1937, 245–246/317–319)" refers both to pages 245–246 of Carnap's (1934c) *LogischeSyntax der Sprache* and pages 317–319 of its 1937 English translation, *The Logical Syntax of Language*.

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PREFACE: CARNAP'S POSTHUMOUS CAREER

RICHARD CREATH

When Carnap died in 1970 he was widely honored both as a philosopher of historic importance and as a human being. But even those who so honored him thought that his most characteristic ideas and the major works in which he had expressed them were either seriously flawed or just plain wrong. Worse, his work no longer led the ongoing development of the field. Philosophy had moved on.

As you will see in the following chapters the current picture of Carnap is very different. His views now seem subtler and more defensible. And even if contemporary philosophers still find much to disagree with, they also find that he has much to say that is relevant and useful in their ongoing struggle with philosophic issues. Here I consider the question of how we got from there to here, that is, from the picture of Carnap that was widespread in 1970 to the image that emerges in this volume.

The central answer, of course, is that the change resulted from the work of a great many philosophers and historians on both sides of the Atlantic. Much of this has been done by the authors of the chapters in this volume, and the extensive bibliography is a useful guide to even more. In a brief preface such as this, though, it is not really possible to summarize such a substantial body of work. Besides, you have before you splendid examples of that research, and it would be better to go directly to that. So here I concentrate on developments that have facilitated that research rather than the research itself. And the only persons I will mention by name are no longer living. We have come a long way since 1970, and to see how far we need to see more clearly how things looked then.

The rejection of Carnap's ideas in the period immediately after his death ran across the full gamut of his work. Due to the influential

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work of W. V. Quine and Nelson Goodman, the Aufbau was viewed as primarily aiming ontologically to reduce all scientific objects to sense data, a reduction that was even in principle doomed to fail. The idea of trying to distinguish claims that have genuine empirical content by means of a verificationist or empiricist criterion of significance was thought to be a complete dead end. In this Popper's misrepresentations of Carnap played a significant role. The Logical Syntax of Language was thought mainly to argue that semantics (and pragmatics) were neither necessary nor philosophically useful. Its central "Principle of Tolerance" had been forgotten. Carnap's analytic/synthetic distinction was recognized as one of the main pillars of his philosophy, but it was thought that Quine had shown the distinction to be wholly untenable. In probability theory Carnap had convinced many that an epistemic notion was needed in addition to a notion of chance. But even those who sided with Carnap on that issue viewed his idea that there could be objective, though language relative, prior probabilities as misguided. So his views on probability were largely superceded by what is variously called subjectivism or personal probability theories. Finally, in the aftermath of Thomas Kuhn's enormously successful The Structure of Scientific Revolutions Carnap was thought to have believed erroneously that our judgments at the observational level are certain and theory independent, that the conception of scientific rationality we use is eternal and unchanging, and that theoretical objects such as atoms and electrons are to be rejected in favor of observable entities, whether those are the sturdy objects of common sense or some sort of phenomenal entities.

Philosophy, of course, is a heterogeneous enterprise. If the preceding describes the prevailing opinion, there were holdouts against it. Of course, many of these holdouts encouraged the systematic reconsideration that has ensued. In any case, the portrait that would be drawn of Carnap now, as one can see from the following pages, is very different and much more nuanced. On some issues we now believe that Carnap's opinions were not what we had earlier thought that they were. On others our evaluation of them or of the arguments against them has changed. And on these and other issues we now see that various aspects of Carnap's work provide useful suggestions for how to approach contemporary issues. That there should be changes in our understanding and evaluation of Carnap is not surprising; after



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all, philosophy moves on. But the depth and breadth of the transformation here could scarcely have been anticipated in 1970.

In the 1970s two developments were well under way that would encourage researchers to look at Carnap again from a new perspective. One of these was the slow emergence of a sub-field of philosophy devoted to the historical study of twentieth-century analytic philosophy. This arose independently in a number of centers, but one of the most important formed around Burton Dreben at Harvard. As a teacher and colleague he wielded an influence far beyond his written publications. He convinced many younger scholars to take the history of such areas as logic, philosophy of mathematics, and philosophy of language over the last hundred years as philosophically important and fruitful areas for research. Before Dreben many philosophers sharply distinguished between doing philosophy and doing the history of philosophy, so a genuinely philosophic interest in historical study was rare. And a community of scholars amounting to a sub-discipline interested in the history of analytic philosophy was non-existent. Again, Harvard was not the only place that such historical interests were stirring, but it was perhaps the one most directly focused on twentieth-century analytic philosophy.

