

#### INTERPRETING CARNAP

Rudolf Carnap (1891–1970), one of the most important philosophers of the twentieth century, helped found logical positivism, was one of the originators of the field of philosophy of science, and was a leading contributor to semantics and inductive logic. This volume of new essays, written by leading international experts, places Carnap in his philosophical context and studies his topics, his interests, and the major stages of his thought. The essays reassess Carnap's place in the history of analytic philosophy through his approach to metaphysics, values, politics, epistemology, and philosophy of science. They delve into important topics of Carnap's mature thought, namely explication, naturalism, and his defense of analyticity; and they recover the logical and the linguistic components of philosophy and how they unfolded in the syntax–semantics relation, induction, and language-planning. The resulting interpretation of Carnap will be illuminating for both current and future research.

ALAN RICHARDSON is Professor of Philosophy at the University of British Columbia. He is the author of *Carnap's Construction of the World* (1998) and is on the editorial board of *The Collected Works of Rudolf Carnap* (2019).

ADAM TAMAS TUBOLY is Leader of the MTA Lendület Values and Science Research Group, at the HUN-REN Research Centre for the Humanities in Budapest, and Research Fellow at the ITD, Medical School, University of Pécs. He is coauthor (with Christopher Burke) of *Otto Neurath in Britain* (forthcoming).



# INTERPRETING CARNAP

Critical Essays

EDITED BY
ALAN RICHARDSON

University of British Columbia

ADAM TAMAS TUBOLY

HUN-REN, Research Centre for the Humanities







Shaftesbury Road, Cambridge CB2 8EA, United Kingdom
One Liberty Plaza, 20th Floor, New York, NY 10006, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India
103 Penang Road, #05-06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org Information on this title: www.cambridge.org/9781009098205

DOI: 10.1017/9781009099080

© Cambridge University Press & Assessment 2024

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press & Assessment.

#### First published 2024

A catalogue record for this publication is available from the British Library

A Cataloging-in-Publication data record for this book is available from the Library of Congress

1SBN 978-1-009-09820-5 Hardback

Cambridge University Press & Assessment has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.



# Contents

Acki	of Contributors pa nowledgments of Abbreviations	ge vii ix x
	Introduction: Carnap's Transformation of the Canon Alan Richardson and Adam Tamas Tuboly	I
PAR	T I PHILOSOPHY IN NEW DRESS	
I	Carnap's Noncognitivism: Paths and Influences Christian Damböck	13
2	Carnap Is Not against Metaphysics Vera Flocke	32
3	Interpreting Carnap's Construction of the World Christopher Pincock	50
4	Philosophy in a Collective Spirit as "Politics in Its Broadest Sense"  Audrey Yap	70
PAR	T II NATURALISM AND METHOD	
5	Shades of Naturalism: Carnap and Quine André W. Carus	89
6	On Quine's Epistemological Objection to Carnap's Analyticity <i>Joseph Bentley and Thomas Uebel</i>	106
7	Carnapian Explication: Origins and Shifting Goals Erich H. Reck	127



> vi Contents PART III THE LOGICAL AND THE LINGUISTIC Carnap's Approach to Semantics and Syntax: Relations and Tension 153 Pierre Wagner Carnap on the Formality of Logic and Mathematics 171 Georg Schiemer Carnap on Probability and Induction 10 192 Sandy Zabell Metaphysics, Tolerance, and Language Planning: Carnap on ΙI International Auxiliary Languages 214 Başak Aray PART IV SCIENCE AND THEORIES Ι2 Carnap on Theories and the Methods of Science 237 Lydia Patton Carnap on Unity of Science Ι3 252 Bianca Crewe and Alan Richardson Carnap on Determinism and Free Will 14 270 Richard Creath Bibliography 286 Index 308