The second development was the creation of important archives on both sides of the Atlantic. Wittgenstein's papers had long been widely available even in microfilm form. In 1968 The Bertrand Russell Archive was started at McMaster University in Canada. Russell was still alive and sold to McMaster the vast bulk of his manuscripts and other memorabilia. The collection was significantly added to thereafter. In 1978 another archival collection, The Vienna Circle Foundation, was established to house the papers of Moritz Schlick and Otto Neurath. Now housed at the Rijksarchief in Noord-Holland (Haarlem), the archive was created by Henk L. Mulder, who had earlier acquired and conserved these papers.

From the point of view of reexamining Carnap, the most important archive is the Rudolf Carnap Collection, founded in 1974 at the University of Pittsburgh. It includes Carnap's personal library, much of it heavily annotated, some 10,000 letters, and masses of notes, manuscripts, and other materials. A large body of photographs and other personal material has since been added to the collection. Moreover, the Carnap Collection formed the nucleus of a larger archive, the Archives of Scientific Philosophy, that now holds the papers of



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Bruno de Finetti, Carl Hempel, Richard Jeffrey, Frank Ramsay, Hans Reichenbach, Wilfrid Sellars, and others. This magnificent collection and others like it around the world (including a smaller body of Carnap material at UCLA), together with the published record, have made real historical scholarship possible.

By the late 1980s the rise in historical interest and the staggering body of new archival material was producing a steady stream of new research results appearing in mainstream journals, for example, in a special issue of *Nous* (1987) edited by Alberto Coffa. 1991, however, was a landmark year. It was the centennial of the birth of both Rudolf Carnap and Hans Reichenbach. There was a special issue of *Erkenntnis* for the two men and two special issues of *Synthese*, one for each. There were major international conferences in Los Angeles, Boston, and Konstanz, Germany, as well as many special sessions at philosophical meetings around the world.

1991 also saw the founding of the Institute Vienna Circle. The Institute has been extremely active in hosting conferences, running seminars, classes, and a summer school, and vigorously supporting research and publication. It has been and remains one of the primary European venues to have both crystallized and encouraged the revival of interest in the Circle, including of course Carnap.

Finally, in this banner year, Cambridge University Press brought out Alberto Coffa's long-awaited *The Semantic Tradition from Kant to Carnap: To the Vienna Station*. Coffa had died at the end of 1984 just after completing a penultimate draft. One reviewer called the book ". . . the first comprehensive treatment of the development of logical positivism that is rigorous and sophisticated from both a historical and technical point of view." The book has provoked much vigorous discussion in a fruitful way, and it has enabled many of its readers to see that serious philosophy and careful history can not only coexist in the same work, but reinforce one another.

The stream of papers, books, conferences, and seminars has only grown since 1991. A new sub-field of philosophy, twentieth-century analytic history, has now been recognized. The study of Carnap is a significant part of that sub-field and is strengthened by an increasingly sophisticated understanding of Carnap's contemporaries. Indeed, as of this writing, *The Cambridge Companion to Logical Empiricism* is about to appear.



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Among the most important developments currently under way is the republication by Open Court Publishing Company of all the work that Carnap published in his lifetime into a *Collected Works of Rudolf Carnap*. All of the work will appear in English and also in the original language if that is different. This is a massive undertaking, comprising some thirteen volumes, and it will take well over a decade to complete. The first volumes of the *Collected Works* should appear in 2007 or 2008. On its completion the set will provide ready access to all of Carnap's published writings, and the introductory essays will make his ideas accessible to a contemporary audience.

The book you now hold, *The Cambridge Companion to Carnap*, is itself a major step in the continuing reappraisal of Carnap's legacy. As Michael Friedman's introduction shows, Carnap's philosophic interests were broad, deep, and even revolutionary. As the chapters that follow demonstrate, Carnap's ideas continue to guide illuminating research. Philosophy still moves on – now enriched and inspired by a fuller appreciation of Carnap's legacy.