# Contributors

- BAŞAK ARAY has a PhD in philosophy from the University Paris I Panthéon-Sorbonne and is an independent scholar.
- JOSEPH BENTLEY is a lecturer in the Department of Philosophy at the University of Manchester.
- ANDRÉ W. CARUS is a visiting fellow at the Munich Center for Mathematical Philosophy, Ludwig Maximilian University, Munich.
- RICHARD CREATH is Professor in the School of Life Sciences, College of Liberal Arts and Sciences at Arizona State University.
- BIANCA CREWE is a doctoral student in the Department of Philosophy at the University of British Columbia.
- CHRISTIAN DAMBÖCK is a lecturer in the Philosophy Department at the University of Vienna.
- VERA FLOCKE is Assistant Professor in the Department of Philosophy at Indiana University Bloomington.
- LYDIA PATTON is Professor of Philosophy and Affiliate in the Department of Science, Technology, and Society at Virginia Tech.
- CHRISTOPHER PINCOCK is Professor in the Department of Philosophy at The Ohio State University.
- ERICH H. RECK is Professor in the College of Humanities, Arts, and Social Sciences at the University of California Riverside.
- ALAN RICHARDSON is Professor in the Department of Philosophy at the University of British Columbia.



viii

#### List of Contributors

- GEORG SCHIEMER is Professor in the Department of Philosophy and Head of Department of the Institute Vienna Circle at the University of Vienna.
- ADAM TAMAS TUBOLY is Leader of the MTA Lendület Values and Science Research Group and Research Fellow at the Institute of Transdisciplinary Discoveries, Medical School, University of Pécs.
- THOMAS UEBEL is Professor Emeritus in the Department of Philosophy at the University of Manchester.
- PIERRE WAGNER is Professor in the Department of Philosophy at the University Paris 1 Panthéon-Sorbonne and a member of the Institute for the History and Philosophy of Science and Technology in Paris.
- AUDREY YAP is Associate Professor in the Department of Philosophy at the University of Victoria.
- SANDY ZABELL is Professor in the Department of Statistics and Data Science at Northwestern University.



# Acknowledgments

During the editorial process, Adam Tamas Tuboly was supported by the MTA Lendület Values and Science Research Group at the HUN-REN Research Centre for the Humanities (Hungarian Academy of Sciences). Both editors are grateful to Hilary Gaskin for her kind support of the project and to all the reviewers and referees of the book and its chapters for their time and critical comments. All errors are, of course, our responsibility.



# Abbreviations

# Abbreviated Works of Carnap

- Aufbau Der logische Aufbau der Welt. Berlin-Schlachtensee: Weltkreis-Verlag, 1928. Quoted from the English translation, *The Logical Structure of the World*. Translated by Rolf A. George. Berkeley: University of California Press, 1967.
- CIM The Continuum of Inductive Methods. Chicago: University of Chicago Press, 1952.
- CW1 The Collected Works of Rudolf Carnap, Volume 1: Early Writings.
  Edited by A. W. Carus, M. Friedman, W. Kienzler,
  A. Richardson, and S. Schlotter. Oxford: Oxford University
  Press, 2019.
- ESO "Empiricism, Semantics, and Ontology." Revue International de Philosophie 4 (11) (1950): 20–40.
- FLM Foundations of Logic and Mathematics. Chicago: University of Chicago Press, 1939.
- FoL Formalization of Logic. Cambridge, MA: Harvard University Press, 1943.
- IA "Intellectual Autobiography." In P. A. Schilpp (ed.), *The Philosophy of Rudolf Carnap*. LaSalle, IL: Open Court, 3–84, 1963.
- IPoS An Introduction to the Philosophy of Science. New York: Basic Books, 1966.
- IS Introduction to Semantics. Cambridge, MA: Harvard University Press, 1942.
- LFP Logical Foundations of Probability. Chicago: University of Chicago Press, 1950.



### List of Abbreviations

хi

	·y · · · · · · · · · · · · · · · ·
LFP2	Logical Foundations of Probability. 2nd ed. Chicago: University of
	Chicago Press, 1962.
LSL	Logical Syntax of Language. London: Routledge & Kegan
	Paul, 1937.
LSS	Logische Syntax der Sprache. Vienna: Springer, 1934.
$M \phi N$	Meaning and Necessity. Chicago: University of Chicago Press,
	1947; 2nd ed., 1956.
Raum	Der Raum: Ein Beitrag zur Wissenschaftslehre / Space:
	A Contribution to the Theory of Science. In CW1, 21–171.
<i>RSE</i>	"Replies and Systematic Expositions." In P. A. Schilpp (ed.), The
	Philosophy of Rudolf Carnap. LaSalle, IL: Open Court,
	1963, 859–1013.
Т&М	"Testability and Meaning." Philosophy of Science 3 (4): 419-471;
	4 (I) (1936): I–40.